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Appendix A

Federal Register on Air Quality Designations for 8-hour Ozone

Federal Register

Friday,
April 30, 2004

Part II

Environmental Protection Agency

40 CFR Part 81

40 CFR Parts 50, 51, and 81
8-Hour Ozone National Ambient Air Quality Standards; Final Rules

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[OAR–2003–0083; FRL–7651–8]

RIN 2060–

Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards; Early Action Compact Areas With Deferred Effective Dates

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule sets forth the air quality designations and classifications for every area in the United States, including Indian country, for the 8-hour ozone national ambient air quality standard. We are issuing this rule so that citizens will know whether the air where they live and work is healthful or unhealthful and to establish the boundaries and classifications for areas designated as nonattainment. Children are at risk when exposed to ozone pollution because their lungs are still developing, people with existing respiratory disease are at risk, and even healthy people who are active outdoors can experience difficulty breathing when exposed to ozone pollution. In this document, EPA is also promulgating the first deferral of the effective date, to September 30, 2005, of the nonattainment designation for Early Action Compact areas that have met all milestones through March 31, 2004. Finally, we are inviting States to submit by July 15, 2004, requests to reclassify areas if their design value falls within five percent of a high or lower classification. This rule does not establish or address State and Tribal obligations for planning and control requirements which apply to nonattainment areas for the 8-hour ozone standard. Two separate rules, one of which is also published today, set forth the planning and control requirements which apply to nonattainment areas for this standard. The second rule will be published at a later date.

EFFECTIVE DATE: This final rule is effective on June 15, 2004.

ADDRESSES: EPA has established dockets for this action under Docket ID No. OAR–2003–0083 (Designations) and OAR–2003–0090 (Early Action Compacts). All documents in the docket are listed in the EDOCKET index at *http://www.epa.gov/edocket.* Although listed in the index, some information is not publicly available, *i.e.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at the Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m. Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Office of Air and Radiation Docket and Information Center is (202) 566–1742. In addition, we have placed a copy of the rule and a variety of materials regarding designations on EPA's designation Web site at: *http://www.epa.gov/oar/oaqps/glo/designations* and on the Tribal Web site at: *http://www.epa.gov/air/tribal.* Materials relevant to Early Action Compact (EAC) areas are on EPA's Web site at: *http://www.epa.gov/ttn/naaqs/ozone/eac/w1040218_eac_resources.pdf.* In addition, the public may inspect the rule and technical support at the following locations.

Regional offices	States
Dave Conroy, Acting Branch Chief, Air Programs Branch, EPA New England, I Congress Street, Suite 1100, Boston, MA 02114–2023, (617) 918–1661.	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
Raymond Werner, Chief, Air Programs Branch, EPA Region II, 290 Broadway, 25th Floor, New York, NY 10007–1866, (212) 637–4249.	New Jersey, New York, Puerto Rico, and Virgin Islands.
Makeba Morris, Branch Chief, Air Quality Planning Branch, EPA Region III, 1650 Arch Street, Philadelphia, PA 19103–2187, (215) 814–2187.	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.
Richard A. Schutt, Chief, Regulatory Development Section, EPA Region IV, Sam Nunn Atlanta Federal Center, 61 Forsyth Street, SW., 12th Floor, Atlanta, GA 30303, (404) 562–9033.	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
Pamela Blakley, Acting Chief, Air Programs Branch, EPA Region V, 77 West Jackson Street, Chicago, IL 60604, (312) 886–4447.	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
Donna Ascenzi, Acting Associate Director, Air Programs, EPA Region VI, 1445 Ross Avenue, Dallas, TX 75202, (214) 665–2725.	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
Joshua A. Tapp, Chief, Air Programs Branch, EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101–2907, (913) 551–7606.	Iowa, Kansas, Missouri, and Nebraska.
Richard R. Long, Director, Air and Radiation Program, EPA Region VIII, 999 18th Street, Suite 300, Denver, CO 80202–2466, (303) 312–6005.	Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
Steven Barhite, Air Planning Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972–3980.	Arizona, California, Guam, Hawaii, and Nevada.
Bonnie Thie, Manager, State and Tribal Air Programs, EPA Region X, Office of Air, Waste, and Toxics, Mail Code OAQ–107, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553–1189.	Alaska, Idaho, Oregon, and Washington.

FOR FURTHER INFORMATION CONTACT: Ms. Sharon Reinders, Designations, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–02, Research Triangle Park, NC 27711, phone number (919) 541–5284 or by e-mail at: *reinders.sharon@epa.gov.*

Ms. Annie Nikbakht, Part 81 Code of Federal Regulations, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–02, Research Triangle Park, NC 27711, phone number (919) 541–5246 or by e-mail at: *nikbakht.annie@epa.gov.*

Mr. Doug Grano, Classifications, Office of Air Quality Planning and

Standards, U.S. Environmental Protection Agency, Mail Code C539–02, Research Triangle Park, NC 27711, phone number (919) 541–3292 or by e-mail at: *grano.doug@epa.gov.*

Mr. David Cole, Early Action Compacts, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–02, Research Triangle Park, NC 27711, phone number (919) 541–5565 or by e-mail at: *cole.david@epa.gov.*

Mr. Barry Gilbert, Technical Issues, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–02, Research Triangle Park, NC 27711, phone number (919) 541–5238 or by e-mail at: *gilbert.barry@epa.gov.*

SUPPLEMENTARY INFORMATION:

Table of Contents

The following is an outline of the preamble.

I. Preamble Glossary Of Terms And Acronyms

The following are abbreviations of terms used in the preamble.

CAA—Clean Air Act
CFR—Code of Federal Regulations
CBI—Confidential Business Information
CMAQ—Congestion Mitigation Air Quality
CMSA—Consolidated Metropolitan Statistical Area
D.C.—District of Columbia
EAC—Early Action Compact or Compact
EPA—Environmental Protection Agency or Agency
FR—Federal Register
MPO—Metropolitan Planning Organization
MSA—Metropolitan Statistical Area
NAAQS—National Ambient Air Quality Standard or Standard
NO_x—Nitrogen Oxides
NOA—Notice of Availability
NPR—Notice of Proposed Rulemaking
NSR—New Source Review
OMB—Office of Management and Budget
PPM—Parts Per Million
RFG—Reformulated Fuel
RTC—Response to Comment
SIP—State Implementation Plan
TAR—Tribal Authority Rule
TEA–21—Transportation Equity Act for the 21st Century
TPY—Tons Per Year
TSD—Technical Support Document
U.S.—United States
VOC—Volatile Organic Compounds

II. What Is the Purpose of This Document?

The purpose of this document is to announce and promulgate designations, classifications, and boundaries for areas of the country with respect to the 8-hour ground-level ozone National Ambient Air Quality Standard (NAAQS) in accordance with the requirements of the CAA. We took several steps to announce that this rule was available. We posted the rule on several EPA Web sites and provided a copy of the rule, which was signed by the Administrator on April 15, 2004, to States and Tribes.

III. How Is Ground-Level Ozone Formed?

Ground-level ozone (sometimes referred to as smog) is formed by the reaction of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) in the atmosphere in the presence of sunlight. These two pollutants, often referred to as ozone precursors, are emitted by many types of pollution sources, including on-road and off-road motor vehicles and engines, power plants and industrial facilities, and smaller sources, collectively referred to as area sources. Ozone is predominately a summertime air pollutant. Changing weather patterns contribute to yearly differences in ozone concentrations from region to region. Ozone and the pollutants that form ozone also can be transported into an area from pollution sources found hundreds of miles upwind.

IV. What Are the Health Concerns Addressed by the 8-Hour Ozone Standard?

During the hot summer months, ground-level ozone reaches unhealthy levels in several parts of the country. Ozone is a significant health concern, particularly for children and people with asthma and other respiratory diseases. Ozone has also been associated with increased hospitalizations and emergency room visits for respiratory causes, school absences, and reduced activity and productivity because people are suffering from ozone-related respiratory symptoms.

Breathing ozone can trigger a variety of health problems. Ozone can irritate the respiratory system, causing coughing, throat irritation, an uncomfortable sensation in the chest, and/or pain when breathing deeply. Ozone can worsen asthma and possibly other respiratory diseases, such as bronchitis and emphysema. When ozone levels are high, more people with asthma have attacks that require a doctor's attention or the use of additional medication. Ozone can reduce lung function and make it more difficult to breathe deeply, and breathing may become more rapid and shallow than normal, thereby limiting a person's normal activity. In addition, breathing ozone can inflame and damage the lining of the lungs, which may lead to permanent changes in lung tissue, irreversible reductions in lung function, and a lower quality of life if the inflammation occurs repeatedly over a long time period (months, years, a lifetime). People who are particularly

susceptible to the effects of ozone include children and adults who are active outdoors, people with respiratory disease, such as asthma, and people with unusual sensitivity to ozone.

More detailed information on the health effects of ozone can be found at the following Web site: *http://www.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html.*

V. What Is the Chronology of Events Leading Up to This Rule?

This section summarizes the relevant activities leading up to today's rule, including promulgation of the 8-hour ozone NAAQS and litigation challenging that standard. The CAA establishes a process for air quality management through the NAAQS. Area designations are required after promulgation of a new or revised NAAQS. In 1979, we promulgated the 0.12 parts per million (ppm) 1-hour ozone standard, (44 **Federal Register** 8202, February 8, 1979). On July 18, 1997, we promulgated a revised ozone standard of 0.08 ppm, measured over an 8-hour period, *i.e.*, the 8-hour standard (62 FR 38856). The 8-hour standard is more protective of public health and more stringent than the 1-hour standard. The NAAQS rule was challenged by numerous litigants and in May 1999, the U.S. Court of Appeals for the D.C. Circuit issued a decision remanding, but not vacating, the 8-hour ozone standard. Among other things, the Court recognized that EPA is required to designate areas for any new or revised NAAQS in accordance with the CAA and addressed a number of other issues, which are not related to designations. *American Trucking Assoc.* v. *EPA*, 175 F.3d 1027, 1047–48, *on rehearing* 195 F.3d 4 (D.C. Cir., 1999). We sought review of two aspects of that decision in the U.S. Supreme Court. In February 2001, the Supreme Court upheld our authority to set the NAAQS and remanded the case back to the D.C. Circuit for disposition of issues the Court did not address in its initial decision. *Whitman* v. *American Trucking Assoc.*, 121 S. Ct. 903, 911–914, 916–919 (2001) (Whitman). The Supreme Court also remanded the 8-hour implementation strategy to EPA. In March 2002, the D.C. Circuit rejected all remaining challenges to the 8-hour ozone standard. *American Trucking Assoc.* v. *EPA*, 283 F.3d 355 (D.C. Cir. 2002).

The process for designations following promulgation of a NAAQS is contained in section 107(d)(1) of the CAA. For the 8-hour NAAQS, the Transportation Equity Act for the 21st Century (TEA–21) extended by 1 year the time for EPA to designate areas for the 8-hour NAAQS.[1] Thus, EPA was required to designate areas for the 8-hour NAAQS by July 2000. However, HR3645 (EPA's appropriation bill in 2000) restricted EPA's authority to spend money to designate areas until June 2001 or the date of the Supreme Court ruling on the standard, whichever came first. As noted earlier, the Supreme Court decision was issued in February 2001. In 2003, several environmental groups filed suit in district court claiming EPA had not met its statutory obligation to designate areas for the 8-hour NAAQS. We entered into a consent decree, which requires EPA to issue the designations by April 15, 2004.

VI. What Are the Statutory Requirements for Designating Areas and What Is EPA's Policy and Guidance for Determining Nonattainment Area Boundaries for the 8-Hour Ozone NAAQS?

This section describes the statutory definition of nonattainment and EPA's guidance for determining air quality attainment and nonattainment areas for the 8-hour ozone NAAQS. In March 2000[2] and July 2000[3] we issued designation guidance on how to determine the boundaries for nonattainment areas. In that guidance, we rely on the CAA definition of a nonattainment area that is defined in section 107(d)(1)(A)(i) as an area that is violating an ambient standard or is contributing to a nearby area that is violating the standard. If an area meets this definition, EPA is obligated to designate the area as nonattainment.

In making designations and classifications, we use the most recent 3 years of monitoring data.[4] Therefore, today's designations and classifications are generally based on monitoring data collected in 2001–2003 although other relevant years of data may have been used in certain circumstances. Once we determine that a monitor is recording a violation, the next step is to determine if there are any nearby areas that are contributing to the violation and include them in the designated nonattainment area.

For guidance on determining the nonattainment boundary for the 8-hour ozone standard, we look to CAA section 107(d)(4) that established the Consolidated Metropolitan Statistical Area (CMSA) or Metropolitan Statistical Area (MSA) presumptive boundary for more polluted areas when we promulgated our designation actions in 1991 for the 1-hour ozone standard. In our guidance on determining nonattainment area boundaries for the 8-hour ozone standard, we advised States that if a violating monitor is located in a CMSA or MSA (as defined by the Office of Management and Budget (OMB) in 1999), the larger of the 1-hour ozone nonattainment area or the CMSA or MSA should be considered in determining the boundary of a nonattainment area. The actual size of the nonattainment area may be larger or smaller, depending on air quality-related technical factors contained in our designation guidance. We start with counties in the CMSA or MSA because that area, defined by OMB, generally shares economic, transportation, population and other linkages that are similar to air quality related factors that produce ozone pollution. Also, many CMSAs and MSAs generally are associated with higher levels of ozone concentrations and ozone precursor emissions than areas that are not in or near CMSAs or MSAs.

In June 2003, OMB released a new list of statistical areas. This release was so late in the designation process that we determined that it would be disruptive and unfair to the States and Tribes to revise our guidance. However, we believe it is necessary to evaluate all counties in and around an area containing a monitor that is violating the standard, pursuant to our guidance to consider nearby areas that are contributing to a violation in determining the boundaries of the nonattainment area.

Once a CMSA, MSA or single county area is determined to contain a monitor that is violating the standard, the area can be evaluated using all applicable suggested air quality related factors in our guidance. The factors can be used to justify including counties outside the CMSA or MSA or excluding counties in the CMSA or MSA. The factors were compiled based on our experience in designating areas for the ozone standard in March 1978 and November 1991 and by looking to the CAA, section 107(d)(4), which states that the Administrator and the Governor shall consider factors such as population density, traffic congestion, commercial

[1] CAA 107(d)(1); TEA–21 § 6103(a).

[2] Memorandum of March 28, 2002, from John S. Seitz, "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards."

[3] Memorandum of July 18, 2000, from John S. Seitz, "Guidance on 8-Hour Ozone Designations for Indian Tribes."

[4] To determine whether an area is attaining the 8-hour ozone NAAQS, EPA considers the most recent 3 consecutive years of data in accordance with 40 Code of Federal Regulations (CFR) part 50, appendix I.

development, industrial development, meteorological conditions, and pollution transport. State and local agencies also had extensive input into compiling the factors.

The factors are:

(1) Emissions and air quality in adjacent areas (including adjacent CMSAs and MSAs),

(2) Population density and degree of urbanization including commercial development (significant difference from surrounding areas),

(3) Monitoring data representing ozone concentrations in local areas and larger areas (urban or regional scale),

(4) Location of emission sources (emission sources and nearby receptors should generally be included in the same nonattainment area),

(5) Traffic and commuting patterns,

(6) Expected growth (including extent, pattern and rate of growth),

(7) Meteorology (weather/transport patterns),

(8) Geography/topography (mountain ranges or other air basin boundaries),

(9) Jurisdictional boundaries (*e.g.*, counties, air districts, existing 1-hour nonattainment areas, Reservations, etc.),

(10) Level of control of emission sources, and,

(11) Regional emissions reductions (*e.g.*, NO_X State Implementation Plan (SIP) Call or other enforceable regional strategies).

When evaluating the air quality factors for individual areas, we took into account our view that data recorded by an ozone air quality monitor in most cases represents air quality throughout the area in which it is located. In addition, we used the county (or in the case of parts of New England, the township) as the basic jurisdictional unit in determining the extent of the area reflected by the ozone monitor data. As a result, if an ozone monitor was violating the standard based on the 2001–2003 data, we designated the entire county as nonattainment. There were some exceptions to this rule: in cases where a county was extremely large as in the West; where a geographic feature bifurcated a county, leading to different air quality in different parts of the county; and where a mountain top monitor reflected the air quality data only on the mountain top and not in lower elevation areas.

After identifying the counties with violating monitors, we then determined which nearby counties were not monitoring violations but were nonetheless contributing to the nearby violation. We considered each of the 11 factors in making our contribution assessment, including emissions, traffic patterns, population density, and area growth. In some cases, in considering these factors, as well as information and recommendations provided by the State, we determined that only part of a county was contributing to the nearby nonattainment area. In addition, in certain cases, we determined that a county without an ozone monitor should be designated nonattainment because contiguous counties have monitors that are violating the standard. In at least two instances, we determined that a part of a county with no monitor, but with a large emission source that did not have state-of-the-art controls, contributes to a nearby violation. In some instances, if a State had requested that we continue to use the 1-hour ozone nonattainment boundary for an area, we continued to use that boundary in determining the size of the 8-hour nonattainment area.

The EPA cannot rely on planned ozone reduction strategies in making decisions regarding nonattainment designations, even if those strategies predict that an area may attain in the future. We recognize that some areas with a violating monitor may come into attainment in the future without additional local emission controls because of State and/or national programs that will reduce ozone transport. While we cannot consider these analyses in determining designations, we intend to expedite the redesignation of the areas to attainment once they monitor clean air. We also intend to apply our policy which streamlines the planning process for nonattainment areas that are meeting the NAAQS.[5]

We believe that area-to-area variations must be considered in determining whether to include a county as contributing to a particular nonattainment problem. Thus, our guidance does not establish cut-points for how a particular factor is applied, *e.g.*, it does not identify a set amount of VOC or NO_X emissions or a specific level of commuting population that would result in including a county in the designated nonattainment area. For example, a county with a large source or sources of NO_X emissions may be considered as a contributing county if it is upwind, rather than downwind, of a violating monitor. Additionally, a county with VOC emissions of 5,000 tons per year (tpy) might be viewed differently if the total VOC emissions of the area are 15,000 tpy rather than 30,000 tpy. We analyzed the information provided by each State or Tribe in its recommendation letter, or subsequently submitted, along with any other pertinent information available to EPA, to determine whether a county should be designated nonattainment. We evaluated each State or Tribal designation recommendation in light of the 11 factors, bringing to bear our best technical and policy judgement. If the result of the evaluation is that a county, whether inside or outside of the CMSA or MSA, is contributing to the violation, we designated the area as nonattainment.

[5] Memorandum of May 10, 1995, from John S. Seitz, "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard."

VII. What Are the CAA Requirements for Air Quality Designations and What Actions Has EPA Taken To Meet the Requirements?

In this part, we summarize the provisions of section 107(d)(1) of the CAA that govern the process States and EPA must undertake to recommend and promulgate designations. Following promulgation of a standard, each State Governor or Tribal leader has an opportunity to recommend air quality designations, including appropriate boundaries, to EPA. No later than 120 days prior to promulgating designations, we must notify States or Tribes if we intend to make modifications to their recommendations and boundaries as we deem necessary. States and Tribes then have an opportunity to provide a demonstration as to why the proposed modification is inappropriate. Whether or not a State or Tribe provides a recommendation, EPA must promulgate the designation it deems appropriate.

In June 2000, we asked each State and Tribal Governor or Tribal leader to submit their designation recommendations and supporting documentation to EPA. Because of the uncertainties due to the ongoing litigation on the ozone standard, we did not notify States and Tribes of any intended modifications and did not designate areas at that time. After the legal challenges to the ozone NAAQS were resolved, we requested that States and Tribes provide updated recommendations and any additional supporting documentation by July 15, 2003. EPA published a Notice of Availability (NOA) announcing the availability of the State and Tribal recommendations in the FR on September 8, 2003 (68 FR 52933). After carefully evaluating each recommendation and the supporting documentation, on December 3, 2003, we wrote a letter to each State and Tribe notifying them if we intended to make a modification to their recommendation and indicating the area with which we agreed with their recommendation. We

provided an opportunity until February 6, 2004, for a demonstration as to why our modification was not appropriate. A NOA announcing the availability of our letters was published in the FR on December 10, 2003 (68 FR 68805). In response to our December 3, 2003 letters, we received letters and demonstrations from many States and Tribes on why our modifications were not appropriate. We evaluated each letter and all of the timely technical information provided to us before arriving at the final decisions reflected in today's rule. Some of the designations reflect our modifications to the State or Tribes' recommendations. Throughout the designation process, we have received letters from other interested parties. We have placed these letters and our responses to the substantive issues raised by them in the docket. Responses to significant comments received on EAC areas are summarized in this document.

Tribal designation activities are covered under the authority of section 301(d) of the CAA. This provision of the Act authorizes us to treat eligible Indian Tribes in the same manner as States. Pursuant to section 301(d)(2), we promulgated regulations known as the Tribal Authority Rule (TAR) on February 12, 1999, that specify those provisions of the CAA for which it is appropriate to treat Tribes as States, (63 FR 7254), codified at 40 CFR part 49 (1999). Under the TAR, Tribes may choose to develop and implement their own CAA programs, but are not required to do so. The TAR also establishes procedures and criteria by which Tribes may request from EPA a determination of eligibility for such treatment. The designations process contained in section 107(d) of the CAA is included among those provisions determined appropriate by us for treatment of Tribes in the same manner as States. As authorized by the TAR, Tribes may request an opportunity to submit designation recommendations to us. In cases where Tribes do not make their own recommendations, EPA, in consultation with the Tribes, will promulgate the designation we deem appropriate on their behalf. We invited all Tribes to submit recommendations to us. We worked with the Tribes that requested an opportunity to submit designation recommendations. Eligible Tribes could choose to submit their own recommendations and supporting documentation. We reviewed the recommendations made by Tribes and, in consultation with the Tribes, made modifications as deemed necessary. Under the TAR, Tribes generally are not subject to the same submission schedules imposed by the CAA on States. However, we worked with Tribes in scheduling interim activities and final designation actions because of the consent decree obligating us to have a signed rule designating areas by April 15, 2004.

Today's designation action is a final rule establishing designations for all areas of the country. Today's action also sets forth the classifications for subpart 2 ozone nonattainment areas. Section 181(a) provides that areas will be classified at the time of designation. This rulemaking fulfills those requirements. Classifications are discussed below.

A. Where Can I Find Information Forming the Basis for This Rule and Exchanges Between EPA, States, and Tribes Related to This Rule?

Discussions concerning the basis for today's actions and decisions are provided in the technical support document (TSD). The TSD, along with copies of all of the above mentioned correspondence, other correspondence between the States, Tribes, interested parties, and EPA regarding this process and guidance memoranda are available for review in the EPA Docket Center listed above in the addresses section of this document and on our designation Web site at: *http://www.epa.gov/oar/oaqps/glo/designations*. State specific information is available at the EPA Regional Offices.

VIII. What Are the CAA Requirements for Air Quality Classifications?

The CAA contains two sets of provisions—subpart 1 and subpart 2—that address planning and control requirements for nonattainment areas. (Both are found in title I, part D.) Subpart 1 (which we refer to as "basic" nonattainment contains general, less prescriptive, requirements for nonattainment areas for any pollutant—including ozone—governed by a NAAQS. Subpart 2 (which we refer to as "classified" nonattaiment) provides more specific requirements for ozone nonattainment areas.[6] Some areas will be subject only to the provisions of subpart 1. Other areas will be subject to the provisions of subpart 2. Section 172(a)(1) provides that EPA has the discretion to classify areas subject only to subpart 1. Under subpart 2, areas will be classified based on each area's design value. Control requirements are linked to each classification. Areas with more serious ozone pollution are subject to more prescribed requirements. The requirements are designed to bring areas into attainment by their specified attainment dates.

Under our 8-hour ozone implementation rule, signed on April 15, 2004, an area will be classified under subpart 2 based on its 8-hour design value[7] if it has a 1-hour design value at or above 0.121 ppm (the lowest 1-hour design value in Table 1 of subpart 2). All other areas will be covered under subpart 1. Section 172(a)(1) provides EPA with discretion whether to classify areas under subpart 1 and we are not classifying subpart 1 areas, with one exception. As noted in EPA's final rule on implementing the 8-hour ozone standard (Phase 1 implementation rule), we are creating an overwhelming transport classification that will be available to subpart 1 areas that demonstrate they are affected by overwhelming transport of ozone and its precursors and demonstrate they meet the definition of a rural transport area in section 182(h). No subpart 1 areas are being classified in today's action; however, for informational purposes, 8-hour ozone nonattainment areas covered under subpart 1 are identified as such in the classification column in 40 CFR part 81.

Any area with a 1-hour ozone design value (based on the most recent 3 years of data) that meets or exceeds the statutory level of 0.121 ppm that Congress specified in Table 1 of section 181 is classified under subpart 2 and is subject to the control obligations associated with its classification.[8] Subpart 2 areas are classified as marginal, moderate, serious, or severe based on the area's 8-hour design value calculated using the most recent 3 years of data.[9] As described in the Phase 1 implementation rule, since Table 1 is based on 1-hour design values, we promulgated in that rule a regulation translating the thresholds in Table 1 of section 181 from 1-hour values to 8-hour values. (*See* Table 1, below, "Classification for 8-Hour NAAQS" from 40 CFR 51.903.)

[6] State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990; Proposed Rule." April 16, 1992 (57 FR 13498 at 13501 and 13510).

[7] For the 1-hour ozone NAAQS, design value is defined at 40 CFR 51.900(c). For the 8-hour ozone NAAQS, design value is defined at 40 CFR 51.900(d).

[8] In the Phase 2 implementation rule, we will address the control obligations that apply to areas under both subpart 1 and subpart 2.

[9] At this time, there are no areas with design values in the extreme classification for the 8-hour ozone standard.

TABLE 1.—CLASSIFICATION FOR 8-HOUR OZONE NAAQS

Area class		8-hour design value ppm ozone)	Maximum period for Attainment dates in State plans (years after effective date of nonattainment designation for 8-hour NAAQS)
Marginal	from	0.085	3
	up to*	0.092	
Moderate	from	0.092	6
	up to*	0.107	
Serious	from	0.107	9
	up to*	0.120	
Severe-15	from	0.120	15
	up to*	0.127	
Severe-17	from	0.127	17
	up to*	0.187	
Extreme	equal to or above	0.187	20

*But not including.

Five Percent Bump Down

Under section 181(a)(4), an ozone nonattainment area may be reclassified "if an area classified under paragraph (1) (Table 1) would have been classified in another category if the design value in the area were 5 percent greater or 5 percent less than the level on which such classification was based." The section also states that "In making such adjustment, the Administrator may consider the number of exceedances of the national primary ambient air quality standard for ozone in the area, the level of pollution transport between the area and other affected areas, including both intrastate and interstate transport, and the mix of sources and air pollutants in the area.

As noted in the November 6, 1991, FR on designating and classifying areas, the section 181(a)(4) provisions grant the Administrator broad discretion in making or determining not to make, a reclassification (56 FR 56698). As part of the 1991 action, EPA developed criteria (*see* list below) to evaluate whether it is appropriate to reclassify a particular area. In 1991, EPA approved reclassifications when the area met the first requirement (a request by the State to EPA) and at least some of the other criteria and did not violate any of the criteria (emissions, reductions, trends, etc.). We intend to use this method and these criteria once again to evaluate reclassification requests under section 181(a)(4), with the minor changes noted below. Because section 181(b)(3) provides that an area may request a higher classification and EPA must grant it, these criteria primarily focus on how we will assess requests for a lower classification. We further discuss bump ups below.

Request by State: The EPA does not intend to exercise its authority to bump down areas on EPA's own initiative. Rather, EPA intends to rely on the State to submit a request for a bump down. A Tribe may also submit such a request and, in the case of a multi-state nonattainment area, all affected States must submit the reclassification request.

Discontinuity: A five percent reclassification must not result in an illogical or excessive discontinuity relative to surrounding areas. In particular, in light of the area-wide nature of ozone formation, a reclassification should not create a "donut hole" where an area of one classification is surrounded by areas of higher classification.

Attainment: Evidence should be available that the proposed area would be able to attain by the earlier date specified by the lower classification in the case of a bump down.

Emissions reductions: Evidence should be available that the area would be very likely to achieve the appropriate total percent emission reduction necessary in order to attain in the shorter time period for a bump down.

Trends: Near- and long-term trends in emissions and air quality should support a reclassification. Historical air quality data should indicate substantial air quality improvement for a bump down. Growth projections and emission trends should support a bump down. In addition, we will consider whether vehicle miles traveled and other indicators of emissions are increasing at higher than normal rates.

Years of data: For the 8-hour ozone standard, the 2001–2003 period is central to determining classification. This criterion has been updated to reflect the latest air quality data available to make the determinations within the statute's 90 day limitation.

Limitations on Bump Downs

An area may only be reclassified to the next lower classification. An area cannot present data from other years as justification to be reclassified to an even lower classification. In addition, section 181(a)(4) does not permit moving areas from subpart 2 into subpart 1.

The EPA applied these criteria in 1991. For example, our action to bump down one area from severe to serious considered trends in population and emissions data, similarities to a nearby serious area, disparity with a nearby moderate area, the logical gradation of attainment deadlines proceeding outward from large metropolitan areas upwind, and the likelihood that the area would be able to attain the NAAQS in the shorter time frame. In approving a bump down to marginal, we noted that air quality trends showed improvement and recent air quality data indicated a marginal status. In denying a bump down, we analyzed local air quality trends and emission sources and considered long range transport from an area with a much later attainment deadline, which together made it unlikely the candidate area could attain the standard in the shorter time frame associated with the lower classification. Requests to bump down areas were also denied due, in part, to concern that transport of emissions from these areas would make it less likely that downwind nonattainment areas could attain the standards in a timely fashion. For additional information, see section 5, "Areas requesting a 5% downshift per § 181(a)(4) and EPA's response to those requests," of the Technical Support Document, October 1991 for the 1991 rule. [Docket A–90–42A.]

Five Percent Bump Up

An ozone nonattainment area may also be reclassified under section 181(a)(4) to the next higher classification. For the reasons described below ("Other Reasons to Consider Bump Ups"), we believe some areas with design values close to the next higher classification may not be able to attain within the period allowed by their classification. We encourage States to request reclassification upward where the State finds that an area may need more time to attain than their classification would permit. In addition, EPA will consider bumping up areas subject to the five percent provision on our own initiative where there is evidence that an area is unlikely to attain within the period allowed by their classification. In making this determination, EPA would consider criteria similar to that listed above (adjusted to consider bump ups rather than bump downs) regarding discontinuity, attainment, emissions reduction and trends. The following areas have design values based on 2001–2003 data that fall within five percent of the next higher classification:

Marginal areas within five percent of Moderate

Portland, ME; Atlanta, GA; Beaumont-Port Arthur, TX; and Norfolk, VA

Moderate areas within five percent of Serious

New York-New Jersey-Long Island, NY-NJ-CT; Los Angeles-San Bernardino Counties (W. Mojave), CA; Baltimore, MD; Cleveland-Akron-Lorain, OH; and Houston-Galveston-Brazoria, TX

Serious areas within five percent of Severe-15

San Joaquin Valley, CA

Calculation of Five Percent

For an area to be eligible for a bump down (or bump up) under section 181(a)(4), the area's design value must be within five percent of the next lower (or higher) classification. For example, an area with a moderate design value of 0.096 ppm (or less) would be eligible to request a bump down because five percent less than 0.096 ppm is 0.091 ppm, a marginal design value.[10] An area with a moderate design value of 0.102 ppm (or more) would be eligible for a bump up because five percent more than 0.102 ppm is 0.107 ppm, a serious design value. As a result, the following areas may be eligible to request a bump down: moderate areas with a design value of 0.096 ppm or less; serious areas with a design value of 0.112 ppm or less; and severe-17 areas with a design value of 0.133 ppm or less. Similarly, for bump ups, the following areas may be eligible: marginal areas with a design value of 0.088 ppm or more; moderate areas with a design value of 0.102 ppm or more; and serious areas with a design value of 0.115 ppm or more.

Timing of the Five Percent Reclassifications

The notice of availability for this rule permits States to submit five percent reclassification requests within 30 days of the effective date of the designations and classifications. The effective date is June 15 which means that reclassification requests must be submitted by July 15, 2004. This relatively short time frame is necessary because section 181(a)(4) only authorizes the Administrator to make such reclassifications within 90 days after the initial classification. Thus, the Governor or eligible Tribal governing body of any area that wishes to pursue a reclassification should submit all requests and supporting documentation to the EPA Regional office by July 15, 2004. We will make a decision by September 15, 2004.

Other Reasons To Consider Bump Ups

We encourage States to consider a voluntary bump up in cases where the State finds that an area may need more time to attain the 8-hour NAAQS than its classification would permit. In addition to the reclassification provision of section 181(a)(4), a State can request a higher classification under section 181(b)(3) of the CAA. This provision directs EPA to grant a State's request for a higher classification and to publish notice of the request and EPA's approval. In addition, we are interpreting section 181(b)(3) to allow a State with an area covered under subpart 1 to request a reclassification to a subpart 2 classification.

We note that it is difficult to determine when an area will be able to attain the NAAQS in advance of State development of attainment plans. These plans are based on high-resolution local air quality modeling, refined emissions inventories, use of later air quality data, and detailed analyses of the impacts and costs of potential local control measures. As noted earlier, we are classifying nonattainment areas subject to subpart 2 based on the most recent ozone design values at the time of designation, the 2001–2003 period. Because of year-to-year variations in meteorology, this snapshot in time may not be representative of the normal magnitude of problems that some areas may face.

The EPA's analysis in the proposed Interstate Air Quality Rule (IAQR) uses design values taken from the 2000–2002 period, rather than the 2001–2003 data used in the classification process. At the time the IAQR modeling was completed, 2000–2002 was the latest period which was available for determining designation compliance with the NAAQS. Concentrations of ozone in 2010 were estimated by applying the relative change in model predicted ozone from 2001 to 2010 with the 8-hour ozone design values (2000–2002). The IAQR base case analysis (which assumes existing control requirements only) projects ozone values in 2010 for several areas—for example, Baltimore, Houston, New York and Philadelphia—that are high enough to suggest that the areas may be unable to attain by 2010, given our current information on the potential for additional controls. Yet, as a result of their classification, these areas are required to adopt a plan to attain the 8-hour ozone standard earlier than the 2010 ozone season. Atlanta has a projected 2010 ozone value much closer to the standard, but has an attainment date prior to the 2007 ozone season. Thus, the IAQR analysis, based on the 2000–2002 period, suggests that States should evaluate whether certain areas may need more time to attain. States should consider in their local air quality modeling whether an area's projected air quality level would be higher if the projection were based on different three-year base periods. While we recognize that future local analyses for specific nonattainment areas may show different results than the regional IAQR analysis, we encourage States to consider requesting a higher classification for areas that the State believes need more time to attain, especially in cases where existing modeling analysis and information on potential controls suggests more time is needed than their classification would permit.

IX. What Action Is EPA Taking To Defer the Effective Date of Nonattainment Designations for EAC Areas?

This section discusses EPA's final action with respect to deferring the effective date of nonattainment designations for areas of the country that do not meet the 8-hour ozone NAAQS and are participating in the EAC program. By December 31, 2002, we entered into compacts with 33 communities. To receive this deferral, these EAC areas have agreed to reduce ground-level ozone pollution earlier

[10] See EPA's "Guideline on Data Handling Conventions for the 8-Hour Ozone NAAQS" (12–98) and appendix I to 40 CFR part 50.

than the CAA would require. This final rule for compact areas addresses several key aspects of the proposed rule, including deferral of the effective date of nonattainment designation for certain compact areas; progress of compact areas toward completing their milestones; final action for compact areas; EPA's schedule for taking further action to continue to defer the effective date of nonattainment designations, if appropriate; and consequences for compact areas that do not meet a milestone. In this action, we have added regulatory text to clarify specific requirements in part 81 for compact areas and to identify actions that we will take to address any failed milestones. Finally, we have responded to the significant comments on the proposed rule.

A. When Did EPA Propose the First Deferred Effective Date of Nonattainment Designations?

On December 16, 2003 (68 FR 70108), we published a proposed rule to defer the effective date of air quality nonattainment designations for EAC areas that do not meet the 8-hour ozone NAAQS. The proposal also described the compact approach, the requirements for areas participating in the program, and the impacts of the program on these areas. Compact areas have agreed to reduce ground-level ozone pollution earlier than the CAA would require. Please refer to the proposed rule for a detailed discussion and background information on the development of the compact program, what compact areas are required to do, and the impacts of the program.

Table 2 describes the milestones and submissions that compact areas are required to complete to continue eligibility for a deferred effective date of nonattainment designation for the 8-hour ozone standard.

TABLE 2.—EARLY ACTION COMPACT MILESTONES

Submittal date	Compact milestone
December 31, 2002	Submit Compact for EPA signature.
June 16, 2003	Submit preliminary list and description of potential local control measures under consideration.
March 31, 2004	Submit complete local plan to State (includes specific, quantified and permanent control measures to be adopted).
December 31, 2004	State submits adopted local measures to EPA as a SIP revision that, when approved, will be federally enforceable.
2005 Ozone Season (or no later than December 31, 2005).	Implement SIP control measures.
June 30, 2006	State reports on implementation of measures and assessment of air quality improvement and reductions in NO_X and VOC emissions to date
December 31, 2007	Area attains 8-hour ozone NAAQS.

B. What Progress Are Compact Areas Making Toward Completing Their Milestones?

In this section we describe the status of the compact areas' progress toward meeting their compact milestones. In general, these areas have made satisfactory progress toward timely completion of their milestones. As reported in the December 16, 2003 proposal, all 33 communities met the June 16, 2003 milestone, which required areas to submit a list and description of local control measures each area considered for adoption and implementation. A compiled list, as well as highlights, of these local measures is found on EPA's Web site for compact areas at *http://www.epa.gov/ttn/ naaqs/ozone/eac/index.htm#EACsummary.* By December 31, 2003, compact areas reported the status of these measures by identifying the local measures still under consideration at that time, the estimated emissions reductions expected from these measures, and the schedule for implementation. A summary of the local measures as reported in December 2003 is presented on EPA's EAC Web site at *http://www.epa.gov/ttn/ naaqs/ozone/eac/20031231_eac_measures_full_list.pdf.*

By March 31, 2004, compact areas submitted local plans, which included measures for adoption that are specific, quantified, and permanent, and if approved by EPA, will be federally enforceable as part of the SIP. These plans also included specific implementation dates for the local controls, as well as a technical assessment of whether the area could attain the 8-hour ozone NAAQS by the December 31, 2007 milestone, which is described in Table 2. The local plans for all compact areas are posted on the EAC Web site at: *http://www.epa.gov/ttn/naaqs/ozone/eac/#List.*

The EPA reviewed all of the local plans submitted by March 31, 2004 and determined that most of the plans were acceptable. With respect to control strategies, a number of areas are relying on measures to be adopted by the State, and are committed to implement these measures by 2005. In many cases, particularly in the southeast, the MAC areas demonstrated that they can attain the 8-hour ozone standard by December 2007 without implementation of local controls. In general, the technical demonstrations of attainment were acceptable; however, some of the 33 communities did not project attainment in 2007 (the attainment test) based on modeling, unless they considered additional factors to supplement their analysis (*i.e.*, weight of evidence). In evaluating a State's weight of evidence determination for an area, we consider the results of the modeled, attainment test—for all EAC areas, a demonstration of attainment in 2007—along with additional information, such as predicted air quality improvement, meteorological influences, and additional measures not modeled. Our modeling guidance indicates that the farther an area is from the level of the standard, the more compelling the additional information needs to be in order to demonstrate that the area will attain the standard. Based on our analysis of the technical information provided, we believe that some areas did not present as strong a case as other areas to demonstrate attainment by December 2007. Three areas in Tennessee, Knoxville, Memphis and Chattanooga each developed attainment demonstrations that generally conform to our modeling guidance. However, in reviewing and analyzing the local plans for these areas, we determined that Knoxville, Memphis and Chattanooga did not pass the modeled attainment test and the predicted air quality improvement test. In addition, our review of meteorological influences for the three areas was inconclusive; and these areas did not provide additional measures not already modeled. In

addition to the technical analysis, we reviewed the strength of the control strategies each EAC area proposed in their March 31, 2004 plans. We determined that the control measures submitted by these three areas could have been strengthened, and the Agency expected more local measures. Therefore, EPA determined that the States' technical assessments for each of these areas and their suite of measures were not acceptable. The only other two compact areas that did not pass the modeled attainment test, the Denver, Colorado area and the Triad (Greensboro-Winston-Salem-High Point), North Carolina area, provided more meaningful local control measures than the three Tennessee compact areas.

Based on our review and evaluation of these local plans, we have determined that Knoxville, Memphis and Chattanooga do not meet the March 31, 2004 milestone. In accordance with the Early Action Protocol and agency guidance, all EAC areas must meet all compact milestones, including this most recent one, to be eligible for the deferred effective date of designation. Consequently, today, these three areas are being designated nonattainment, effective June 15, 2004, and are subject to full planning requirements of title I, part D of the CAA. For the other EAC areas not meeting the 8-hour ozone standard, which we determined have complied with the March 2004 milestone, are being designated nonattainment with a deferred effective date of September 30, 2005. By that date, we intend to take notice and comment rulemaking and promulgate approval or disapproval of these plans as SIP revisions. The local plans that are approved at that time will be eligible for an extension of the deferred effective date. If EPA disapproves any local plans at that time, the nonattainment designation will become effective immediately. Our evaluations of all local plans submitted by March 31, 2004, are included in the TSD for this rulemaking.

Table 3 lists the EAC areas and their air quality designation for the 8-hour ozone standard by county. The table in Part 81 lists 8-hour ozone designations for all areas of the country.

TABLE 3.—DESIGNATION OF COUNTIES PARTICIPATING IN EARLY ACTION COMPACTS

State	Compact area (designated area)	County	Designation	Effective date
		EPA Region 3		
VA	Northern Shenandoah Valley Region (Frederick County, VA), adjacent to Washington, DC–MD–VA.	Winchester City	Nonattainment-deferred	9/30/2005
		Frederick County	Nonattainment-deferred	9/30/2005
VA	Roanoke Area (Roanoke, VA)	Roanoke County	Nonattainment-deferred	9/30/2005
		Botetourt County	Nonattainment-deferred	9/30/2005
		Roanoke City	Nonattainment-deferred	9/30/2005
		Salem City	Nonattainment-deferred	9/30/2005
MD	Washington County (Washington County (Hagerstown), MD), adjacent to Washington, DC–MD–VA.	Washington County	Nonattainment-deferred	9/30/2005
WV	The Eastern Pan Handle Region (Berkeley & Jefferson Counties, WV), Martinsburg area.	Berkeley County	Nonattainment-deferred	9/30/2005
		Jefferson County	Nonattainment-deferred	9/30/2005
		EPA Region 4		
NC	Mountain Area of Western NC (includes Asheville).	Buncombe County	Unclassifiable/Attainment	6/15/2004
		Haywood County (part)	Unclassifiable/Attainment	6/15/2004
		Henderson County (opt out)[1]	Unclassifiable/Attainment	6/15/2004
		Madison County	Unclassifiable/Attainment	6/15/2004
		Transylvania County (opt out)[1]	Unclassifiable/Attainment	6/15/2004
NC	Unifour (Hickory-Morganton-Lenoir, NC)	Catawba County	Nonattainment-deferred	9/30/2005
		Alexander County	Nonattainment-deferred	9/30/2005
		Burke County (part)	Nonattainment-deferred	9/30/2005
		Caldwell County (part)	Nonattainment-deferred	9/30/2005
NC	Triad (Greensboro-Winston-Salem-High Point, NC).	Surry County	Unclassifiable/Attainment	6/15/2004
		Yadkin County	Unclassifiable/Attainment	6/15/2004
		Randolph County	Nonattainment-deferred	9/30/2005
		Forsyth County	Nonattainment-deferred	9/30/2005
		Davie County	Nonattainment-deferred	9/30/2005
		Alamance County	Nonattainment-deferred	9/30/2005
		Caswell County	Nonattainment-deferred	9/30/2005
		Davidson County	Nonattainment-deferred	9/30/2005
		Stokes County	Unclassifiable/Attainment	6/15/2004
		Guilford County	Nonattainment-deferred	9/30/2005
		Rockingham County	Nonattainment-deferred	9/30/2005
NC	Fayetteville (Fayetteville, NC)	Cumberland County	Nonattainment-deferred	9/30/2005
SC	Appalachian—A (Greenville-Spartanburg-Anderson, SC).	Cherokee County	Unclassifiable/Attainment	6/15/2004
		Spartanburg County	Nonattainment-deferred	9/30/2005
		Greenville County	Nonattainment-deferred	9/30/2005
		Pickens County	Unclassifiable/Attainment	6/15/2004
		Anderson County	Nonattainment-deferred	9/30/2005

TABLE 3.—DESIGNATION OF COUNTIES PARTICIPATING IN EARLY ACTION COMPACTS—Continued

State	Compact area (designated area)	County	Designation	Effective date
		Oconee County	Unclassifiable/Attainment	6/15/2004
SC	Catawba—B Part of York County, SC is in the Charlotte-Gastonia-Rock Hill, NC–SC nonattainment area.	York County (part) [2]	Nonattainment	6/15/2004
		Chester County	Unclassifiable/Attainment	6/15/2004
		Lancaster County	Unclassifiable/Attainment	6/15/2004
		Union County	Unclassifiable/Attainment	6/15/2004
SC	Pee Dee—C Florence area	Florence County	Unclassifiable/Attainment	6/15/2004
		Chesterfield County	Unclassifiable/Attainment	6/15/2004
		Darlington County	Unclassifiable/Attainment	6/15/2004
		Dillon County	Unclassifiable/Attainment	6/15/2004
		Marion County	Unclassifiable/Attainment	6/15/2004
		Marlboro County	Unclassifiable/Attainment	6/15/2004
SC	Waccamaw—D Myrtle Beach area	Williamsburg County	Unclassifiable/Attainment	6/15/2004
		Georgetown County	Unclassifiable/Attainment	6/15/2004
		Horry County	Unclassifiable/Attainment	6/15/2004
SC	Santee Lynches—E Sumter area	Clarendon County	Unclassifiable/Attainment	6/15/2004
		Lee County	Unclassifiable/Attainment	6/15/2004
		Sumter County	Unclassifiable/Attainment	6/15/2004
		Kershaw County	Unclassifiable/Attainment	6/15/2004
SC	Berkeley-Charleston-Dorchester—F Charleston-North Charleston area.	Dorchester County	Unclassifiable/Attainment	6/15/2004
		Berkeley County	Unclassifiable/Attainment	6/15/2004
		Charleston County	Unclassifiable/Attainment	6/15/2004
SC	Low Country—G Beaufort area	Beaufort County	Unclassifiable/Attainment	6/15/2004
		Colleton County	Unclassifiable/Attainment	6/15/2004
		Hampton County	Unclassifiable/Attainment	6/15/2004
		Jasper County	Unclassifiable/Attainment	6/15/2004
SC/GA	Lower Savannah-Augusta part of Augusta-Aiken, GA–SC area.	Aiken County, SC	Unclassifiable/Attainment	6/15/2004
		Orangeburg County, SC	Unclassifiable/Attainment	6/15/2004
		Barnwell County, SC	Unclassifiable/Attainment	6/15/2004
		Calhoun County, SC	Unclassifiable/Attainment	6/15/2004
		Allendale County, SC	Unclassifiable/Attainment	6/15/2004
		Bamberg County, SC	Unclassifiable/Attainment	6/15/2004
		Richmond County, GA	Unclassifiable/Attainment	6/15/2004
		Columbia County, GA	Unclassifiable/Attainment	6/15/2004
SC	Central Midlands—I Columbia area	Richland County (part)	Nonattainment-deferred	9/30/2005
		Lexington County (part)	Nonattainment-deferred	9/30/2005
		Newberry County	Unclassifiable/Attainment	6/15/2004
		Fairfield County	Unclassifiable/Attainment	6/15/2004
SC	Upper Savannah Abbeville-Greenwood area	Abbeville County	Unclassifiable/Attainment	6/15/2004
		Edgefield County	Unclassifiable/Attainment	6/15/2004
		Laurens County	Unclassifiable/Attainment	6/15/2004
		Saluda County	Unclassifiable/Attainment	6/15/2004
		Greenwood County	Unclassifiable/Attainment	6/15/2004
TN/GA	Chattanooga (Chattanooga, TN–GA) County, TN.	Hamilton County, TN	Nonattainment	6/15/2004
		Meigs County, TN	Nonattainment	6/15/2004
		Marion County, TN	Unclassifiable/Attainment	6/15/2004
		Walker County, GA	Unclassifiable/Attainment	6/15/2004
		Catoosa County, GA	Nonattainment	6/15/2004
TN	Knoxville (Knoxville, TN)	Knox County	Nonattainment	6/15/2004
		Anderson County	Nonattainment	6/15/2004
		Union County	Unclassifiable/Attainment	6/15/2004
		Loudon County	Nonattainment	6/15/2004
		Blount County	Nonattainment	6/15/2004
		Sevier County	Nonattainment	6/15/2004
		Jefferson County	Nonattainment	6/15/2004
TN	Nashville (Nashville, TN)	Davidson County	Nonattainment-deferred	9/30/2005
		Rutherford County	Nonattainment-deferred	9/30/2005
		Williamson County	Nonattainment-deferred	9/30/2005
		Wilson County	Nonattainment-deferred	9/30/2005
		Sumner County	Nonattainment-deferred	9/30/2005
		Robertson County	Attainment	6/15/2004
		Cheatham County	Attainment	6/15/2004
		Dickson County	Attainment	6/15/2004
TN/AR/MS	Memphis, (Memphis, TN–AR–MS)	Shelby County, TN	Nonattainment	6/15/2004
		Tipton County, TN	Unclassifiable/Attainment	6/15/2004
		Fayette County, TN	Unclassifiable/Attainment	6/15/2004

compact area that does not meet the 8-hour ozone NAAQS and would otherwise be designated nonattainment, but has met all compact milestones through the March 31, 2004 submission.[11] We are deferring until September 30, 2005, the effective date of the 8-hour ozone nonattainment designation for these compact area counties which are listed in 40 CFR part 81 (included at the end of this document).

As described earlier in this notice, we analyzed information provided by the States to determine whether a county should be included as part of a designated nonattainment area. This information included such factors as population density, traffic congestion, meteorological conditions, and pollution transport. We analyzed the factors for each county participating in an EAC to determine whether a county should be included in the nonattainment area. Therefore, some portions of compact areas are designated unclassifiable/attainment and some are designated nonattainment.

The EAC areas that EPA is designating in today's rule as attainment for the 8-hour ozone NAAQS have agreed to continue participating in their compacts and meet their obligations on a voluntary basis. However, two of the five counties in the compact for the Mountain Area of Western North Carolina have decided to withdraw because the area is monitoring attainment. The remaining three counties are continuing to participate in the agreement.

D. What Is EPA's Schedule for Taking Further Action To Continue To Defer the Effective Date of Nonattainment Designation for Compact Areas?

As discussed in the proposed rule, prior to the time the first deferral expires, we intend to take further action to propose and, as appropriate, promulgate a second deferred effective date of the nonattainment designation for those areas that continue to fulfill all compact obligations. Prior to the time the second deferral expires, we would propose and, as appropriate, promulgate a third deferral for those areas that continue to meet all compact milestones. Before the third deferral expires shortly after December 31, 2007, we intend to determine whether the compact areas have attained the 8-hour ozone NAAQS and have met all compact milestones. By April 2008, we will issue our determination. If the area has not attained the standard, the nonattainment designation will take effect. If it has attained the standard, EPA will issue an attainment designation for the area. Any compact area that has not attained the NAAQS and has an effective nonattainment designation will be subject to full planning requirements of title I, part D of the CAA, and the area will be required to submit a revised attainment demonstration SIP within 1 year of the effective date of the designation.

E. What Action Will EPA Take if a Compact Area Does Not Meet a Milestone?

As described in the December 16, 2003 proposed rule (68 FR 70111), the compact program was based on a number of principles as described in the EAC protocol.[12] One of these principles is to provide safeguards to return areas to traditional SIP requirements for nonattainment areas should an area fail to comply with the terms of the compact. For example, if a compact area with a deferred effective date fails to meet one of the milestones, we would take steps immediately to remove the deferred effective date of its nonattainment designation.

Today, we are promulgating regulatory text, which specifies the milestones that EAC areas are required to complete to be eligible for the deferred effective date, as well as certain actions that the Administrator will take when EAC areas either comply, or do not comply, with the terms of the compact.

F. What Comments Did EPA Receive on the December 16, 2003 Proposal and on the June 2, 2003 Proposed Implementation Rule Specific to Compacts?

We received a number of comments on the proposed rule for compact areas. We have responded to the significant comments in this section. Our responses address various aspects of the compact program: (1) Legal concerns; (2) the designations process for EAC areas, including the anticipated schedule for removal of the deferred effective date of the nonattainment designation for any compact area that fails to meet a milestone; (3) concerns about the compact process; (4) transportation/fuels-related comments; and (5) need for regulatory language. Other compact-related comments not addressed in this document are included in the RTC document, which is located in the docket for this rulemaking (OAR–2003–0090) and on EPA's technical Web site for early action compacts at: *http://www.epa.gov/ttn/naaqs/ozone/eac/#RMNotices.*

In addition, we received a number of EAC-related comments on the June 2, 2003 proposal for implementing the 8-hour ozone standard. We have addressed these comments in the same EAC RTC document, which may be found at the location noted above.

1. Support for and Opposition to Early Action Compacts

Comment: Many commenters expressed support for the compact process, the goal of clean air sooner, the incentives and flexibility the program provides for encouraging early reductions of ozone-forming pollution, and the deferred effective date of nonattainment designation. However, a number of commenters opposed the EAC program. Several of these commenters expressed concern about the legality of the program and primarily about the deferral of the effective date of the nonattainment designation for these areas. Although all of these commenters were supportive of the goal of addressing proactively the public health concerns associated with ozone pollution, the commenters state that the EAC program is not authorized by the CAA. All of these commenters indicated that EPA lacks authority under the CAA to defer the effective date of a nonattainment designation. In addition, these commenters state that EPA lacks authority to enter into EACs areas and lacks authority to allow areas to be relieved of obligations under title I, part D of the CAA while these areas are violating the 8-hour ozone standard or are designated nonattainment for that standard.

Response: We continue to believe that the compact program, as designed, gives local areas the flexibility to develop their own approach to meeting the 8-hour ozone standard, provided the participating communities are serious in their commitment to control emissions from local sources earlier than the CAA would otherwise require. By involving diverse stakeholders, including representatives from industry, local and State governments, and local environmental and citizens' groups, a number of communities are discussing for the first time the need for regional cooperation in solving air quality problems that affect the health and

[11] In a few instances, some of the counties participating in EACs were determined not to be part of the nonattainment area and were designated attainment. In such cases, the effective date of the attainment designation is not deferred.

[12] "Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-hour Ozone Standard", Texas Commission on Environmental Quality (TCEQ), March 2002 (Protocol). The EPA endorsed the Protocol in a letter dated June 19, 2002, from Gregg Cooke, Administrator, EPA Region VI, to Robert Huston, TCEQ. The Prtocol was revised December 11, 2002 based on comments from EPA.

welfare of its citizens. People living in these areas that realize reductions in pollution levels sooner will enjoy the health benefits of cleaner air sooner than might otherwise occur. In today's rule we are codifying the specific requirements in part 81 of the CFR to clarify what is required of compact areas to be eligible for deferral of the effective date of their nonattainment designation and what actions EPA intends to take in response to areas that meet the milestones and areas that do not meet the milestones.

As discussed earlier in this notice, EPA and nine environmental organizations entered into a Consent Decree on March 13, 2003, which requires EPA to issue the designations by April 15, 2004. Related to that agreement, we have been discussing with these parties the actions that compact areas have committed to take to implement measures on an accelerated schedule to attain the 8-hour ozone standard by December 31, 2007. On April 5, 2004, these environmental organizations and EPA entered into a joint stipulation to modify the deadline in the consent decree. The parties agreed to extend the deadline for the effective date of designations with respect to each area which EPA determines meets the requirements of the Protocol and EPA guidance.

Comment: One commenter expressed concern about the health impact and the effect on air quality of delaying the effectiveness of nonattainment.

Response: The compact areas that are violating the standard are designated nonattainment (with deferred effective date), which means EPA is acknowledging the air quality problem of the area and the health impact on the community. However, these areas are committed to early reductions and early implementation of control measures that make sense for the local area. The Agency believes this proactive approach involving multiple, diverse stakeholders is beneficial to the citizens of the area by raising awareness of the need to adopt and implement measures that will reduce emissions and improve air quality.

2. Designations Process for Compact Areas

Comment: Several commenters expressed concern about EPA's process for designating areas that are participating in a compact. In addition, a number of commenters also were confused about the following statement in the June 2, 2003 proposed 8-hour implementation rule: "States are advised that if EPA determines that any portion of a compact area should become part of an 8-hour ozone nonattainment area, that portion would no longer be eligible for participation in the Early Action Compact, and the effective date of the nonattainment designation would not be deferred" (68 FR 32860, June 2, 2003). Some of these commenters noted that the language, as written, could be interpreted to mean if any EAC area becomes designated as nonattainment for the 8-hour ozone standard, the EAC is no longer valid. A number of commenters submitted recommendations to EPA for either including or excluding certain participating EAC counties from the designated area.

Response: In determining the boundary for the designated area, we applied the same procedure as we did for areas that are not participating in an EAC, as described elsewhere in this document. The commenters are referring to language in section VIII.A.3 of the June 2, 2003 proposed rule for implementing the 8-hour ozone standard at 68 FR 32860. At the time we entered into compact agreements with the local communities by December 2002, and at the time we proposed the 8-hour implementation rule, we had not made a decision as to which participating counties would be included in a nonattainment area. Therefore, at that time we were not able to determine the appropriate boundary for the area that would be eligible for a deferral of the effective date of nonattainment designation. We agree with the commenters that the preamble language in the proposed 8-hour implementation rule is not clear. The language was intended to be applied to a portion of a compact area that is adjacent to or part of an area that is violating the 1-hour ozone standard (or otherwise did not qualify for participation in a compact), and subsequently is designated nonattainment for the 8-hour ozone standard.

An example is the Catawba EAC, which includes York County, SC, as well as Chester, Lancaster and Union Counties, SC. York County, which has one monitor that is attaining the 8-hour standard, is in the Charlotte-Gastonia-Rock Hill MSA. We have examined all applicable air quality-related factors in our guidance and concluded that part of the county is contributing to a violation in the MSA. Based on our analysis, therefore, we are designating this county as a partial county nonattainment area, in the 8-hour ozone nonattainment area for Charlotte-Gastonia-Rock Hill. As we noted earlier, nonattainment is defined in the CAA as an area that is violating the NAAQS or is contributing to a nearby area that is violating the NAAQS. York County ranks high in population growth (25 percent) and the predicted growth from 2000 to 2010 is 12 percent, approximately 20,000 additional population. York County ranks second and third for VOC and NO_X emissions in the CMSA, and 94 percent of its population of workers drives to work within the CMSA. York County may continue in the Catawba compact along with the other three counties as a voluntary participant; however, the nonattainment portion of York County is not eligible for a deferred effective date. Moreover, because the other counties in the Charlotte-Gastonia-Rock Hill nonattainment area are not participating in the EAC process, the Charlotte area, which includes York County, is not eligible for a deferred effective date. In no way does EPA intend for the Catawba compact to be revoked. For EPA's responses to comments regarding designation and boundary issues for specific EAC areas, see the RTC document and the TSD for this rulemaking.

Comment: A number of commenters recommended that EPA clarify exactly when a compact area would be designated nonattainment if it fails to meet a milestone.

Response: Today, we have determined that a number of compact areas have met the March 31, 2004 milestone (plan of local measures); therefore, the effective date of nonattainment designation for these areas is deferred until September 30, 2005. In Table 3 we have listed the air quality designations and the effective dates for all counties participating in EACs. In addition, today, we have determined that some compact areas have not met the March 31, 2004 milestone. A discussion of our assessment of these local plans is provided elsewhere in this document. We are designating these areas as nonattainment, which is effective June 15, 2004.

In another section of this document, we are promulgating regulatory text that clarifies the actions we would take in the event a compact area does not meet subsequent milestones. We have summarized those actions below.

If an EAC area fails to meet a milestone, in accordance with our guidance, we intend to take action as soon as practicable to remove the deferral, which would trigger the effective date of the nonattainment designation. If a State fails to submit a SIP revision for a compact area, consisting of the adopted local plan and the demonstration of attainment by December 31, 2004, we intend to take

action as soon as practicable (*e.g.*, January 2005) to remove the deferral for that area, which would trigger the effective date of the nonattainment designation and, thus, also the classification, rather than letting the designation take effect automatically on September 30, 2005. The State would be required to submit a revised attainment demonstration within 1 year of the effective date of the nonattainment designation.

Assuming EPA takes rulemaking action to continue to defer the effective date of the nonattainment designation for compact areas, if a compact area fails the December 31, 2005 milestone (complete implementation of local measures), we would take action as soon as practicable (*e.g.*, by March 31, 2006) to remove the deferral which would trigger the effective date of their nonattainment designation and, thus, also their classification, rather than letting the designation take effect automatically at the next deferred date. The State would be required to submit a revised attainment demonstration within 1 year of the effective date of the nonattainment designation.

Similarly, for any area that does not meet the June 30, 2006 milestone (assessment of air quality improvement and emissions reductions from implementation of measures), we would take action as soon as practicable (*e.g.*, by September 30, 2006) to remove the deferral which would trigger the effective date of their nonattainment designation and, thus, also their classification. If the area, based on the most recent 3 years of quality-assured monitoring data, is not attaining the 8-hour ozone standard by December 31, 2007, we would take action by April 15, 2008, to remove the deferral which would trigger the effective date of their nonattainment designation and, where applicable, classification.

Comment: Some commenters strongly recommended that if the compact measures fail to be implemented or fail to achieve targeted emissions reductions, the compact area should immediately be designated as nonattainment with a subpart 2 classification and be required to comply with all applicable obligations within the original timeframe.

Response: In another section of this document, we are promulgating regulatory text that clarifies the actions we intend to take in the event a compact area does not meet subsequent milestones. Compact areas are designated as nonattainment and the effective date of that designation is deferred. The deferral for any areas that do not meet or fail any milestone will be removed as soon as practicable which would trigger the effective date of their nonattainment designation and, thus, also the classification consistent with the final 8-hour implementation rule. If called for by the area's classification, these areas will be required to submit a revised attainment demonstration within 1 year of the effective date of designation and will be subject to all applicable requirements of title 1, part D of the CAA, to be implemented within a time frame consistent with the area's classification.

Comment: One commenter believes the second rolling deferred effective date is not necessary and should be eliminated. According to the commenter, there should be only two separate deferral dates promulgated for nonattainment designations for areas where controls would be implemented by September 30, 2005, and no other milestones (the June 2006 progress assessment) would be needed between implementation of controls and attainment.

Response: The June 2006 milestone, which is one of the compact requirements that would be subject to the second deferred effective date (December 31, 2006), provides that States report progress of EAC areas in implementing adopted measures and assess improvements in air quality and reductions in NO_X and VOC emissions. The second deferral is a checkpoint that is needed to ensure that areas are making progress toward attainment. This milestone can be one of the progress reports, but it is considered a milestone because EPA believes it is important to have a checkpoint between implementation of measures by December 2005 and attainment in December 2007.

Comment: A number of commenters were concerned about EPA's statement in the proposal that the Agency would commit to not redesignate areas that subsequently violate the 8-hour ozone NAAQS to nonattainment, provided the area continues to meet all compact milestones and requirements.

Response: In the proposed rule at FR 68 70113, EPA did state its intention to commit to not redesignate EAC areas to nonattainment that are designated attainment in April 2004. We realize that our shorthand phrasing did not properly convey our intent. To clarify, in deciding whether to redesignate an EAC area to nonattainment, EPA will consider the factors in section 107(d)(3)(a) of the CAA. If an EAC area continues to meet its compact milestones, EPA believes those factors should weigh in favor of not redesignating the area to nonattainment immediately, but rather waiting to see if the programs the area puts in place will bring it back into attainment.

3. Transportation/Fuels-Related Comments

Comment: The EPA received a number of comments expressing concern that lack of transportation conformity in EAC areas will negatively impact air quality in these areas. In addition, several commented that since EAC areas are not eligible to receive Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding, projects to reduce congestion and, thereby, reduce mobile source emissions, would not occur. Another commenter suggested that EPA work with the U.S. Department of Transportation (DOT) to revise the TEA–21 so that EAC areas are eligible to receive CMAQ funding.

Response: The commenters are correct that EAC areas violating the 8-hour ozone standard, which would otherwise have a nonattainment date effective June 1, 2004, will not be subject to transportation or general conformity requirements for the 8-hour standard in 2005. The EAC protocol does not require EAC areas to meet CAA transportation conformity requirements, since, as noted, these requirements apply one year after the 8-hour nonattainment designation becomes effective.

However, continuing to defer 8-hour conformity requirements is contingent upon the area's ability to demonstrate adherence to the compact. Consistent with 40 CFR 93.102(d) and CAA section 176(c)(6), conformity for the 8-hour ozone standard will not apply, provided the area meets all of the terms and milestones of its compact between 2004 and 2007. At any point, if a milestone is missed, the nonattainment designation becomes effective and conformity for the 8-hour standard will be required one year after the effective date of EPA's nonattainment designation.

The EAC areas that are maintenance areas for the 1-hour standard will be subject to conformity until 1 year after the effective date of designation of the 8-hour standard. At that time the 1-hour standard will be revoked. Thus, for an EAC area that meets all of its milestones and whose deferral is lifted in April 2008, the 8-hour attainment designation would become effective in April 2008, and the 1-hour standard would be revoked 1 year later or, April 2009. For an EAC area that is also a 1-hour maintenance area under § 175A, the area would be subject to both its 1-hour maintenance plan and 1-hour

transportation conformity until April 2009.

Finally, EPA would like to clarify that transportation conformity is not a control measure similar to voluntary control programs funded through CMAQ dollars. Rather, it establishes a process for state and local governments to consider the broader emissions impacts of planned highway and transit activities to ensure that Federal funding and approval goes to those transportation activities that are consistent with air quality goals.

Comment: One commenter stated that they were reluctant to enter into a compact agreement knowing that they would not receive CMAQ funds. Several commenters also suggested that EPA provide EAC areas with tangible financial incentives to proactively improve their air quality, as well as work with the DOT to revise the Transportation Efficiency Act (TEA) so that it allows EAC areas to receive CMAQ funding.

Response: The commenters are correct that EAC areas are not eligible to receive CMAQ funding under current law. The CMAQ apportionment formula in TEA-21 contains no provisions to allow inclusion of EAC areas into the formula and thus into the authorized CMAQ levels for each state. Thus, until and unless the 8-hour ozone nonattainment designation is effective, areas cannot be eligible for CMAQ funding, absent a change in the law.

The primary incentive for many areas entering into an EAC is deferral of a nonattainment designation and major requirements, such as transportation conformity and NSR. It is true that compact areas are subject to SIP requirements, but not to other such major requirements. The EPA's interpretation is that Congress intended to link the obligations that come with a nonattainment designation to CMAQ funding. The purpose of the CMAQ program is to help those areas burdened with the significant obligations of the CAA attain the NAAQS as expeditiously as possible. Under the current CMAQ program, an EAC area would not be able to receive CMAQ funds because it would not be designated as a nonattainment or maintenance area.

Since TEA-21 has not been reauthorized as of this writing, EPA cannot postulate on whether it will contain a new provision allowing compact areas to receive CMAQ funding. The reauthorization bills passed by the Senate and House contain no such provision.

Comment: A number of EAC areas are considering the addition of cetane additives to fuel for increased fuel efficiency. Several commenters expressed concern about the focus on diesel cetane. They have expressed these concerns in detail in earlier correspondence with both the Agency and the Ozone Transport Commission.

Response: Clean fuel programs have been an integral part of the nation's strategy to reduce smog-forming emissions and other harmful pollutants, including air toxics from our nation's air. For example, the Federal reformulated gasoline program (RFG) and lower volatility fuels have been cost effective and have provided significant and immediate reductions in air pollution levels throughout the nation.

The CAA also allows States, under specified circumstances, to design and implement their own clean fuel programs. Several EAC areas are considering such programs including cetane improvement programs. Cetane improvement programs have the potential to contribute emission reductions needed for progress toward attainment and maintenance of the NAAQS. (*See* EPA Technical Report entitled, "The Effect of Cetane Number Increase Due to Additives on NO_X Emissions from Heavy-Duty Highway Engines", EPA-420-R-03-002, February 2003. This document can be downloaded from: *http://www.epa.gov/otaq/models/analysis.htm.* The EPA is now in the process of developing guidance to help States properly quantify the benefits of cetane improvement programs for their areas.

In selecting possible clean fuel programs and other potential ozone control measures, states will engage in a careful and extensive process. It is during this process that States should properly consider and evaluate their air quality needs, the air quality benefits of specific measures, costs, ease of implementation, enforceability and other issues and factors like those the commenter raises with respect to cetane programs. In addition, the States must involve the public in the selection of control measures, through hearings and opportunities to comment.

4. Regulatory Text

Comment: Several commenters strongly recommended that EPA include regulatory text in the final rule. One commenter, in particular, suggested that EPA do the following:

1. Codify the rolling deferred effective date so that it is enforceable and that areas are held accountable if they miss a milestone;

2. include in the final rule all deadlines and milestones specified in our EAC guidance;

3. codify the September 30, 2005 deadline for EPA action to approve/disapprove SIP submittals;

4. codify the December 31, 2008 deadline for States to submit a revised attainment demonstration SIP for EAC areas that fail to attain by December 31, 2007.

Response: Based on the recommendations of several commenters, we have added regulatory text to the final rule. This language codifies the EAC program into part 81 of the CFR. In addition, the regulatory text clarifies what is required of compact areas and the consequences to these areas if they do not meet a milestone.

X. How Do Designations Affect Indian Country?

All counties, partial counties or Air Quality Control Regions listed in the table at the end of this document are designated as indicated, and include Indian country geographically located within such areas, except as otherwise indicated.

As mentioned earlier in this document, EPA's guidance for determining nonattainment area boundaries presumes that the larger of the 1-hour nonattainment area, CMSA or MSA with a violating monitor forms the bounds of the nonattainment area but that the size of the area can be larger or smaller depending on contribution to the violation from nearby areas and other air quality-related technical factors. In general, and consistent with relevant air quality information, EPA intends to include Indian country encompassed within these areas as within the boundaries of the area for designation purposes to best protect public health and welfare. The EPA anticipates that in most cases relevant air quality information will indicate that areas of Indian country located within CMSAs or MSAs should have the same designation as the surrounding area. However, based on the factors outlined in our guidance, there may be instances where a different designation is appropriate.

A state recommendation for a designation of an area that surrounds Indian country does not dictate the designation for Indian county. However, the conditions that support a State's designation recommendation, such as air quality data and the location of sources, may indicate the likelihood that similar conditions exist for the Indian county located in that area. States generally have neither the responsibility nor the authority for planning and regulatory activities under the CAA in Indian country.

XI. Statutory and Executive Order Reviews

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate areas as attaining or not attaining that NAAQS. The CAA then specifies requirements for areas based on whether such areas are attaining or not attaining the NAAQS. In this final rule, we assign designations to areas as required. We also indicate the classifications that apply as a matter of law for areas designated nonattainment. This rule also provides flexibility for areas that have entered into a compact and take early action to achieve emissions reductions necessary to attain the 8-hour ozone standard. This action defers the effective date of the nonattainment designation for these areas and establishes regulations governing future actions with respect to these areas.

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and, therefore, subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a "significant regulatory action" because none of the above factors applies. As such, this final rule was not formally submitted to OMB for review.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* This rule responds to the requirement to promulgate air quality designations after promulgation of a NAAQS. This requirement is prescribed in the CAA section 107 of Title 1. The present final rule does not establish any new information collection burden apart from that required by law. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) A small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards. (*See* 13 CFR 121.); (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

The portion of this rule designating areas for the 8-hour ozone NAAQS indicating the classification for each subpart 2 area designated nonattainment, is not subject to the RFA because it was not subject to notice and comment rulemaking requirements. *See* CAA section 107(d)(2)(B). This rule also defers the effective date of the nonattainment designation for areas that implement control measures and achieve emissions reductions earlier than otherwise required by the CAA in order to attain the 8-hour ozone NAAQS. The deferral of the effective date will not impose any requirements on small entities. States and local areas that have entered into compacts with EPA have the flexibility to decide which sources to regulate in their communities.

After considering the economic impacts of today's final rule on small entities, I certify that this rule will not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and

informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's final action does not include a Federal mandate within the meaning of UMRA that may result in expenditures of $100 million or more in any one year by either State, local, or Tribal governments in the aggregate or to the private sector, and therefore, is not subject to the requirements of sections 202 and 205 of the UMRA. It does not create any additional requirements beyond those of the 8-hour National Ambient Air Quality Standards (NAAQS) for Ozone (62 FR 38894; July 18, 1997), therefore, no UMRA analysis is needed. This rule establishes the application of the 8-hour ozone standard and the designation for each area of the country for the 8-hour NAAQS for Ozone. The CAA requires States to develop plans, including control measures, based on their designations and classifications. In this rule, EPA is also deferring the effective date of nonattainment designations for certain areas that have entered into compacts with us and is promulgating regulations governing future actions with respect to these areas.

One mandate that may apply as a consequence of this action to all designated nonattainment areas is the requirement under CAA section 176(c) and associated regulations to demonstrate conformity of Federal actions to SIPs. These rules apply to Federal agencies and Metropolitan Planning Organizations (MPOs) making conformity determinations. The EPA concludes that such conformity determinations will not cost $100 million or more in the aggregate.

The EPA believes that any new controls imposed as a result of this action will not cost in the aggregate $100 million or more annually. Thus, this Federal action will not impose mandates that will require expenditures of $100 million or more in the aggregate in any one year.

Nonetheless, EPA carried out consultations with governmental entities affected by this rule, including States, Tribal governments, and local air pollution control agencies.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The CAA establishes the scheme whereby States take the lead in developing plans to meet the NAAQS. This rule will not modify the relationship of the States and EPA for purposes of developing programs to implement the NAAQS. Thus, Executive Order 13132 does not apply to this rule.

Although Executive Order 13132 does not apply to this rule, EPA discussed the designation process and compact program with representatives of State and local air pollution control agencies, and Tribal governments, as well as the Clean Air Act Advisory Committee, which is also composed of State and local representatives. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicited comment on the proposed rule for deferring the effective date of nonattainment designations from State and local officials. The portion of this rule that assigns designations is not subject to notice and comment under section 107(d)(2)(B) of the CAA and, therefore, no proposed rulemaking was prepared which specifically solicited comment on the designations. However, section 107(d)(1)(A) establishes a process whereby States first recommends the designations for areas in their States. In addition, the Agency has consulted extensively with representatives of State, Tribal and local governments, including elected officials regarding the designations. The EPA also notified national organizations of State and local officials and made EPA staff available to discuss the action with the organization staff and their members.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have "Tribal implications" as specified in Executive Order 13175. This rule concerns the classification and designation of areas as attainment or nonattainment of areas for the 8-hour ozone standard and deferral of the effective date of the nonattainment designation for areas participating in the early action compact process and that have met all milestones. The CAA provides for States to develop plans to regulate emissions of air pollutants within their jurisdictions. The TAR gives Tribes the opportunity to develop and implement CAA programs such as programs to attain and maintain the 8-hour ozone NAAQS, but it leaves to the discretion of the Tribe whether to develop these programs and which programs, or appropriate elements of a program, they will adopt. Early Action Compact areas that would be affected by this final rule would be required to develop and submit local plans for adoption and implementation of the 8-hour ozone standard earlier than the CAA requires. These plans would be submitted to EPA as SIP revisions in December 2004. No early action compact areas include Tribal land.

This final rule does not have Tribal implications as defined by Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes, since no Tribe has implemented a CAA program to attain the 8-hour ozone NAAQS at this time or has participated in a compact. Furthermore, this rule does not affect the relationship or distribution of power and responsibilities between the Federal government and Indian Tribes. The CAA and the TAR establish the relationship of the Federal government and Tribes in developing plans to attain the NAAQS, and this rule does nothing to modify that relationship. Because this rule does not have Tribal implications, Executive Order 13175 does not apply.

Although Executive Order 13175 does not apply to this rule, EPA did outreach to Tribal representatives regarding the designations and to inform them about the compact program and its impact on designations. The EPA supports a national "Tribal Designations and Implementation Work Group" which provides an open forum for all Tribes to voice concerns to EPA about the designation and implementation process for the NAAQS, including the 8-hour ozone standard. These discussions informed EPA about key Tribal concerns regarding designations as the rule was under development.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

Executive Order 13045: "Protection of Children From Environmental Health and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The final rule is not subject to Executive Order 13045 because it is not economically significant as defined in E.O. 12866, and because the Agency does not have reason to believe the environmental health risks or safety risks addressed by this rule present a disproportionate risk to children. Nonetheless, we have evaluated the environmental health or safety effects of the 8-hour ozone NAAQS on children. The results of this risk assessment are contained the National Ambient Air Quality Standards for Ozone, Final Rule (62 FR 38855–38896; specifically, 62 FR 38854, 62 FR 38860 and 62 FR 38865).

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions That Significantly Affect Energy Supply, Distribution, or Use," (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

Information on the methodology and data regarding the assessment of potential energy impacts is found in Chapter 6 of U.S. EPA 2002, *Cost, Emission Reduction, Energy, and Economic Impact Assessment of the Proposed Rule Establishing the Implementation Framework for the 8-Hour, 0.08 ppm Ozone National Ambient Air Quality Standard*, prepared by the Innovative Strategies and Economics Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC April 24, 2003.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer Advancement Act of 1995 (NTTAA), Public Law No. 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

This action does not involve technical standards. Therefore, EPA did not consider the use of any VCS.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective June 15, 2004.

K. Judicial Review

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This Section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit (i) when the agency action consists of "nationally applicable regulations promulgated, or final actions taken, by the Administrator," or (ii) when such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

This rule designating areas for the 8-hour ozone standard is "nationally applicable" within the meaning of section 307(b)(1). This rule establishes designations for all areas of the United States for the 8-hour ozone NAAQS. At the core of this rulemaking is EPA's interpretation of the definition of nonattainment under section 107(d)(1) of the Clean Air Act. In determining which areas should be designated nonattainment (or conversely, should be designated unclassifiable/attainment), EPA used a set of 11 factors that it applied consistently across the United States.

For the same reasons, the Administrator also is determining that the final designations are of nationwide scope and effect for purposes of section 307(b)(1). This is particularly appropriate because in the report on the 1977 Amendments that revised section 307(b)(1) of the CAA, Congress noted that the Administrator's determination that an action is of "nationwide scope or effect" would be appropriate for any action that has "scope or effect beyond a single judicial circuit." H.R. Rep. No. 95–294 at 323, 324, *reprinted in* 1977 U.S.C.C.A.N. 1402–03. Here, the scope and effect of this rulemaking extend to numerous judicial circuits since the designations apply to all areas of the country. In these circumstances, section 307(b)(1) and its legislative history calls for the Administrator to find the rule to be of "nationwide scope or effect" and for venue to be in the D.C. Circuit.

Thus, any petitions for review of final designations must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date final action is published in the **Federal Register**.

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Dated: April 15, 2004.

Michael O. Leavitt,

Administrator.

■ For the reasons set forth in the preamble, 40 CFR part 81, subpart C is amended as follows:

PART 81—DESIGNATIONS OF AREAS FOR AIR QUALITY PLANNING PURPOSES

■ 1. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart C—Section 107 Attainment Status Designations

■ 2. Section 81.300 is amended by adding paragraph (e) to read as follows:

§ 81.300 Scope.

* * * * *

(e) Provisions for Early Action Compact Areas with Deferred Effective Date of Nonattainment Designation.

(1) *Definitions.* The following definitions apply for purposes of this subpart. Any term not defined herein shall have the meaning as defined in 40 CFR 51.100 and § 81.1

(i) *Early Action Compact.* The term "early action compact" ("compact") means an agreement entered into on or before December 31, 2002, by—

(A) The Administrator;

(B) A State;

(C) An official of a county, parish, or town that—

(*1*) Is designated attainment for the 1-hour national ambient air quality standard for ozone;

(*2*) Has monitored data representing the most recent 3 years of quality-assured data that meets the 1-hour national ambient air quality standard for ozone; and

(*3*) May or may not be meeting the 8-hour national ambient air quality standard for ozone.

(ii) *State.* The term "State" has the meaning given the term in section 302 of the Clean Air Act (42 U.S.C. 7602).

(iii) *Area.* The term "area" means one or more counties, parishes, or towns that are participating in an early action compact.

(iv) *State Implementation Plan.* The term "State implementation plan" ("SIP") means a plan required to be submitted to the Administrator by a State under section 110 of the Clean Air Act (42 U.S.C. 7410).

(v) *8-hour National Ambient Air Quality Standard* means the air quality standards under the Clean Air Act (42 U.S.C. 7401 *et seq.*) codified at 40 CFR 50.10.

(2) *What Are Early Action Compact Areas Required To Do?*

(i) Not later than June 16, 2003, the local area shall—

(A) Submit to the Administrator a list identifying and describing the local control measures that are being considered for adoption during the local planning process; and

(B) Provide to the public clear information on the measures under consideration;

(ii) Not later than March 31, 2004, the local plan shall be completed and submitted to the State (with a copy of the local plan provided to the Administrator), which shall include—

(A) One or more locally adopted measures that are specific, quantified, and permanent and that, if approved by the Administrator, will be enforceable as part of the State implementation plan;

(B) Specific implementation dates for the adopted control measures;

(C) Sufficient documentation to ensure that the Administrator will be able to make a preliminary technical assessment based on control measures demonstrating attainment of the 8-hour ozone national ambient air quality standard under the Clean Air Act not later than December 31, 2007;

(iii) Not later than December 31, 2004, the State shall submit to the Administrator a revision to the SIP consisting of the local plan, including all adopted control measures, and a demonstration that the applicable area will attain the 8-hour ozone national ambient air quality standard not later than December 31, 2007;

(iv) The area subject to the early action compact shall implement expeditiously, but not later than December 31, 2005, the local control measures that are incorporated in the SIP;

(v) Not later than June 30, 2006, the State shall submit to the Administrator a report describing the progress of the local area since December 31, 2005, that includes—

(A) A description of whether the area continues to implement its control measures, the emissions reductions being achieved by the control measures, and the improvements in air quality that are being made; and

(B) Sufficient information to ensure that the Administrator will be able to make a comprehensive assessment of air quality progress in the area; and

(vi) Not later than December 31, 2007, the area subject to a compact shall attain the 8-hour ozone national ambient air quality standard.

(3) *What Action Shall the Administrator Take To Promulgate Designations for an Early Action Compact Area That Does Not Meet (or That Contributes to Ambient Air Quality in a Nearby Area That Does Not Meet) the 8-Hour Ozone National Ambient Air Quality Standard?*

(i) *General.* Notwithstanding clauses (i) through (iv) of section 107(d)(1)(B) of the Clean Air Act (42 U.S.C. 7407(d)(1)(B)), the Administrator shall defer until September 30, 2005, the effective date of a nonattainment designation of any area subject to a compact that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the 8-hour ozone national ambient air quality standard if the Administrator determines that the area subject to a compact has met the requirements in paragraphs (e)(2)(i) and (ii) of this section.

(ii) *Requirements not met.*

(A) If the Administrator determines that an area subject to a compact has not met the requirements in paragraphs (e)(2)(i) and (ii) of this section, the nonattainment designation will become effective June 15, 2004.

(B) Prior to expiration of the deferred effective date on September 30, 2005, if the Administrator determines that an area or the State subject to a compact has not met either requirement in paragraphs (e)(2)(ii) and (iii) of this section, the nonattainment designation shall become effective as of the deferred effective date, unless EPA takes affirmative rulemaking action to further extend the deadline.

(C) If the Administrator determines that an area subject to a compact and/or State has not met any requirement in paragraphs (e)(2)(iii)–(vi) of this section, the nonattainment designation shall become effective as of the deferred effective date, unless EPA takes affirmative rulemaking action to further extend the deadline.

(D) Not later than 1 year after the effective date of the nonattainment designation, the State shall submit to the Administrator a revised attainment demonstration SIP.

(iii) All Requirements Met. If the Administrator determines that an area subject to a compact has met all of the requirements under subparagraph (e)(2) of this section—

(A) The Administrator shall designate the area as attainment under section 107(d)(1)(B) of the Clean Air Act; and

(B) The designation shall become effective no later than April 15, 2008.

(4) *What Action Shall the Administrator Take To Approve or Disapprove a Revision to the SIP Submitted by a Compact Area on or Before December 31, 2004?*

(i) Not later than September 30, 2005, the Administrator shall take final action to approve or disapprove a revision to the SIP, in accordance with paragraph (e)(2)(iii) of this section, that is submitted by a compact area on or before December 31, 2004.

(ii) If the Administrator approves the SIP revision, the area will continue to be eligible for a deferral of the effective date of nonattainment designation.

(iii) If the Administrator disapproves the SIP revision, the nonattainment designation shall become effective on September 30, 2005.

(iv) If the area's nonattainment designation applies, the State shall comply with paragraph (e)(3)(ii)(D) of this section.

PART 81—[AMENDED]

■ 2a. In § 81.301, the table entitled "Alabama—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.301 Alabama.

* * * * *

ALABAMA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Birmingham, AL:				
Jefferson County		Nonattainment		Subpart 1.
Shelby County		Nonattainment		Subpart 1.
Rest of State		Unclassifiable/Attainment.		
Autauga County				
Baldwin County				
Barbour County				
Bibb County				
Blount County				
Bullock County				
Butler County				
Calhoun County				
Chambers County				
Cherokee County				
Chilton County				
Choctaw County				
Clarke County				
Clay County				
Cleburne County				
Coffee County				
Colbert County				
Conecuh County				
Coosa County				
Covington County				
Crenshaw County				
Cullman County				
Dale County				
Dallas County				
DeKalb County				
Elmore County				
Escambia County				
Etowah County				
Fayette County				
Franklin County				
Geneva County				
Greene County				
Hale County				
Henry County				
Houston County				
Jackson County				
Lamar County				
Lauderdale County				
Lawrence County				
Lee County				
Limestone County				
Lowndes County				
Macon County				
Madison County				
Marengo County				
Marion County				
Marshall County				
Mobile County				
Monroe County				
Montgomery County				
Morgan County				
Perry County				
Pickens County				
Pike County				
Randolph County				
Russell County				
St. Clair County				
Sumter County				
Talladega County				
Tallapoosa County				
Tuscaloosa County				
Walker County				
Washington County				
Wilcox County				
Winston County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is June 15, 2004, unless otherwise noted.

■ 3. In § 81.302, the table entitled "Alaska—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.302 Alaska.

* * * * *

ALASKA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 08 Cook Inlet Intrastate		Unclassifiable/Attainment.		
Anchorage Borough				
Kenai Peninsula Borough				
Matanuska-Susitna Borough				
AQCR 09 Northern Alaska Intrastate		Unclassifiable/Attainment.		
Denali Borough				
Fairbanks North Star Borough				
Nome Census Area				
North Slope Borough				
Northwest Arctic Borough				
Southeast Fairbanks Census Area				
Yukon-Koyukuk Census Area				
AQCR 10 South Central Alaska Intrastate		Unclassifiable/Attainment.		
Aleutians East Borough				
Aleutians West Census Area				
Bethel Census Area				
Bristol Bay Borough				
Dillingham Census Area				
Kodiak Island Borough				
Lake and Peninsula Borough				
Valdez-Cordova Census Area				
Wade Hampton Census Area				
AQCR 11 Southeastern Alaska Intrastate		Unclassifiable/Attainment.		
Haines Borough				
Juneau Borough				
Ketchikan Gateway Borough				
Prince of Wales-Outer Ketchikan Census Area				
Sitka Borough				
Skagway-Hoonah-Angoon Census Area				
Wrangell-Petersburg Census Area				
Yakutat Borough				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 4. In § 81.303, the table entitled "Arizona—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.303 Arizona.

* * * * *

ARIZONA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Phoenix-Mesa, AZ:				
Maricopa County (part)		Nonattainment		Subpart 1
T1N, R1E (except that portion in Indian Country); T1N, R2E; T1N, R3E; T1N, R4E; T1N, R5E; T1N, R6E; T1N, R7E; T1N, R1W; T1N, R2W; T1N, R3W; T1N, R4W; T1N, R5W; T1N, R6W; T2N, R1E; T2N, R2E; T2N, R3E; T2N, R4E; T2N, R5E; T2N, R6E; T2N, R7E; T2N, R8E; T2N, R9E; T2N, R10E; T2N, R11E; T2N, R12E (except that portion in Gila County); T2N, R13E (except that portion in Gila County); T2N, R1W; T2N, R2W; T2N, R3W; T2N, R4W; T2N, R5W; T2N, R6W; T2N, R7W; T3N, R1E; T3N, R2E; T3N, R3E; T3N, R4E; T3N, R5E; T3N, R6E; T3N, R7E; T3N, R8E; T3N, R9E; T3N, R10E (except that portion in Gila County);.				

ARIZONA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
T3N, R11E (except that portion in Gila County); T3N, R12E (except that portion in Gila County); T3N, R1W; T3N, R2W; T3N, R3W; T3N, R4W; T3N, R5W; T3N, R6W; T4N, R1E; T4N, R2E; T4N, R3E; T4N, R4E; T4N, R5E; T4N, R6E; T4N, R7E; T4N, R8E; T4N, R9E; T4N, R10E (except that portion in Gila County); T4N, R11E (except that portion in Gila County); T4N, R12E (except that portion in Gila County); T4N, R1W; T4N, R2W; T4N, R3W; T4N, R4W; T4N, R5W; T4N, R6W; T5N, R1E; T5N, R2E; T5N, R3E; T5N, R4E; T5N, R5E; T5N, R6E; T5N, R7E; T5N, R8E; T5N, R9E (except that portion in Gila County); T5N, R10E (except that portion in Gila County); T5N, R1W; T5N, R2W; T5N, R3W; T5N, R4W; T5N, R5W; T6N, R1E (except that portion in Yavapai County); T6N, R2E; T6N, R3E;				
T6N, R4E; T6N, R5E; T6N, R6E; T6N, R7E; T6N, R8E; T6N, R9E (except that portion in Gila County); T6N, R10E (except that portion in Gila County); T6N, R1W (except that portion in Yavapai County); T6N, R2W; T6N, R3W; T6N, R4W T6N, R5W T7N, R1E (except that portion in Yavapai County); T7N, R2E; (except that portion in Yavapai County); T7N, R3E; T7N, R4E; T7N, R5E; T7N, R6E; T7N, R7E; T7N, R8E; T7N, R9E (except that portion in Gila County); T7N, R1W (except that portion in Yavapai County); T7N, R2W (except that portion in Yavapai County); T8N, .				
R2E (except that portion in Yavapai County); T8N, R3E (except that portion in Yavapai County); T8N, R4E (except that portion in Yavapai County); T8N, R5E (except that portion in Yavapai County); T8N, R6E (except that portion in Yavapai County); T8N, R7E (except that portion in Yavapai County); T8N, R8E (except that portion in Yavapai and Gila Counties); T8N, R9E (except that portion in Yavapai and Gila Counties); T1S, R1E (except that portion in Indian Country); T1S, R2E (except that portion in Pinal County and in Indian Country); T1S, R3E; T1S, R4E; T1S, R5E; T1S, R6E; T1S, R7E; T1S, R1W; T1S, R2W; T1S, R3W; T1S, R4W; T1S, R5W; T1S, R6W; T2S, R1E (except that portion in Indian Country); T2S, R5E; T2S, R6E; T2S, R7E; T2S, R1W; T2S, R2W; T2S, R3W; T2S, R4W; T2S, R5W; T3S, R1E; T3S, R1W; T3S, R2W; T3S, R3W; T3S, R4W; T3S, R5W; T4S, R1E; T4S, R1W; T4S, R2W; T4S, R3W; T4S, R4W; T4S, R5W.				
Pinal County (part)		Nonattainment		Subpart 1
Apache Junction: T1N, R8E; T1S, R8E (Sections 1 through 12)				
Rest of State		Unclassifiable/Attainment		

ARIZONA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Apache County				
Cochise County				
Coconino County				
Gila County				
Graham County				
Greenlee County				
La Paz County				
Maricopa County (part) remainder				
Mohave County				
Navajo County				
Pima County				
Pinal County (part) remainder				
Santa Cruz County				
Yavapai County				
Yuma County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 5. In § 81.304, the table entitled "Arkansas-Ozone (8-Hour Standard)" is added to read as follows:

§ 81.304 Arkansas.

* * * * *

ARKANSAS—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Memphis, TN–AR:				
(AQCR 018 Metropolitan Memphis Interstate)				
Crittenden County	.....	Nonattainment	.....	Subpart 2/Moderate.
AQCR 016 Central Arkansas Intrastate (part)	.....	Unclassifiable/Attainment.		
Pulaski County				
AQCR 016 Central Arkansas Intrastate (remainder of)	.....	Unclassifiable/Attainment.		
Chicot County				
Clark County				
Cleveland County				
Conway County				
Dallas County				
Desha County				
Drew County				
Faulkner County				
Garland County				
Grant County				
Hot Spring County				
Jefferson County				
Lincoln County				
Lonoke County				
Perry County				
Pope County				
Saline County				
Yell County				
AQCR 017 Metropolitan Fort Smith Interstate	.....	Unclassifiable/Attainment.		
Benton County				
Crawford County				
Sebastian County				
Washington County				
AQCR 019 Monroe-El Dorado Interstate	.....	Unclassifiable/Attainment.		
Ashley County				
Bradley County				
Calhoun County				
Nevada County				
Ouachita County				
Union County				
AQCR 020 Northeast Arkansas Intrastate	.....	Unclassifiable/Attainment.		
Arkansas County				
Clay County				
Craighead County				
Cross County				

ARKANSAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Greene County				
Independence County				
Jackson County				
Lawrence County				
Lee County				
Mississippi County				
Monroe County				
Phillips County				
Poinsett County				
Prairie County				
Randolph County				
St. Francis County				
Sharp County				
White County				
Woodruff County				
AQCR 021 Northwest Arkansas Intrastate	.....	Unclassifiable/Attainment.		
Baxter County				
Boone County				
Carroll County				
Cleburne County				
Franklin County				
Fulton County				
Izard County				
Johnson County				
Logan County				
Madison County				
Marion County				
Montgomery County				
Newton County				
Pike County				
Polk County				
Scott County				
Searcy County				
Stone County				
Van Buren County				
AQCR 022 Shreveport-Texarkana-Tyler Interstate.	.....	Unclassifiable/Attainment.		
Columbia County				
Hempstead County				
Howard County				
Lafayette County				
Little River County				
Miller County				
Sevier County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 6. In § 81.305, the table entitled "California—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.305 California.

* * * * *

CALIFORNIA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Amador and Calaveras Cos., CA:				
(Central Mountain Cos.)				
Amador County	.....	Nonattainment	.....	Subpart 1.
Calaveras County	.....	Nonattainment	.....	Subpart 1.
Chico, CA:				
Butte County	.....	Nonattainment	.....	Subpart 1.
Kern County (Eastern Kern), CA	.....	Nonattainment	.....	Subpart 1.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Kern County (part)				
That portion of Kern County (with the exception of that portion in Hydrologic Unit Number 18090205—the Indian Wells Valley) east and south of a line described as follows: Beginning at the Kern-Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to Range 16 West and Range 17 West, San Bernardino Base and Meridian; north along the range line to the point of intersection with the Rancho El Tejon Land Grant boundary; then southeast, northeast, and northwest along the boundary of the Rancho El Tejon Grant to the northwest corner of Section 3, Township 11 North, Range 17 West; then west 1.2 miles; then north to the Rancho El Tejon Land Grant boundary; then northwest along the Rancho El Tejon line to the southeast corner of Section 34, Township 32 South, Range 30 East, Mount Diablo Base and Meridian; then north to the northwest corner of Section 35, Township 31 South, Range 30 East; then northeast along the boundary of the Rancho El Tejon Land Grant to the southwest corner of Section 18, Township 31 South, Range 31 East; then east to the southeast corner of Section 13, Township 31 South, Range 31 East; then north along the range line common to Range 31 East and Range 32 East, Mount Diablo Base and Meridian, to the northwest corner of Section 6, Township 29 South, Range 32 East; then east to the southwest corner of Section 31, Township 28 South, Range 32 East; then north along the range line common to Range 31 East and Range 32 East to the northwest corner of Section 6, Township 28 South, Range 32 East, then west to the southeast corner of Section 36, Township 27 South, Range 31 East, then north along the range line common to Range 31 East and Range 32 East to the Kern-Tulare County boundary.				
Imperial Co., CA:				
Imperial County	.....	Nonattainment	.....	Subpart 2/Marginal.
Los Angeles—South Coast Air Basin, CA:	.....	Nonattainment	.....	Subpart 2/Severe 17.
Los Angeles County (part)	.....	Nonattainment	.....	Subpart 2/Severe 17.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
That portion of Los Angeles County which lies south and west of a line described as follows: Beginning at the Los Angeles-San Bernardino County boundary and running west along the Township line common to Township 3 North and Township 2 North, San Bernardino Base and Meridian; then north along the range line common to Range 8 West and Range 9 West; then west along the Township line common to Township 4 North and Township 3 North; then north along the range line common to Range 12 West and Range 13 West to the southeast corner of Section 12, Township 5 North and Range 13 West; then west along the south boundaries of Sections 12, 11, 10, 9, 8, and 7, Township 5 North and Range 13 West to the boundary of the Angeles National Forest which is collinear with the range line common to Range 13 West and Range 14 West; then north and west along the Angeles National Forest boundary to the point of intersection with the Township line common to Township 7 North and Township 6 North (point is at the northwest corner of Section 4 in Township 6 North and Range 14 West); then west along the Township line common to Township 7 North and Township 6 North; then north along the range line common to Range 15 West and Range 16 West to the southeast corner of Section 13, Township 7 North and Range 16 West; then along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 7 North and Range 16 West; then north along the range line common to Range 16 West and Range 17 West to the north boundary of the Angeles National Forest (collinear with the Township line common to Township 8 North and Township 7 North); then west and north along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the Los Angeles-Kern County boundary.				
Orange County	.....	Nonattainment	.....	Subpart 2/Severe 17.
Riverside County (part)	.....	Nonattainment	.....	Subpart 2/Severe 17.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
That portion of Riverside County which lies to the west of a line described as follows: Beginning at the Riverside-San Diego County boundary and running north along the range line common to Range 4 East and Range 3 East, San Bernardino Base and Meridian; then east along the Township line common to Township 8 South and Township 7 South; then north along the range line common to Range 5 East and Range 4 East; then west along the Township line common to Township 6 South and Township 7 South to the southwest corner of Section 34, Township 6 South, Range 4 East; then north along the west boundaries of Sections 34, 27, 22, 15, 10, and 3, Township 6 South, Range 4 East; then west along the Township line common to Township 5 South and Township 6 South; then north along the range line common to Range 4 East and Range 3 East; then west along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 5 South, Range 3 East; then north along the range line common to Range 2 East and Range 3 East; to the Riverside-San Bernardino County line.				
San Bernardino County (part)	.....	Nonattainment	.....	Subpart 2/Severe 17.
That portion of San Bernardino County which lies south and west of a line described as follows: Beginning at the San Bernardino-Riverside County boundary and running north along the range line common to Range 3 East and Range 2 East, San Bernardino Base and Meridian; then west along the Township line common to Township 3 North and Township 2 North to the San Bernardino-Los Angeles County boundary.				
Los Angeles-San Bernardino Cos.(W Mojave Desert), CA:	.....	Nonattainment	.....	Subpart 2/Moderate.
Los Angeles County (part)	.....	Nonattainment	.....	Subpart 2/Moderate.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
That portion of Los Angeles County which lies north and east of a line described as follows: Beginning at the Los Angeles—San Bernardino County boundary and running west along the Township line common to Township 3 North and Township 2 North, San Bernardino Base and Meridian; then north along the range line common to Range 8 West and Range 9 West; then west along the Township line common to Township 4 North and Township 3 North; then north along the range line common to Range 12 West and Range 13 West to the southeast corner of Section 12, Township 5 North and Range 13 West; then west along the south boundaries of Sections 12, 11, 10, 9, 8, and 7, Township 5 North and Range 13 West to the boundary of the Angeles National Forest which is collinear with the range line common to Range 13 West and Range 14 West; then north and west along the Angeles National Forest boundary to the point of intersection with the Township line common to Township 7 North and Township 6 North (point is at the northwest corner of Section 4 in Township 6 North and Range 14 West); then west along the Township line common to Township 7 North and Township 6 North; then north along the range line common to Range 15 West and Range 16 West to the southeast corner of Section 13, Township 7 North and Range 16 West; then along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 7 North and Range 16 West; then north along the range line common to Range 16 West and Range 17 West to the north boundary of the Angeles National Forest (collinear with the Township line common to Township 8 North and Township 7 North); then west and north along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the Los Angeles—Kern County boundary.				
San Bernardino County (part)		Nonattainment		Subpart 2/Moderate.
That portion of San Bernardino County which lies north and east of a line described as follows: Beginning at the San Bernardino—Riverside County boundary and running north along the range line common to Range 3 East and Range 2 East, San Bernardino Base and Meridian; then west along the Township line common to Township 3 North and Township 2 North to the San Bernardino— Los Angeles County boundary; And that portion of San Bernardino County which lies south and west of a line described as follows: latitude 35 degrees, 10 minutes north and longitude 115 degrees, 45 minutes west.				
Mariposa and Tuolumne Cos., CA: (Southern Mountain Counties)				
Mariposa County		Nonattainment		Subpart 1.
Tuolumne County		Nonattainment		Subpart 1.
Riverside Co. (Coachella Valley), CA;		Nonattainment		Subpart 2/Serious.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Riverside County (part) That portion of Riverside County which lies to the east of a line described as follows: Beginning at the Riverside—San Diego County boundary and running north along the range line common to Range 4 East and Range 3 East, San Bernardino Base and Meridian; then east along the Township line common to Township 8 South and Township 7 South; then north along the range line common to Range 5 East and Range 4 East; then west along the Township line common to Township 6 South and Township 7 South to the southwest corner of Section 34, Township 6 South, Range 4 East; then north along the west boundaries of Sections 34, 27, 22, 15, 10, and 3, Township 6 South, Range 4 East; then west along the Township line common to Township 5 South and Township 6 South; then north along the range line common to Range 4 East and Range 3 East; then west along the south boundaries of Sections 13, 14, 15, 16, 17, and 18, Township 5 South, Range 3 East; then north along the range line common to Range 2 East and Range 3 East; to the Riverside-San Bernardino County line. And that portion of Riverside County which lies to the west of a line described as follows: That segment of the southwestern boundary line of Hydrologic Unit Number 18100100 within Riverside County, further described as follows: Beginning at the Riverside—Imperial County boundary and running north along the range line common to Range 17 East and Range 16 East, San Bernardino Base and Meridian; then northwest along the ridge line of the Chuckwalla Mountains, through Township 8 South, Range 16 East and Township 7 South, Range 16 East, until the Black Butte Mountain, elevation 4504′; then west and northwest along the ridge line to the southwest corner of Township 5 South, Range 14 East; then north along the range line common to Range 14 East and Range 13 East; then west and northwest along the ridge line to Monument Mountain, elevation 4834′; then southwest and then northwest along the ridge line of the Little San Bernardino Mountains to Quail Mountain, elev. 5814′; then northwest along the ridge line to the Riverside—San Bernardino County line.				
Sacramento Metro, CA	.....	Nonattainment	.....	Subpart 2/Serious.
El Dorado County (part) All portions of the county except that portion of El Dorado County within the drainage area naturally tributary to Lake Tahoe including said Lake.				
Placer County (part)	.....	Nonattainment	.....	Subpart 2/Serious.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
All portions of the county except that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: Commencing at the point common to the aforementioned drainage area crestline and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian, and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, Mount Diablo Base and Meridian, thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, Mount Diablo Base and Meridian, to the intersection with the said drainage area crestline, thence following the said drainage area boundary in a southeasterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crestline in a northeasterly, then northwesterly direction to the point of beginning.				
Sacramento County		Nonattainment		Subpart 2/Serious.
Solano County (part)		Nonattainment		Subpart 2/Serious.
That portion of Solano County which lies north and east of a line described as follows: Beginning at the intersection of the westerly boundary of Solano County and the ¼ section line running east and west through the center of Section 34; Township 6 North, Range 2 West, Mount Diablo Base and Meridian, thence east along said ¼ section line to the east boundary of Section 36, Township 6 North, Range 2 West, thence south ½ mile and east 2.0 miles, more or less, along the west and south boundary of Los Putos Rancho to the northwest corner of Section 4, Township 5 North, Range 1 West, thence east along a line common to Township 5 North and Township 6 North to the northeast corner of Section 3, Township 5 North, Range 1 East, thence south along section lines to the southeast corner of Section 10, Township 3 North, Range 1 East, thence east along section lines to the south ¼ corner of Section 8, Township 3 North, Range 2 East, thence east to the boundary between Solano and Sacramento Counties.				
Sutter County (part)		Nonattainment		Subbpart 2/Serious.
Portion south of a line connecting the northern border of Yolo County to the SW tip of Yuba County and continuing along the southern Yuba County border to Placer County.				
Yolo County		Nonattainment		Subpart 2/Serious.
San Diego, CA		Nonattainment		Subpart 1.
San Diego County (part)				
That portion of San Diego County that excludes the areas listed below: La Posta Areas #1 and #2 [b], Cuyapaipe Area [b], Manzanita Area [b], Campo Areas #1 and #2 [b]				
San Francisco Bay Area, CA		Nonattainment		Subpart 2/Marginal.
Alameda County		Nonattainment		Subpart 2/Marginal.
Contra Costa County		Nonattainment		Subpart 2/Marginal.
Marin County		Nonattainment		Subpart 2/Marginal.
Napa County		Nonattainment		Subpart 2/Marginal.
San Francisco County		Nonattainment		Subpart 2/Marginal.
San Mateo County		Nonattainment		Subpart 2/Marginal.
Santa Clara County		Nonattainment		Subpart 2/Marginal.
Solano County (part)		Nonattainment		Subpart 2/Marginal.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Portion of Solano County which lies south and west of a line described as follows: Beginning at the intersection of the westerly boundary of Solano County and the ¼ section line running east and west through the center of Section 34, T6N, R2W, M.D.B. & M., thence east along said ¼ section line to the east boundary of Section 36, T6N, R2W, thence south ½ mile and east 2.0 miles, more or less, along the west and south boundary of Los Putos Rancho to the northwest corner of Section 4, T5N, R1W, thence east along a line common to T5N and T6N to the northeast corner of Section 3, T5N, R1E, thence south along section lines to the southeast corner of Section 10, T3N, R1E, thence east along section lines to the south ¼ corner of Section 8, T3N, R2E, thence east to the boundary between Solano and Sacramento Counties.				
Sonoma County (part)	.....	Nonattainment	.....	Subpart 2/Marginal.
That portion of Sonoma County which lies south and east of a line described as follows: Beginning at the southeasterly corner of the Rancho Estero Americano, being on the boundary line between Marin and Sonoma Counties, California; thence running northerly along the easterly boundary line of said Rancho Estero Americano to the northeasterly corner thereof, being an angle corner in the westerly boundary line of Rancho Canada de Jonive; thence running along said boundary of Rancho Canada de Jonive westerly, northerly and easterly to its intersection with the easterly line of Graton Road; thence running along the easterly and southerly line of Graton Road, northerly and easterly to its intersection with the easterly line of Sullivan Road; thence running northerly along said easterly line of Sullivan Road to the southerly line of Green Valley Road; thence running easterly along the said southerly line of Green Valley Road and easterly along the southerly line of State Highway 116, to the westerly line of Vine Hill Road; thence running along the westerly and northerly line of Vine Hill Road, northerly and easterly to its intersection with the westerly line of Laguna Road; thence running northerly along the westerly line of Laguna Road and the northerly projection thereof to the northerly line of Trenton Road; thence running westerly along the northerly line of said Trenton Road to the easterly line of Trenton-Healdsburg Road; thence running northerly along said easterly line of Trenton-Healdsburg Road to the easterly line of Eastside Road; thence running northerly along said easterly line of Eastside Road to its intersection with the southerly line of Rancho Sotoyome; thence running easterly along said southerly line of Rancho Sotoyome to its intersection with the Township line common to Townships 8 and 9 North, M.D.M.; thence running easterly along said township line to its intersection with the boundary line between Sonoma and Napa Counties.				
San Joaquin Valley, CA:				
Fresno County	.....	Nonattainment	.....	Subpart 2/Serious.
Kern County (part)	.....	Nonattainment	.....	Subpart 2/Serious.

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
That portion of Kern County which lies west and north of a line described as follows: Beginning at the Kern-Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Libre Land Grant to the point of intersection with the range line common to R. 16 W. and R. 17 W., San Bernardino Base and Meridian; north along the range line to the point of intersection with the Rancho El Tejon Land Grant boundary; then southeast, northeast, and northwest along the boundary of the Rancho El Tejon Land Grant to the northwest corner of S. 3, T. 11 N., R. 17 W.;then west 1.2 miles; then north to the Rancho El Tejon Land Grant boundary; then northwest along the Rancho El Tejon line to the southeast corner of S. 34, T. 32 S., R. 30 E., Mount Diablo Base and Meridian; then north to the northwest corner of S. 35, T. 31 S., R. 30 E.; then northeast along the boundary of the Rancho El Tejon Land Grant to the southwest corner of S. 18, T. 31 S., R. 31 E.; then east to the southeast corner of S. 13, T. 31 S., R. 31 E.; then north along the range line common to R. 31 E. and R. 32 E., Mount Diablo Base and Meridian, to the northwest corner of S. 6, T. 29 S., R. 32 E.; then east to the southwest corner of S. 31, T. 28 S., R. 32 E.; then north along the range line common to R. 31 E. and R. 32 E. to the northwest corner of S. 6, T. 28 S., R. 32 E., then west to the southeast corner of S. 36, T. 27 S., R. 31 E., then north along the range line common to R. 31 E. and R. 32 E. to the Kern-Tulare County boundary.				
Kings County	.....	Nonattainment	.....	Subpart 2/Serious.
Madera County	.....	Nonattainment	.....	Subpart 2/Serious.
Merced County	.....	Nonattainment	.....	Subpart 2/Serious.
San Joaquin County	.....	Nonattainment	.....	Subpart 2/Serious.
Stanislaus County	.....	Nonattainment	.....	Subpart 2/Serious.
Tulare County	.....	Nonattainment	.....	Subpart 2/Serious.
Sutter County (part), CA:				
Sutter County (part)	.....	Nonattainment	.....	Subpart 1.
(Sutter Buttes) That portion of the Sutter Buttes mountain range at or above 2,000 feet in elevation.				
Remainder of County	.....	Unclassifiable/Attainment.		
Ventura County, CA:				
Ventura County (part)	.....	Nonattainment	.....	Subpart 2/Moderate.
That part of Ventura County excluding the Channel Islands of Anacapa and San Nicolas Islands.				
Remainder of County	.....	Unclassifiable/Attainment.		
Nevada County (Western part), CA	.....	Nonattainment	.....	Subpart 1.
Nevada County (part)				
That portion of Nevada County, which lies west of a line, described as follows: beginning at the Nevada-Placer County boundary and running north along the western boundaries of Sections 24, 13, 12, 1, Township 17 North, Range 14 East, Mount Diablo Base and Meridian, and Sections 36, 25, 24, 13, 12, Township 18 North, Range 14 East to the Nevada-Sierra County boundary.				
Santa Barbara-Santa Maria-Lompoc, CA:				
Santa Barbara County	.....	Unclassifiable/Attainment.		
Mohave Desert Air Basin:				
Riverside County (part) remainder	.....	Unclassifiable/Attainment.		
San Bernardino County (part) remainder	.....	Unclassifiable/Attainment.		
Great Basin Valleys Air Basin	.....	Unclassifiable/Attainment.		

CALIFORNIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Alpine County				
Inyo County				
Mono County				
Lake County Air Basin		Unclassifiable/Attainment.		
Lake County				
Lake Tahoe Air Basin		Unclassifiable/Attainment.		
El Dorado County (part)				
Lake Tahoe Area: As described under 40 CFR 81.275.				
Placer County (part)				
Lake Tahoe Area: As described under 40 CFR 81.275.				
Monterey Bay Area		Unclassifiable/Attainment.		
Monterey County				
San Benito County				
Santa Cruz County				
Mountain Counties Air Basin (remainder of):				
Nevada County (part) remainder		Unclassifiable/Attainment.		
Plumas County		Unclassifiable/Attainment.		
Sierra County		Unclassifiable/Attainment.		
North Coast Air Basin		Unclassifiable/Attainment.		
Del Norte County				
Humboldt County				
Mendocino County				
Sonoma County (part) remainder				
Trinity County				
Northeast Plateau Air Basin		Unclassifiable/Attainment.		
Lassen County				
Modoc County				
Siskiyou County				
Sacramento Valley Air Basin (remainder of):				
Colusa County		Unclassifiable/Attainment.		
Glenn County		Unclassifiable/Attainment.		
Shasta County		Unclassifiable/Attainment.		
Tehama County		Unclassifiable/Attainment.		
Yuba County		Unclassifiable/Attainment.		
South Central Coast Air Basin: (remainder of)				
Channel Islands		Unclassifiable/Attainment.		
San Luis Obispo County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[b] The boundaries for these designated areas are based on coordinates of latitude and longitude derived from EPA Region 9's GIS database and are illustrated in a map entitled "Eastern San Diego County Attainment Areas for the 8-Hour Ozone NAAQS," dated March 9, 2004, including an attached set of coordinates. The map and attached set of coordinates are available at EPA's Region 9 Air Division office. The designated areas roughly approximate the boundaries of the reservations for these tribes, but their inclusion in this table is intended for CAA planning purposes only and is not intended to be a federal determination of the exact boundaries of the reservations. Also, the specific listing of these tribes in this table does not confer, deny, or withdraw Federal recognition of any of the tribes so listed nor any of the tribes not listed.

[1] This date is June 15, 2004, unless otherwise noted.

■ 7. In § 81.306, the table entitled "Colorado-Ozone (8-Hour Standard)" is added to read as follows:

§ 81.306 Colorado.

* * * * *

COLORADO—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Denver-Boulder-Greeley-Ft.Collins-Love., CO:				
Adams County	(2)	Nonattainment	(2)	Subpart 1.
Arapahoe County	(2)	Nonattainment	(2)	Subpart 1.
Boulder County (includes part of Rocky Mtn. Nat. Park).	(2)	Nonattainment	(2)	Subpart 1.
Broomfield County	(2)	Nonattainment	(2)	Subpart 1.
Denver County	(2)	Nonattainment	(2)	Subpart 1.
Douglas County	(2)	Nonattainment	(2)	Subpart 1.
Jefferson County	(2)	Nonattainment	(2)	Subpart 1.

COLORADO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Larimer County (part) (includes part of Rocky Mtn. Nat. Park).	(2)	Nonattainment	(2)	Subpart 1.
That portion of the county that lies south of a line described as follows: Beginning at a point on Larimer County's eastern boundary and Weld County's western boundary intersected by 40 degrees, 42 minutes, and 47.1 seconds north latitude, proceed west to a point defined by the intersection of 40 degrees, 42 minutes, 47.1 seconds north latitude and 105 degrees, 29 minutes, and 40.0 seconds west longitude, thence proceed south on 105 degrees, 29 minutes, 40.0 seconds west longitude to the intersection with 40 degrees, 33 minutes and 17.4 seconds north latitude, thence proceed west on 40 degrees, 33 minutes, 17.4 seconds north latitude until this line intersects Larimer County's western boundary and Grand County's eastern boundary.				
Weld County (part)	(2)	Nonattainment	(2)	Subpart 1.
That portion of the county that lies south of a line described as follows: Beginning at a point on Weld County's eastern boundary and Logan County's western boundary intersected by 40 degrees, 42 minutes, 47.1 seconds north latitude, proceed west on 40 degrees, 42 minutes, 47.1 seconds north latitude until this line intersects Weld County's western boundary and Larimer County's eastern boundary.				
State AQCR 01		Unclassifiable/Attainment		
Logan County				
Phillips County				
Sedgwick County				
Washington County				
Yuma County				
State AQCR 03 (remainder of)		Unclassifiable/Attainment		
Clear Creek County				
Gilpin County				
State AQCR 11		Unclassifiable/Attainment		
Garfield County				
Mesa County				
Moffat County				
Rio Blanco County				
Rest of State		Unclassifiable/Attainment		
Alamosa County				
Archuleta County				
Baca County				
Bent County				
Chaffee County				
Cheyenne County				
Conejos County				
Costilla County				
Crowley County				
Custer County				
Delta County				
Dolores County				
Eagle County				
El Paso County				
Elbert County				
Fremont County				
Grand County (includes portion of W. Rocky Mtn. Nat. Park)				
Gunnison County				
Hinsdale County				
Huerfano County				
Jackson County				
Kiowa County				
Kit Carson County				
La Plata County				
Lake County				

COLORADO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Larimer County (part) remainder				
Las Animas County				
Lincoln County				
Mineral County				
Montezuma County				
Montrose County				
Morgan County				
Otero County				
Ouray County				
Park County				
Pitkin County				
Prowers County				
Pueblo County				
Rio Grande County				
Routt County				
Saguache County				
San Juan County				
San Miguel County				
Summit County				
Teller County				
Weld County (part) remainder				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 8. In § 81.307, the table entitled "Connecticut—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.307 Connecticut.

* * * * *

CONNECTICUT—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Greater Connecticut, CT:				
Hartford County		Nonattainment		Subpart 2/Moderate.
Litchfield County		Nonattainment		Subpart 2/Moderate.
New London County		Nonattainment		Subpart 2/Moderate.
Tolland County		Nonattainment		Subpart 2/Moderate.
Windham County		Nonattainment		Subpart 2/Moderate.
New York–N. New Jersey–Long Island, NY–NJ–CT:				
Fairfield County		Nonattainment		Subpart 2/Moderate.
Middlesex County		Nonattainment		Subpart 2/Moderate.
New Haven County		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 9. In § 81.308, the table entitled "Delaware—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.308 Delaware.

* * * * *

DELAWARE—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Philadelphia–Wilmington–Atlantic Ci, PA–NJ–MD–DE:				
Kent County		Nonattainment		Subpart 2/Moderate.
New Castle County		Nonattainment		Subpart 2/Moderate.
Sussex County		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 10. In § 81.309, the table entitled "District of Columbia—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.309 District of Columbia.

* * * * *

DISTRICT OF COLUMBIA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Washington, DC–MD–VA:				
District of Columbia		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 11. In § 81.310, the table entitled "Florida—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.310 Florida.

* * * * *

FLORIDA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment		
Alachua County				
Baker County				
Bay County				
Bradford County				
Brevard County				
Broward County				
Calhoun County				
Charlotte County				
Citrus County				
Clay County				
Collier County				
Columbia County				
DeSoto County				
Dixie County				
Duval County				
Escambia County				
Flagler County				
Franklin County				
Gadsden County				
Gilchrist County				
Glades County				
Gulf County				
Hamilton County				
Hardee County				
Hendry County				
Hernando County				
Highlands County				
Hillsborough County				
Holmes County				
Indian River County				
Jackson County				
Jefferson County				
Lafayette County				
Lake County				
Lee County				
Leon County				
Levy County				
Liberty County				
Madison County				
Manatee County				
Marion County				
Martin County				
Miami-Dade County				
Monroe County				
Nassau County				
Okaloosa County				
Okeechobee County				
Orange County				

FLORIDA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Osceola County				
Palm Beach County				
Pasco County				
Pinellas County				
Polk County				
Putnam County				
St. Johns County				
St. Lucie County				
Santa Rosa County				
Sarasota County				
Seminole County				
Sumter County				
Suwannee County				
Taylor County				
Union County				
Volusia County				
Wakulla County				
Walton County				
Washington County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 12. In § 81.311, the table entitled "Georgia—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.311 Georgia.

* * * * *

GEORGIA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Atlanta, GA:				
Barrow County		Nonattainment		Subpart 2/Marginal.
Bartow County		Nonattainment		Subpart 2/Marginal.
Carroll County		Nonattainment		Subpart 2/Marginal.
Cherokee County		Nonattainment		Subpart 2/Marginal.
Clayton County		Nonattainment		Subpart 2/Marginal.
Cobb County		Nonattainment		Subpart 2/Marginal.
Coweta County		Nonattainment		Subpart 2/Marginal.
DeKalb County		Nonattainment		Subpart 2/Marginal.
Douglas County		Nonattainment		Subpart 2/Marginal.
Fayette County		Nonattainment		Subpart 2/Marginal.
Forsyth County		Nonattainment		Subpart 2/Marginal.
Fulton County		Nonattainment		Subpart 2/Marginal.
Gwinnett County		Nonattainment		Subpart 2/Marginal.
Hall County		Nonattainment		Subpart 2/Marginal.
Henry County		Nonattainment		Subpart 2/Marginal.
Newton County		Nonattainment		Subpart 2/Marginal.
Paulding County		Nonattainment		Subpart 2/Marginal.
Rockdale County		Nonattainment		Subpart 2/Marginal.
Spalding County		Nonattainment		Subpart 2/Marginal.
Walton County		Nonattainment		Subpart 2/Marginal.
Macon, GA:				
Bibb County		Nonattainment		Subpart 1.
Monroe County (part)		Nonattainment		Subpart 1.
From the point where Bibb and Monroe Counties meet at the Ocmulgee River, follow the Ocmulgee River boundary north to 33 degrees, 05 minutes, due west to 83 degrees, 50 minutes, due south to the intersection with Georgia Hwy 18, east along Georgia Hwy 18 to US Hwy 23/ Georgia Hwy 87, south on US Hwy 23/ Georgia Hwy 87 to the Monro/Bibb County line, and east to the intersection with the Ocmulgee River				
Chattanooga, TN–GA:				
Catoosa County		Nonattainment		Subpart 1.

GEORGIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Murray Co (Chattahoochee Nat Forest), GA:				
Murray County (part)		Nonattainment		Subpart 1.
Rest of State		Unclassifiable/Attainment		
Appling County.				
Atkinson County				
Bacon County				
Baker County				
Baldwin County				
Banks County				
Ben Hill County				
Berrien County				
Bleckley County				
Brantley County				
Brooks County				
Bryan County				
Bulloch County				
Burke County				
Butts County				
Calhoun County				
Camden County				
Candler County				
Charlton County				
Chatham County				
Chattahoochee County				
Chattooga County				
Clarke County				
Clay County				
Clinch County				
Coffee County				
Colquitt County				
Columbia County				
Cook County				
Crawford County				
Crisp County				
Dade County				
Dawson County				
Decatur County				
Dodge County				
Dooly County				
Dougherty County				
Early County				
Echols County				
Effingham County				
Elbert County				
Emanuel County				
Evans County				
Fannin County				
Floyd County				
Franklin County				
Gilmer County				
Glascock County				
Glynn County				
Gordon County				
Grady County				
Greene County				
Habersham County				
Hancock County				
Haralson County				
Harris County				
Hart County				
Heard County				
Houston County				
Irwin County				
Jackson County				
Jasper County				
Jeff Davis County				
Jefferson County				
Jenkins County				
Johnson County				
Jones County				

GEORGIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Lamar County				
Lanier County				
Laurens County				
Lee County				
Liberty County				
Lincoln County				
Long County				
Lowndes County				
Lumpkin County				
Macon County				
Madison County				
Marion County				
McDuffie County				
McIntosh County				
Meriwether County				
Miller County				
Mitchell County				
Monroe County (part) remainder				
Montgomery County				
Morgan County				
Murray County (part) remainder				
Muscogee County				
Oconee County				
Oglethorpe County				
Peach County				
Pickens County				
Pierce County				
Pike County				
Polk County				
Pulaski County				
Putnam County				
Quitman County				
Rabun County				
Randolph County				
Richmond County				
Schley County				
Screven County				
Seminole County				
Stephens County				
Stewart County				
Sumter County				
Talbot County				
Taliaferro County				
Tattnall County				
Taylor County				
Telfair County				
Terrell County				
Thomas County				
Tift County				
Toombs County				
Towns County				
Treutlen County				
Troup County				
Turner County				
Twiggs County				
Union County				
Upson County				
Walker County				
Ware County				
Warren County				
Washington County				
Wayne County				
Webster County				
Wheeler County				
White County				
Whitfield County				
Wilcox County				
Wilkes County				
Wilkinson County				

GEORGIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Worth County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 13. In § 81.312, the table entitled "Hawaii—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.312 Hawaii.

* * * * *

HAWAII—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable Attainment		
Hawaii County				
Honolulu County				
Kalawao County				
Kauai County				
Maui County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 14. In § 81.313, the table entitled "Idaho—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.313 Idaho.

* * * * *

IDAHO—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 61 Eastern Idaho Intrastate		Unclassifiable/Attainment		
Bannock County				
Bear Lake County				
Bingham County				
Bonneville County				
Butte County				
Caribou County				
Clark County				
Franklin County				
Fremont County				
Jefferson County				
Madison County				
Oneida County				
Power County				
Teton County				
AQCR 62 E Washington-N Idaho Interstate		Unclassifiable/Attainment		
Benewah County				
Kootenai County				
Latah County				
Nez Perce County				
Shoshone County				
AQCR 63 Idaho Intrastate		Unclassifiable/Attainment		
Adams County				
Blaine County				
Boise County				
Bonner County				
Boundary County				
Camas County				
Cassia County				
Clearwater County				
Custer County				
Elmore County				
Gem County				
Gooding County				

IDAHO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Idaho County				
Jerome County				
Lemhi County				
Lewis County				
Lincoln County				
Minidoka County				
Owyhee County				
Payette County				
Twin Falls County				
Valley County				
Washington County				
AQCR 64 Metropolitan Boise Interstate		Unclassifiable/Attainment		
Ada County				
Canyon County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 15. In § 81.314, the table entitled "Illinois—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.314 Illinois.

* * * * *

ILLINOIS—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Chicago-Gary-Lake County, IL-IN:				
Cook County		Nonattainment		Subpart 2/Moderate.
DuPage County		Nonattainment		Subpart 2/Moderate.
Grundy County (part)		Nonattainment		Subpart 2/Moderate.
Aux Sable Township Goose Lake Township				
Kane County		Nonattainment		Subpart 2/Moderate.
Kendall County (part)		Nonattainment		Subpart 2/Moderate.
Oswego Township				
Lake County		Nonattainment		Subpart 2/Moderate.
McHenry County		Nonattainment		Subpart 2/Moderate.
Will County		Nonattainment		Subpart 2/Moderate.
St. Louis, MO-IL:				
Jersey County		Nonattainment		Subpart 2/Moderate.
Madison County		Nonattainment		Subpart 2/Moderate.
Monroe County		Nonattainment		Subpart 2/Moderate.
St. Clair County		Nonattainment		Subpart 2/Moderate.
Rest of State				
Adams County		Unclassifiable/Attainment.		
Alexander County		Unclassifiable/Attainment.		
Bond County		Unclassifiable/Attainment.		
Boone County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Bureau County		Unclassifiable/Attainment.		
Calhoun County		Unclassifiable/Attainment.		
Carroll County		Unclassifiable/Attainment.		
Cass County		Unclassifiable/Attainment.		
Champaign County		Unclassifiable/Attainment.		
Christian County		Unclassifiable/Attainment.		
Clark County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Clinton County		Unclassifiable/Attainment.		
Coles County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Cumberland County		Unclassifiable/Attainment.		
De Witt County		Unclassifiable/Attainment.		
DeKalb County		Unclassifiable/Attainment.		
Douglas County		Unclassifiable/Attainment.		
Edgar County		Unclassifiable/Attainment.		
Edwards County		Unclassifiable/Attainment.		
Effingham County		Unclassifiable/Attainment.		
Fayette County		Unclassifiable/Attainment.		
Ford County		Unclassifiable/Attainment.		

ILLINOIS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Franklin County		Unclassifiable/Attainment.		
Fulton County		Unclassifiable/Attainment.		
Gallatin County		Unclassifiable/Attainment.		
Greene County		Unclassifiable/Attainment.		
Grundy County (part)		Unclassifiable/Attainment.		
All townships except Aux Sable and Goose Lake.				
Hamilton County		Unclassifiable/Attainment.		
Hancock County		Unclassifiable/Attainment.		
Hardin County		Unclassifiable/Attainment.		
Henderson County		Unclassifiable/Attainment.		
Henry County		Unclassifiable/Attainment.		
Iroquois County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Jasper County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
Jo Daviess County		Unclassifiable/Attainment.		
Johnson County		Unclassifiable/Attainment.		
Kankakee County		Unclassifiable/Attainment.		
Kendall County (part)		Unclassifiable/Attainment.		
All townships except Oswego				
Knox County		Unclassifiable/Attainment.		
La Salle County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Lee County		Unclassifiable/Attainment.		
Livingston County		Unclassifiable/Attainment.		
Logan County		Unclassifiable/Attainment.		
Macon County		Unclassifiable/Attainment.		
Macoupin County		Unclassifiable/Attainment.		
Marion County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
Mason County		Unclassifiable/Attainment.		
Massac County		Unclassifiable/Attainment.		
McDonough County		Unclassifiable/Attainment.		
McLean County		Unclassifiable/Attainment.		
Menard County		Unclassifiable/Attainment.		
Mercer County		Unclassifiable/Attainment.		
Montgomery County		Unclassifiable/Attainment.		
Morgan County		Unclassifiable/Attainment.		
Moultrie County		Unclassifiable/Attainment.		
Ogle County		Unclassifiable/Attainment.		
Peoria County		Unclassifiable/Attainment.		
Perry County		Unclassifiable/Attainment.		
Piatt County		Unclassifiable/Attainment.		
Pike County		Unclassifiable/Attainment.		
Pope County		Unclassifiable/Attainment.		
Pulaski County		Unclassifiable/Attainment.		
Putnam County		Unclassifiable/Attainment.		
Randolph County		Unclassifiable/Attainment.		
Richland County		Unclassifiable/Attainment.		
Rock Island County		Unclassifiable/Attainment.		
Saline County		Unclassifiable/Attainment.		
Sangamon County		Unclassifiable/Attainment.		
Schuyler County		Unclassifiable/Attainment.		
Scott County		Unclassifiable/Attainment.		
Shelby County		Unclassifiable/Attainment.		
Stark County		Unclassifiable/Attainment.		
Stephenson County		Unclassifiable/Attainment.		
Tazewell County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		
Vermilion County		Unclassifiable/Attainment.		
Wabash County		Unclassifiable/Attainment.		
Warren County		Unclassifiable/Attainment.		
Washington County		Unclassifiable/Attainment.		
Wayne County		Unclassifiable/Attainment.		
White County		Unclassifiable/Attainment.		
Whiteside County		Unclassifiable/Attainment.		
Williamson County		Unclassifiable/Attainment.		
Winnebago County		Unclassifiable/Attainment.		
Woodford County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is June 15, 2004, unless otherwise noted.

■ 16. In § 81.315, the table entitled "Indiana—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.315 Indiana.

INDIANA—OZONE (8-HOUR STANDARD)

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
Chicago-Gary-Lake County, IL–IN:				
Lake County		Nonattainment		Subpart 2/Moderate.
Porter County		Nonattainment		Subpart 2/Moderate.
Cincinnati-Hamilton, OH–KY–IN:				
Dearborn County (part)		Nonattainment		Subpart 1.
Lawrenceburg Township				
Evansville, IN:				
Vanderburgh County		Nonattainment		Subpart 1.
Warrick County		Nonattainment		Subpart 1.
Fort Wayne, IN:				
Allen County		Nonattainment		Subpart 1.
Greene Co., IN:				
Greene County		Nonattainment		Subpart 1.
Indianapolis, IN:				
Boone County		Nonattainment		Subpart 1.
Hamilton County		Nonattainment		Subpart 1.
Hancock County		Nonattainment		Subpart 1.
Hendricks County		Nonattainment		Subpart 1.
Johnson County		Nonattainment		Subpart 1.
Madison County		Nonattainment		Subpart 1.
Marion County		Nonattainment		Subpart 1.
Morgan County		Nonattainment		Subpart 1.
Shelby County		Nonattainment		Subpart 1.
Jackson Co., IN:				
Jackson County		Nonattainment		Subpart 1.
La Porte Co., IN:				
La Porte County		Nonattainment		Subpart 2/Moderate.
Louisville, KY–IN:				
Clark County		Nonattainment		Subpart 1.
Floyd County		Nonattainment		Subpart 1.
Muncie, IN:				
Delaware County		Nonattainment		Subpart 1.
South Bend-Elkhart, IN:				
Elkhart County		Nonattainment		Subpart 1.
St. Joseph County		Nonattainment		Subpart 1.
Terre Haute, IN:				
Vigo County		Nonattainment		Subpart 1.
Rest of State				
Adams County		Unclassifiable/Attainment.		
Bartholomew County		Unclassifiable/Attainment.		
Benton County		Unclassifiable/Attainment.		
Blackford County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Carroll County		Unclassifiable/Attainment.		
Cass County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Clinton County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Daviess County		Unclassifiable/Attainment.		
De Kalb County		Unclassifiable/Attainment.		
Dearborn County (part) remainder		Unclassifiable/Attainment.		
Decatur County		Unclassifiable/Attainment.		
Dubois County		Unclassifiable/Attainment.		
Fayette County		Unclassifiable/Attainment.		
Fountain County		Unclassifiable/Attainment.		
Franklin County		Unclassifiable/Attainment.		
Fulton County		Unclassifiable/Attainment.		
Gibson County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Harrison County		Unclassifiable/Attainment.		
Henry County		Unclassifiable/Attainment.		
Howard County		Unclassifiable/Attainment.		
Huntington County		Unclassifiable/Attainment.		

INDIANA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Jasper County		Unclassifiable/Attainment.		
Jay County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
Jennings County		Unclassifiable/Attainment.		
Knox County		Unclassifiable/Attainment.		
Kosciusko County		Unclassifiable/Attainment.		
LaGrange County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
Martin County		Unclassifiable/Attainment.		
Miami County		Unclassifiable/Attainment.		
Monroe County		Unclassifiable/Attainment.		
Montgomery County		Unclassifiable/Attainment.		
Newton County		Unclassifiable/Attainment.		
Noble County		Unclassifiable/Attainment.		
Ohio County		Unclassifiable/Attainment.		
Orange County		Unclassifiable/Attainment.		
Owen County		Unclassifiable/Attainment.		
Parke County		Unclassifiable/Attainment.		
Perry County		Unclassifiable/Attainment.		
Pike County		Unclassifiable/Attainment.		
Posey County		Unclassifiable/Attainment.		
Pulaski County		Unclassifiable/Attainment.		
Putnam County		Unclassifiable/Attainment.		
Randolph County		Unclassifiable/Attainment.		
Ripley County		Unclassifiable/Attainment.		
Rush County		Unclassifiable/Attainment.		
Scott County		Unclassifiable/Attainment.		
Spencer County		Unclassifiable/Attainment.		
Starke County		Unclassifiable/Attainment.		
Steuben County		Unclassifiable/Attainment.		
Sullivan County		Unclassifiable/Attainment.		
Switzerland County		Unclassifiable/Attainment.		
Tippecanoe County		Unclassifiable/Attainment.		
Tipton County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		
Vermillion County		Unclassifiable/Attainment.		
Wabash County		Unclassifiable/Attainment.		
Warren County		Unclassifiable/Attainment.		
Warrick County		Unclassifiable/Attainment.		
Washington County		Unclassifiable/Attainment.		
Wayne County		Unclassifiable/Attainment.		
Wells County		Unclassifiable/Attainment.		
White County		Unclassifiable/Attainment.		
Whitley County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 17. In § 81.316, the table entitled "Iowa—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.316 Iowa.

* * * * *

IOWA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment.		
Adair County				
Adams County				
Allamakee County				
Appanoose County				
Audubon County				
Benton County				
Black Hawk County				
Boone County				
Bremer County				

IOWA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Buchanan County				
Buena Vista County				
Butler County				
Calhoun County				
Carroll County				
Cass County				
Cedar County				
Cerro Gordo County				
Cherokee County				
Chickasaw County				
Clarke County				
Clay County				
Clayton County				
Clinton County				
Crawford County				
Dallas County				
Davis County				
Decatur County				
Delaware County				
Des Moines County				
Dickinson County				
Dubuque County				
Emmet County				
Fayette County				
Floyd County				
Franklin County				
Fremont County				
Greene County				
Grundy County				
Guthrie County				
Hamilton County				
Hancock County				
Hardin County				
Harrison County				
Henry County				
Howard County				
Humboldt County				
Ida County				
Iowa County				
Jackson County				
Jasper County				
Jefferson County				
Johnson County				
Jones County				
Keokuk County				
Kossuth County				
Lee County				
Linn County				
Louisa County				
Lucas County				
Lyon County				
Madison County				
Mahaska County				
Marion County				
Marshall County				
Mills County				
Mitchell County				
Monona County				
Monroe County				
Montgomery County				
Muscatine County				
O'Brien County				
Osceola County				
Page County				
Palo Alto County				
Plymouth County				
Pocahontas County				
Polk County				
Pottawattamie County				
Poweshiek County				

IOWA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Ringgold County				
Sac County				
Scott County				
Shelby County				
Sioux County				
Story County				
Tama County				
Taylor County				
Union County				
Van Buren County				
Wapello County				
Warren County				
Washington County				
Wayne County				
Webster County				
Winnebago County				
Winneshiek County				
Woodbury County				
Worth County				
Wright County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 18. In § 81.317, the table entitled "Kansas—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.317 Kansas.

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KANSAS—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Kansas City, KS–MO:				
Johnson County		Unclassifiable [b].		
Linn County		Unclassifiable [b].		
Miami County		Unclassifiable [b].		
Wyandotte County		Unclassifiable [b].		
Rest of State:				
Allen County		Unclassifiable/Attainment.		
Anderson County		Unclassifiable/Attainment.		
Atchison County		Unclassifiable/Attainment.		
Barber County		Unclassifiable/Attainment.		
Barton County		Unclassifiable/Attainment.		
Bourbon County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Butler County		Unclassifiable/Attainment.		
Chase County		Unclassifiable/Attainment.		
Chautauqua County		Unclassifiable/Attainment.		
Cherokee County		Unclassifiable/Attainment.		
Cheyenne County		Unclassifiable/Attainment.		
Clark County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Cloud County		Unclassifiable/Attainment.		
Coffey County		Unclassifiable/Attainment.		
Comanche County		Unclassifiable/Attainment.		
Cowley County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Decatur County		Unclassifiable/Attainment.		
Dickinson County		Unclassifiable/Attainment.		
Doniphan County		Unclassifiable/Attainment.		
Douglas County		Unclassifiable/Attainment.		
Edwards County		Unclassifiable/Attainment.		
Elk County		Unclassifiable/Attainment.		
Ellis County		Unclassifiable/Attainment.		
Ellsworth County		Unclassifiable/Attainment.		
Finney County		Unclassifiable/Attainment.		
Ford County		Unclassifiable/Attainment.		

KANSAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Franklin County		Unclassifiable/Attainment.		
Geary County		Unclassifiable/Attainment.		
Gove County		Unclassifiable/Attainment.		
Graham County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Gray County		Unclassifiable/Attainment.		
Greeley County		Unclassifiable/Attainment.		
Greenwood County		Unclassifiable/Attainment.		
Hamilton County		Unclassifiable/Attainment.		
Harper County		Unclassifiable/Attainment.		
Harvey County		Unclassifiable/Attainment.		
Haskell County		Unclassifiable/Attainment.		
Hodgeman County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
Jewell County		Unclassifiable/Attainment.		
Kearny County		Unclassifiable/Attainment.		
Kingman County		Unclassifiable/Attainment.		
Kiowa County		Unclassifiable/Attainment.		
Labette County		Unclassifiable/Attainment.		
Lane County		Unclassifiable/Attainment.		
Leavenworth County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Logan County		Unclassifiable/Attainment.		
Lyon County		Unclassifiable/Attainment.		
Marion County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
McPherson County		Unclassifiable/Attainment.		
Meade County		Unclassifiable/Attainment.		
Mitchell County		Unclassifiable/Attainment.		
Montgomery County		Unclassifiable/Attainment.		
Morris County		Unclassifiable/Attainment.		
Morton County		Unclassifiable/Attainment.		
Nemaha County		Unclassifiable/Attainment.		
Neosho County		Unclassifiable/Attainment.		
Ness County		Unclassifiable/Attainment.		
Norton County		Unclassifiable/Attainment.		
Osage County		Unclassifiable/Attainment.		
Osborne County		Unclassifiable/Attainment.		
Ottawa County		Unclassifiable/Attainment.		
Pawnee County		Unclassifiable/Attainment.		
Phillips County		Unclassifiable/Attainment.		
Pottawatomie County		Unclassifiable/Attainment.		
Pratt County		Unclassifiable/Attainment.		
Rawlins County		Unclassifiable/Attainment.		
Reno County		Unclassifiable/Attainment.		
Republic County		Unclassifiable/Attainment.		
Rice County		Unclassifiable/Attainment.		
Riley County		Unclassifiable/Attainment.		
Rooks County		Unclassifiable/Attainment.		
Rush County		Unclassifiable/Attainment.		
Russell County		Unclassifiable/Attainment.		
Saline County		Unclassifiable/Attainment.		
Scott County		Unclassifiable/Attainment.		
Sedgwick County		Unclassifiable/Attainment.		
Seward County		Unclassifiable/Attainment.		
Shawnee County		Unclassifiable/Attainment.		
Sheridan County		Unclassifiable/Attainment.		
Sherman County		Unclassifiable/Attainment.		
Smith County		Unclassifiable/Attainment.		
Stafford County		Unclassifiable/Attainment.		
Stanton County		Unclassifiable/Attainment.		
Stevens County		Unclassifiable/Attainment.		
Sumner County		Unclassifiable/Attainment.		
Thomas County		Unclassifiable/Attainment.		
Trego County		Unclassifiable/Attainment.		
Wabaunsee County		Unclassifiable/Attainment.		
Wallace County		Unclassifiable/Attainment.		
Washington County		Unclassifiable/Attainment.		
Wichita County		Unclassifiable/Attainment.		

KANSAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Wilson County		Unclassifiable/Attainment.		
Woodson County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[b] This area is given an "Unclassifiable" designation. EPA will review all available information and make an attainment or nonattainment decision after reviewing the 2004 data.
[1] This date is June 15, 2004, unless otherwise noted.

■ 19. In § 81.318, the table entitled "Kentucky—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.318 Kentucky.

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KENTUCKY—OZONE (8-HOUR STANDARD)

Designation	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Cincinnati-Hamilton, OH–KY–IN:				
Boone County		Nonattainment		Subpart 1.
Campbell County		Nonattainment		Subpart 1.
Kenton County		Nonattainment		Subpart 1.
Clarkesville-Hopkinsville, TN–KY:				
Christian County		Nonattainment		Subpart 1.
Louisville, KY–IN:				
Bullitt County		Nonattainment		Subpart 1.
Jefferson County		Nonattainment		Subpart 1.
Oldham County		Nonattainment		Subpart 1.
Huntington-Ashland, WV–KY:				
Boyd County		Nonattainment		Subpart 1.
Rest of State				
Adair County		Unclassifiable/Attainment.		
Allen County		Unclassifiable/Attainment.		
Anderson County		Unclassifiable/Attainment.		
Ballard County		Unclassifiable/Attainment.		
Barren County		Unclassifiable/Attainment.		
Bath County		Unclassifiable/Attainment.		
Bell County		Unclassifiable/Attainment.		
Bourbon County		Unclassifiable/Attainment.		
Boyle County		Unclassifiable/Attainment.		
Bracken County		Unclassifiable/Attainment.		
Breathitt County		Unclassifiable/Attainment.		
Breckinridge County		Unclassifiable/Attainment.		
Butler County		Unclassifiable/Attainment.		
Caldwell County		Unclassifiable/Attainment.		
Calloway County		Unclassifiable/Attainment.		
Carlisle County		Unclassifiable/Attainment.		
Carroll County		Unclassifiable/Attainment.		
Carter County		Unclassifiable/Attainment.		
Casey County		Unclassifiable/Attainment.		
Clark County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Clinton County		Unclassifiable/Attainment.		
Crittenden County		Unclassifiable/Attainment.		
Cumberland County		Unclassifiable/Attainment.		
Daviess County		Unclassifiable/Attainment.		
Edmonson County		Unclassifiable/Attainment.		
Elliott County		Unclassifiable/Attainment.		
Estill County		Unclassifiable/Attainment.		
Fayette County		Unclassifiable/Attainment.		
Fleming County		Unclassifiable/Attainment.		
Floyd County		Unclassifiable/Attainment.		
Franklin County		Unclassifiable/Attainment.		
Fulton County		Unclassifiable/Attainment.		
Gallatin County		Unclassifiable/Attainment.		
Garrard County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Graves County		Unclassifiable/Attainment.		
Grayson County		Unclassifiable/Attainment.		
Green County		Unclassifiable/Attainment.		

KENTUCKY—OZONE (8-HOUR STANDARD)—Continued

Designation	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Greenup County		Unclassifiable/Attainment.		
Hancock County		Unclassifiable/Attainment.		
Hardin County		Unclassifiable/Attainment.		
Harlan County		Unclassifiable/Attainment.		
Harrison County		Unclassifiable/Attainment.		
Hart County		Unclassifiable/Attainment.		
Henderson County		Unclassifiable/Attainment.		
Henry County		Unclassifiable/Attainment.		
Hickman County		Unclassifiable/Attainment.		
Hopkins County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Jessamine County		Unclassifiable/Attainment.		
Johnson County		Unclassifiable/Attainment.		
Knott County		Unclassifiable/Attainment.		
Knox County		Unclassifiable/Attainment.		
Larue County		Unclassifiable/Attainment.		
Laurel County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Lee County.		Unclassifiable/Attainment.		
Leslie County		Unclassifiable/Attainment.		
Letcher County		Unclassifiable/Attainment.		
Lewis County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Livingston County		Unclassifiable/Attainment.		
Logan County		Unclassifiable/Attainment.		
Lyon County		Unclassifiable/Attainment.		
Madison County		Unclassifiable/Attainment.		
Magoffin County		Unclassifiable/Attainment.		
Marion County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
Martin County		Unclassifiable/Attainment.		
Mason County		Unclassifiable/Attainment.		
McCracken County		Unclassifiable/Attainment.		
McCreary County		Unclassifiable/Attainment.		
McLean County		Unclassifiable/Attainment.		
Meade County		Unclassifiable/Attainment.		
Menifee County		Unclassifiable/Attainment.		
Mercer County		Unclassifiable/Attainment.		
Metcalfe County		Unclassifiable/Attainment.		
Monroe County		Unclassifiable/Attainment.		
Montgomery County		Unclassifiable/Attainment.		
Morgan County		Unclassifiable/Attainment.		
Muhlenberg County		Unclassifiable/Attainment.		
Nelson County		Unclassifiable/Attainment.		
Nicholas County		Unclassifiable/Attainment.		
Ohio County		Unclassifiable/Attainment.		
Owen County		Unclassifiable/Attainment.		
Owsley County		Unclassifiable/Attainment.		
Pendleton County		Unclassifiable/Attainment.		
Perry County		Unclassifiable/Attainment.		
Pike County		Unclassifiable/Attainment.		
Powell County		Unclassifiable/Attainment.		
Pulaski County		Unclassifiable/Attainment.		
Robertson County		Unclassifiable/Attainment.		
Rockcastle County		Unclassifiable/Attainment.		
Rowan County		Unclassifiable/Attainment.		
Russell County		Unclassifiable/Attainment.		
Scott County		Unclassifiable/Attainment.		
Shelby County		Unclassifiable/Attainment.		
Simpson County		Unclassifiable/Attainment.		
Spencer County		Unclassifiable/Attainment.		
Taylor County		Unclassifiable/Attainment.		
Todd County		Unclassifiable/Attainment.		
Trigg County		Unclassifiable/Attainment.		
Trimble County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		
Warren County		Unclassifiable/Attainment.		
Washington County		Unclassifiable/Attainment.		
Wayne County		Unclassifiable/Attainment.		
Webster County		Unclassifiable/Attainment.		

KENTUCKY—OZONE (8-HOUR STANDARD)—Continued

Designation	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Whitley County		Unclassifiable/Attainment.		
Wolfe County		Unclassifiable/Attainment.		
Woodford County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 20. In § 81.319, the table entitled "Louisiana—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.319 Louisiana.

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LOUISIANA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Baton Rouge, LA:				
Ascension Parish		Nonattainment		Subpart 2/Marginal.
East Baton Rouge Parish		Nonattainment		Subpart 2/Marginal.
Iberville Parish		Nonattainment		Subpart 2/Marginal.
Livingston Parish		Nonattainment		Subpart 2/Marginal.
West Baton Rouge Parish		Nonattainment		Subpart 2/Marginal.
Beauregard Parish Area, LA:				
Beauregard Parish		Unclassifiable/Attainment.		
Grant Parish Area:				
Grant Parish		Unclassifiable/Attainment.		
Lafayette Area:				
Lafayette Parish		Unclassifiable/Attainment.		
Lafourche Parish Area:				
Lafourche Parish		Unclassifiable/Attainment.		
Lake Charles Area:				
Calcasieu Parish		Unclassifiable/Attainment.		
New Orleans Area:				
Jefferson Parish		Unclassifiable/Attainment.		
Orleans Parish		Unclassifiable/Attainment..		
St. Bernard Parish		Unclassifiable/Attainment.		
St. Charles Parish		Unclassifiable/Attainment.		
Pointe Coupee Area:				
Pointe Coupee Parish		Unclassifiable/Attainment.		
St. James Parish Area:				
St. James Parish		Unclassifiable/Attainment.		
St. Mary Parish Area:				
St. Mary Parish		Unclassifiable/Attainment.		
AQCR 019 Monroe-El Dorado Interstate		Unclassifiable/Attainment.		
Caldwell Parish				
Catahoula Parish				
Concordia Parish				
East Carroll Parish				
Franklin Parish				
La Salle Parish				
Madison Parish				
Morehouse Parish				
Ouachita Parish				
Richland Parish				
Tensas Parish				
Union Parish				
West Carroll Parish				
AQCR 022 Shreveport-Texarkana-Tyler Interstate		Unclassifiable/Attainment.		
Bienville Parish				
Bossier Parish				
Caddo Parish				
Claiborne Parish				
De Soto Parish				
Jackson Parish				
Lincoln Parish				
Natchitoches Parish				
Red River Parish				
Sabine Parish				
Webster Parish				

LOUISIANA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Winn Parish				
AQCR 106 S. Louisiana-S.E. Texas Interstate:				
St. John the Baptist Parish		Unclassifiable/Attainment.		
AQCR 106 S. Louisiana-S.E. Texas Interstate		Unclassifiable/Attainment.		
Acadia Parish				
Allen Parish				
Assumption Parish				
Avoyelles Parish				
Cameron Parish				
East Feliciana Parish				
Evangeline Parish				
Iberia Parish				
Jefferson Davis Parish				
Plaquemines Parish				
Rapides Parish				
St. Helena Parish				
St. Landry Parish				
St. Martin Parish				
St. Tammany Parish				
Tangipahoa Parish				
Terrebonne Parish				
Vermilion Parish				
Vernon Parish				
Washington Parish				
West Feliciana Parish				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 21. In § 81.320, the table entitled "Maine—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.320 Maine.

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MAINE—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Hancock, Knox, Lincoln and Waldo Cos., ME:				
Hancock County (part)		Nonattainment		Subpart 1.
(includes only the following cities and towns): Bar Harbor, Blue Hill, Brooklin, Brooksville, Cranberry Isle, Deer Isle, Frenchboro, Gouldsboro, Hancock, Lamoine, Mount Desert, Sedgwick, Sorrento, Southwest Harbor, Stonington, Sullivan, Surry, Swans Island, Tremont, Trenton, and Winter Harbor				
Knox County (part)		Nonattainment		Subpart 1.
(includes only the following cities and towns): Camden, Criehaven, Cushing, Friendship, Isle au Haut, Matinicus Isle, Muscle Ridge Shoals, North Haven, Owls Head, Rockland, Rockport, St. George, South Thomaston, Thomaston, Vinalhaven, and Warren				
Lincoln County (part)		Nonattainment		Subpart 1.
(includes only the following cities and towns): Alna, Boothbay, Boothbay Harbor, Breman, Bristol, Damariscotta, Dresden, Edgecomb, Monhegan, Newcastle, Nobleboro, South Bristol, Southport, Waldoboro, Westport, and Wiscasset				
Waldo County (part)		Nonattainment		Subpart 1.
(includes only the following town): Islesboro				
Portland, ME:				
Androscoggin County (part)		Nonattainment		Subpart 2/Marginal.
(includes only the following town): Durham				
Cumberland County (part)		Nonattainment		Subpart 2/Marginal.

MAINE—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
(includes only the following cities and towns): Brunswick, Cape Elizabeth, Casco, Cumberland, Falmouth, Freeport, Frye Island, Gorham, Gray, Harpswell, Long Island, New Gloucester, North Yarmouth, Portland, Pownal, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham, and Yarmouth				
Sagadahoc County		Nonattainment		Subpart 2/Marginal.
(includes all cities & towns)				
York County (part)		Nonattainment		Subpart 2/Marginal.
(includes only the following cities and towns): Alfred, Arundel, Berwick, Biddeford, Buxton, Dayton, Elliot, Hollis, Kennebunk, Kennebunkport, Kittery, Limington, Lyman, North Berwick, Ogunquit, Old Orchard Beach, Saco, Sanford, South Berwick, Wells, and York				
Rest of State		Unclassifiable Attainment.		
Androscoggin County (part) remainder				
Aroostook County				
Cumberland County (part) remainder				
Franklin County				
Hancock County (part) remainder				
Kennebec County				
Knox County (part) remainder				
Lincoln County (part) remainder				
Oxford County				
Penobscot County				
Piscataquis County				
Somerset County				
Waldo County (part) remainder				
Washington County				
York County (part) remainder				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 22. In § 81.321, the table entitled "Maryland—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.321 Maryland.

* * * * *

MARYLAND—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Baltimore, MD:				
Anne Arundel County		Nonattainment		Subpart 2/Moderate.
City of Baltimore		Nonattainment		Subpart 2/Moderate.
Baltimore County		Nonattainment		Subpart 2/Moderate.
Carroll County		Nonattainment		Subpart 2/Moderate.
Harford County		Nonattainment		Subpart 2/Moderate.
Howard County		Nonattainment		Subpart 2/Moderate.
Kent and Queen Anne's Cos., MD:				
Kent County		Nonattainment		Subpart 2/Moderate.
Queen Anne's County		Nonattainment		Subpart 2/Moderate.
Washington Co. (Hagerstown), MD:				
Washington County	(2)	Nonattainment	(2)	Subpart 1.
Philadelphia-Wilmin-Atlantic Ci, PA–NJ–MD–DE:				
Cecil County		Nonattainment		Subpart 2/Moderate.
Washington, DC–MD–VA:				
Calvert County		Nonattainment		Subpart 2/Moderate.
Charles County		Nonattainment		Subpart 2/Moderate.
Frederick County		Nonattainment		Subpart 2/Moderate.
Montgomery County		Nonattainment		Subpart 2/Moderate.
Prince George's County		Nonattainment		Subpart 2/Moderate.
AQCR 113 Cumberland-Keyser Interstate		Unclassifiable/Attainment.		
Allegany County.				
Garrett County.				

MARYLAND—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 114 Eastern Shore Interstate (remainder of)		Unclassifiable/Attainment.		
Caroline County.				
Dorchester County.				
Somerset County.				
Talbot County.				
Wicomico County.				
Worcester County.				
AQCR 116 Southern Maryland Intrastate (remainder of)		Unclassifiable/Attainment.		
St. Mary's County.				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 23. In § 81.322, the table entitled "Massachusetts—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.322 Massachusetts.

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MASSACHUSETTS—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Boston-Lawrence-Worcester (E. Mass), MA:				
Barnstable County		Nonattainment		Subpart 2/Moderate.
Bristol County		Nonattainment		Subpart 2/Moderate.
Dukes County		Nonattainment		Subpart 2/Moderate.
Essex County		Nonattainment		Subpart 2/Moderate.
Middlesex County		Nonattainment		Subpart 2/Moderate.
Nantucket County		Nonattainment		Subpart 2/Moderate.
Norfolk County		Nonattainment		Subpart 2/Moderate.
Plymouth County		Nonattainment		Subpart 2/Moderate.
Suffolk County		Nonattainment		Subpart 2/Moderate.
Worcester County		Nonattainment		Subpart 2/Moderate.
Springfield (W. Mass), MA:				
Berkshire County		Nonattainment		Subpart 2/Moderate.
Franklin County		Nonattainment		Subpart 2/Moderate.
Hampden County		Nonattainment		Subpart 2/Moderate.
Hampshire County		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 24. In § 81.323, the table entitled "Michigan—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.323 Michigan.

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MICHIGAN—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Allegan Co., MI:				
Allegan County		Nonattainment		Subpart 1.
Barry County Area:				
Barry County		Unclassifiable/Attainment.		
Benton Harbor, MI:				
Berrien County		Nonattainment		Subpart 1.
Benzie Co., MI:				
Benzie County		Nonattainment		Subpart 1.
Branch County Area:				
Branch County		Unclassifiable/Attainment.		
Cass County, MI:				
Cass County		Nonattainment		Subpart 2/Moderate.
Detroit-Ann Arbor, MI:				
Lenawee County		Nonattainment		Subpart 2/Moderate.

MICHIGAN—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Livingston County		Nonattainment		Subpart 2/Moderate.
Macomb County		Nonattainment		Subpart 2/Moderate.
Monroe County		Nonattainment		Subpart 2/Moderate.
Oakland County		Nonattainment		Subpart 2/Moderate.
St Clair County		Nonattainment		Subpart 2/Moderate.
Washtenaw County		Nonattainment		Subpart 2/Moderate.
Wayne County		Nonattainment		Subpart 2/Moderate.
Flint, MI:				
Genesee County		Nonattainment		Subpart 1.
Lapeer County		Nonattainment		Subpart 1.
Grand Rapids, MI:				
Kent County		Nonattainment		Subpart 1.
Ottawa County		Nonattainment		Subpart 1.
Gratiot County Area:				
Gratiot County		Unclassifiable/Attainment.		
Hillsdale County Area:				
Hillsdale County		Unclassifiable/Attainment.		
Huron Co, MI:				
Huron County		Nonattainment		Subpart 1.
Ionia County Area:				
Ionia County		Unclassifiable/Attainment.		
Jackson Area:				
Jackson County		Unclassifiable/Attainment.		
Kalamazoo-Battle Creek, MI:				
Calhoun County		Nonattainment		Subpart 1.
Kalamazoo County		Nonattainment		Subpart 1.
Van Buren County		Nonattainment		Subpart 1.
Lansing-East Lansing, MI:				
Clinton County		Nonattainment		Subpart 1.
Eaton County		Nonattainment		Subpart 1.
Ingham County		Nonattainment		Subpart 1.
Mason Co, MI:				
Mason County		Nonattainment		Subpart 1.
Montcalm Area:				
Montcalm County		Unclassifiable/Attainment.		
Muskegon, MI:				
Muskegon County		Nonattainment		Subpart 2/Moderate.
Saginaw-Bay City-Midland Area:				
Bay County		Unclassifiable/Attainment.		
Midland County		Unclassifiable/Attainment.		
Saginaw County		Unclassifiable/Attainment.		
Sanilac County Area:				
Sanilac County		Unclassifiable/Attainment.		
Shiawassee County Area:				
Shiawassee County		Unclassifiable/Attainment.		
St Joseph County Area:				
St Joseph County		Unclassifiable/Attainment.		
Tuscola County Area:				
Tuscola County		Unclassifiable/Attainment.		
AQCR 122 Central Michigan Intrastate (remainder of)		Unclassifiable/Attainment.		
Arenac County				
Clare County				
Gladwin County				
Iosco County				
Isabella County				
Lake County				
Mecosta County				
Newaygo County				
Oceana County				
Ogemaw County				
Osceola County				
Roscommon County				
AQCR 126 Upper Michigan Intrastate (part)		Unclassifiable/Attainment.		
Marquette County				
AQCR 126 Upper Michigan Intrastate (remainder of)		Unclassifiable/Attainment.		
Alcona County				
Alger County				
Alpena County				
Antrim County				
Baraga County				

MICHIGAN—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Charlevoix County				
Cheboygan County				
Chippewa County				
Crawford County				
Delta County				
Dickinson County				
Emmet County				
Gogebic County				
Grand Traverse County				
Houghton County				
Iron County				
Kalkaska County				
Keweenaw County				
Leelanau County				
Luce County				
Mackinac County				
Manistee County				
Menominee County				
Missaukee County				
Montmorency County				
Ontonagon County				
Oscoda County				
Otsego County				
Presque Isle County				
Schoolcraft County				
Wexford County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 25. In § 81.324, the table entitled "Minnesota—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.324 Minnesota.

* * * * *

MINNESOTA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Minneapolis-Saint Paul Area:				
Anoka County		Unclassifiable/Attainment.		
Carver County		Unclassifiable/Attainment.		
Dakota County		Unclassifiable/Attainment.		
Hennepin County		Unclassifiable/Attainment.		
Ramsey County		Unclassifiable/Attainment.		
Scott County		Unclassifiable/Attainment.		
Washington County		Unclassifiable/Attainment.		
Rest of State		Unclassifiable/Attainment.		
Aitkin County		Unclassifiable/Attainment.		
Becker County		Unclassifiable/Attainment.		
Beltrami County		Unclassifiable/Attainment.		
Benton County		Unclassifiable/Attainment.		
Big Stone County		Unclassifiable/Attainment.		
Blue Earth County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Carlton County		Unclassifiable/Attainment.		
Cass County		Unclassifiable/Attainment.		
Chippewa County		Unclassifiable/Attainment.		
Chisago County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Clearwater County		Unclassifiable/Attainment.		
Cook County		Unclassifiable/Attainment.		
Cottonwood County		Unclassifiable/Attainment.		
Crow Wing County		Unclassifiable/Attainment.		
Dodge County		Unclassifiable/Attainment.		
Douglas County		Unclassifiable/Attainment.		
Faribault County		Unclassifiable/Attainment.		
Fillmore County		Unclassifiable/Attainment.		

MINNESOTA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
Freeborn County		Unclassifiable/Attainment.		
Goodhue County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Houston County		Unclassifiable/Attainment.		
Hubbard County		Unclassifiable/Attainment.		
Isanti County		Unclassifiable/Attainment.		
Itasca County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Kanabec County		Unclassifiable/Attainment.		
Kandiyohi County		Unclassifiable/Attainment.		
Kittson County		Unclassifiable/Attainment.		
Koochiching County		Unclassifiable/Attainment.		
Lac qui Parle County		Unclassifiable/Attainment.		
Lake County		Unclassifiable/Attainment.		
Lake of the Woods County		Unclassifiable/Attainment.		
Le Sueur County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Lyon County		Unclassifiable/Attainment.		
Mahnomen County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
Martin County		Unclassifiable/Attainment.		
McLeod County		Unclassifiable/Attainment.		
Meeker County		Unclassifiable/Attainment.		
Mille Lacs County		Unclassifiable/Attainment.		
Morrison County		Unclassifiable/Attainment.		
Mower County		Unclassifiable/Attainment.		
Murray County		Unclassifiable/Attainment.		
Nicollet County		Unclassifiable/Attainment.		
Nobles County		Unclassifiable/Attainment.		
Norman County		Unclassifiable/Attainment.		
Olmsted County		Unclassifiable/Attainment.		
Otter Tail County		Unclassifiable/Attainment.		
Pennington County		Unclassifiable/Attainment.		
Pine County		Unclassifiable/Attainment.		
Pipestone County		Unclassifiable/Attainment.		
Polk County		Unclassifiable/Attainment.		
Pope County		Unclassifiable/Attainment.		
Red Lake County		Unclassifiable/Attainment.		
Redwood County		Unclassifiable/Attainment.		
Renville County		Unclassifiable/Attainment.		
Rice County		Unclassifiable/Attainment.		
Rock County		Unclassifiable/Attainment.		
Roseau County		Unclassifiable/Attainment.		
St. Louis County		Unclassifiable/Attainment.		
Sherburne County		Unclassifiable/Attainment.		
Sibley County		Unclassifiable/Attainment.		
Stearns County		Unclassifiable/Attainment.		
Steele County		Unclassifiable/Attainment.		
Stevens County		Unclassifiable/Attainment.		
Swift County		Unclassifiable/Attainment.		
Todd County		Unclassifiable/Attainment.		
Traverse County		Unclassifiable/Attainment.		
Wabasha County		Unclassifiable/Attainment.		
Wadena County		Unclassifiable/Attainment.		
Waseca County		Unclassifiable/Attainment.		
Watonwan County		Unclassifiable/Attainment.		
Wilkin County		Unclassifiable/Attainment.		
Winona County		Unclassifiable/Attainment.		
Wright County		Unclassifiable/Attainment.		
Yellow Medicine County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 26. In § 81.325, the table entitled "Mississippi—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.325 Mississippi.

* * * * *

MISSISSIPPI—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide	.....	Unclassifiable/Attainment.		
Adams County				
Alcorn County				
Amite County				
Attala County				
Benton County				
Bolivar County				
Calhoun County				
Carroll County				
Chickasaw County				
Choctaw County				
Claiborne County				
Clarke County				
Clay County				
Coahoma County				
Copiah County				
Covington County				
DeSoto County				
Forrest County				
Franklin County				
George County				
Greene County				
Grenada County				
Hancock County				
Harrison County				
Hinds County				
Holmes County				
Humphreys County				
Issaquena County				
Itawamba County				
Jackson County				
Jasper County				
Jefferson County				
Jefferson Davis County				
Jones County				
Kemper County				
Lafayette County				
Lamar County				
Lauderdale County				
Lawrence County				
Leake County				
Lee County				
Leflore County				
Lincoln County				
Lowndes County				
Madison County				
Marion County				
Marshall County				
Monroe County				
Montgomery County				
Neshoba County				
Newton County				
Noxubee County				
Oktibbeha County				
Panola County				
Pearl River County				
Perry County				
Pike County				
Pontotoc County				
Prentiss County				
Quitman County				
Rankin County				
Scott County				
Sharkey County				
Simpson County				
Smith County				
Stone County				
Sunflower County				
Tallahatchie County				
Tate County				

MISSISSIPPI—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Tippah County				
Tishomingo County				
Tunica County				
Union County				
Walthall County				
Warren County				
Washington County				
Wayne County				
Webster County				
Wilkinson County				
Winston County				
Yalobusha County				
Yazoo County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 27. In § 81.326, the table entitled "Missouri—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.326 Missouri.

* * * * *

MISSOURI—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Kansas City, MO–KS:				
Cass County		Unclassifiable [b].		
Clay County		Unclassifiable [b].		
Jackson County		Unclassifiable [b].		
Platte County		Unclassifiable [b].		
St. Louis, MO–IL:				
Franklin County		Nonattainment		Subpart 2/Moderate.
Jefferson County		Nonattainment		Subpart 2/Moderate.
St. Charles County		Nonattainment		Subpart 2/Moderate.
St. Louis City		Nonattainment		Subpart 2/Moderate.
St. Louis County.		Nonattainment		Subpart 2/Moderate.
AQCR 094 Metro Kansas City Interstate		Unclassifiable/Attainment.		
Buchanan County				
Ray County				
AQCR 137 N. Missouri Intrastate (part)				
Pike County		Unclassifiable/Attainment.		
Ralls County		Unclassifiable/Attainment.		
AQCR 137 N. Missouri Intrastate (remainder of)		Unclassifiable/Attainment.		
Adair County				
Andrew County				
Atchison County				
Audrain County				
Boone County				
Caldwell County				
Callaway County				
Carroll County				
Chariton County				
Clark County				
Clinton County				
Cole County				
Cooper County				
Daviess County				
DeKalb County				
Gentry County				
Grundy County				
Harrison County				
Holt County				
Howard County				
Knox County				
Lewis County				
Lincoln County				
Linn County				
Livingston County				

MISSOURI—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Macon County				
Marion County				
Mercer County				
Moniteau County				
Monroe County				
Montgomery County				
Nodaway County				
Osage County				
Putnam County				
Randolph County				
Saline County				
Schuyler County				
Scotland County				
Shelby County				
Sullivan County				
Warren County				
Worth County				
Rest of State:		Unclassifiable/Attainment		
Barry County				
Barton County				
Bates County				
Benton County				
Bollinger County				
Butler County				
Camden County				
Cape Girardeau County				
Carter County				
Cedar County				
Christian County				
Crawford County				
Dade County				
Dallas County				
Dent County				
Douglas County				
Dunklin County				
Gasconade County				
Greene County				
Henry County				
Hickory County				
Howell County				
Iron County				
Jasper County				
Johnson County				
Laclede County				
Lafayette County				
Lawrence County				
Madison County				
Maries County				
McDonald County				
Miller County				
Mississippi County				
Morgan County				
New Madrid County				
Newton County				
Oregon County				
Ozark County				
Pemiscot County				
Perry County				
Pettis County				
Phelps County				
Polk County				
Pulaski County				
Reynolds County				
Ripley County				
St. Clair County				
St. Francois County				
Ste. Genevieve County				
Scott County				
Shannon County				
Stoddard County				

MISSOURI—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Stone County				
Taney County				
Texas County				
Vernon County				
Washington County				
Wayne County				
Webster County				
Wright County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[b] This area is given an "Unclassifiable" designation. EPA will review all available information and make an attainment or nonattainment decision after reviewing the 2004 data.
[1] This date is June 15, 2004, unless otherwise noted.

■ 28. In § 81.327, the table entitled "Montana—Ozone(8-Hour Standard)" is added to read as follows:

§ 81.327 Montana.

* * * * *

MONTANA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide:				
Beaverhead County		Unclassifiable/Attainment.		
Big Horn County		Unclassifiable/Attainment.		
Blaine County		Unclassifiable/Attainment.		
Broadwater County		Unclassifiable/Attainment.		
Carbon County		Unclassifiable/Attainment.		
Carter County		Unclassifiable/Attainment.		
Cascade County		Unclassifiable/Attainment.		
Chouteau County		Unclassifiable/Attainment.		
Custer County		Unclassifiable/Attainment.		
Daniels County		Unclassifiable/Attainment.		
Dawson County		Unclassifiable/Attainment.		
Deer Lodge County		Unclassifiable/Attainment.		
Fallon County		Unclassifiable/Attainment.		
Fergus County		Unclassifiable/Attainment.		
Flathead County		Unclassifiable/Attainment.		
Gallatin County		Unclassifiable/Attainment.		
Garfield County		Unclassifiable/Attainment.		
Glacier County		Unclassifiable/Attainment.		
Golden Valley County		Unclassifiable/Attainment.		
Granite County.		Unclassifiable/Attainment.		
Hill County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
Judith Basin County		Unclassifiable/Attainment.		
Lake County		Unclassifiable/Attainment.		
Lewis and Clark County		Unclassifiable/Attainment.		
Liberty County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Madison County		Unclassifiable/Attainment.		
McCone County		Unclassifiable/Attainment.		
Meagher County		Unclassifiable/Attainment.		
Mineral County		Unclassifiable/Attainment.		
Missoula County		Unclassifiable/Attainment.		
Musselshell County		Unclassifiable/Attainment.		
Park County		Unclassifiable/Attainment.		
Petroleum County		Unclassifiable/Attainment.		
Phillips County		Unclassifiable/Attainment.		
Pondera County		Unclassifiable/Attainment.		
Powder River County		Unclassifiable/Attainment.		
Powell County		Unclassifiable/Attainment.		
Prairie County		Unclassifiable/Attainment.		
Ravalli County		Unclassifiable/Attainment.		
Richland County		Unclassifiable/Attainment.		
Roosevelt County		Unclassifiable/Attainment.		
Rosebud County		Unclassifiable/Attainment.		
Sanders County		Unclassifiable/Attainment.		

MONTANA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Sheridan County		Unclassifiable/Attainment.		
Silver Bow County		Unclassifiable/Attainment.		
Stillwater County		Unclassifiable/Attainment.		
Sweet Grass County		Unclassifiable/Attainment.		
Teton County		Unclassifiable/Attainment.		
Toole County		Unclassifiable/Attainment.		
Treasure County		Unclassifiable/Attainment.		
Valley County		Unclassifiable/Attainment.		
Wheatland County		Unclassifiable/Attainment.		
Wibaux County		Unclassifiable/Attainment.		
Yellowstone County		Unclassifiable/Attainment.		
Yellowstone Natl Park		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 29. In § 81.328, the table entitled "Nebraska—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.328 Nebraska.

* * * * *

NEBRASKA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide:		Unclassifiable/Attainment.		
Adams County				
Antelope County				
Arthur County				
Banner County				
Blaine County				
Boone County				
Box Butte County				
Boyd County				
Brown County				
Buffalo County				
Burt County				
Butler County				
Cass County				
Cedar County				
Chase County				
Cherry County				
Cheyenne County				
Clay County				
Colfax County				
Cuming County				
Custer County				
Dakota County				
Dawes County				
Dawson County				
Deuel County				
Dixon County				
Dodge County				
Douglas County				
Dundy County				
Fillmore County				
Franklin County				
Frontier County				
Furnas County				
Gage County				
Garden County				
Garfield County				
Gosper County				
Grant County				
Greeley County				
Hall County				
Hamilton County				
Harlan County				
Hayes County				

NEBRASKA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Hitchcock County				
Holt County				
Hooker County				
Howard County				
Jefferson County				
Johnson County				
Kearney County				
Keith County				
Keya Paha County				
Kimball County				
Knox County				
Lancaster County				
Lincoln County				
Logan County				
Loup County				
Madison County				
McPherson County				
Merrick County				
Morrill County				
Nance County				
Nemaha County				
Nuckolls County				
Otoe County				
Pawnee County				
Perkins County				
Phelps County				
Pierce County				
Platte County				
Polk County				
Red Willow County				
Richardson County				
Rock County				
Saline County				
Sarpy County				
Saunders County				
Scotts Bluff County				
Seward County				
Sheridan County				
Sherman County				
Sioux County				
Stanton County				
Thayer County				
Thomas County				
Thurston County				
Valley County				
Washington County				
Wayne County				
Webster County				
Wheeler County				
York County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 30. In § 81.329, the table entitled "Nevada—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.329 Nevada.

* * * * *

NEVADA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Las Vegas, NV:				
Clark County		Nonattainment		Subpart 1
Rest of State:		Unclassifiable/Attainment.		
Carson City				
Churchill County				

NEVADA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Douglas County				
Elko County				
Esmeralda County				
Eureka County				
Humboldt County				
Lander County				
Lincoln County				
Lyon County				
Mineral County				
Nye County				
Pershing County				
Storey County				
Washoe County (Reno Area)				
White Pine County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 31. In § 81.330, the table entitled "New Hampshire—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.330 New Hampshire.

* * * * *

NEW HAMPSHIRE—OZONE (8-HOUR STANDARD)

Designated area	Designated [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Boston-Manchester-Portsmouth (SE), NH:				
Hillsborough County (part)		Nonattainment		Subpart 2/Moderate.
Amherst Town, Bedford Town, Brookline Town, Goffstown Town, Hollis Town, Hudson Town, Litchfield Town, Manchester City, Merrimack Town, Milford Town, Nashua City, Pelham Town				
Merrimack County (part)		Nonattainment		Subpart 2/Moderate.
Hooksett Town				
Rockingham County (part)		Nonattainment		Subpart 2/Moderate.
Atkinson Town, Auburn Town, Brentwood Town, Candia Town, Chester Town, Danville Town, Derry Town, E. Kingston Town, Epping Town, Exeter Town, Fremont Town, Greenland Town, Hampstead Town, Hampton Town, Hampton Falls Town, Kensington Town, Kingston Town, Londonderry Town, New Castle Town, Newfields Town, Newington Town, Newmarket Town, Newton Town, North Hampton Town, Plaistow Town, Portsmouth City, Raymond Town, Rye Town, Salem Town, Sandown Town, Seabrook Town, South Hampton Town, Stratham Town, Windham Town				
Strafford County (part)		Nonattainment		Subpart 2/Moderate.
Dover City, Durham Town, Rochester City, Rollinsford Town, and Somersworth City				
Rest of State:		Unclassifiable/Attainment.		
Belknap County				
Carroll County				
Cheshire County				
Coos County				
Grafton County				
Hillsborough County (part) remainder				
Merrimack County (part) remainder				
Rockingham County (part) remainder				
Strafford County (part) remainder				
Sullivan County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 32. In § 81.331, the table entitled "New Jersey—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.331 New Jersey.

* * * * *

NEW JERSEY—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
New York-N. New Jersey-Long Island, NY-NJ-CT:				
Bergen County		Nonattainment		Subpart 2/Moderate.
Essex County		Nonattainment		Subpart 2/Moderate.
Hudson County		Nonattainment		Subpart 2/Moderate.
Hunterdon County		Nonattainment		Subpart 2/Moderate.
Middlesex County		Nonattainment		Subpart 2/Moderate.
Monmouth County		Nonattainment		Subpart 2/Moderate.
Morris County		Nonattainment		Subpart 2/Moderate.
Passaic County		Nonattainment		Subpart 2/Moderate.
Somerset County		Nonattainment		Subpart 2/Moderate.
Sussex County		Nonattainment		Subpart 2/Moderate.
Union County		Nonattainment		Subpart 2/Moderate.
Warren County		Nonattainment		Subpart 2/Moderate.
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE:				
Atlantic County		Nonattainment		Subpart 2/Moderate.
Burlington County		Nonattainment		Subpart 2/Moderate.
Camden County		Nonattainment		Subpart 2/Moderate.
Cape May County		Nonattainment		Subpart 2/Moderate.
Cumberland County		Nonattainment		Subpart 2/Moderate.
Gloucester County		Nonattainment		Subpart 2/Moderate.
Mercer County		Nonattainment		Subpart 2/Moderate.
Ocean County		Nonattainment		Subpart 2/Moderate.
Salem County		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 33. In § 81.332, the table entitled "New Mexico—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.332 New Mexico.

NEW MEXICO—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 012 New Mexico-Southern Border Intrastate		Unclassifiable/Attainment.		
Grant County				
Hidalgo County				
Luna County				
AQCR 014 Four Corners Interstate (*see* 40 CFR 81.121)		Unclassifiable/Attainment.		
McKinley County (part)				
Río Arriba County (part)				
San Juan County				
Sandoval County (part)				
Valencia County (part)				
AQCR 152 Albuquerque-Mid Rio Grande Intrastate		Unclassifiable/Attainment.		
Bernalillo County (part)				
AQCR 152 Albuquerque-Mid Rio Grande		Unclassifiable/Attainment.		
Sandoval County (part) *see* 40 CFR 81.83				
Valencia County (part) *see* 40 CFR 81.83				
AQCR 153 El Paso-Las Cruces-Alamogordo		Unclassifiable/Attainment.		
Doña Ana County (part) (Sunland Park Area) The Area bounded by the New Mexico-Texas State line on the east, the New Mexico-Mexico international line on the south, the Range 3E-Range 2E line on the west, and the N3200 latitude line on the north.				
Doña Ana County (part) remainder		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Otero County		Unclassifiable/Attainment.		
Sierra County		Unclassifiable/Attainment.		
AQCR 154 Northeastern Plains Intrastate		Unclassifiable/Attainment.		
Colfax County				
Guadalupe County				

NEW MEXICO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Harding County				
Mora County				
San Miguel County				
Torrance County				
Union County				
AQCR 155 Pecos-Permian Basin Intrastate		Unclassifiable/Attainment.		
Chaves County				
Curry County				
De Baca County				
Eddy County				
Lea County				
Quay County				
Roosevelt County				
AQCR 156 SW Mountains-Augustine Plains		Unclassifiable/Attainment.		
Catron County				
Cibola County				
McKinley County (part) *see* 40 CFR 81.241				
Socorro County				
Valencia County (part) *see* 40 CFR 81.241				
AQCR 157 Upper Rio Grande Valley Intrastate		Unclassifiable/Attainment.		
Los Alamos County				
Río Arriba County (part) *see* 40 CFR 81.239				
Santa Fe County				
Taos County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 34. In § 81.333, the table entitled "New York—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.333 New York.

* * * * *

NEW YORK—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Albany-Schenectady-Troy, NY:				
Albany County		Nonattainment		Subpart 1.
Greene County		Nonattainment		Subpart 1.
Montgomery County		Nonattainment		Subpart 1.
Rensselaer County		Nonattainment		Subpart 1.
Saratoga County		Nonattainment		Subpart 1.
Schenectady County		Nonattainment		Subpart 1.
Schoharie County		Nonattainment		Subpart 1.
Buffalo-Niagara Falls, NY:				
Erie County		Nonattainment		Subpart 1.
Niagara County		Nonattainment		Subpart 1.
Essex County (Whiteface Mtn.), NY:				
Essex County (part) The portion of Whiteface Mountain above 1,900 feet in elevation in Essex County.		Nonattainment		Subpart 1.
Essex County (remainder)		Unclassifiable/Attainment.		
Jamestown, NY:				
Chautauqua County		Nonattainment		Subpart 1.
Jefferson County, NY:				
Jefferson County		Nonattainment		Subpart 2/Moderate.
New York-N. New Jersey-Long Island, NY-NJ-CT:				
Bronx County		Nonattainment		Subpart 2/Moderate.
Kings County		Nonattainment		Subpart 2/Moderate.
Nassau County		Nonattainment		Subpart 2/Moderate.
New York County		Nonattainment		Subpart 2/Moderate.
Queens County		Nonattainment		Subpart 2/Moderate.
Richmond County		Nonattainment		Subpart 2/Moderate.
Rockland County		Nonattainment		Subpart 2/Moderate.
Suffolk County		Nonattainment		Subpart 2/Moderate.
Westchester County		Nonattainment		Subpart 2/Moderate.
Poughkeepsie, NY:				
Dutchess County		Nonattainment		Subpart 2/Moderate.

NEW YORK—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Orange County		Nonattainment		Subpart 2/Moderate.
Putnam County		Nonattainment		Subpart 2/Moderate.
Syracuse, NY:				
Cayuga County		Unclassifiable [b].		
Madison County		Unclassifiable [b].		
Onondaga County		Unclassifiable [b].		
Oswego County		Unclassifiable [b].		
Rochester, NY:				
Genesee County		Nonattainment		Subpart 1.
Livingston County		Nonattainment		Subpart 1.
Monroe County		Nonattainment		Subpart 1.
Ontario County		Nonattainment		Subpart 1.
Orleans County		Nonattainment		Subpart 1.
Wayne County		Nonattainment		Subpart 1.
AQCR 158 Central New York Intrastate (remainder of)		Unclassifiable/Attainment.		
Cortland County				
Herkimer County				
Lewis County				
Oneida County				
AQCR 159 Champlain Valley Interstate (remainder of)		Unclassifiable/Attainment.		
Clinton County				
Franklin County				
Hamilton County				
St. Lawrence County				
Warren County				
Washington County				
AQCR 160 Finger Lake Intrastate		Unclassifiable/Attainment.		
Seneca County				
Wyoming County				
Yates County				
AQCR 161 Hudson Valley Intrastate (remainder of)		Unclassifiable/Attainment.		
Columbia County.				
Fulton County				
Ulster County				
AQCR 163 Southern Tier East Intrastate		Unclassifiable/Attainment.		
Broome County				
Chenango County				
Delaware County				
Otsego County				
Sullivan County				
Tioga County				
AQCR 164 Southern Tier West Intrastate		Unclassifiable/Attainment.		
Allegany County				
Cattaraugus County				
Chemung County				
Schuyler County				
Steuben County				
Tompkins County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[b] This area is given an "Unclassifiable" designation. EPA will review all available information and make an attainment or nonattainment decision after reviewing the 2004 data.
[1] This date is June 15, 2004, unless otherwise noted.

■ 35. In § 81.334, the table entitled "North Carolina—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.334 North Carolina.

* * * * *

NORTH CAROLINA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Charlotte-Gastonia-Rock Hill, NC-SC		Nonattainment		Subpart 2/Moderate.
Cabarrus County		Nonattainment		Subpart 2/Moderate.
Gaston County		Nonattainment		Subpart 2/Moderate.
Iredell County (part).				

NORTH CAROLINA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
Davidson Township, Coddle Creek Township	.....	Nonattainment	.....	Subpart 2/Moderate.
Lincoln County	.....	Nonattainment	.....	Subpart 2/Moderate.
Mecklenburg County	.....	Nonattainment	.....	Subpart 2/Moderate.
Rowan County	.....	Nonattainment	.....	Subpart 2/Moderate.
Union County	.....	Nonattainment	.....	Subpart 2/Moderate.
Fayetteville, NC: Cumberland County	(2)	Nonattainment	(2)	Subpart 1.
Greensboro-Winston-Salem-High Point, NC:				
Alamance County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Caswell County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Davidson County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Davie County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Forsyth County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Guilford County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Randolph County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Rockingham County	(2)	Nonattainment	(2)	Subpart 2/Moderate.
Haywood and Swain Cos. (Great Smoky NP), NC:				
Haywood County (part)	.....	Nonattainment	.....	Subpart 1.
Swain County (part)	.....	Nonattainment	.....	Subpart 1.
Hickory-Morganton-Lenoir, NC:				
Alexander County	(2)	Nonattainment	(2)	Subpart 1.
Burke County (part)	(2)	Nonattainment	(2)	Subpart 1.
Unifour Metropolitan Planning Organization Boundary				
Caldwell County (part)	(2)	Nonattainment	(2)	Subpart 1.
Unifour Metropolitan Planning Organization Boundary				
Catawba County	(2)	Nonattainment	(2)	Subpart 1.
Raleigh-Durham-Chapel Hill, NC:				
Chatham County (part)	.....	Nonattainment	.....	Subpart 1.
Baldwin Township, Center Township, New Hope Township, Williams Township				
Durham County	.....	Nonattainment	.....	Subpart 1.
Franklin County	.....	Nonattainment	.....	Subpart 1.
Granville County	.....	Nonattainment	.....	Subpart 1.
Johnston County	.....	Nonattainment	.....	Subpart 1.
Orange County	.....	Nonattainment	.....	Subpart 1.
Person County	.....	Nonattainment	.....	Subpart 1.
Wake County	.....	Nonattainment	.....	Subpart 1.
Rocky Mount, NC:				
Edgecombe County	.....	Nonattainment	.....	Subpart 1.
Nash County	.....	Nonattainment	.....	Subpart 1.
Rest of State:	.....	Unclassifiable/Attainment.		
Alleghany County				
Anson County				
Ashe County				
Avery County				
Beaufort County				
Bertie County				
Bladen County				
Brunswick County				
Buncombe County				
Burke County (part) remainder				
Caldwell County (part) remainder				
Camden County				
Carteret County				
Chatham County (part) remainder				
Cherokee County				
Chowan County				
Clay County				
Cleveland County				
Columbus County				
Craven County				
Currituck County				
Dare County				
Duplin County				
Gates County				
Graham County				
Greene County				
Halifax County				
Harnett County				

NORTH CAROLINA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Haywood County (part) remainder				
Henderson County				
Hertford County				
Hoke County				
Hyde County				
Iredell County (part) remainder				
Jackson County				
Jones County				
Lee County				
Lenoir County				
Macon County				
Madison County				
Martin County				
McDowell County				
Mitchell County				
Montgomery County				
Moore County				
New Hanover County				
Northampton County				
Onslow County				
Pamlico County				
Pasquotank County				
Pender County				
Perquimans County				
Pitt County				
Polk County				
Richmond County				
Robeson County				
Rutherford County				
Sampson County				
Scotland County				
Stanly County				
Stokes County				
Surry County				
Swain County (part) remainder				
Transylvania County				
Tyrrell County				
Vance County				
Warren County				
Washington County				
Watauga County				
Wayne County				
Wilkes County				
Wilson County				
Yadkin County				
Yancey County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 36. In § 81.335, the table entitled "North Dakota—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.335 North Dakota.

* * * * *

NORTH DAKOTA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 130 Metropolitan Fargo-Moorhead Interstate:				
Cass County		Unclassifiable/Attainment.		
Rest of State, AQCR 172		Unclassifiable/Attainment.		
Adams County				
Barnes County				
Benson County				
Billings County				
Bottineau County				

NORTH DAKOTA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Bowman County				
Burke County				
Burleigh County				
Cavalier County				
Dickey County				
Divide County				
Dunn County				
Eddy County				
Emmons County				
Foster County				
Golden Valley County				
Grand Forks County				
Grant County				
Griggs County				
Hettinger County				
Kidder County				
LaMoure County				
Logan County				
McHenry County				
McIntosh County				
McKenzie County				
McLean County				
Mercer County				
Morton County				
Mountrail County				
Nelson County				
Oliver County				
Pembina County				
Pierce County				
Ramsey County				
Ransom County				
Renville County				
Richland County				
Rolette County				
Sargent County				
Sheridan County				
Sioux County				
Slope County				
Stark County				
Steele County				
Stutsman County				
Towner County				
Traill County				
Walsh County				
Ward County				
Wells County				
Williams County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 37. In § 81.336, the table entitled "Ohio—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.336 Ohio.

* * * * *

OHIO—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Canton-Massillion, OH: Stark County		Nonattainment		Subpart 1.
Cincinnati-Hamilton, OH–KY–IN:				
Butler County		Nonattainment		Subpart 1.
Clermont County		Nonattainment		Subpart 1.
Clinton County		Nonattainment		Subpart 1.
Hamilton County		Nonattainment		Subpart 1.
Warren County		Nonattainment		Subpart 1.
Cleveland-Akron-Lorain, OH		Nonattainment		Subpart 2/Moderate.

OHIO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Ashtabula County				
Cuyahoga County				
Geauga County				
Lake County				
Lorain County				
Medina County				
Portage County				
Summit County				
Columbus, OH:				
Delaware County		Nonattainment		Subpart 1.
Fairfield County		Nonattainment		Subpart 1.
Franklin County		Nonattainment		Subpart 1.
Knox County		Nonattainment		Subpart 1.
Licking County		Nonattainment		Subpart 1.
Madison County		Nonattainment	Subpart 1.	
Dayton-Springfield, OH:				
Clark County		Nonattainment		Subpart 1.
Greene County		Nonattainment		Subpart 1.
Miami County		Nonattainment		Subpart 1.
Montgomery County		Nonattainment		Subpart 1.
Lima, OH: Allen County		Nonattainment		Subpart 1.
Parkersburg-Marietta, WV–OH: Washington County.		Nonattainment		Subpart 1.
Steubenville-Weirton, OH–WV: Jefferson County.		Nonattainment		Subpart 1.
Toledo, OH:				
Lucas County		Nonattainment		Subpart 1.
Wood County		Nonattainment		Subpart 1.
Wheeling, WV–OH: Belmont County		Nonattainment		Subpart 1.
Youngstown-Warren-Sharon, PA–OH:				
Columbiana County		Nonattainment		Subpart 1.
Mahoning County		Nonattainment		Subpart 1.
Trumbull County		Nonattainment		Subpart 1.
Rest of State:				
Adams County		Unclassifiable/Attainment.		
Ashland County		Unclassifiable/Attainment.		
Athens County.				
Auglaize County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Carroll County		Unclassifiable/Attainment.		
Champaign County		Unclassifiable/Attainment.		
Coshocton County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Darke County		Unclassifiable/Attainment.		
Defiance County		Unclassifiable/Attainment.		
Erie County		Unclassifiable/Attainment.		
Fayette County		Unclassifiable/Attainment.		
Fulton County		Unclassifiable/Attainment.		
Gallia County		Unclassifiable/Attainment.		
Guernsey County		Unclassifiable/Attainment.		
Hancock County		Unclassifiable/Attainment.		
Hardin County		Unclassifiable/Attainment.		
Harrison County		Unclassifiable/Attainment.		
Henry County		Unclassifiable/Attainment.		
Highland County		Unclassifiable/Attainment.		
Hocking County		Unclassifiable/Attainment.		
Holmes County		Unclassifiable/Attainment.		
Huron County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Logan County		Unclassifiable/Attainment.		
Marion County		Unclassifiable/Attainment.		
Meigs County		Unclassifiable/Attainment.		
Mercer County		Unclassifiable/Attainment.		
Monroe County		Unclassifiable/Attainment.		
Morgan County		Unclassifiable/Attainment.		
Morrow County		Unclassifiable/Attainment.		
Muskingum County		Unclassifiable/Attainment.		
Noble County		Unclassifiable/Attainment.		
Ottawa County		Unclassifiable/Attainment.		

OHIO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Paulding County		Unclassifiable/Attainment.		
Perry County		Unclassifiable/Attainment.		
Pickaway County		Unclassifiable/Attainment.		
Pike County		Unclassifiable/Attainment.		
Preble County		Unclassifiable/Attainment.		
Putnam County		Unclassifiable/Attainment.		
Richland County		Unclassifiable/Attainment.		
Ross County		Unclassifiable/Attainment.		
Sandusky County		Unclassifiable/Attainment.		
Scioto County		Unclassifiable/Attainment.		
Seneca County		Unclassifiable/Attainment.		
Shelby County		Unclassifiable/Attainment.		
Tuscarawas County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		
Van Wert County		Unclassifiable/Attainment.		
Vinton County		Unclassifiable/Attainment.		
Wayne County		Unclassifiable/Attainment.		
Williams County		Unclassifiable/Attainment.		
Wyandot County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 38. In § 81.337, the table entitled "Oklahoma—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.337 Oklahoma.

* * * * *

OKLAHOMA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 017 Metropolitan Fort Smith Interstate		Unclassifiable/Attainment.		
Adair County				
Cherokee County				
Le Flore County				
Sequoyah County				
AQCR 022 Shreveport-Texarkana-Tyler Intrastate: McCurtain County.		Unclassifiable/Attainment		
AQCR 184 Central Oklahoma Intrastate (part):				
Cleveland County		Unclassifiable/Attainment.		
Oklahoma County		Unclassifiable/Attainment.		
AQCR 184 Central Oklahoma Intrastate (remainder of)		Unclassifiable/Attainment.		
Canadian County				
Grady County				
Kingfisher County				
Lincoln County				
Logan County				
McClain County				
Pottawatomie County				
AQCR 185 North Central Oklahoma Intrastate		Unclassifiable/Attainment.		
Garfield County				
Grant County				
Kay County				
Noble County				
Payne County				
AQCR 186 Northeastern Oklahoma Intrastate		Unclassifiable/Attainment.		
Craig County				
Creek County				
Delaware County				
Mayes County				
Muskogee County				
Nowata County				
Okmulgee County				
Osage County				
Ottawa County				
Pawnee County				
Rogers County				

OKLAHOMA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Tulsa County				
Wagoner County				
Washington County				
AQCR 187 Northwestern Oklahoma Intrastate	.....	Unclassifiable/Attainment.		
Alfalfa County				
Beaver County				
Blaine County				
Cimarron County				
Custer County				
Dewey County				
Ellis County				
Harper County				
Major County				
Roger Mills County				
Texas County				
Woods County				
Woodward County				
AQCR 188 Southeastern Oklahoma Intrastate	.....	Unclassifiable/Attainment.		
Atoka County				
Bryan County				
Carter County				
Choctaw County				
Coal County				
Garvin County				
Haskell County				
Hughes County				
Johnston County				
Latimer County				
Love County				
Marshall County				
McIntosh County				
Murray County				
Okfuskee County				
Pittsburg County				
Pontotoc County				
Pushmataha County				
Seminole County				
AQCR 189 Southwestern Oklahoma Intrastate	.....	Unclassifiable/Attainment.		
Beckham County				
Caddo County				
Comanche County				
Cotton County				
Greer County				
Harmon County				
Jackson County				
Jefferson County				
Kiowa County				
Stephens County				
Tillman County				
Washita County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 39. In § 81.338, the table entitled "Oregon—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.338 Oregon.

OREGON—OZONE (8-HOUR STANDARD)

Designated area	Designation area [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Portland-Vancouver AQMA: (Air Quality Maintenance Area)		Unclassifiable/Attainment..		

OREGON—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation area [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Clackamas County (part) Multnomah County (part) Washington County (part)				
Salem Area: (Salem Area Transportation Study)				
Marion County (part)		Unclassifiable/Attainment..		
Polk County		Unclassifiable/Attainment..		
AQCR 190 Central Oregon Intrastate (remainder of)		Unclassifiable/Attainment..		
Crook County Deschutes County Hood River County Jefferson County Klamath County Lake County Sherman County Wasco County				
AQCR 191 Eastern Oregon Intrastate		Unclassifiable/Attainment..		
Baker County Gilliam County Grant County Harney County Malheur County Morrow County Umatilla County Union County Wallowa County Wheeler County				
AQCR 192 Northwest Oregon Intrastate		Unclassifiable/Attainment..		
Clatsop County Lincoln County Tillamook County				
AQCR 193 Portland Interstate (part)		Unclassifiable/Attainment..		
Lane County (part) Eugene Springfield Air Quality Maintenance Area				
AQCR 193 Portland Interstate (remainder of)		Unclassifiable/Attainment..		
Benton County Clackamas County (part) remainder Columbia County Lane County (part) remainder Linn County Marion County (part) The area outside the Salem Area Transportation Study Multnomah County (part) remainder Polk County (part) The area outside the Salem Area Transportation Study Washington County (part) remainder Yamhill County				
AQCR 194 Southwest Oregon Intrastate (part)				
Jackson County (part) Medford-Ashland Air Quality Maintenance Area.		Unclassifiable/Attainment..		
AQCR 194 Southwest Oregon Intrastate (remainder of)		Unclassifiable/Attainment..		
Coos County Curry County Douglas County Jackson County (part) remainder Josephine County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 40. In § 81.339, the table entitled "Pennsylvania—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.339 Pennsylvania.

* * * * *

PENNSYLVANIA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Allentown-Bethlehem-Easton, PA:				
Carbon County		Nonattainment		Subpart 1.
Lehigh County		Nonattainment		Subpart 1.
Northampton County		Nonattainment		Subpart 1.
Altoona, PA: Blair County		Nonattainment		Subpart 1.
Clearfield & Indiana Cos., PA:				
Clearfield County		Nonattainment		Subpart 1.
Indiana County		Nonattainment		Subpart 1.
Erie, PA: Erie County		Nonattainment		Subpart 1.
Franklin Co., PA: Franklin County		Nonattainment		Subpart 1.
Greene Co., PA: Greene County		Nonattainment		Subpart 1.
Harrisburg-Lebanon-Carlisle, PA:				
Cumberland County		Nonattainment		Subpart 1.
Dauphin County		Nonattainment		Subpart 1.
Lebanon County		Nonattainment		Subpart 1.
Perry County		Nonattainment		Subpart 1.
Johnstown, PA: Cambria County		Nonattainment		Subpart 1.
Lancaster, PA: Lancaster County		Nonattainment		Subpart 2/Moderate.
Philadelphia-Wilmington-Atlantic City, PA–NJ–MD–DE:				
Bucks County		Nonattainment		Subpart 2/Moderate.
Chester County		Nonattainment		Subpart 2/Moderate.
Delaware County		Nonattainment		Subpart 2/Moderate.
Montgomery County		Nonattainment		Subpart 2/Moderate.
Philadelphia County		Nonattainment		Subpart 2/Moderate.
Pittsburgh-Beaver Valley, PA:				
Allegheny County		Nonattainment		Subpart 1.
Armstrong County		Nonattainment		Subpart 1.
Beaver County		Nonattainment		Subpart 1.
Butler County		Nonattainment		Subpart 1.
Fayette County		Nonattainment		Subpart 1.
Washington County		Nonattainment		Subpart 1.
Westmoreland County		Nonattainment		Subpart 1.
Reading, PA: Berks County		Nonattainment		Subpart 1.
Scranton-Wilkes-Barre, PA:				
Lackawanna County		Nonattainment		Subpart 1.
Luzerne County		Nonattainment		Subpart 1.
Monroe County		Nonattainment		Subpart 1.
Wyoming County		Nonattainment		Subpart 1.
State College, PA: Centre County		Nonattainment		Subpart 1.
Tioga Co., PA: Tioga County		Nonattainment		Subpart 1.
Williamsport, PA: Lycoming County		Unclassifiable/Attainment.		
York, PA:				
Adams County		Nonattainment		Subpart 1.
York County		Nonattainment		Subpart 1.
Youngstown-Warren-Sharon, PA–OH: Mercer County		Nonattainment		Subpart 1.
AQCR 151 NE Pennsylvania Intrastate (remainder of):				
Bradford County		Unclassifiable/Attainment.		
Sullivan County		Unclassifiable/Attainment.		
AQCR 178 NW Pennsylvania Interstate (remainder of):				
Cameron County		Unclassifiable/Attainment.		
Clarion County		Unclassifiable/Attainment.		
Elk County		Unclassifiable/Attainment.		
Forest County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
McKean County		Unclassifiable/Attainment.		
Potter County		Unclassifiable/Attainment.		
Venango County		Unclassifiable/Attainment.		
AQCR 195 Central Pennsylvania Intrastate (remainder of):				
Bedford County		Unclassifiable/Attainment.		
Clinton County		Unclassifiable/Attainment.		
Fulton County		Unclassifiable/Attainment.		
Huntingdon County		Unclassifiable/Attainment.		
Mifflin County		Unclassifiable/Attainment.		
Montour County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		

PENNSYLVANIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Rest of State		Unclassifiable/Attainment.		
Columbia County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Juniata County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Northumberland County		Unclassifiable/Attainment.		
Pike County		Unclassifiable/Attainment.		
Schuylkill County		Unclassifiable/Attainment.		
Snyder County		Unclassifiable/Attainment.		
Somerset County		Unclassifiable/Attainment.		
Susquehanna County		Unclassifiable/Attainment.		
Warren County		Unclassifiable/Attainment.		
Wayne County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 41. In § 81.340, the table entitled "Rhode Island—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.340 Rhode Island.

* * * * *

RHODE ISLAND—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Providence (all of RI), RI:				
Bristol County		Nonattainment		Subpart 2/Moderate.
Kent County		Nonattainment		Subpart 2/Moderate.
Newport County		Nonattainment		Subpart 2/Moderate.
Providence County		Nonattainment		Subpart 2/Moderate.
Washington County		Nonattainment		Subpart 2/Moderate.

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 42. In § 81.341, the table entitled "South Carolina—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.341 South Carolina.

SOUTH CAROLINA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Columbia, SC:				
Lexington County (part)	(2)	Nonattainment	(2)	Subpart 1.
Portion along MPO lines				
Richland County (part)	(2)	Nonattainment	(2)	Subpart 1.
Portion along MPO lines				
Greenville-Spartanburg-Anderson, SC:				
Anderson County	(2)	Nonattainment	(2)	Subpart 1.
Greenville County	(2)	Nonattainment	(2)	Subpart 1.
Spartanburg County	(2)	Nonattainment	(2)	Subpart 1.
Charlotte-Gastonia-Rock Hill, NC-SC:				
York County (part)		Nonattainment		Subpart 2/Moderate.
Portion along MPO lines				
Rest of State:		Unclassifiable/Attainment.		
Abbeville County				
Aiken County				
Allendale County				
Bamberg County				
Barnwell County				
Beaufort County				
Berkeley County				
Calhoun County				
Charleston County				

SOUTH CAROLINA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Cherokee County				
Chester County				
Chesterfield County				
Clarendon County				
Colleton County				
Darlington County				
Dillon County				
Dorchester County				
Edgefield County				
Fairfield County				
Florence County				
Georgetown County				
Greenwood County				
Hampton County				
Horry County				
Jasper County				
Kershaw County				
Lancaster County				
Laurens County				
Lee County				
Lexington County (part) remainder				
Marion County				
Marlboro County				
McCormick County				
Newberry County				
Oconee County				
Orangeburg County				
Pickens County				
Richland County (part) remainder				
Saluda County				
Sumter County				
Union County				
Williamsburg County				
York County (part) remainder				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 43. In § 81.342, the table entitled "South Dakota—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.342 South Dakota.

SOUTH DAKOTA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment.		
Aurora County		Unclassifiable/Attainment.		
Beadle County		Unclassifiable/Attainment.		
Bennett County		Unclassifiable/Attainment.		
Bon Homme County		Unclassifiable/Attainment.		
Brookings County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Brule County		Unclassifiable/Attainment.		
Buffalo County		Unclassifiable/Attainment.		
Butte County		Unclassifiable/Attainment.		
Campbell County		Unclassifiable/Attainment.		
Charles Mix County		Unclassifiable/Attainment.		
Clark County		Unclassifiable/Attainment.		
Clay County		Unclassifiable/Attainment.		
Codington County		Unclassifiable/Attainment.		
Corson County		Unclassifiable/Attainment.		
Custer County		Unclassifiable/Attainment.		
Davison County		Unclassifiable/Attainment.		
Day County		Unclassifiable/Attainment.		
Deuel County		Unclassifiable/Attainment.		

SOUTH DAKOTA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Dewey County		Unclassifiable/Attainment.		
Douglas County		Unclassifiable/Attainment.		
Edmunds County		Unclassifiable/Attainment.		
Fall River County		Unclassifiable/Attainment.		
Faulk County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Gregory County		Unclassifiable/Attainment.		
Haakon County		Unclassifiable/Attainment.		
Hamlin County		Unclassifiable/Attainment.		
Hand County		Unclassifiable/Attainment.		
Hanson County		Unclassifiable/Attainment.		
Harding County		Unclassifiable/Attainment.		
Hughes County		Unclassifiable/Attainment.		
Hutchinson County		Unclassifiable/Attainment.		
Hyde County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Jerauld County		Unclassifiable/Attainment.		
Jones County		Unclassifiable/Attainment.		
Kingsbury County		Unclassifiable/Attainment.		
Lake County		Unclassifiable/Attainment.		
Lawrence County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Lyman County		Unclassifiable/Attainment.		
Marshall County		Unclassifiable/Attainment.		
McCook County		Unclassifiable/Attainment.		
McPherson County		Unclassifiable/Attainment.		
Meade County		Unclassifiable/Attainment.		
Mellette County		Unclassifiable/Attainment.		
Miner County		Unclassifiable/Attainment.		
Minnehaha County		Unclassifiable/Attainment.		
Moody County		Unclassifiable/Attainment.		
Pennington County		Unclassifiable/Attainment.		
Perkins County		Unclassifiable/Attainment.		
Potter County		Unclassifiable/Attainment.		
Roberts County		Unclassifiable/Attainment.		
Sanborn County		Unclassifiable/Attainment.		
Shannon County		Unclassifiable/Attainment.		
Spink County		Unclassifiable/Attainment.		
Stanley County		Unclassifiable/Attainment.		
Sully County		Unclassifiable/Attainment.		
Todd County		Unclassifiable/Attainment.		
Tripp County		Unclassifiable/Attainment.		
Turner County		Unclassifiable/Attainment.		
Union County		Unclassifiable/Attainment.		
Walworth County		Unclassifiable/Attainment.		
Yankton County		Unclassifiable/Attainment.		
Ziebach County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 44. In § 81.343, the table entitled "Tennessee—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.343 Tennessee.

* * * * *

TENNESSEE—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Chattanooga, TN-GA:				
Hamilton County		Nonattainment		Subpart 1.
Meigs County		Nonattainment		Subpart 1.
Clarkesville-Hopkinsville, TN-KY:				
Montgomery County		Nonattainment		Subpart 1.
Johnson City-Kingsport-Bristol, TN:				
Hawkins County	(2)	Nonattainment	(2)	Subpart 1.
Sullivan County	(2)	Nonattainment	(2)	Subpart 1.

TENNESSEE—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Knoxville, TN:				
Anderson County		Nonattainment		Subpart 1.
Blount County		Nonattainment		Subpart 1.
Cocke County (part)		Nonattainment		Subpart 1.
(Great Smoky Mtn Park)				
Jefferson County		Nonattainment		Subpart 1.
Knox County		Nonattainment		Subpart 1.
Loudon County		Nonattainment		Subpart 1.
Sevier County		Nonattainment		Subpart 1.
Memphis, TN-AR:				
Shelby County		Nonattainment		Subpart 2/Moderate.
Nashville, TN:				
Davidson County	(2)	Nonattainment	(2)	Subpart 1.
Rutherford County	(2)	Nonattainment	(2)	Subpart 1.
Sumner County	(2)	Nonattainment	(2)	Subpart 1
Williamson County	(2)	Nonattainment	(2)	Subpart 1.
Wilson County	(2)	Nonattainment	(2)	Subpart 1.
Rest of State		Unclassifiable/Attainment.		
Bedford County				
Benton County				
Bledsoe County				
Bradley County				
Campbell County				
Cannon County				
Carroll County				
Carter County				
Cheatham County				
Chester County				
Claiborne County				
Clay County				
Cocke County (part) remainder				
Coffee County				
Crockett County				
Cumberland County				
Decatur County				
DeKalb County				
Dickson County				
Dyer County				
Fayette County				
Fentress County				
Franklin County				
Gibson County				
Giles County				
Grainger County				
Greene County				
Grundy County				
Hamblen County				
Hancock County				
Hardeman County				
Hardin County				
Haywood County				
Henderson County				
Henry County				
Hickman County				
Houston County				
Humphreys County				
Jackson County				
Johnson County				
Lake County				
Lauderdale County				
Lawrence County				
Lewis County				
Lincoln County				
Macon County				
Madison County				
Marion County				
Marshall County				
Maury County				
McMinn County				
McNairy County				

TENNESSEE—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Monroe County				
Moore County				
Morgan County				
Obion County				
Overton County				
Perry County				
Pickett County				
Polk County				
Putnam County				
Rhea County				
Roane County				
Robertson County				
Scott County				
Sequatchie County				
Smith County				
Stewart County				
Tipton County				
Trousdale County				
Unicoi County				
Union County				
Van Buren County				
Warren County				
Washington County				
Wayne County				
Weakley County				
White County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

45. In § 81.344, the table entitled "Texas—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.344 Texas.

* * * * *

TEXAS—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Beaumont/Port Arthur, TX:				
Hardin County		Nonattainment		Subpart 2/Marginal.
Jefferson County		Nonattainment		Subpart 2/Marginal.
Orange County		Nonattainment		Subpart 2/Marginal.
Dallas-Fort Worth, TX:				
Collin County		Nonattainment		Subpart 2/Moderate.
Dallas County		Nonattainment		Subpart 2/Moderate.
Denton County		Nonattainment		Subpart 2/Moderate.
Ellis County		Nonattainment		Subpart 2/Moderate.
Johnson County		Nonattainment		Subpart 2/Moderate.
Kaufman County		Nonattainment		Subpart 2/Moderate.
Parker County		Nonattainment		Subpart 2/Moderate.
Rockwall County		Nonattainment		Subpart 2/Moderate.
Tarrant County		Nonattainment		Subpart 2/Moderate.
Houston-Galveston-Brazoria, TX:				
Brazoria County		Nonattainment		Subpart 2/Moderate.
Chambers County		Nonattainment		Subpart 2/Moderate.
Fort Bend County		Nonattainment		Subpart 2/Moderate.
Galveston County		Nonattainment		Subpart 2/Moderate.
Harris County		Nonattainment		Subpart 2/Moderate.
Liberty County		Nonattainment		Subpart 2/Moderate.
Montgomery County		Nonattainment		Subpart 2/Moderate.
Waller County		Nonattainment		Subpart 2/Moderate.
San Antonio, TX:				
Bexar County	(2)	Nonattainment	(2)	Subpart 1.
Comal County	(2)	Nonattainment	(2)	Subpart 1.
Guadalupe County	(2)	Nonattainment	(2)	Subpart 1.
Victoria Area:				

TEXAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Victoria County	.....	Unclassifiable/Attainment.		
AQCR 022 Shreveport-Texarkana-Tyler Interstate	.....	Unclassifiable/Attainment.		
Anderson County				
Bowie County				
Camp County				
Cass County				
Cherokee County				
Delta County				
Franklin County				
Gregg County				
Harrison County				
Hopkins County				
Lamar County				
Marion County				
Morris County				
Panola County				
Rains County				
Red River County				
Rusk County				
Smith County				
Titus County				
Upshur County				
Van Zandt County				
Wood County				
AQCR 106 S Louisiana-SE Texas Interstate (remainder of).	.....	Unclassifiable/Attainment.		
Angelina County				
Houston County				
Jasper County				
Nacogdoches County				
Newton County				
Polk County				
Sabine County				
San Augustine County				
San Jacinto County				
Shelby County				
Trinity County				
Tyler County				
AQCR 153 El Paso-Las Cruces-Alamogordo Interstate	.....	Unclassifiable/Attainment.		
Brewster County				
Culberson County				
El Paso County				
Hudspeth County				
Jeff Davis County				
Presidio County				
AQCR 210 Abilene-Wichita Falls Intrastate	.....	Unclassifiable/Attainment.		
Archer County				
Baylor County				
Brown County				
Callahan County				
Clay County				
Coleman County				
Comanche County				
Cottle County				
Eastland County				
Fisher County				
Foard County				
Hardeman County				
Haskell County				
Jack County				
Jones County				
Kent County				
Knox County				
Mitchell County				
Montague County				
Nolan County				
Runnels County				
Scurry County				
Shackelford County				
Stephens County				

TEXAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Stonewall County				
Taylor County				
Throckmorton County				
Wichita County				
Wilbarger County				
Young County				
AQCR 211 Amarillo-Lubbock Intrastate	.....	Unclassifiable/Attainment.		
Armstrong County				
Bailey County				
Briscoe County				
Carson County				
Castro County				
Childress County				
Cochran County				
Collingsworth County				
Crosby County				
Dallam County				
Deaf Smith County				
Dickens County				
Donley County				
Floyd County				
Garza County				
Gray County				
Hale County				
Hall County				
Hansford County				
Hartley County				
Hemphill County				
Hockley County				
Hutchinson County				
King County				
Lamb County				
Lipscomb County				
Lubbock County				
Lynn County				
Moore County				
Motley County				
Ochiltree County				
Oldham County				
Parmer County				
Potter County				
Randall County				
Roberts County				
Sherman County				
Swisher County				
Terry County				
Wheeler County				
Yoakum County				
AQCR 212 Austin-Waco Intrastate	.....	Unclassifiable/Attainment.		
Bastrop County				
Bell County				
Blanco County				
Bosque County				
Brazos County				
Burleson County				
Burnet County				
Caldwell County				
Coryell County				
Falls County				
Fayette County				
Freestone County				
Grimes County				
Hamilton County				
Hays County				
Hill County				
Lampasas County				
Lee County				
Leon County				
Limestone County				
Llano County				

TEXAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Madison County				
McLennan County				
Milam County				
Mills County				
Robertson County				
San Saba County				
Travis County				
Washington County				
Williamson County				
AQCR 213 Brownsville-Laredo Intrastate		Unclassifiable/Attainment.		
Cameron County				
Hidalgo County				
Jim Hogg County				
Starr County				
Webb County				
Willacy County				
Zapata County				
AQCR 214 Corpus Christi-Victoria Intrastate (remainder of).		Unclassifiable/Attainment.		
Aransas County				
Bee County				
Brooks County				
Calhoun County				
DeWitt County				
Duval County				
Goliad County				
Gonzales County				
Jackson County				
Jim Wells County				
Kenedy County				
Kleberg County				
Lavaca County				
Live Oak County				
McMullen County				
Refugio County				
San Patricio County				
AQCR 214 Corpus Christi-Victoria Intrastate (part)		Unclassifiable/Attainment.		
Nueces County				
AQCR 215 Metro Dallas-Fort Worth Intrastate (remainder of).		Unclassifiable/Attainment.		
Cooke County				
Erath County				
Fannin County				
Grayson County				
Henderson County				
Hood County				
Hunt County				
Navarro County				
Palo Pinto County				
Somervell County				
Wise County				
AQCR 216 Metro Houston-Galveston Intrastate (remainder of).		Unclassifiable/Attainment.		
Austin County				
Colorado County				
Matagorda County				
Walker County				
Wharton County				
AQCR 217 Metro San Antonio Intrastate (remainder of)		Unclassifiable/Attainment.		
Atascosa County				
Bandera County				
Dimmit County				
Edwards County				
Frio County				
Gillespie County				
Karnes County				
Kendall County				
Kerr County				
Kinney County				
La Salle County				

TEXAS—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Maverick County				
Medina County				
Real County				
Uvalde County				
Val Verde County				
Wilson County				
Zavala County				
AQCR 218 Midland-Odessa-San Angelo Intrastate (part)	.....	Unclassifiable/Attainment.		
Ector County				
AQCR 218 Midland-Odessa-San Angelo Intrastate (remainder of).	.....	Unclassifiable/Attainment.		
Andrews County				
Borden County				
Coke County				
Concho County				
Crane County				
Crockett County				
Dawson County				
Gaines County				
Glasscock County				
Howard County				
Irion County				
Kimble County				
Loving County				
Martin County				
Mason County				
McCulloch County				
Menard County				
Midland County				
Pecos County				
Reagan County				
Reeves County				
Schleicher County				
Sterling County				
Sutton County				
Terrell County				
Tom Green County				
Upton County				
Ward County				
Winkler County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 46. In § 81.345, the table entitled "Utah—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.345 Utah.

* * * * *

UTAH—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Salt Lake City Area:				
Davis County	.....	Unclassifiable/Attainment.		
Salt Lake County	.....	Unclassifiable/Attainment.		
Rest of State:	.....	Unclassifiable/Attainment.		
Beaver County				
Box Elder County				
Cache County				
Carbon County				
Daggett County				
Duchesne County				
Emery County				
Garfield County				
Grand County				
Iron County				

UTAH—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Juab County				
Kane County				
Millard County				
Morgan County				
Piute County				
Rich County				
San Juan County				
Sanpete County				
Sevier County				
Summit County				
Tooele County				
Uintah County				
Utah County				
Wasatch County				
Washington County				
Wayne County				
Weber County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 47. In § 81.346, the table entitled "Vermont—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.346 Vermont.

* * * * *

VERMONT—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
AQCR 159 Champlain Valley Interstate (part)				
Addison County		Unclassifiable/Attainment.		
Chittenden County		Unclassifiable/Attainment.		
AQCR 159 Champlain Calley Interstate (remainder of)		Unclassifiable/Attainment.		
Franklin County				
Grand Isle County				
Rutland County				
AQCR 221 Vermont Intrastate (part)		Unclassifiable/Attainment.		
Windsor County				
AQCR 221 Vermont Intrastate (remainder of)		Unclassifiable/Attainment.		
Bennington County				
Caledonia County				
Essex County				
Lamoille County				
Orange County				
Orleans County				
Washington County				
Windham County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 48. In § 81.347, the table entitled "Virginia—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.347 Virginia.

* * * * *

VIRGINIA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Frederick Co., VA:				
Frederick County	(2)	Nonattainment	(2)	Subpart 1.
Winchester City	(2)	Nonattainment	(2)	Subpart 1.
Fredericksburg, VA:				
City of Fredericksburg		Nonattainment		Subpart 2/Moderate.

VIRGINIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Spotsylvania County		Nonattainment		Subpart 2/Moderate.
Stafford County		Nonattainment		Subpart 2/Moderate.
Madison & Page Cos. (Shenandoah NP), VA:				
Madison County (part)		Nonattainment		Subpart 1.
Page County (part)		Nonattainment		Subpart 1.
Norfolk-Virginia Beach-Newport News (Hampton Roads), VA:				
Chesapeake City		Nonattainment		Subpart 2/Marginal.
Gloucester County		Nonattainment		Subpart 2/Marginal.
Hampton City		Nonattainment		Subpart 2/Marginal.
Isle of Wight County		Nonattainment		Subpart 2/Marginal.
James City County		Nonattainment		Subpart 2/Marginal.
Newport News City		Nonattainment		Subpart 2/Marginal.
Norfolk City		Nonattainment		Subpart 2/Marginal.
Poquoson City		Nonattainment		Subpart 2/Marginal.
Portsmouth City		Nonattainment		Subpart 2/Marginal.
Suffolk City		Nonattainment		Subpart 2/Marginal.
Virginia Beach City		Nonattainment		Subpart 2/Marginal.
Williamsburg City		Nonattainment		Subpart 2/Marginal.
York County		Nonattainment		Subpart 2/Marginal.
Richmond-Petersburg, VA:				
Charles City County		Nonattainment		Subpart 2/Moderate.
Chesterfield County		Nonattainment		Subpart 2/Moderate.
Colonial Heights City		Nonattainment		Subpart 2/Moderate.
Hanover County		Nonattainment		Subpart 2/Moderate.
Henrico County		Nonattainment		Subpart 2/Moderate.
Hopewell City		Nonattainment		Subpart 2/Moderate.
Petersburg City		Nonattainment		Subpart 2/Moderate.
Prince George County		Nonattainment		Subpart 2/Moderate.
Richmond City		Nonattainment		Subpart 2/Moderate.
Roanoke, VA:				
Botetourt County	(2)	Nonattainment	(2)	Subpart 1.
Roanoke City	(2)	Nonattainment	(2)	Subpart 1.
Roanoke County	(2)	Nonattainment	(2)	Subpart 1.
Salem City	(2)	Nonattainment	(2)	Subpart 1.
Washington, DC-MD-VA:				
Alexandria City		Nonattainment		Subpart 2/Moderate.
Arlington County		Nonattainment		Subpart 2/Moderate.
Fairfax City		Nonattainment		Subpart 2/Moderate.
Fairfax County		Nonattainment		Subpart 2/Moderate.
Falls Church City		Nonattainment		Subpart 2/Moderate.
Loudoun County		Nonattainment		Subpart 2/Moderate.
Manassas City		Nonattainment		Subpart 2/Moderate.
Manassas Park City		Nonattainment		Subpart 2/Moderate.
Prince William County		Unattainment		Subpart 2/Moderate.
AQCR 207 Eastern Tennessee-SW Virginia Interstate (remainder of).		Unclassifiable/Attainment.		
Bland County				
Bristol City				
Buchanan County				
Carroll County				
Dickenson County				
Galax City				
Grayson County				
Lee County				
Norton City				
Russell County				
Scott County				
Smyth County				
Tazewell County				
Washington County				
Wise County				
Wythe County				
AQCR 222 Central Virginia Intrastate		Unclassifiable/Attainment.		
Amelia County				
Amherst County				
Appomattox County				
Bedford City				
Bedford County				
Brunswick County				

VIRGINIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Buckingham County				
Campbell County				
Charlotte County				
Cumberland County				
Danville City				
Franklin County				
Halifax County				
Henry County				
Lunenburg County				
Lynchburg City				
Martinsville City				
Mecklenburg County				
Nottoway County				
Patrick County				
Pittsylvania County				
Prince Edward County				
AQCR 223 Hampton Roads Intrastate (remainder of)	.....	Unclassifiable/Attainment.		
Franklin City				
Southampton County				
AQCR 224 NE Virginia Intrastate (remainder of)	.....	Unclassifiable/Attainment.		
Accomack County				
Albemarle County				
Caroline County				
Charlottesville City				
Culpeper County				
Essex County				
Fauquier County				
Fluvanna County				
Greene County				
King and Queen County				
King George County				
King William County				
Lancaster County				
Louisa County				
Madison County (part) remainder				
Mathews County				
Middlesex County				
Nelson County				
Northampton County				
Northumberland County				
Orange County				
Rappahannock County				
Richmond County				
Westmoreland County				
AQCR 225 State Capital Intrastate (remainder of)	.....	Unclassifiable/Attainment.		
Dinwiddie County				
Emporia City				
Goochland County				
Greensville County				
New Kent County				
Petersburg City				
Powhatan County				
Surry County				
Sussex County				
AQCR 226 Valley of Virginia Intrastate	.....	Unclassifiable/Attainment.		
Alleghany County				
Augusta County				
Bath County				
Buena Vista City				
Clarke County				
Covington City				
Craig County				
Floyd County				
Giles County				
Harrisonburg City				
Highland County				
Lexington City				
Montgomery County				
Page County (part) remainder				
Pulaski County				

VIRGINIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Radford City				
Rockbridge County				
Rockingham County				
Shenandoah County				
Staunton City				
Warren County				
Waynesboro City				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 49. In § 81.348, the table entitled "Washington—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.348 Washington.

* * * * *

WASHINGTON—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Portland-Vancouver AQMA Area:				
Clark County (part)		Unclassifiable/Attainment.		
Air Quality Maintenance Area				
Seattle-Tacoma Area:		Unclassifiable/Attainment.		

WASHINGTON—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
The following boundary includes all of Pierce County, and all of King County except a small portion on the north-east corner and the western portion of Snohomish County: Starting at the mouth of the Nisqually river extend northwesterly along the Pierce County line to the southernmost point of the west county line of King County; thence northerly along the county line to the southernmost point of the west county line of Snohomish County; thence northerly along the county line to the intersection with SR 532; thence easterly along the north line of SR 532 to the intersection of I–5, continuing east along the same road now identified as Henning Rd., to the intersection with SR 9 at Bryant; thence continuing easterly on Bryant East Rd. and Rock Creek Rd., also identified as Grandview Rd., approximately 3 miles to the point at which it is crossed by the existing BPA electrical transmission line; thence southeasterly along the BPA transmission line approximately 8 miles to point of the crossing of the south fork of the Stillaguamish River; thence continuing in a southeasterly direction in a meander line following the bed of the River to Jordan Road; southerly along Jordan Road to the north city limits of Granite Falls; thence following the north and east city limits to 92nd St. NE., and Menzel Lake Rd.; thence south-southeasterly along the Menzel Lake Rd., and the Lake Roesiger Rd., a distance of approximately 6 miles to the northernmost point of Lake Roesiger; thence southerly along a meander line following the middle of the Lake and Roesiger Creek to Woods Creek; thence southerly along a meander line following the bed of the Creek approximately 6 miles to the point the Creek is crossed by the existing BPA electrical transmission line; thence easterly along the BPA transmission line approximately 0.2 miles; thence southerly along the BPA Chief Joseph-Covington electrical transmission line approximately 3 miles to the north line of SR 2; thence southeasterly along SR 2 to the intersection with the east county line of King County; thence south along the county line to the northernmost point of the east county line of Pierce County; thence along the county line to the point of beginning at the mouth of the Nisqually River.				
AQCR 062 E Washington-N Idaho Interstate (part)	.....	Unclassifiable/Attainment.		
Spokane County	.....	Unclassifiable/Attainment.		
AQCR 062 E Washington-N Idaho Interstate (remainder of).	.....	Unclassifiable/Attainment.		
Adams County				
Asotin County				
Columbia County				
Garfield County				
Grant County				
Lincoln County				
Whitman County				
AQCR 193 Portland Interstate (remainder of)	.....	Unclassifiable/Attainment.		
Clark County (part) remainder				
Cowlitz County				
Lewis County				
Skamania County				
Wahkiakum County				
AQCR 227 Northern Washington Intrastate	.....	Unclassifiable/Attainment.		
Chelan County				
Douglas County				
Ferry County				
Okanogan County				
Pend Oreille County				
Stevens County				
AQCR 228 Olympic-Northwest Washington Intrastate	.....	Unclassifiable/Attainment.		

WASHINGTON—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
Clallam County				
Grays Harbor County				
Island County				
Jefferson County				
Mason County				
Pacific County				
San Juan County				
Skagit County				
Thurston County				
Whatcom County				
AQCR 229 Puget Sound Intrastate (remainder of)	.....	Unclassifiable/Attainment.		
King County (part) remainder				
Kitsap County				
Snohomish County (part) remainder				
AQCR 230 South Central Washington Intrastate	.....	Unclassifiable/Attainment.		
Benton County				
Franklin County				
Kittitas County				
Klickitat County				
Walla Walla County				
Yakima County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 50. In § 81.349, the table entitled "West Virginia—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.349 West Virginia.

* * * * *

WEST VIRGINIA—OZONE (8-HOUR STANDARD)

Designated area	Designation[a]		Category/classification	
	Date[1]	Type	Date[1]	Type
Berkeley & Jefferson Cos, WV:				
Berkeley County	(2)	Nonattainment	(2)	Subpart 1.
Jefferson County	(2)	Nonattainment	(2)	Subpart 1.
Charleston, WV:				
Kanawha County	.....	Nonattainment	.....	Subpart 1.
Putnam County	.....	Nonattainment	.....	Subpart 1.
Huntington-Ashland, WV-KY:				
Cabell County	.....	Nonattainment	.....	Subpart 1.
Wayne County	.....	Nonattainment	.....	Subpart 1.
Parkersburg-Marietta, WV-OH:				
Wood County	.....	Nonattainment	.....	Subpart 1.
Wheeling, WV-OH:				
Marshall County	.....	Nonattainment	.....	Subpart 1.
Ohio County	.....	Nonattainment	.....	Subpart 1.
Steubenville-Weirton, OH-WV:				
Brooke County	.....	Nonattainment	.....	Subpart 1.
Hancock County	.....	Nonattainment	.....	Subpart 1.
Rest of State	.....	Unclassifiable/Attainment.		
Barbour County				
Boone County				
Braxton County				
Calhoun County				
Clay County				
Doddridge County				
Fayette County				
Gilmer County				
Grant County				
Greenbrier County				
Hampshire County				
Hardy County				
Harrison County				
Jackson County				
Lewis County				
Lincoln County				

WEST VIRGINIA—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Logan County				
Marion County				
Mason County				
McDowell County				
Mercer County				
Mineral County				
Mingo County				
Monongalia County				
Monroe County				
Morgan County				
Nicholas County				
Pendleton County				
Pleasants County				
Pocahontas County				
Preston County				
Raleigh County				
Randolph County				
Ritchie County				
Roane County				
Summers County				
Taylor County				
Tucker County				
Tyler County				
Upshur County				
Webster County				
Wetzel County				
Wirt County				
Wyoming County				

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.
[2] Early Action Compact Area, effective date deferred until September 30, 2005.

■ 51. In § 81.350, the table entitled "Wisconsin—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.350 Wisconsin.

* * * * *

WISCONSIN—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Door County, WI:				
Door County		Nonattainment		Subpart 1.
Kewaunee County, WI:				
Kewaunee County		Nonattainment		Subpart 1.
Manitowoc County, WI:				
Manitowoc County		Nonattainment		Subpart 1.
Milwaukee-Racine, WI:				
Kenosha County		Nonattainment		Subpart 2/Moderate.
Milwaukee County		Nonattainment		Subpart 2/Moderate.
Ozaukee County		Nonattainment		Subpart 2/Moderate.
Racine County		Nonattainment		Subpart 2/Moderate.
Washington County		Nonattainment		Subpart 2/Moderate.
Waukesha County		Nonattainment		Subpart 2/Moderate.
Sheboygan, WI:				
Sheboygan County		Nonattainment		Subpart 2/Moderate.
Rest of State:				
Adams County		Unclassifiable/Attainment.		
Ashland County		Unclassifiable/Attainment.		
Barron County		Unclassifiable/Attainment.		
Bayfield County		Unclassifiable/Attainment.		
Brown County		Unclassifiable/Attainment.		
Buffalo County		Unclassifiable/Attainment.		
Burnett County		Unclassifiable/Attainment.		
Calumet County		Unclassifiable/Attainment.		
Chippewa County		Unclassifiable/Attainment.		
Clark County		Unclassifiable/Attainment.		

WISCONSIN—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Columbia County		Unclassifiable/Attainment.		
Crawford County		Unclassifiable/Attainment.		
Dane County		Unclassifiable/Attainment.		
Dodge County		Unclassifiable/Attainment.		
Douglas County		Unclassifiable/Attainment.		
Dunn County		Unclassifiable/Attainment.		
Eau Claire County.		Unclassifiable/Attainment.		
Florence County		Unclassifiable/Attainment.		
Fond du Lac County		Unclassifiable/Attainment.		
Forest County		Unclassifiable/Attainment.		
Grant County		Unclassifiable/Attainment.		
Green County		Unclassifiable/Attainment.		
Green Lake County		Unclassifiable/Attainment.		
Iowa County		Unclassifiable/Attainment.		
Iron County		Unclassifiable/Attainment.		
Jackson County		Unclassifiable/Attainment.		
Jefferson County		Unclassifiable/Attainment.		
Juneau County		Unclassifiable/Attainment.		
La Crosse County		Unclassifiable/Attainment.		
Lafayette County		Unclassifiable/Attainment.		
Langlade County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Marathon County		Unclassifiable/Attainment.		
Marinette County		Unclassifiable/Attainment.		
Marquette County		Unclassifiable/Attainment.		
Menominee County		Unclassifiable/Attainment.		
Monroe County		Unclassifiable/Attainment.		
Oconto County		Unclassifiable/Attainment.		
Oneida County		Unclassifiable/Attainment.		
Outagamie County		Unclassifiable/Attainment.		
Pepin County		Unclassifiable/Attainment.		
Pierce County		Unclassifiable/Attainment.		
Polk County		Unclassifiable/Attainment.		
Portage County		Unclassifiable/Attainment.		
Price County		Unclassifiable/Attainment.		
Richland County		Unclassifiable/Attainment.		
Rock County		Unclassifiable/Attainment.		
Rusk County		Unclassifiable/Attainment.		
St. Croix County		Unclassifiable/Attainment.		
Sauk County		Unclassifiable/Attainment.		
Sawyer County		Unclassifiable/Attainment.		
Shawano County		Unclassifiable/Attainment.		
Taylor County		Unclassifiable/Attainment.		
Trempealeau County		Unclassifiable/Attainment.		
Vernon County		Unclassifiable/Attainment.		
Vilas County		Unclassifiable/Attainment.		
Walworth County		Unclassifiable/Attainment.		
Washburn County		Unclassifiable/Attainment.		
Waupaca County		Unclassifiable/Attainment.		
Waushara County		Unclassifiable/Attainment.		
Winnebago County		Unclassifiable/Attainment.		
Wood County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 52. In § 81.351, the table entitled "Wyoming—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.351 Wyoming.

* * * * *

WYOMING—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment.		
Albany County		Unclassifiable/Attainment.		
Big Horn County		Unclassifiable/Attainment.		

WYOMING—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Campbell County		Unclassifiable/Attainment.		
Carbon County		Unclassifiable/Attainment.		
Converse County		Unclassifiable/Attainment.		
Crook County		Unclassifiable/Attainment.		
Fremont County		Unclassifiable/Attainment.		
Goshen County		Unclassifiable/Attainment.		
Hot Springs County		Unclassifiable/Attainment.		
Johnson County		Unclassifiable/Attainment.		
Laramie County		Unclassifiable/Attainment.		
Lincoln County		Unclassifiable/Attainment.		
Natrona County		Unclassifiable/Attainment.		
Niobrara County		Unclassifiable/Attainment.		
Park County		Unclassifiable/Attainment.		
Platte County		Unclassifiable/Attainment.		
Sheridan County		Unclassifiable/Attainment.		
Sublette County		Unclassifiable/Attainment.		
Sweetwater County		Unclassifiable/Attainment.		
Teton County		Unclassifiable/Attainment.		
Uinta County		Unclassifiable/Attainment.		
Washakie County		Unclassifiable/Attainment.		
Weston County		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is June 15, 2004, unless otherwise noted.

■ 53. In § 81.352, the table entitled "American Samoa—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.352 American Samoa.

* * * * *

AMERICAN SAMOA—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide:		Unclassifiable/Attainment.		

[1] This date is June 15, 2004, unless otherwise noted.

■ 54. In § 81.353, the table entitled "Guam—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.353 Guam.

* * * * *

GUAM—OZONE (8-HOUR STANDARD)

Designated area	Designation [a]		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide:		Unclassifiable/Attainment.		

[1] This date is June 15, 2004, unless otherwise noted.

■ 55. In § 81.354, the table entitled "Northern Mariana Islands—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.354 Northern Mariana Islands.

* * * * *

NORTHERN MARIANA ISLANDS—OZONE (8-HOUR STANDARD)

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Whole State		Unclassifiable/Attainment.		

[1] This date is June 15, 2004, unless otherwise noted.

■ 56. In § 81.355, the table entitled "Puerto Rico—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.355 Puerto Rico.

* * * * *

PUERTO RICO—OZONE (8-HOUR STANDARD)

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide	.....	Unclassifiable/Attainment.		
Adjuntas Municipio				
Aguada Municipio				
Aguadilla Municipio				
Aguas Buenas Municipio				
Aibonito Municipio				
Añasco Municipio				
Arecibo Municipio				
Arroyo Municipio				
Barceloneta Municipio				
Barranquitas Municipio				
Bayamón County				
Cabo Rojo Municipio				
Caguas Municipio				
Camuy Municipio				
Canóvanas Municipio				
Carolina Municipio				
Cataño County				
Cayey Municipio				
Ceiba Municipio				
Ciales Municipio				
Cidra Municipio				
Coamo Municipio				
Comerío Municipio				
Corozal Municipio				
Culebra Municipio				
Dorado Municipio				
Fajardo Municipio				
Florida Municipio				
Guánica Municipio				
Guayama Municipio				
Guayanilla Municipio				
Guaynabo County				
Gurabo Municipio				
Hatillo Municipio				
Hormigueros Municipio				
Humacao Municipio				
Isabela Municipio				
Jayuya Municipio				
Juana Díaz Municipio				
Juncos Municipio				
Lajas Municipio				
Lares Municipio				
Las Marías Municipio				
Las Piedras Municipio				
Loíza Municipio				
Luquillo Municipio				
Manatí Municipio				
Maricao Municipio				
Maunabo Municipio				
Mayagüez Municipio				
Moca Municipio				
Morovis Municipio				
Naguabo Municipio				
Naranjito Municipio				
Orocovis Municipio				
Patillas Municipio				
Peñuelas Municipio				
Ponce Municipio				
Quebradillas Municipio				
Rincón Municipio				
Río Grande Municipio				
Sabana Grande Municipio				
Salinas Municipio				
San Germán Municipio				
San Juan Municipio				

PUERTO RICO—OZONE (8-HOUR STANDARD)—Continued

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
San Lorenzo Municipio				
San Sebastián Municipio				
Santa Isabel Municipio				
Toa Alta Municipio				
Toa Baja County				
Trujillo Alto Municipio				
Utuado Municipio				
Vega Alta Municipio				
Vega Baja Municipio				
Vieques Municipio				
Villalba Municipio				
Yabucoa Municipio				
Yauco Municipio				

[1] This date is June 15, 2004, unless otherwise noted.

■ 57. In § 81.356, the table entitled "Virgin Islands—Ozone (8-Hour Standard)" is added to read as follows:

§ 81.356 Virgin Islands.

* * * * *

VIRGIN ISLANDS—OZONE (8-HOUR STANDARD)

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment.		
St. Croix				
St. John				
St. Thomas				

[1] This date is June 15, 2004, unless otherwise noted.

[FR Doc. 04-9152 Filed 4-29-04; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 50, 51 and 81

[OAR 2003-0079, FRL-7651-7]

RIN 2060-AJ99

Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 1

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: In this document, EPA is taking final action on key elements of the program to implement the 8-hour ozone national ambient air quality standard (NAAQS or standard). This final rule addresses the following topics: classifications for the 8-hour NAAQS; revocation of the 1-hour NAAQS (*i.e.*, when the 1-hour NAAQS will no longer apply); how anti-backsliding principles will ensure continued progress toward attainment of the 8-hour ozone NAAQS; attainment dates; and the timing of emissions reductions needed for attainment. We are issuing this rule so that States and Tribes will know how we plan to classify areas and transition from implementation of the 1-hour NAAQS to implementation of the 8-hour NAAQS. The intended effect of the rule is to provide certainty to States and Tribes regarding classifications for the 8-hour NAAQS and their continued obligations with respect to existing requirements. This document is Phase 1 of the program to implement the 8-hour ozone NAAQS. We plan to issue a second rule, Phase 2, within the next several months which will address the remaining 8-hour implementation issues, *e.g.*, requirements for reasonable further progress (RFP), requirements for modeling and attainment demonstrations, and requirements for reasonably available control measures (RACM) and reasonably available control technology (RACT).

DATES: Effective Date: This rule is effective on June 15, 2004.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. OAR-2003-0079. All documents in the docket are listed in the EDOCKET index at *http://www.epa.gov/edocket.* Although listed in the index, some information is not publicly available, *i.e.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at the EPA Docket Center (Air Docket), EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Office of Air and Radiation Docket and Information Center is (202) 566-1742.

In addition, we have placed a variety of earlier materials regarding implementation of the 8-hour ozone NAAQS on the Web site: *http://www.epa.gov/ttn/naaqs/ozone/o3imp8hr.*

FOR FURTHER INFORMATION CONTACT: Mr. John Silvasi, Office of Air Quality

Appendix B

USEPA Guidance Memos on Redesignations

USEPA Calcagni Memo on Process for SIP Submittals

MEMORANDUM

SUBJECT: Processing of State Implementation Plan (SIP) Submittals

FROM: John Calcagni, Director
Air Quality Management Division, OAQPS (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides, and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

This memorandum provides guidance concerning the processing of SIP submittals. In general, there are three situations that can occur related to each required submittal: the State may fail to submit the required plan, the State may make a submittal that is not complete, or the State may make a complete submittal. Once a State submits a SIP and the Environmental Protection Agency (EPA) has determined that the submittal is complete, EPA must either approve or disapprove the submittal within a specified time period. However, if the State fails to make a required submittal or makes a submittal that is determined to be incomplete, the sanctions and Federal implementation plan (FIP) provisions of sections 179 and 110(c), respectively, will be triggered. In addition, disapproval of a submittal also triggers the sanctions and FIP provisions. These provisions are discussed in further detail in this memorandum.

There are, however, three alternatives to full approval or full disapproval of a complete SIP submittal: partial approval,

limited approval, and conditional approval. Each of these is discussed in more detail below along with some guidance as to when each might be used. In addition, Attachment 1 to this memorandum contains several examples of how these may be used. Attachment 2 to this memorandum is a table that summarizes the requirements discussed below.

Partial Approval/Disapproval

Section 110(k)(3) of the amended Clean Air Act (Act) addresses the situation in which an entire submittal, or a separable portion of a submittal, meets all applicable requirements of the Act. Where the entire submittal meets all the requirements of the Act, EPA will fully approve the entire submittal. In the case where a separable portion of the submittal meets all of the applicable requirements, partial approval may be used to approve that part of the submittal and disapprove the remainder. It is important that the two parts of the submittal be separable. By separable, EPA means that the action it anticipates taking will not result in the approved rule(s) being more stringent than the State anticipated. See Bethlehem Steel Corp. v. Gorsuch, 742 F. 2d 1028 (7th Cir. 1984); Indiana and Michigan Elec. Co. v. U.S. E.P.A., 733 F. 2d 489 (7th Cir. 1984). For example, EPA cannot approve part of a submittal that specifies control measures and disapprove the part that specifies the test methods associated with those control measures. The EPA has frequently taken a partial approval approach in the past to process groups of rules that are submitted together. The EPA can approve some of the rules and disapprove the rest as long as the rules that are disapproved do not affect those that are approved. The disapproval of any part of a required SIP submittal starts the clocks discussed above for sanctions and FIP's.

Limited Approval/Disapproval

In some cases, a submittal may contain certain provisions that meet the applicable requirements of the Act along with other provisions that do not meet the requirements, and the provisions are not separable. Although the submittal may not meet all of the applicable requirements, EPA may want to consider whether the submittal as a whole has a strengthening effect on the SIP. If that is the case, limited approval may be used to approve a rule that strengthens the existing SIP as representing an improvement over what is currently in the SIP and as meeting some of the applicable requirements of the Act.

The Act does not expressly provide for limited approvals.

Rather, EPA is using its "gap-filling" authority under section 301(a) of the Act in conjunction with the section 110(k)(3) approval provision to interpret the Act to provide for this type of approval action.

Through a limited approval, EPA would concurrently, or within a reasonable time thereafter, disapprove the rule, under the relevant provision(s) of Part D, for not meeting all of the applicable requirements of the Act. As with the limited approval action the limited disapproval is a rulemaking action, and it is subject to notice and comment. Under section 110(k), EPA must take final rulemaking action on SIP submittals within 12 months of the date EPA determines the submittal is complete or the submittal is automatically deemed to be complete if EPA fails to make a completeness determination. As a general matter, although the statute directs EPA to act within that timeframe, EPA's failure to finalize the disapproval portion of the action within that 12-month timeframe will not affect the validity of any prior or subsequent limited approval or limited disapproval.[1] The EPA's failure to take action prior to the expiration of the 12-month period could, however, subject EPA to a lawsuit to compel such an action.

A key distinction between the limited approval and a partial approval is that under a limited approval EPA's approval action goes to the entire rule. In other words, although portions of a rule prevent EPA from finding that the rule meets a certain requirement of the Act, EPA believes that the rule, as a whole, strengthens the SIP. Therefore, EPA approves the entire rule--even those portions that prohibit full approval. Likewise, when EPA issues the limited disapproval, the disapproval applies to the entire rule as failing to meet a specific requirement of the Act. The rule remains a part of the SIP, however, under the limited disapproval, because the rule strengthens the SIP. The disapproval only applies to whether the submittal meets a specific requirement of the Act and does not affect incorporation of the rule into the approved, federally enforceable SIP.

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[1] The March 22, 1991 memorandum from John Calcagni discussed the potential impact of Abramowitz v. U.S. E.P.A., 832, F. 2d 1071 (9th Cir. 1988), on EPA's decision to split the approval and disapproval portions of a limited approval. After reevaluating that case, we believe it may have a narrower impact than initially described and, therefore, generally would not impact the timing of limited approval/disapproval actions.

The primary advantage to using the limited approval approach is to make the State submittal federally enforceable and to increase the SIP's potential to achieve additional reductions. Therefore, limited approval should not be used to approve any rule that is unenforceable for all situations--for example, a rule that lacks a test method. These rules and any other rules that do not have an overall strengthening effect on the SIP should be disapproved. Limited approval can be used, however,

where the rule is unenforceable for some limited number of situations but is enforceable for the majority of situations, if the rule, as a whole, strengthens the SIP.

The disapproval coinciding with (or following) the limited approval also starts the sanctions and FIP clocks discussed above. With the limited approval EPA may or may not have a commitment from the State to correct the deficiency. The EPA may choose to use the limited approval approach (instead of conditional approval) in the case where the State has submitted a commitment as part of a rule but EPA has reason to believe that the State will not be able to meet the commitment (as discussed below). Where a limited approval/disapproval approach is taken, the notice of proposed rulemaking (NPR) should clearly identify which requirements have not been met and what action would be required on the part of the State to meet those requirements.

Conditional Approval

Under section 110(k)(4) of the Act EPA may conditionally approve a plan based on a commitment from the State to adopt specific enforceable measures within 1 year from the date of approval. If the State fails to meet its commitment within the 1-year period, the approval is treated as a disapproval. We expect that conditional approvals will be used only in rare situations that merit special consideration. We will evaluate specific types of SIP submittals [e.g., reasonably available control technology (RACT) catch-ups, particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-10) SIP's] to determine whether certain elements of that type of submittal, or that type of submittal as a whole, merit conditional approval. For this reason and to ensure consistency, Regions should not use conditional approvals without input from Headquarters as to whether such an approach is appropriate. Furthermore, as any statutory deadline approaches, we may issue guidance regarding the appropriate use of conditional approval with respect to that specific requirement.

Once a determination has been made that a specific type of submittal can be considered for conditional approval, Regions

must make a determination of whether an individual State submittal should be conditionally approved. The first consideration should be whether the State has made (or agrees to make) a commitment to adopt specific enforceable measures within 1 year of EPA approval. The commitment must be made in writing by the party responsible for adopting the specified measures before the plan is conditionally approved, and the commitment must be submitted by the State.[2]

In addition, to the extent that the commitment materially alters the existing rule (in respects that the public could not reasonably have anticipated would result from the public review of the existing rule), or is a commitment to adopt an entire rule or set of rules, the commitment must be a SIP revision submittal by the State. In many cases, the determination of whether the commitment materially alters the underlying rule may be based on whether a similar issue was raised during the earlier State proceedings on the submitted rule. In general, each commitment will need to be examined to determine whether it materially alters the submitted rule. As with any SIP revision, in order for EPA to accept the commitment as a SIP revision, the State must have provided notice and public hearing on the submitted commitment. However, EPA has the discretion to parallel process commitments and in limited circumstances may propose conditional approval of the commitment and allow the State process to proceed on a parallel track.

As a general matter, the greater the extent to which a submittal is lacking in important plan elements, the less appropriate the use of conditional approval may be. It should be noted, however, that there may be circumstances under which EPA would accept a SIP revision consisting of a commitment only (without specifically adopted rules) as a candidate for conditional approval. In such cases, the commitment should also be accompanied by a work plan detailing any specific measures to be adopted, the steps that will be taken to adopt the measures,

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[2] Although the commitment must identify the measures to be adopted and contain a schedule for adopting such measures, it is not necessary for the commitment itself to be enforceable in a State court.

and the schedule for adoption of those measures. As stated earlier, a submittal that consists entirely of a commitment will be considered a SIP revision that is subject to the State process for submitting SIP revisions, e.g., notice and a public hearing.

Where the submittal contains specifically adopted rules that need some revisions or corrections to be fully-approvable, the commitment may not need to be as comprehensive. The commitment should, however, be as explicit as possible concerning the measures that will be adopted, the steps that will be taken to adopt the measures, and the schedule for adoption of those measures.

Because the conditional approval relies on a commitment from the State, EPA would need some level of confidence that the State would be able to meet such a commitment. In making a determination as to whether a State could reasonably be expected to meet its commitment, EPA would need to consider a number of factors such as:

- the amount of technical work necessary for the measures to be adopted;
- whether adoption of the measures is expected to be controversial;
- the average length of the State adoption process;
- how far along in the process the State is; and
- the State's past track record.

It should be noted that these are only some of the factors that should be considered. Each Region, in making a determination regarding the credibility of the State's commitment, may have to look at a number of other factors. The Region should clearly explain, either in the NPR or in a technical support document, the rationale for these determinations.

In addition to the determination of whether the State's commitment is credible, the Region must make a determination as to whether it is appropriate to conditionally approve a revision on the merits of that revision. Conditional approval might typically be used in the same types of situations as the limited approval. As with the limited approval, one of the main advantages of the conditional approval approach is to make the State submittal (where the submittal contains control requirements and not just a commitment to adopt enforceable measures) federally enforceable and to increase its potential to achieve additional reductions. Because the conditionally approved submittal will become a part of the SIP, the Region

should be certain that the approval of the commitment will not weaken the existing SIP. The Region may also want to consider when the plan (or plan element) that has been submitted was due.

The NPR for a conditional approval should clearly identify which requirements are the subject of the commitment and, therefore, have not been met. In addition, both the NPR and the State's commitment should clearly identify what action is required on the part of the State. Unlike the limited approval/disapproval, the conditional approval does not immediately start the sanctions and FIP clocks. These clocks start if and when the approval is converted to a disapproval.

There are at least two ways that the conditional approval may be converted to a disapproval.[3] First, if the State fails to adopt and submit the specified measures by the end of 1 year (from the final conditional approval), or fails to submit anything at all, EPA will have to issue a finding of disapproval but will not have to propose the disapproval. That is because in the original proposed and final conditional approval, EPA will have provided notice and an opportunity for comment on the fact that EPA would directly make the finding of disapproval (by letter) if the State failed to submit anything.[4] Therefore, at the end of 1 year from the conditional approval, the Regional Administrator (RA) will send a letter to the State finding that it had failed to meet its commitment and that the SIP submittal is disapproved. The 18-month clock for sanctions and the 2-year clock for a FIP start as of the date of the letter. Subsequently, a notice to that effect will be published in the Federal Register, and appropriate language will be inserted in the Code of Federal Regulations. Similarly, if EPA receives a submittal addressing the commitment but determines that the submittal is incomplete, the RA will send a letter to the State making such a finding. As with the failure to submit, the sanctions and FIP clocks will begin as of the date of the finding

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[3] It should be noted that this disapproval can be a limited approval/disapproval. In some cases, the Regions may want to use such an approach to retain the enforceability of control measures. The NPR should indicate if this approach is planned.

[4] To provide for this contingency, in the final conditional approval, EPA would need to provide, for example, "If the State fails to make a submittal or makes only an incomplete submittal during the time period for submittal of the rule, EPA will issue a letter to the State which converts the conditional approval to a disapproval."

letter.

Second, where the State does make a complete submittal by the end of the 1-year period, EPA will have to evaluate that submittal to determine if it may be approved and take final action on the submittal within 12 months after the date EPA determines the submittal is complete. If the submittal does not adequately address the deficiencies that were the subject of the conditional approval, and is therefore not approvable, EPA will have to go through notice-and-comment rulemaking to disapprove the submittal. The 18-month clock for sanctions and the 2-year clock for a FIP start as of the date of final disapproval. If EPA determines that the rule is approvable, EPA will propose approval of the rule. In either instance, whether EPA finally approves or disapproves the rule, the conditional approval remains in effect until EPA takes its final action.

It should be noted that EPA will conditionally approve a certain rule only once. Subsequent submittals of the same rule that attempt to correct the same specifically identified problems will not be eligible for conditional approval.

Sanctions and FIP Requirements

Actions that Trigger the Sanctions and FIP Requirements

The actions EPA has the authority to take under the sanctions and FIP provisions of the Act correspond to the different steps EPA must follow as it reviews and processes SIP submittals. As discussed previously, the Act in section 179[5] requires EPA to impose sanctions based on four types of actions (findings[6]) provided in section 179(a):

(1) a finding that a State has failed to submit a SIP, a

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[5] Section 110(m) grants EPA broad authority to apply either sanction listed in section 179(b) " . . . at any time (or at any time after) a finding . . ." under section 179(a) with respect to any portion of the State, with certain exceptions. This memorandum is intended to address the application of sanctions under section 179. The section 179 sanctions apply only to the area for which a finding has been made.

[6] Although subsections (1)-(4) refer to findings, determinations and disapprovals, for simplicity these four actions will be referred to as "findings."

SIP element,[7] or has submitted a SIP or SIP element that does not satisfy the completeness criteria;

(2) that EPA disapproval of a SIP submission for a nonattainment area based on its failure to meet one or more elements required by the Act;

(3) a determination that the State has not made any other submission, has made an inadequate submission (as required by the Act), or that EPA disapproves such a submission; or

(4) a finding that a requirement of an approved plan is not being implemented.

Under section 110(c)(1), EPA is required to promulgate a FIP based on two types of findings:[8]

(1) a finding that a State has failed to make a required submittal or that a submittal does not satisfy the minimum completeness criteria established under section 110(k)(1)(A), or

(2) the EPA disapproval of a SIP submittal in whole or in part.

The Sanctions and FIP Clocks

Although EPA may make any of the findings discussed above to trigger the 179(a) sanctions and 110(c)(1) FIP requirements, these findings do not require the immediate imposition of sanctions or promulgation of a FIP. Instead the Act provides a "clock" for sanctions and FIP's. For plan submittals required under Part D or in response to a SIP call, section 179(a) allows

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[7] Since EPA does not intend to issue a list of such elements per se, to ensure that such findings are consistently applied, findings of failure to submit SIP elements should be decided on a case-by-case basis in conjunction with Headquarters. The basis for the finding should be clear and well-supported.

[8] Since the deficiency is a failure to implement after a State has submitted a plan and EPA has approved it, it is unnecessary for this finding to trigger a requirement that EPA develop the required rule (i.e., prepare a FIP) and section 110(c)(1) does not require it.

for up to 18 months for the State to correct the deficiency that is the subject of a finding or disapproval before EPA is required to impose sanctions. Section 110(c)(1) provides for up to 2 years for the State to correct the deficiency and for EPA to approve a new submittal before EPA is obligated to promulgate a FIP.

The Administrator has delegated the authority to make findings of failure to submit to the RA's. The findings are made via letters from the RA's to State governors or other State officers to whom authority has been delegated. The letter itself triggers the sanctions and FIP clocks. For disapprovals, the Federal Register notice in which EPA takes final action triggers the sanctions and FIP clocks. Findings of nonimplementation have traditionally been processed as rulemaking actions through Headquarters. The sanctions clock will start when EPA makes a finding of nonimplementation in the Federal Register after soliciting comment on the proposal (the FIP clock is not triggered by such a finding). Although the findings of failure to submit and SIP disapproval start both the sanctions and FIP clocks, what is required to stop the clocks differs; therefore, they are discussed separately. Note that in some cases the sanctions clock may be stopped while EPA remains under an obligation to promulgate a FIP.

Sanctions Clock

Under section 179(a), in order to stop the sanctions clock, the State must correct the "deficiency" prompting the finding. The EPA must apply one of the two sanctions available under section 179(b) within 18 months after the date of the finding and both sanctions at 24 months, unless the deficiency has been corrected. Section 179(a) also requires EPA to apply both sanctions after 18 months if EPA finds a lack of good faith on the part of the State.

Attachment 3 provides seven scenarios illustrating how the sanctions clock operates, including examples of what constitutes a deficiency correction (and hence a stopping of the clock). In brief, for purposes of the sanctions clock, findings of failure to submit plans or complete plans are corrected when EPA finds the submittal complete[9] [although the FIP clock is still

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[9] Where EPA made a finding of failure to submit and subsequently finds that the State has made a complete submittal for the plan or plan element that was the subject of the finding, the letter that makes the finding of completeness will notify the State that the sanctions clock is stopped as of the date of that

running (see FIP clock discussion)] and disapprovals are corrected when EPA takes final rulemaking action approving the plan. In addition, findings of nonimplementation are corrected when EPA makes a finding in the Federal Register that the State is now implementing that provision.

FIP Clock

Under the FIP provisions, either a SIP must be approved or a FIP must promulgated within 2 years of one of the two findings discussed above. In other words, EPA must approve the State submittal in order to stop the FIP clock. Where the sanctions and FIP clocks were started by EPA disapproval of a plan, the clocks will run concurrently. In this case, to correct the deficiency for purposes of the sanctions clock, the State must make a submittal which EPA finds approvable. Such a determination is not made until EPA issues a final approval of the plan. Final approval of a plan is also what is needed to stop the FIP clock. Attachment 3 provides seven scenarios of how the FIP clock operates.

Available Sanctions

For plan submittals required under Part D or in response to a SIP call, if the State does not correct the specific deficiency within the 18-month period allowed under section 179(a), EPA must apply at least one of the two sanctions available under section 179(b)[10] as described:

(1) Highway funding sanctions. The EPA may impose a prohibition on the approval by the Secretary of Transportation of certain projects, or the awarding of certain grants.

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letter. The Region should periodically announce any such findings that represent corrections of failure to submit in the Federal Register.

[10] In addition, section 179(a) provides for an air pollution grant sanction that applies to grants EPA may award under section 105. However, since it is not a sanction provided under section 179(b), it is not one of the sanctions EPA must impose after the 18-month period.

(2) Offset sanctions. A ratio of at least 2-to-1 will be required for emissions reductions within the nonattainment area to offset emissions from new or modified major facilities (as required under section 173).

Regions should determine which of the sanctions will be applied at the 18- and 24-month milestones on a case-by-case basis. As discussed previously, EPA must apply both sanctions at the 18-month mark if it finds there is a lack of good faith effort. Such a determination should be made on a case-by-case basis in consultation with Headquarters. In addition, once one of the sanctions has been imposed, EPA must impose the second sanctions if the deficiency has not been corrected within 6 months (regardless of the State's efforts). Headquarters will issue a proposal of the sanctions and the Regional Office will issue the final rule imposing sanctions.

Conclusion

General comments on this memorandum should be directed to Pam Johnson of the Regional Operations Branch at (919) 541-5270. Comments related specifically to ozone or carbon monoxide should be directed to Carla Oldham at (919) 541-3347. Comments related to particulate matter, sulfur dioxide, or lead should be directed to Chris Stoneman at (919) 541-0823.

cc: Regional Air Counsels, Regions I-X
Chief, Air Programs Branch, Regions I-X
Jane Armstrong, OMS (Ann Arbor)
William Becker, STAPPA/ALAPCO
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Tom Helms, AQMD (MD-15)
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Attachment 1

Example 1

A State submits a SIP revision containing four rules: (1) control requirements for bulk gasoline plants, (2) control requirements for gasoline dispensing facilities (Stage I), (3) leak detection requirements for gasoline tanks trucks, and (4) test methods that apply to these three rules. The EPA review of the rules shows that all of the rules except the Stage I rule meet the applicable requirements of the Act. The Stage I rule fails to require submerged fill loading for all storage tanks. This is inconsistent with EPA's RACT guidance and the State has failed to propose an alternative that it has demonstrated is RACT for the applicable sources.

Partial Approval

Under the partial approval option, EPA can approve the rules for bulk terminals and tank truck leaks, approve the test methods, and disapprove the Stage I rule. These rules are separable from the Stage I rule. Disapproval of the Stage I rule does not affect the stringency of the other three rules. Therefore, the other three rules may be approved under this provision. However, the submittal as a whole would only be partially approved.

Limited Approval of Stage I Rule

Under the limited approval approach, EPA could approve the Stage I rule as being an improvement over what is currently in the SIP and, at the same time or within a reasonable time after the approval (but no later than 12 months after the submittal is complete), disapprove the rule because it does not represent RACT. The sanctions and FIP clocks would start upon the final disapproval of the rule.

Conditional Approval

Alternatively, EPA could conditionally approve the Stage I rule if the State committed to revise the rule, within 1 year of the conditional approval, to require submerged fill loading. If the State then failed to make such a revision, EPA would issue a finding converting the conditional approval to a disapproval.

Example 2

If in example 1 the first three rules (containing control requirements) are all approvable but the fourth (containing the test methods) is either deficient or has not been submitted, then the submittal would have to be handled differently. Because a test method is critical in determining the stringency of a control requirement and is needed for the requirements to be enforceable, these rules cannot be considered separable and,

therefore, partial approval would not be an option. In addition, because the control requirements will not be enforceable without a test method, it would not be appropriate to use either the limited or conditional approval approach.

Example 3

A State submits a SIP revision that contains four PM-10 rules, two for controlling emissions of fugitive dust and two for the control of residential wood combustion. The rules represent reasonable available control measures (RACM) and include (1) paving or stabilizing unpaved roads, (2) developing a traffic reduction plan for unpaved roads, (3) a mandatory episode curtailment program for residential wood combustion, and (4) encouraging changeover to new source performance standards and wood stoves. The third rule is deficient in that it does not provide a communication strategy on which the curtailment program is dependent.

Partial Approval

The EPA may approve the three rules which satisfy RACM but disapprove the episode curtailment program as failing to meet the RACM requirement. These rules are separable because disapproval of the curtailment program will not have any effect on the stringency or enforceability of the remaining rules.

Limited Approval

The EPA may approve the episode curtailment plan as strengthening the SIP by providing enforceable measures in a SIP which currently has no curtailment program. At the same time or within a reasonable time after the approval (but no later than 12 months after the submittal is complete), EPA must disapprove the rule as not representing RACM. Final disapproval of the rule would start the sanctions and FIP clocks.

Conditional Approval

The EPA may conditionally approve the rule if the State submits a commitment to submit a revised rule within 1 year of the approval. If the State then failed to make such a revision, EPA would issue a finding converting the conditional approval to a disapproval.

Attachment 2

Type of Approval	Separability	Commitment	Act Requirements	SIP Strengthening
Partial	rules must be separable	no commitment necessary	part to be approved must meet all applicable requirements	part to be approved must strengthen the SIP
Limited	deficient portion of submittal is not separable	no commitment necessary	does not have to meet <u>all</u> applicable requirements	submittal as a whole must strengthen the SIP
Conditional	deficient portion of submittal is not separable	State must commit to correct within 1 year	does not have to meet <u>all</u> applicable requirements	submittal as a whole must strengthen the SIP

Attachment 3: Sanctions and FIP Clocks Scenarios

Scenario 1: The EPA receives a SIP and finds it incomplete prior to the statutory due date of the SIP.

Although a finding that the State submitted an incomplete SIP is one of the section 179(a) findings, the sanctions and FIP clocks will not begin to run until after a submittal is due. This is because the finding must be based on the failure to submit a complete required SIP or SIP element and the submittal is not required until it is due under the statute. If a SIP submitted prior to a due date is still incomplete by the due date, then EPA will notify the State by letter that the plan remains incomplete and that the 18-month sanctions clock and the 2-year FIP clock have started.

Scenario 2: The EPA receives a SIP and finds it incomplete on or after the statutory due date of the SIP.

If EPA receives a SIP and finds it incomplete pursuant to section 110(k) on or after the statutory due date of the SIP, then, as in scenario 1, the State has failed to make a complete submittal under section 179(a). The EPA will notify the State by letter that the plan is incomplete and that the 18-month sanctions clock and the 2-year FIP clock have started.

Scenario 3: The EPA receives no submittal at the due date.

If EPA receives no submittal from a State to meet a statutory due date, then it may make a finding of failure to submit under section 179(a)(1), triggering the 18-month sanctions clock and the 2-year FIP clock.

Scenario 4: After the due date, EPA receives a SIP for which it originally made a finding of failure to submit.

Upon receiving the plan, the sanctions clock will continue to run during the completeness review and be stopped if EPA finds the plan complete and continue if EPA finds the plan incomplete. If the 18 months elapse during the time EPA is doing its completeness review, EPA will not impose sanctions unless it determines the plan incomplete. If sanctions have been imposed prior to the State's submittal, the sanctions will remain in place until EPA determines the submittal complete.

The FIP clock continues to run while EPA makes its completeness determination.

Scenario 5: The EPA originally makes a finding of failure to submit, then receives a SIP, finds it complete, but disapproves it in final rulemaking.

Upon a determination that the SIP is complete, the State corrects the deficiency that prompted the finding of nonsubmittal and the sanctions clock stops. A new sanctions clock will start upon the final SIP disapproval rulemaking. The new sanctions clock will not stop until EPA has taken final action to approve the revised SIP submittal.

Even after the submittal is determined to be complete, EPA remains under obligation to promulgate a FIP. Therefore, the disapproval of the SIP does not start a new FIP clock.

Scenario 6: The EPA originally makes a finding of failure to submit, then receives a SIP, finds it complete, and approves it in final rulemaking.

Upon a determination that the SIP is complete, the State corrects the deficiency prompting the finding of nonsubmittal and the sanctions clock stops. The EPA remains under obligation to promulgate a FIP until EPA takes final rulemaking action to approve the SIP.

Scenario 7: The EPA finds that a State has failed to implement a SIP or SIP provision.

The EPA will make a finding of nonimplementation in the Federal Register after soliciting comment on the proposal. The sanctions clock will start upon EPA taking final action and stop when EPA makes a finding in the Federal Register after notice-and-comment rulemaking that the State has corrected the deficiency that prompted the finding. A finding of nonimplementation does not start a FIP clock.

USEPA Calcagni Memo on Procedures to Redesignate

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

4 SEP 1992

MEMORANDUM

SUBJECT: Procedures for Processing Requests to Redesignate Areas to Attainment

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Purpose

The Office of Air Quality Planning and Standards (OAQPS) expects that a number of redesignation requests will be submitted in the near future. Thus, Regions will need to have guidance on the applicable procedures for handling these requests, including maintenance plan provisions. This memorandum, therefore, consolidates the Environmental Protection Agency's (EPA's) guidance regarding the processing of requests for redesignation of nonattainment areas to attainment for ozone (O_3), carbon monoxide (CO), particulate matter (PM-10), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). Regions should use this guidance as a general framework for drafting Federal Register notices pertaining to redesignation requests. Special concerns for areas seeking redesignation from unclassifiable to attainment will be addressed on a case-by-case basis.

Background

Section 107(d)(3)(E) of the Clean Air Act, as amended, states that an area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the national ambient air quality standards (NAAQS) have been attained.

2. The applicable implementation plan has been fully approved by EPA under section 110(K).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and Part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Each of these criteria is discussed in more detail in the following paragraphs. Particular attention is given to maintenance plan provisions at the end of this document since maintenance plans constitute a new requirement under the amended Clean Air Act. Exceptions to the guidance will be considered on a case-by-case basis.

1. Attainment of the Standard

The State must show that the area is attaining the applicable NAAQS. There are two components involved in making this demonstration which should be considered interdependently. The first component relies upon ambient air quality data. The data that are used to demonstrate attainment should be the product of ambient monitoring that is representative of the area of highest concentration. These monitors should remain at the same location for the duration of the monitoring period required for demonstrating attainment. The data should be collected and quality-assured in accordance with 40 CFR 58 and recorded in the Aerometric Information Retrieval System (AIRS) in order for it to be available to the public for review. For purposes of redesignation, the Regional Office should verify that the integrity of the air quality monitoring network has been preserved.

For PM-10, an area may be considered attaining the NAAQS if the number of expected exceedances per year, according to 40 CFR 50.6, is less than or equal to 1.0. For O_3, the area must show that the average annual number of expected exceedances, according to 40 CFR 50.9, is less than or equal to 1.0 based on data from all monitoring sites in the area or its affected downwind environs. In making this showing, both PM-10 and O_3 must rely on 3 complete, consecutive calendar years of quality-assured air quality monitoring data, collected in accordance with 40 CFR 50, Appendices H and K. For CO, an area may be considered attaining the NAAQS if there are no violations, as determined in accordance

with 40 CFR 50.8, based on 2 complete, consecutive calendar years of quality-assured monitoring data. For SO_2, according to 40 CFR 50.4, an area must show no more than one exceedance annually and for Pb, according to section 50.12, an area may show no exceedances on a quarterly basis.

The second component relies upon supplemental EPA-approved air quality modeling. No such supplemental modeling is required for O_3 nonattainment areas seeking redesignation. Modeling may be necessary to determine the representativeness of the monitored data. For pollutants such as SO_2 and CO, a small number of monitors typically is not representative of areawide air quality or areas of highest concentration. When dealing with SO_2, Pb, PM-10 (except for a limited number of initial moderate nonattainment areas), and CO (except moderate areas with design values of 12.7 parts per million or lower at the time of passage of the Clean Air Act Amendments of 1990), dispersion modeling will generally be necessary to evaluate comprehensively sources' impacts and to determine the areas of expected high concentrations based upon current conditions. Areas which were designated nonattainment based on modeling will generally not be redesignated to attainment unless an acceptable modeling analysis indicates attainment. Regions should consult with OAQPS for further guidance addressing the need for modeling in specific circumstances.

2. State Implementation Plan (SIP) Approval

The SIP for the area must be fully approved under section 110(k),[1] and must satisfy all requirements that apply to the area. It should be noted that approval action on SIP elements and the redesignation request may occur simultaneously. An area cannot be redesignated if a required element of its plan is the subject of a disapproval; a finding of failure to submit or to implement the SIP; or partial, conditional, or limited approval. However, this does not mean that earlier issues with regard to the SIP will be reopened. Regions should not reconsider those things that have already been approved and for which the Clean Air Act Amendments did not alter what is required. In contrast, to the extent the Amendments add a requirement or alter an existing requirement so that it adds something more, Regions should consider those issues. In addition, requests from areas known to be affected by dispersion techniques which are inconsistent with EPA guidance will continue to be considered unapprovable under section 110 and will not qualify for redesignation.

[1]Section 110(k) contains the requirements for EPA action on plan submissions. It addresses completeness, deadlines, full and partial approval, conditional approval, and disapproval.

3. Permanent and Enforceable Improvement in Air Quality

The State must be able to reasonably attribute the improvement in air quality to emission reductions which are permanent and enforceable.[2] Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions.

In making this showing, the State should estimate the percent reduction (from the year that was used to determine the design value for designation and classification) achieved from Federal measures such as the Federal Motor Vehicle Control Program and fuel volatility rules as well as control measures that have been adopted and implemented by the State. This estimate should consider emission rates, production capacities, and other related information to clearly show that the air quality improvements are the result of implemented controls. The analysis should assume that sources are operating at permitted levels (or historic peak levels) unless evidence is presented that such an assumption is unrealistic.

4. Section 110 and Part D Requirements

For the purposes of redesignation, a State must meet all requirements of section 110 and Part D that were applicable prior to submittal of the complete redesignation request. When evaluating a redesignation request, Regions should not consider whether the State has met requirements that come due under the Act after submittal of a complete redesignation request.[3]

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[2]This is consistent with EPA's existing policy on redesignations as stated in an April 21, 1983 memorandum titled "Section 107 Designation Policy Summary." This memorandum states that in order for an area to be redesignated to attainment, the State must show that "actual enforceable emission reductions are responsible for the recent air quality improvement." This element of the policy retains its validity under the amended Act pursuant to section 193. [Note: other aspects of the April 21, 1983 memorandum have since been superseded by subsequent memorandums; interested parties should consult with OAQPS before relying on these aspects, e.g. those relating to required years of air quality data.]

[3]Under section 175A(c), however, the requirements of Part D remain in force and effect for the area until such time as it is redesignated. Upon redesignation to attainment, the requirements that became due under section 175A(c) after submittal of the complete redesignation request would no longer be applicable.

However, any requirements that came due prior to submittal of the redesignation request must be fully approved into the plan at or before the time EPA redesignates the area.

To avoid confusion concerning what requirements will be applicable for purposes of redesignation, Regions should encourage States to work closely with the appropriate Regional Office early in the process. This will help to ensure that a redesignation request submitted by the State has a high likelihood of being approved by EPA. Regions should advise States of the practical planning consequences if EPA disapproves the redesignation request or if the request is invalidated because of violations recorded during EPA's review. Under such circumstances, EPA does not have the discretion to adjust schedules for implementing SIP requirements. As a result, an area may risk sanctions and/or Federal implementation plan implementation that could result from failure to meet SIP submittal or implementation requirements.

a. Section 110 Requirements

Section 110(a)(2) contains general requirements for nonattainment plans. Most of the provisions of this section are the same as those contained in the pre-amended Act. We will provide guidance on these requirements as needed.[4]

b. Part D Requirements

Part D consists of general requirements applicable to all areas which are designated nonattainment based on a violation of the NAAQS. The general requirements are followed by a series of subparts specific to each pollutant. The general requirements appear in subpart 1. The requirements relating to O_3, CO, PM-10, SO_2, NO_2, and Pb appear in subparts 2 through 5. In those instances where an area is subject to both the general nonattainment provisions in subpart 1 as well as one of the pollutant-specific subparts, the general provisions may be subsumed within, or superseded by, the more specific requirements of subparts 2 through 5.

If an area was not classified under section 181 for O_3, or section 186 for CO, then that area is only subject to the provisions of subpart 1, "Nonattainment Areas in General." In addition to relevant provisions in subpart 1, an O_3 and CO area, which is classified, must meet all applicable requirements in subpart 2, "Additional Provisions for Ozone Nonattainment Areas," and subpart 3, "Additional Provisions for Carbon Monoxide

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[4]General guidance regarding the requirements for SIP's may be found in the "General Preamble to Title I of the 1990 Clean Air Act Amendments," 57 FR 13498 (April 16, 1992).

Nonattainment Areas," respectively, before the area may be redesignated to attainment. All PM-10 nonattainment areas (whether classified as moderate or serious) must similarly meet the applicable general provisions of subpart 1 and the specific PM-10 provisions in subpart 4, "Additional Provisions for Particulate Matter Nonattainment Areas." Likewise, SO_2, NO_2, and Pb nonattainment areas are subject to the applicable general nonattainment provisions in subpart 1 as well as the more specific requirements in subpart 5, "Additional Provisions for Areas Designated Nonattainment for Sulfur Oxides, Nitrogen Dioxide, and Lead."

i. Section 172(c) Requirements

This section contains general requirements for nonattainment plans. A thorough discussion of these requirements may be found in the General Preamble to Title I [57 FR 13498 (April 16, 1992)]. The EPA anticipates that areas will already have met most or all of these requirements to the extent that they are not superseded by more specific Part D requirements. The requirements for reasonable further progress, identification of certain emissions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard. The requirements for an emission inventory will be satisfied by the inventory requirements of the maintenance plan. The requirements of the Part D new source review program will be replaced by the prevention of significant deterioration (PSD) program once the area has been redesignated. However, in order to ensure that the PSD program will become fully effective immediately upon redesignation, either the State must be delegated the Federal PSD program or the State must make any needed modifications to its rules to have the approved PSD program apply to the affected area upon redesignation.

ii. Conformity

The State must work with EPA to show that its SIP provisions are consistent with section 176(c)(4) conformity requirements. The redesignation request should include conformity procedures, if the State already has these procedures in place. Additionally, we currently interpret the conformity requirement to apply to attainment areas. However, EPA has not yet issued its conformity regulations specifying what areas are subject to the conformity requirement. Therefore, if a State does not have conformity procedures in place at the time that it submits a redesignation request, the State must commit to follow EPA's conformity regulation upon issuance, as applicable. If the State submits the redesignation request subsequent to EPA's issuance of the conformity regulations, and the conformity requirement became applicable to the area prior to submission,

the State must adopt the applicable conformity requirements before EPA can redesignate the area.

5. Maintenance Plans

Section 107(d)(3)(E) of the amended Act stipulates that for an area to be redesignated, EPA must fully approve a maintenance plan which meets the requirements of section 175A. A State may submit both the redesignation request and the maintenance plan at the same time and rulemaking on both may proceed on a parallel track. Maintenance plans may, of course, be submitted and approved by EPA before a redesignation is requested. However, according to section 175A(c), pending approval of the maintenance plan and redesignation request, all applicable nonattainment area requirements shall remain in place.

Section 175A defines the general framework of a maintenance plan. The maintenance plan will constitute a SIP revision and must provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. Section 175A further states that the plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance. Because the Act requires a demonstration of maintenance for 10 years after an area is redesignated (not 10 years after submittal of a redesignation request), the State should plan for some lead time for EPA action on the request. In other words, the maintenance demonstration should project maintenance for 10 years, beginning from a date which factors in the time necessary for EPA review and approval action on the redesignation request. In determining the amount of lead time to allow, States should consider that section 107(d)(3)(D) grants the Administrator up to 18 months from receipt of a complete submittal to process a redesignation request. The statute also requires the State to submit a revision of the SIP 8 years after the original redesignation request is approved to provide for maintenance of the NAAQS for an additional 10 years following the first 10-year period [see section 175A(b)].

In addition, the maintenance plan shall contain such contingency measures as the Administrator deems necessary to ensure prompt correction of any violation of the NAAQS [see section 175A(d)]. The Act provides that, at a minimum, the contingency measures must include a requirement that the State will implement all measures contained in the nonattainment SIP prior to redesignation. Failure to maintain the NAAQS and triggering of the contingency plan will not necessitate a revision of the SIP unless required by the Administrator, as stated in section 175A(d).

The following is a list of core provisions that we anticipate will be necessary to ensure maintenance of the relevant NAAQS in an area seeking redesignation from

nonattainment to attainment. We therefore recommend that States seeking redesignation of a nonattainment area consider these provisions. However, any final EPA determination regarding the adequacy of a maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant information available at the time.

a. Attainment Inventory

The State should develop an attainment emissions inventory to identify the level of emissions in the area which is sufficient to attain the NAAQS.[5] This inventory should be consistent with EPA's most recent guidance on emission inventories for nonattainment areas available at the time and should include the emissions during the time period associated with the monitoring data showing attainment.[6]

Source size thresholds are 100 tons/year for SO_2, NO_2, and PM-10 areas, and 5 tons/year for Pb based upon 40 CFR 51.100(k) and 51.322, as well as established practice for AIRS data. The source size threshold for serious PM-10 areas is 70 tons/year

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[5]Where the State has made an adequate demonstration that air quality has improved as a result of the SIP (as discussed previously), the attainment inventory will generally be the actual inventory at the time the area attained the standard.

[6]The EPA's current guidance on the preparation of emission inventories for O_3 and CO nonattainment areas is contained in the following documents: "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume I" (EPA-450/4-91-016), "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume II" (EPA-450/4-91-014), "Emission Inventory Requirements for Ozone State Implementation Plans" (EPA-450/4-91-010), "Emission Inventory Requirements for Carbon Monoxide Implementation Plans" (EPA-450/4-91-011), "Guideline for Regulatory Application of the Urban Airshed Model" (EPA-450/4-91-013), "Procedures for Emission Inventory Preparation: Volume IV, Mobile Sources" (EPA-450/4-81-026d), and "Procedures for Preparing Emission Inventory Projections" (EPA-450/4-91-019). The EPA does not currently have specific guidance on attainment emissions inventories for SO_2. In lieu thereof, States are referred to the guidance on emissions data to be used as input to modeling demonstrations, contained in Table 9.1 of EPA's "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R), July 1987, which is generally applicable to all criteria pollutants. Emission inventory procedures and requirements documents are currently being prepared by OAQPS for PM-10 and Pb; these documents are due for release by summer 1992.

according to Clean Air Act section 189(b)(3). However, the inventory should include sources below these size thresholds if these smaller sources were included in the SIP attainment demonstration. Where sources below the 100, 70, and 5 tons/year-size thresholds (e.g., areas with smaller source size definitions) are subject to a State's minor source permit program, these sources need only be addressed in the aggregate to the extent that they result in areawide growth.

For O_3 nonattainment areas, the inventory should be based on actual "typical summer day" emissions of O_3 precursors (volatile organic compounds and nitrogen oxides) during the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas to reconcile milestones. For CO nonattainment areas, the inventory should be based on actual "typical CO season day" emissions for the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas.

b. Maintenance Demonstration

A State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. Under the Clean Air Act, many areas are required to submit modeled attainment demonstrations to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling. In areas where no such modeling was required, the State should be able to rely on the attainment inventory approach. In both instances, the demonstration should be for a period of 10 years following the redesignation.

Where modeling is relied upon to demonstrate maintenance, each plan should contain a summary of the air quality concentrations expected to result from application of the control strategy. In the process, the plan should identify and describe the dispersion model or other air quality model used to project ambient concentrations (see 40 CFR 51.46).

In either case, to satisfy the demonstration requirement the State should project emissions for the 10-year period following redesignation, either for the purpose of showing that emissions will not increase over the attainment inventory or for conducting modeling.[7] The projected inventory should consider future growth, including population and industry, should be consistent

[7]Guidance for projecting emissions may be found in the emissions inventory guidance cited in footnote 6.

with the attainment inventory, and should document data inputs and assumptions. All elements of the demonstration (e.g., emission projections, new source growth, and modeling) should be consistent with current EPA modeling guidance.[8] For O_3 and CO, the projected emissions should reflect the expected actual emissions based on enforceable emission rates and typical production rates.

For CO, a State should address the areawide component of the maintenance demonstration either by showing that future CO emissions will not increase or by conducting areawide modeling. Preferably, the State should carry out hot-spot modeling that is consistent with the Guideline on Air Quality Models (Revised), in order to demonstrate maintenance of the NAAQS. In particular, if the nonattainment problem is related to a pattern of hot-spots then hot-spot modeling should generally be conducted. However, hot-spot modeling is not automatically required. For example, if the nonattainment problem was related solely to stationary point sources, or if highway improvements have been implemented and the associated emission reductions and travel characteristics can be qualitatively documented, then hot-spot modeling is not required. In such cases, adequate documentation as well as the concurrence of Headquarters is needed.

Any assumptions concerning emission rates must reflect permanent, enforceable measures. In other words, a State generally cannot take credit in the maintenance demonstration for reductions unless there are regulations in place requiring those reductions or the reductions are otherwise shown to be permanent. Therefore, the State will be expected to maintain its implemented control strategy despite redesignation to attainment, unless such measures are shown to be unnecessary for maintenance or are replaced with measures that achieve equivalent reductions (see additional discussion under "Contingency Plan"). Emission reductions from source shutdowns can be considered permanent and enforceable to the extent that those shutdowns have been reflected in the SIP and all applicable permits have been modified accordingly.

Modeling used to demonstrate attainment may be relied upon in the maintenance demonstration where the modeling conforms to current EPA guidance and where the State has projected no significant changes in the modeling inputs during the intervening time. Where the original attainment demonstration may no longer be relied upon, States will be expected to remodel using current

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[8]The EPA-approved modeling guidance may be found in the following documents: "Guideline on Air Quality Models (Revised)," OAQPS, RTP, NC (EPA-450/2-78-027R), July 1986; and "PM-10 SIP Development Guideline," OAQPS, RTP, NC (EPA-450/2-86-001), June 1987.

EPA referenced techniques.[9] This may be necessary where, for example, there has been a change in emissions or a change in the siting of new sources or modifications such that air quality may no longer be accurately represented by the existing modeling.

c. Monitoring Network

Once an area has been redesignated, the State should continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR Part 58, to verify the attainment status of the area. The maintenance plan should contain provisions for continued operation of air quality monitors that will provide such verification. In cases where measured mobile source parameters (e.g., vehicle miles traveled congestion) have changed over time, the State may also need to perform a saturation monitoring study to determine the need for, and location of, additional permanent monitors.

d. Verification of Continued Attainment

Each State should ensure that it has the legal authority to implement and enforce all measures necessary to attain and to maintain the NAAQS. Sections 110(a)(2)(B) and (F) of the Clean Air Act, as amended, and regulations promulgated at 40 CFR 51.110(k), suggest that one such measure is the acquisition of ambient and source emission data to demonstrate attainment and maintenance.

Regardless of whether the maintenance demonstration is based on a showing that future emission inventories will not exceed the attainment inventory or on modeling, the State submittal should indicate how the State will track the progress of the maintenance plan. This is necessary due to the fact that the emission projections made for the maintenance demonstration depend on assumptions of point and area source growth.

One option for tracking the progress of the maintenance demonstration, provided here as an example, would be for the State to periodically update the emissions inventory. In this case, the maintenance plan should specify the frequency of any planned inventory updates. Such an update could be based, in part, on the annual AIRS update and could indicate new source growth and other changes from the attainment inventory (e.g., changes in vehicle miles travelled or in traffic patterns). As an alternative to a complete update of the inventory, the State may choose to do a comprehensive review of the factors that were used in developing the attainment inventory to show no significant change. If this review does show a significant change, the State should then perform an update of the inventory.

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[9]See references for modeling guidance cited in footnote 8.

Where the demonstration is based on modeling, an option for tracking progress would be for the State to periodically (typically every 3 years) reevaluate the modeling assumptions and input data. In any event, the State should monitor the indicators for triggering contingency measures (as discussed below).

e. Contingency Plan

Section 175A of the Act also requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area. These contingency measures are distinguished from those generally required for nonattainment areas under section 172(c)(9) and those specifically required for O_3 and CO nonattainment areas under sections 182(c)(9) and 187(a)(3), respectively. For the purposes of section 175A, a State is not required to have fully adopted contingency measures that will take effect without further action by the State in order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expediently once they are triggered. The plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific time limit for action by the State. As a necessary part of the plan, the State should also identify specific indicators, or triggers, which will be used to determine when the contingency measures need to be implemented.

Where the maintenance demonstration is based on the inventory, the State may, for example, identify an "action level" of emissions as the indicator. If later inventory updates show that the inventory has exceeded the action level, the State would take the necessary steps to implement the contingency measures. The indicators would allow a State to take early action to address potential violations of the NAAQS before they occur. By taking early action, States may be able to prevent any actual violations of the NAAQS and, therefore, eliminate the need on the part of EPA to redesignate an area to nonattainment.

Other indicators to consider include monitored or modeled violations of the NAAQS (due to the inadequacy of monitoring data in some situations). It is important to note that air quality data in excess of the NAAQS will not automatically necessitate a revision of the SIP where implementation of contingency measures is adequate to address the cause of the violation. The need for a SIP revision is subject to the Administrator's discretion.

The EPA will review what constitutes a contingency plan on a case-by-case basis. At a minimum, it must require that the State will implement all measures contained in the Part D nonattainment

plan for the area prior to redesignation [see section 175A(d)]. This language suggests that a State may submit a SIP revision at the time of its redesignation request to remove or reduce the stringency of control measures. Such a revision can be approved by EPA if it provides for compensating equivalent reductions. A demonstration that measures are equivalent would have to include appropriate modeling or an adequate justification. Alternatively, a State might be able to demonstrate (through EPA-approved modeling) that the measures are not necessary for maintenance of the standard. In either case, the contingency plan would have to provide for implementation of any measures that were reduced or removed after redesignation of the area.

Summary

As stated previously, this memorandum consolidates EPA's redesignation and maintenance plan guidance and Regions should rely upon it as a general framework in drafting Federal Register notices. It is strongly suggested that the Regional Offices share this document with the appropriate States. This should give the States a better understanding of what is expected from a redesignation request and maintenance plan under existing policy. Any necessary changes to existing Agency policy will be made through our action on specific redesignation requests and the review of section 175A maintenance plans for these particular areas, both of which are subject to notice and comment rulemaking procedures. Thus, in applying this memorandum to specific circumstances in a rulemaking, Regions should consider the applicability of the underlying policies to the particular facts and to comments submitted by any person. If your staff members have questions which require clarification, they may contact Sharon Reinders at (919) 541-5284 for O_3- and CO-related issues, and Eric Ginsburg at (919) 541-0877 for SO_2-, PM-10-, and Pb-related issues.

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USEPA Shapiro Memo on SIP to Redesignate Area to Attainment

September 17, 1993

MEMORANDUM

SUBJECT: State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992

FROM: Michael H. Shapiro
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TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
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I. Purpose

The purpose of this memorandum is to address State requests to redesignate from nonattainment to attainment of the ozone and CO NAAQS under section 107. Specifically at issue are requests submitted on or after November 15, 1992 where outstanding Clean Air Act (Act) requirements have not been met. This memo provides guidance on the statutorily-mandated control programs that must be in the EPA-approved SIP if EPA is to approve the redesignation request. The Act's requirements for redesignation and a list of EPA's redesignation policy and guidance are included in Attachments A and B. In the future, further guidance may be provided for redesignations submitted after November 15, 1993.

II. Policy Summary

Section 107(d)(3)(E)(v) of the Act as amended (amended Act) provides that the State must have met all applicable requirements of section 110 and part D in order to be redesignated. Furthermore, section 107(d)(3)(E)(ii) provides that the State must have a fully-approved SIP for the area seeking redesignation.

The EPA is interpreting these section 107 provisions to require satisfactory completion of the current Act planning requirements. Specifically, before EPA can act favorably upon any State redesignation request, the statutorily-mandated control programs of section 110 and part D (that were due prior to the time of the redesignation request) must have been adopted by the State and approved by EPA into the SIP.

Thus, with respect to redesignation requests submitted on or after the Act's deadline for submittal of the required programs, States must generally adopt and provide for implementation of their regulations for all of the programs that were due. States must submit these plans to EPA for incorporation into the SIP.[1] This would include such requirements as emissions inventories and/or emission statements. Such requirements must be met in order for the area to have a fully-approved SIP that meets all requirements applicable to the area under section 110 and part D.

The amended Act, however, also provides that upon redesignation, a State may move measures from the implemented SIP to the contingency plan portion of the SIP if the State demonstrates that such measures are not needed for maintaining the NAAQS. Many areas sought redesignation at or about the same time they were required to adopt and implement the requirements due on November 15, 1992. In many instances, the State will be able to immediately move these measures to the contingency plan without implementation.

III. Exceptions to Policy

The EPA decided to review the requirements to determine if something less than full adoption of these regulations would be

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[1]Note that this represents a departure from earlier guidance for part D new source review (NSR) regulations.

acceptable under the Act for areas seeking redesignation. Exceptions to this policy on the States' need to complete the full planning and adoption process for the November 15, 1992 mandated programs are very limited. The language in the Act allows a degree of flexibility in only four program areas. These are: (1) basic inspection and maintenance (I/M), (2) annual updates of vehicle miles traveled (VMT) forecasts and annual estimates of actual VMT for CO nonattainment areas, (3) nitrogen oxides (NOx) reasonably available control technology (RACT), and (4) small business programs (SBP).

These exceptions are only applicable in areas for which EPA approves a redesignation. The States should be aware that if EPA denies a redesignation request, rules submitted in accordance with this guidance may also be disapprovable. Finally, because EPA anticipates issuing onboard regulations by January 1994, States seeking redesignation of areas classified as moderate may have some flexibility with respect to the Stage II requirement.

Our guidance for State submittals covering these four programs is described in the following paragraphs.

Basic I/M

For areas where maintenance plans do not rely on implementation of a basic I/M program immediately following redesignation, the I/M component of the SIP should include:

1. Legislative authority for basic I/M such that implementing regulations can be adopted without any further legislative action.

2. A provision in the SIP providing that basic I/M be placed in the contingency measures portion of the maintenance plan upon redesignation.

3. An enforceable schedule and commitment by the Governor or his designee for adoption and implementation of a basic I/M program upon a specified, appropriate triggering event.

Note that, for purposes of consideration of a redesignation request submitted after November 15, 1992, the commitment as described in the I/M regulation (see 57 FR 52950, November 5, 1992) is not sufficient to meet the Act's requirement for a fully-approved SIP.

In addition, please note that, EPA's final I/M regulations in 40 CFR part 51 require a fully-adopted I/M program by November 15, 1993. At this time, our preliminary interpretative

guidance on basic I/M in this memo is not discussed in the I/M regulations. Therefore, EPA is proceeding to establish this interpretation through regulatory action, thus enabling EPA to accept legislative authority and a commitment to adopt and implement basic I/M regulations for those areas being redesignated to attainment.

VMT Forecasting

The VMT forecasting SIP for CO should include:

1. Annual forecasts of VMT (i.e., average daily VMT for the peak 3-month CO seasons for 1993, 1994, and 1995 in moderate areas above 12.7 ppm, and until 2000 in serious areas).

2. An enforceable commitment by the Governor or his designee to estimate actual annual VMT for each of these years (by September 30 of the following year) and to update the forecast of the VMT in the remaining years.

3. A request that the commitment be moved to the contingency plan portion of the SIP upon redesignation, becoming a contingency provision triggered by a specified triggering event.

4. Adopted contingency measures to reduce CO emissions. The implementation of such measures is contingent upon either: (a) an annual estimate of actual VMT or updated forecast of VMT exceeding the previous forecast for that year, or (b) the area failing to attain by the CO attainment deadline. These contingency measures must meet the requirements of section 187(a)(3) as interpreted by the April 16, 1992, "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," including the requirement that no further action by the State is needed for them to take effect.

NOx RACT

Section 182(f) provides that States may request an exemption from the NOx RACT requirements. The NOx RACT requirements of section 182(f) do not apply if additional reductions of NOx would not contribute to attainment.[2] In an area that did not implement

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[2]Note that the section 182(f) exemption for NOx RACT and NSR requirements described in this section is applicable only for

the section 182(f) NOx requirement but did meet the ozone standard, as demonstrated by adequate monitoring data consistent with EPA guidance, it is clear that the additional NOx reductions required by section 182(f) would not contribute to attainment, although they might contribute to maintenance. Therefore, EPA believes that if a State submits a redesignation request along with a section 182(f) exemption request based on monitoring data demonstrating attainment of the ozone NAAQS, further documentation is not required. The State may follow one of two approaches in making such a submittal:

1. Submit a redesignation request along with a section 182(f) exemption request based solely upon monitoring data showing that the area's air quality is meeting the ozone NAAQS; and submit a maintenance plan SIP revision, which includes a NOx RACT program as a contingency measure. In lieu of adopted NOx RACT rules, such a NOx RACT program may consist of an enforceable schedule and commitment by the Governor or his designee to adopt and implement the NOx RACT rules upon a specified, appropriate triggering event.

2. An exemption request based on both ambient monitoring and urban airshed modeling consistent with EPA guidance that shows additional NOx reductions would not contribute to attainment in the area. In this case, NOx RACT rules do not have to be included as a contingency measure of the maintenance plan.

SBP

For several reasons, the Act can be interpreted as not requiring the section 507 SBP submittal in order for EPA to approve a redesignation request. The SBP submittal is required regardless of whether there are any designated nonattainment areas within the State. In addition, the SBP is not a control measure intended to contribute to the emission reductions achieved by an area; rather it is a service provided to help small businesses comply with requirements of the Act. For the above reasons, EPA is interpreting the SBP as not being an applicable requirement for any specific nonattainment area that is seeking redesignation. However, EPA will continue to ensure that States make SBP submittals in a timely fashion.

Stage II Vapor Recovery

States outside an ozone transport region, since only those States fall under the section 182(f) "contribute to attainment" provision.

Stage II vapor recovery remains an applicable requirement for moderate ozone nonattainment areas until EPA promulgates onboard vapor recovery regulations. Section 202(a)(6) of the Act provides that once onboard regulations are promulgated, the Stage II regulations required under section 182(b)(3) are no longer applicable for moderate ozone nonattainment areas. Therefore, final redesignation for a moderate nonattainment area that occurs after EPA's onboard regulations are promulgated does not have to include a Stage II SIP control program. For redesignation requests that are submitted before EPA promulgates onboard rules and that do not include Stage II rules for moderate areas, Regional Offices may prepare rulemaking actions proposing to approve the redesignation, if appropriate, as long as final approval occurs after EPA promulgates onboard regulations.

IV. Coordination of SIP Submittals and Redesignation Requests

If the State elects to follow the approach above, the State should submit the SIP control program as described above along with the redesignation request and maintenance plan. The EPA will review the required SIP submittal(s) against EPA policy and guidance and in coordination with the redesignation request and maintenance plan. Approvability of the redesignation is directly related to the approvability of the SIP submittals (i.e., EPA is precluded from approving a redesignation to attainment if the SIP is not approvable).

As a general policy, a State may not relax the adopted and implemented SIP for an area upon the area's redesignation to attainment. States should continue to implement existing control strategies in order to maintain the standard. However, section 175A recognizes that States may be able to move SIP measures to the contingency plan upon redesignation if the State can adequately demonstrate that such action will not interfere with maintenance of the standard. The type of demonstration necessary is dependent upon the pollutant for which the area has been redesignated to attainment.

In order to make such a demonstration for an area redesignated to attainment for CO, EPA believes that the State could submit a revised control strategy demonstration showing that the measure is not necessary to maintain the standard. For ozone, the State would need to submit an attainment modeling demonstration consistent with EPA's current "Guideline on Air

Quality Models," showing that the control measure is not needed to maintain the standard. The EPA intends to be very cautious in approving such revisions in cases where the control measures were implemented during the time the area attained the standard; the State's demonstration should indicate an ample margin of safety with respect to maintenance of the standard.

V. Conclusion

In summary, full adoption of all of the statutorily-required programs, as well as a schedule and an enforceable commitment for an implementation date, are necessary for redesignation to attainment from nonattainment for ozone or CO if the redesignation request is submitted after the statutory due date for the program. The few exceptions to this requirement are basic I/M, annual updates of VMT forecasts, and estimates of actual VMT, NOx RACT, and SBP.

If you have any questions, please contact Sharon Reinders at (919) 541-5284, or Annie Nikbakht at (919) 541-5246.

Attachments

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This memorandum has been under development for several months. It has been coordinated with OGC (Jan Tierney, Rich Ossias), OMS (John Chamberlin, Al Mannato), Regional Air Division Directors and Air Branch Chiefs, NSR (Mike Sewell, David Solomon), and TSD (David Misenheimer).

OAQPS:AQMD:OCMPB:ANNIE NIKBAKHT:JKING:Ext. 5246:7/30/93
DISK: REINDERS.JK FILE: SIPRED.GEN

Attachment A

Criteria For Redesignation Under Section 107(d)

Section 107(d)(3)(E) of the Act states five criteria that must be met before the Administrator may redesignate an area to attainment. The criteria are:

1. The EPA has determined that the NAAQS have been attained.

2. The applicable implementation plan has been fully approved by EPA under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Attachment B

The EPA policies for implementing section 107 of the Act for redesignations are contained in the following memorandums.

1. "Procedures for Processing Requests to Redesignate Areas to Attainment," John Calcagni, Director, Air Quality Management Division, September 4, 1992.

2. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," John Calcagni, Director, Air Quality Management Division, October 28, 1992.

3. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992.

4. "Maintenance Plans for Redesignation of Ozone and Carbon Monoxide Nonattainment Areas," G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, April 30, 1992.

In the event that EPA does not approve the redesignation, the applicable I/M program requirements and guidance can be found in 57 FR 52950, November 5, 1992 and in 40 CFR part 51. The applicable VMT forecast guidance is described in the document entitled, "Section 187 VMT Forecasting and Tracking Guidance," January 1992.

Appendix C

AQS/USEPA Database Report for 8-hour Ozone 2002-2005

UNITES STATES ENVIRC AL PROTECTION AGENCY

User ID: NOQ

QUICKLOOK CRITERIA PARAMETERS

Report Request ID: 316130 Report Code: AMP450 Mar. 15, 2006

GEOGRAPHIC SELECTIONS

Tribal State	County	Site	Parameter	POC	City	AQCR	UAR	MSA	CMSA	EPA Region	Method	Duration	Begin Date	End Date
21	111			1									1995	2005
21	029			1									1995	2005
21	185			1									1995	2005

PROTOCOL SELECTIONS

Parameter Classification	Parameter	Method	Duration
CRITERIA	44201		

SELECTED OPTIONS

Option Type	Option Value
EVENTS PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS
MERGE PDF FILES	YES

SORT ORDER

Order	Column
1	PARAMETER_CODE
2	STATE_CODE
3	COUNTY_CODE
4	SITE_ID
5	POC
6	DATES
7	EDT_ID

Mar. 15, 2006

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
3	EXCEPTIONAL EVENTS EXCLUDED
4	NATURAL EVENTS EXCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED
6	EXCEPTIONAL EVENTS WITH CONCURRENCE EXCLUDED
7	NATURAL EVENTS WITH CONCURRENCE EXCLUDED

Note: The * indicates that the mean does
not satisfy summary criteria.

Ozone (44201) Kentucky Parts per million (007)

1-HOUR

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 1-HR	2ND MAX 1-HR	3RD MAX 1-HR	4TH MAX 1-HR	DAY MAX>/= 0.125	EST DAYS>/= .125	MISS DAYS< 0.125	CERT	EDT
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1995	053	213	214	.120	.116	.100	.098	0	0.0	0	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1996	053	196	214	.116	.110	.100	.098	0	0.0	0	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1997	053	181	214	.126	.112	.104	.100	1	1.2	1	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1998	053	213	214	.111	.108	.106	.106	0	0.0	1	Y	5
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1999	078	213	245	.117	.114	.113	.108	0	0.0	1	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2000	078	235	245	.097	.096	.095	.092	0	0.0	2	Y	5
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2001	078	243	245	.136	.101	.100	.097	1	1.0	0		0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2002	078	244	245	.125	.114	.114	.108	1	1.0	1	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2003	078	243	245	.090	.086	.081	.079	0	0.0	2	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2004	078	242	245	.127	.085	.082	.080	1	1.0	1	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2005	000	240	245	.096	.094	.092	.088	0	0.0	2		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1995	000	214	214	.127	.109	.103	.100	1	1.0	0	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1996	047	202	214	.110	.107	.105	.100	0	0.0	2	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1997	047	211	214	.128	.122	.111	.105	1	1.0	0	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1998	047	210	214	.125	.120	.115	.110	1	1.0	1	Y	5
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1999	047	212	245	.119	.114	.114	.109	0	0.0	2	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2000	047	241	245	.113	.108	.108	.098	0	0.0	0	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2001	047	241	245	.100	.097	.096	.092	0	0.0	0		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2002	047	238	245	.122	.111	.111	.107	0	0.0	0		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2003	047	245	245	.118	.093	.079	.077	0	0.0	0		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2004	047	241	245	.109	.089	.083	.079	0	0.0	1		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2005	047	245	245	.092	.091	.090	.089	0	0.0	0	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1995	000	207	214	.129	.119	.118	.109	1	1.0	2	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1996	047	213	214	.126	.109	.105	.104	1	1.0	1	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1997	047	212	214	.123	.120	.109	.107	0	0.0	2	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1998	047	212	214	.132	.121	.110	.109	1	1.0	0	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1999	047	212	245	.123	.121	.115	.111	0	0.0	0	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2000	047	236	245	.093	.092	.088	.086	0	0.0	0	Y	0

Note: The * indicates that the mean does
not satisfy summary criteria.

Ozone (44201) Kentucky Parts per million (007)

1-HOUR

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 1-HR	2ND MAX 1-HR	3RD MAX 1-HR	4TH MAX 1-HR	DAY MAX>/= 0.125	EST DAYS>/= .125	MISS DAYS< 0.125	CERT	EDT
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2001	047	245	245	.111	.103	.096	.095	0	0.0	0		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2002	047	244	245	.122	.116	.112	.112	0	0.0	1		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2003	047	245	245	.097	.095	.092	.091	0	0.0	0		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2004	047	240	245	.088	.086	.080	.080	0	0.0	1		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2005	047	245	245	.116	.115	.103	.103	0	0.0	0	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	1995	000	213	214	.120	.117	.117	.108	0	0.0	1		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	1996	047	184	214	.133	.121	.118	.112	1	1.1	4		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	1997	047	200	214	.121	.113	.105	.104	0	0.0	1		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	1998	047	213	214	.142	.115	.110	.108	1	1.0	1	Y	5
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	1999	047	211	245	.116	.102	.101	.100	0	0.0	1	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2000	047	213	245	.103	.100	.100	.098	0	0.0	0	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2001	047	242	245	.097	.094	.094	.092	0	0.0	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2002	047	245	245	.116	.109	.103	.103	0	0.0	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2003	047	245	245	.095	.094	.093	.088	0	0.0	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2004	047	245	245	.080	.080	.079	.077	0	0.0	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A\	2005	047	245	245	.101	.096	.087	.085	0	0.0	0	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1995	053	203	214	.112	.108	.105	.099	0	0.0	1	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1996	053	206	214	.120	.109	.103	.102	0	0.0	4	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1997	053	203	214	.137	.126	.109	.100	2	2.1	2	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1998	053	213	214	.129	.120	.120	.117	1	1.0	1	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1999	053	213	245	.136	.124	.123	.114	1	1.2	0	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2000	053	224	245	.115	.112	.102	.094	0	0.0	2	Y	5
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2001	053	242	245	.108	.104	.103	.101	0	0.0	1		0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2002	053	243	245	.124	.108	.107	.103	0	0.0	2	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2003	053	245	245	.106	.102	.100	.098	0	0.0	0	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2004	053	243	245	.089	.085	.085	.084	0	0.0	2	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2005	000	245	245	.113	.111	.107	.100	0	0.0	0		0

Note: The * indicates that the mean does
not satisfy summary criteria.

Ozone (44201) Kentucky Parts per million (007)

8-HOUR

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT	EDT
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1995	053	99	212	214	.105	.090	.088	.086	5	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1996	053	91	194	214	.093	.091	.085	.085	4	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1997	053	84	180	214	.111	.092	.089	.086	4	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1998	053	100	213	214	.102	.100	.098	.090	12	Y	5
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	1999	078	87	212	245	.100	.096	.093	.093	11	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2000	078	96	234	245	.090	.086	.082	.082	2	Y	5
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2001	078	98	241	245	.100	.089	.083	.082	2		0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2002	078	98	241	245	.104	.094	.092	.091	10	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2003	078	99	243	245	.076	.073	.072	.072	0	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2004	078	97	237	245	.102	.078	.070	.068	1	Y	0
21-029-0006	1	0584	Shepherdsville	Bullitt	2ND & CARPENTER	2005	000	97	238	245	.083	.081	.081	.080	0		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1995	000	100	214	214	.102	.092	.087	.086	5	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1996	047	93	200	214	.099	.092	.087	.086	5	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1997	047	99	211	214	.105	.099	.090	.089	6	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1998	047	99	211	214	.111	.101	.097	.096	10	Y	5
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	1999	047	86	210	245	.105	.099	.098	.097	16	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2000	047	98	241	245	.102	.092	.092	.090	5	Y	0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2001	047	98	241	245	.086	.085	.081	.081	2		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2002	047	97	238	245	.094	.091	.090	.085	4		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2003	047	100	245	245	.096	.082	.076	.072	1		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2004	047	98	241	245	.093	.071	.071	.070	1		0
21-111-0027	1	0549	Not in a city	Jefferson	7601 BARDSTOWN I	2005	047	100	245	245	.083	.079	.079	.079	0	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1995	000	95	204	214	.104	.103	.100	.091	9	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1996	047	100	213	214	.103	.092	.088	.085	4	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1997	047	98	209	214	.100	.098	.095	.091	7	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1998	047	99	212	214	.117	.097	.096	.095	11	Y	0

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not satisfy summary criteria.

Mar. 15, 2006

Ozone (44201) Kentucky Parts per million (007)

8-HOUR

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT	EDT
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	1999	047	86	211	245	.107	.101	.101	.100	13	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2000	047	96	236	245	.087	.077	.076	.076	1	Y	0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2001	047	100	245	245	.086	.082	.082	.081	1		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2002	047	100	244	245	.104	.099	.097	.096	15		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2003	047	100	245	245	.084	.081	.079	.075	0		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2004	047	96	236	245	.073	.071	.071	.070	0		0
21-111-0051	1	0549	Louisville	Jefferson	7201 WATSON LN,	2005	047	100	245	245	.091	.086	.086	.085	4	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	1995	000	99	212	214	.103	.099	.091	.091	9		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	1996	047	83	177	214	.107	.100	.099	.095	6		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	1997	047	93	199	214	.102	.099	.091	.089	6		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	1998	047	100	213	214	.122	.093	.090	.088	7	Y	5
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	1999	047	86	210	245	.090	.087	.087	.086	4	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2000	047	87	212	245	.090	.089	.088	.084	3	Y	0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2001	047	98	241	245	.085	.080	.078	.077	1		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2002	047	100	245	245	.091	.089	.089	.088	7		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2003	047	100	245	245	.081	.079	.074	.073	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2004	047	100	245	245	.072	.071	.069	.068	0		0
21-111-1021	1	0549	Louisville	Jefferson	1918 MELLWOOD A'	2005	047	100	245	245	.088	.084	.076	.074	1	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1995	053	94	202	214	.092	.088	.088	.088	8	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1996	053	93	199	214	.104	.094	.091	.089	5	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1997	053	94	201	214	.109	.108	.098	.085	4	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1998	053	100	213	214	.112	.106	.102	.101	12	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	1999	053	87	213	245	.109	.108	.107	.103	34	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2000	053	90	220	245	.095	.094	.093	.085	4	Y	5
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2001	053	98	241	245	.092	.089	.089	.086	4		0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2002	053	99	243	245	.105	.098	.097	.091	12	Y	0

Note: The * indicates that the mean does not satisfy summary criteria.

UNITED STATES ENVIR[illegible]TAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Mar. 15, 2006

Ozone (44201) Kentucky Parts per million (007)

8-HOUR

SITE ID	POC	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT	EDT
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2003	053	100	245	245	.088	.085	.082	.082	2	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2004	053	99	242	245	.078	.077	.076	.076	0	Y	0
21-185-0004	1	0584	Buckner	Oldham	3995 MORGAN RD,	2005	000	100	245	245	.094	.094	.093	.089	4		0

Note: The * indicates that the mean does not satisfy summary criteria.

Mar. 15, 2006

METHODS USED IN THIS REPORT

PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
ALL	000	MULTIPLE METHODS	MULTIPLE METHODS
44201	047	INSTRUMENTAL	ULTRA VIOLET
44201	053	INSTRUMENTAL	ULTRA VIOLET
44201	078	INSTRUMENTAL	ULTRA VIOLET

Note: The * indicates that the mean does not satisfy summary criteria.

REPORTING ORGANIZATIONS USED IN THIS REPORT

REPORTING ORGANIZATION CODE	AGENCY DESCRIPTION
0549	Jefferson County, KY Air Pollution Control District
0584	Kentucky Division For Air Quality

Note: The * indicates that the mean does not satisfy summary criteria.

Appendix D

2002 Emissions Inventory Methodology and Documentation, and Appendices A through E for Inventory Documentation

2002 OZONE PRECURSOR EMISSIONS INVENTORY

AS REQUIRED BY THE CLEAN AIR ACT

FOR BULLITT AND OLDHAM COUNTIES
THE KENTUCKY PORTION OF THE LOUISVILLE 8-HOUR OZONE NONATTAINMENT AREA

Prepared by

THE KENTUCKY DIVISION FOR AIR QUALITY

Submitted by

THE KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

May 2006

TABLE OF CONTENTS

1.0 BACKGROUND AND EMISSIONS SUMMARY

1.1 BACKGROUND

Kentucky has developed a 2002 ozone precursor emissions inventory submittal for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). The Kentucky portion of the Louisville area was designated nonattainment for the 8-hour ozone standard effective June 15, 2004, per an April 30, 2004, *Federal Register* notice. This document presents Kentucky's 2002 ozone precursor emissions inventory for Bullitt and Oldham Counties in Kentucky. This inventory was developed based on EPA guidance, direct consultation with EPA personnel, and previous emission inventory development experience. The inventory includes reactive volatile organic compounds (VOC), oxides of nitrogen (NO_x), and carbon monoxide (CO) emissions for area, point, non-highway mobile, highway mobile and biogenic sources.

The point source inventory was developed using the Division's existing emissions inventory database (i.e., TEMPO). The existing TEMPO database was updated using questionnaires and annual surveys completed by the sources and quality assured by division personnel.

Nonattainment area population information for Kentucky is provided in Table 1-1. The data provided in Table 1-1 are vital to many emission calculation procedures used to develop the emissions inventory, particularly for area and nonroad mobile sources. These data are frequently referenced throughout this document.

TABLE 1-1
2002 POPULATION

Kentucky Portion of the Louisville Ozone Nonattainment Area

COUNTY	TOTAL POPULATION
Bullitt	63,800
Oldham	49,310
Total	**113,110**

1.2 EMISSIONS SUMMARY

In preparing this inventory, several other agencies contributed information to the Division necessary for completing emission calculations. The Kentucky Transportation Cabinet[1] provided information essential for completing the mobile emissions portion of this document. The Kentucky Economic Development Cabinet[2] and the State Data Center[3] provided valuable population information used primarily in the preparation of the area source inventory.

Within the nonattainment areas, VOC, NO_x, and CO emissions were calculated for point, area, nonroad mobile, onroad mobile and biogenic sources.

The Division's existing point source emissions inventory database (TEMPO) was used to produce point source information. This database is updated annually for Title V major and minor sources and on a varying schedule for other sources. A copy of the point source inventory survey is included as *Appendix A* to this document.

Area source emissions were generally calculated based on current population, employment, and commodity data. Population related information was provided by the State Data Center[3] and the Kentucky Economic Development Cabinet.[2]

Highway vehicle emissions were estimated by using Mobile6.2 generated emission factors and daily vehicle miles traveled (DVMT) estimates. DVMTs and speed information were obtained from the Kentucky Transportation Cabinet[1].

The VOC emissions calculated in this document are for those VOC emissions determined by EPA to be photochemically reactive. All identified nonreactive VOC emissions have been removed, including perchloroethylene emissions from dry cleaning and surface cleaning.

A summary of the VOC, CO, and NO_x emissions in tons per summer day for the nonattainment area is provided in Table 1-2. This document includes emissions data with pre-existing controls in place. These emission control measures include autobody refinishing, consumer solvent use, architectural surface coating, traffic markings, and open burning; fuel and engine control measures related to on-road and non-road mobile sources including Phase II of the RFG program, along with requirements on vehicle refueling and reduced evaporative emissions; and engine control measures include the National Low Emission Vehicle program, along with requirements on nonroad

diesel engines, small nonroad engines (lawnmowers and garden equipment), and outboard marine engines.

Point source emissions are described in Section 2 with supporting information provided in *Appendix A*. Section 3 documents the area source inventory process with supporting information in *Appendix B*. Non-highway mobile emissions are discussed in Section 4 with supporting information in *Appendix C*. Mobile source emissions are discussed in Section 5 with supporting information in *Appendix D*. Biogenic emissions are documented in Section 6 and *Appendix E*.

TABLE 1-2
SUMMARY OF 2002 EMISSIONS
(Tons Per Summer Day)

Kentucky Portion of the Louisville Ozone Nonattainment Area

	MOBILE			AREA			POINT			NON-HIGHWAY MOBILE			BIOGENIC			TOTAL EMISSIONS		
COUNTY	**VOC**	**CO**	**NOx**	**VOC**	**CO**	**NOx**	**VOC**	**CO**	**NOx**	**VOC**	**CO**	**NOx**	**VOC**	**CO**	**NOx**	**VOC**	**CO**	**NOx**
Bullitt	3.69	45.82	7.48	3.21	1.31	0.11	7.78	0.17	0.56	1.37	9.58	1.48	33.81	-	0.41	49.86	56.88	10.04
Oldham	2.22	26.68	4.36	2.20	0.89	0.07	0.55	0.01	0.01	1.18	15.13	1.21	19.64	-	0.49	25.79	42.71	6.14
Total Emissions	**5.91**	**72.50**	**11.84**	**5.41**	**2.20**	**0.18**	**8.33**	**0.18**	**0.57**	**2.55**	**24.71**	**2.69**	**53.45**	**-**	**0.90**	**75.65**	**99.59**	**16.18**

1.3 REFERENCES FOR SECTION 1

1. Kentucky Transportation Cabinet, Daily Vehicle Miles Traveled, 2002. Frankfort, Kentucky.

2. Kentucky Economic Development Cabinet, 2002 Kentucky Deskbook of Economic Statistics, Frankfort, Kentucky.

3. University of Louisville, State Data Center, 2002 Population Statistics, Louisville, Kentucky.

TABLE 1-3 LIST OF CONTACT PERSONS FOR THE KENTUCKY 2002 EMISSIONS INVENTORY

Kentucky Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601	Lead agency contact, overall inventory coordination and supervision, point, area, biogenic, non-highway mobile, and on-highway mobile source emissions and data activity levels	John Gowins (502) 573-3382
Kentucky Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601	On-Highway mobile and area source emissions and data activity levels	Joe Forgacs (502) 573-3382

2.0 POINT SOURCES

2.1 INTRODUCTION AND SCOPE

This section documents the development of the 2002 point source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. The Louisville Metro Air Pollution Control District (LMAPCD) is responsible for data relating to Jefferson County in Kentucky. The LMAPCD documentation is not part of this submittal. For the purpose of this inventory, point sources are defined as stationary, commercial, or industrial operations that emit 10 tons or more per year of volatile organic compounds (VOC) or 100 tons or more of nitrogen oxides (NO_x) or carbon monoxide (CO). Due to the lower cut-off size for VOC sources, the majority of point sources in the nonattainment area have VOC emissions; therefore, most of this section is dedicated to these sources. This point source inventory consists of actual emissions for 2002, and includes sources in the ozone nonattainment counties.

Emissions from point sources are presented using two emission rate formats: annual, tons per year (TYR) and daily, tons per summer day (TSD) rates. Although not specifically required, annual emission rates are provided in order to assist the review agency and the public in performing comparison checks against the existing TEMPO[5] database. In addition, the annual emission rate identifies point sources impacting on the area.

The remainder of this chapter is divided into three parts. Section 2.2 describes the approach used in developing and compiling the point source listing for the ozone nonattainment area. Section 2.3 presents an overall summary of the point source VOC, NO_x, and CO emissions. Section 2.4 lists the references used in preparing this section.

2.2 METHODOLOGY AND APPROACH

This section describes the methodology and approach used in developing information for the 2002 point source emissions inventory. The purpose for including this section is to provide sufficient detail to the review agency and the public to assist them in determining the adequacy of this inventory based on the most recent guidance. In addition, specific elements of the methodology and approach are being described in order to minimize the need for later clarifications.

The development activities for the 2002 point source emissions inventory were initiated in the

spring of 2004. The approach used in compiling the point source listing and emissions data was based on guidance issued by the U.S. Environmental Protection Agency.[1,2]

As mentioned previously, the Kentucky Division for Air Quality (DAQ) was the agency responsible for development of the 2002 emissions inventory. Data collection activities began in the spring of 2004. Since Kentucky already had an existing emissions database of air pollution sources in the state, a thorough review of this database formed the starting point for overall inventory development. A brief description of the methodology and approach used to accomplish these tasks is presented in the following subsections.

2.2.1 Review of Existing Database

The review of the Division's TEMPO[5] database allowed personnel to identify which sources in a given geographical area would need to be updated for this inventory effort. Also, a review of each source in the existing system provided information on whether specific sources had been updated during the normal yearly update or if they would need to be updated separately.

2.2.2 Source Survey

Point source emission surveys were mailed to appropriate point sources (*Please see related survey information provided in Appendix A*). The surveys were designed to have the facilities update specific information as outlined in EPA guidance. In some instances follow-up telephone calls were made to clarify responses given by sources.

2.2.3 Data Evaluation

The next step in developing the point source inventory was to evaluate the collected data. All information received from the sources was checked by emission inventory personnel to ensure that the responses were within reasonable levels.

Another aspect of data evaluation was the application of rule effectiveness for sources subject to regulatory emission limitations and a seasonal adjustment factor for facilities not operating on a uniform schedule. A factor of 80 percent was applied to the control device efficiency to adjust the resulting emission estimates to account for rule effectiveness. The rule effectiveness factor, pursuant to EPA Region 4 guidance,[3] was applied to VOC, CO, and NO_x annual emissions totals and is therefore also

reflected in daily emissions. Seasonal adjustment was applied only to daily emission totals.

2.2.4 Data Compilation

One of the final steps in developing the point source inventory involves submitting the data in an acceptable format. Division personnel routinely submit point source data to EPA's National Emissions Inventory (NEI) database.

2.2.5 Emission Calculations

Point source emissions were calculated using the following equations and variables. *Appendix A* contains point source emissions information utilized to calculate the point source emissions. Information requested by a source to be confidential in accordance with applicable laws is omitted from *Appendix A*.

1. Control Efficiency Adjusted for Rule Effectiveness

CTEFFN	=	(1 - ((CTEFF)(RE))
CTEFFN	=	Actual Control Efficiency Adjusted for Rule Effectiveness
CTEFF	=	Actual Control Efficiency
RE	=	Rule Effectiveness = .80

2. Actual Process Rate for Typical Summer Day

CPROD
NPROD = ((FUELP) (ATHJ) / 100) / ((DWK) (WKYR) (.25))
VPROD

CPROD, NPROD, and VPROD = Actual Process Rate for Typical Summer Day for CO, NOx, and VOC, respectively

FUELP	=	(Actual) Annual Process Rate = Total Throughput
ATHJ	=	Summer Seasonal Activity
DWK	=	Number of Days Per Week Source is in Operation
WKYR	=	Number of Weeks Per Year Source is in Operation

3. Actual Emissions for Typical Summer Day

CATND
NATND = ((_PROD) (EF) (CTEFFN)) / 2000
VATND

CATND, NATND, and VATND	=	Typical Summer Day Emissions for CO, NOx, and VOC, respectively
_PROD	=	CPROD, NPROD, or VPROD as Appropriate
EF	=	Emission Factor

4. Annual Actual Emissions

CATNY
NATNY = ((FUELP) (EF) (CTEFFN)) / 2000
VATNY

CATNY, NATNY, and VATNY	=	Annual Emissions for CO, NOx, and VOC, respectively
FUELP	=	(Actual) Annual Process Rate = Annual Throughput
EF	=	Emission Factor

2.3 SUMMARY OF POINT SOURCE EMISSIONS

2.3.1 KENTUCKY PORTION OF THE LOUISVILLE, KY-IN, AREA

This inventory includes VOC, CO, and NO_x point source emissions for Bullitt and Oldham Counties, Kentucky. County level point source emission totals are provided in Table 2-1. Additionally, Table 2-1 in *Appendix A* catalogues point source emissions by facility, by county, and provides a county total. These tables lists the facilities; the facility identification numbers; SIC codes[4], and the 2002 annual emissions, adjusted for rule effectiveness, in tons per year; and the 2002 daily emissions with seasonal adjustments, in tons per summer day.

Table 2-1 Kentucky Portion of Louisville Area 2002 Point Source Emissions									
			SIC	VOC	VOC	CO	CO	NO2	NO2
COUNTY	FACILITY NAME	Plant I.D. #	Code	tpy	tpd	tpy	tpd	tpy	tpd
BULLITT	KENTUCKY SOLITE CORP	21-029-00002	3295	47.76	0.13	36.95	0.10	116.58	0.32
BULLITT	JOSEPH SEAGRAM & SONS INC	21-029-00004	2085	1211.99	3.33	0.00	0.00	0.00	0.00
BULLITT	JIM BEAM BRANDS CO	21-029-00005	2084	1370.57	3.75	33.49	0.07	95.53	0.24
BULLITT	PUBLISHERS PRINTING CO	21-029-00019	2721	46.02	0.17	1.11	0.00	1.33	0.00
BULLITT	PUBLISHERS PRINTING CO	21-029-00032	2721	103.95	0.40	1.51	0.00	1.80	0.00
OLDHAM	NEXANS MAGNET WIRE INC	21-185-00004	3357	204.10	0.55	4.17	0.01	4.97	0.01
			BULLITT AND OLDHAM TOTAL	**2984.39**	**8.33**	**77.23**	**0.18**	**220.21**	**0.57**

2.4 REFERENCES FOR SECTION 2

1. U.S. Environmental Protection Agency. *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations.* EPA-454/R-05-001. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. August 2005, which references *Emission Inventory Requirements for Post-1987 Ozone State Implementation Plans.* EPA-450/4-88-019. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. December 1988.

2. U.S. Environmental Protection Agency. *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations.* EPA-454/R-05-001. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. August 2005, which references *Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I: General Guidance for Stationary Sources.* EPA-450/4-91-016. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. May 1991.

3. Telecon. U.S. Environmental Protection Agency, Region 4, Ms. Yasmin Yorker, February 4, 1992, concerning rule effectiveness.

4. Executive Office of the President, Office of Management and Budget. *Standard Industrial Classification Manual.* Order no. PB 87-100012. National Technical Information Service, Springfield, Virginia 22161. 1987.

5. Kentucky Division for Air Quality's TEMPO Point Source Database for the Year 2002.

3.0 AREA SOURCES

3.1 INTRODUCTION AND SCOPE

This section documents the development of the 2002 area source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). Area sources include non-traditional sources whose emissions are too small to be treated as stationary point sources individually. However, where several are located in a specific geographic location the combined emissions can be substantial. The emissions documented in this section are presented on an annual basis and for a typical summer day during the ozone season.

Including this introduction and scope, Section 3 is organized into four other subsections. Section 3.2 describes the approach taken to estimate emissions from each source category. Section 3.3 provides a summary of the area source emissions in the nonattainment area. Information explaining the calculations used to derive the area source emissions is discussed in Section 3.4. The references used in developing the area source portion of the inventory are located in Section 3.5.

3.2 METHODOLOGY AND APPROACH

3.2.1 Source Category Identification

The majority of area source categories considered in this inventory were identified from *Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I.*[1] In addition, the U.S. EPA's Emission Inventory Improvement Program (EIIP) guidance[22] was consulted and utilized where feasible. Emissions estimates for some area source categories are not included in the inventory. Agricultural and slash burning, snowmobiles, and orchard heaters are not commonplace in Kentucky in the summer months and therefore do not warrant inclusion. Rationale for not including these categories is discussed later in this narrative.

3.2.2 Emission Estimation Approach

Generally, area source emissions are calculated using factors based on one of four criteria for the inventoried areas: (a) population (per-capita) see Table 3-1, (b) commodity consumption, (c) level-of-activity, or (d) employment. These calculations are further explained in Section 3.4.

Table 3-1
Area Population Information

County	Population
Bullitt	63,800
Oldham	49,310
TOTAL	**113,110**

3.3 SUMMARY OF AREA SOURCE EMISSIONS

Tables 3-1 to 3-31 provide the inventory results for each category of area source emissions. Tables 3-29 and 3-31 contain the contribution of each county for each area source category and provides a total for that county located in Kentucky.

3.4 DISCUSSION OF THE AREA SOURCE CATEGORIES

Subsections 3.4.1 through 3.4.6 contain the descriptions for individual area source types and the methods used to calculate emissions for each. Calculations used to determine emissions are included within the narrative.

3.4.1. Gasoline Distribution.

Four categories are included under gasoline distribution: (a) Storage tank breathing losses; (b) Tank trucks in transit; (c) Tank truck unloading; and (d) Vehicle refueling. Vehicle refueling emissions are included in the Highway Mobile Source Inventory (Section 5) in the Mobile6.2 modeling runs.

Retail gasoline service station sales in 2002, for both the state and individual counties, were obtained from the 2002 *Economic Census Retail Trade* publication for Kentucky.[6] The 2002 taxable gasoline sales were only available at the state level and were obtained from the Kentucky Revenue Cabinet's Motor Fuels Tax Section.[7] The 2002 statewide gasoline sales were segregated to the county level using 1997 retail trade sales information. 2,191.84 million gallons of gasoline were sold in Kentucky in 2002. Emission factors were obtained from Tables 5.2-5 and 5.2-7 of AP-42, Volume I.[2, 22]

To calculate the emissions of VOC from any of the sources noted above, it was necessary to determine the total sales, in gallons, of gasoline in the nonattainment area. Only the *Census Retail*

Trade publication[6] lists county and state gasoline sales. Therefore, the percentage of county gasoline sales relative to the statewide gasoline in 2002 was calculated. State sales were obtained from Table 1 of the *Census Retail Trade* publication,[6] and county sales obtained from Table 3 of that document. This percentage was applied to the total state taxable gasoline sales in 2002 to determine county gasoline sales in 2002. After the county gasoline sales in 2002 were determined, specific methods were used to calculate the emissions of VOC from each of the categories listed. The calculations and procedures described in EPA guidance,[1] were utilized. County-specific gasoline marketing data are shown in Table 3-2.

Table 3-2
Gasoline Marketing Data (1000 Gallons)

County	Gasoline Sales
Bullitt	64,539
Oldham	33,093
TOTAL	**97,632**

3.4.1.1 Storage Tank Breathing Losses

County gasoline sales were multiplied by the emission factor found in Table 5.2-7 of AP-42, Volume I.[2] Tons of VOC emissions per year were converted to tons per typical summer day in accordance with Section 5.9 of reference 1. The seasonal adjustment factor (SAF) was determined by adding the total gasoline sales for June, July, and August of 2002--then dividing that total by the total state gasoline sales for 2002. This dividend was then divided by 0.25 to determine the percentage of activity, which occurred during those months since it was noted that the activity level for that quarter was higher than the other quarters. The denominator represents the uniform seasonal rate since one quarter or season equals 0.25. So if the total gasoline sales for June, July, and August is one quarter of the total annual sales, then the SAF equals 0.25 / 0.25, or 1.00. The seasonal adjustment factor applied for the gasoline marketing was 1.079. The activity days per week were considered to be 7. The formula for this calculation is as follows:

$$\left(\frac{\text{((June + July + August Monthly Gasoline Gallon Totals)/ (Year-End Gasoline Gallon Total)}}{0.25} \right)$$

The calculations used to determine emissions from storage tank breathing losses are as follows.

$$TPY = \left(\text{County Sales (gallons)} \times \frac{1.0 \text{ lbs.}}{1000 \text{ (gal)}} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (7 \times 52)$$

The emissions, by county, produced by storage tank breathing losses are shown in Table 3-3.

3.4.1.2 Tank Trucks in Transit

Since some gasoline is delivered to bulk plants rather than delivered directly to service stations from bulk terminals, the amount of gasoline transferred in any area may exceed the total gasoline consumption, due to the additional trips involved. Reference 1 makes the following statements relating to this matter:

Table 3-3
Summary of Emissions From
Gasoline Breathing Losses

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	32.27	0.10
Oldham	16.55	0.05
TOTAL	**48.82**	**0.15**

"A nationwide average of roughly 25 percent of all gasoline consumed goes through bulk plants. Hence, gasoline distribution in an area could be multiplied by 1.25 to estimate gasoline transported." and

"Emissions from tank trucks in transit, however, will generally be minimal, in most areas. Hence, a great deal of effort is not warranted in making this adjustment."

Based on these statements, and in the absence of specific bulk plant throughput information, 2002 county gasoline sales were multiplied by 1.25 to obtain the total gasoline transported in 2002. Per EPA EIIP guidance[22], the midpoints of the typical AP-42 Table 5.2-5 emission factors for tank trucks

or bulk tanks loaded with product and return with vapor were determined, combined, and applied to gasoline transported in each county to determine the emissions of VOC per year. The yearly emissions were then converted to tons per typical summer day. The seasonal adjustment factor used for tank breathing losses was 1.079. The activity days per week were considered 6. The calculation used to figure emissions from tank trucks in transit are as follows.

$$TPY \left(\begin{array}{l} (\text{County Gas Sales (gallons)} \times 1.25) \times \frac{.060 \text{ lbs.}}{1000 \text{gals.}} \end{array} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (6 \times 52)$$

The emissions, by county, produced by tank trucks in transit are provided in Table 3-4. Bullitt County does not have any bulk plants, therefore the above calculation for Bullitt County has the county gas sales multiplied by 1.00 instead of 1.25.

Table 3-4
Summary of Emissions From
Tank Trucks In Transit

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	1.94	0.01
Oldham	1.24	0.00
TOTAL	**3.18**	**0.01**

3.4.1.3. Vehicle Refueling

The emissions for vehicle refueling have been calculated by Mobile6.2 and are included in the Mobile Source Emissions Inventory in Section 5, but are not listed separately.

3.4.1.4 Tank Truck Unloading

To calculate the emissions of VOC produced by tank truck unloading, the division performed a review of gasoline stations located in the ozone nonattainment area. The following assumptions were made.

For the previous 1-hour ozone maintenance area (i.e., 41% of Bullitt County, 50% of Oldham

County) 98.5% of the gasoline throughput was subject to Stage I vapor recovery controls. The remaining 1.5% of the gasoline throughput was subject to submerged fill controls. For the rest of each county area (i.e., 59% of Bullitt County, 50% of Oldham County) 90% of the gasoline throughput was subject to submerged filling and the remaining 10% of the gasoline throughput was subject to splash filling techniques.

For Stage I areas, there are two percentages applied to Tank Truck Unloading: 98.5% for Splash Fill (Stage I) controls and 1.5% for Submerged Fill controls. For entire counties only two calculations are involved: one to incorporate Stage I controls and one to incorporate Submerged Fill controls. However, a county with a former 1-hour ozone nonattainment portion involves four calculations instead of two. The four calculations are: attainment portion Submerged Fill, nonattainment portion Submerged Fill, attainment portion Splash Fill, and nonattainment portion Splash Fill.

Based on these assumptions, the fraction of gallons of gasoline throughput using each fill method was multiplied by the appropriate emission factors from Table 5.2-7 of AP-42, Volume I[2] to derive emissions. Rule penetration was implicitly applied by allocating the gasoline throughput for each fill method. The yearly emissions were converted to tons per typical summer day in accordance with Section 5.9 of Reference 1. The seasonal adjustment factor of 1.079 for gasoline marketing was applied. The activity days per week for tank truck unloading was 6.[1] The calculations used to determine emissions from this category are as follows.

For the 1-hour maintenance portions of Bullitt and Oldham Counties:

$$TPY = \left(\begin{array}{l} \textit{Apportioned} \\ \textit{(County Sales} \\ \textit{(gallons)} \end{array} - \begin{array}{l} \textit{Submerged Fill} \\ \textit{Pt. Source} \\ \textit{Gas thruput)} \\ \textit{(gallons)} \end{array} \times .015 \right) \times \frac{7.3 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (6 \times 52)$$

Splash Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{(County Sales} \\ \text{(gallons)} \end{array} - \begin{array}{l} \text{Pt. Source} \\ \text{Gas thruput)} \\ \text{(gallons)} \end{array} \times .985 \right) \times \frac{11.5 \text{ lbs.}}{1000 \text{ gals}} \times 1 - \frac{97.4\% \times .80}{100} \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

TPY = Submerged Fill + Stage I Fill

TSD = (TPY x SAF) / (6 x 52)

Total Tank Truck Unloading Annual Emissions = Submerged Fill Annual + Splash Fill Annual

Total Tank Truck Unloading Summer Daily Emissions = Submerged Fill Daily + Splash Fill Daily

For the remainder of Bullitt and Oldham Counties:

Submerged Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{County Sales} \\ \text{(gallons)} \end{array} \times .90 \right) \frac{7.3 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

TSD = (TPY x SAF) / (6 x 52)

Splash Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{County Sales} \\ \text{(gallons)} \end{array} \times .10 \right) \frac{11.5 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

TSD = (TPY x SAF) / (6 x 52)

Total Tank Truck Unloading Annual Emissions = Submerged Fill Annual + Splash Fill Annual

Total Tank Truck Unloading Summer Daily Emissions = Submerged Fill Daily + Splash Fill Daily

The emissions, by county, produced by tank truck unloading are shown in Table 3-5.

Table 3-5
Summary of Emissions From
Tank Truck Unloading

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	181.53	0.63
Oldham	85.48	0.29
TOTAL	**267.01**	**0.92**

3.4.1.5 Aircraft Refueling

There are no airports in Bullitt or Oldham Counties, therefore there are no emissions for aircraft refueling.

3.4.1.6 Petroleum Vessel Loading & Unloading

This category is included in the Point Source Inventory, Section 2.

3.4.2 Stationary Source Solvent Evaporation

The following eight subcategories are included in this area source category. All of these emit Volatile Organic Compounds (VOCs) because of their solvent usage. They are:

(1) Dry Cleaning;

(2) Surface Cleaning;

(3) Surface Coating;

(4) Graphic Arts;

(5) Cutback Asphalt Paving;

(6) Pesticide Applications; and,

(7) Commercial/Consumer Solvent Use.

Each of the previous-mentioned subcategories is discussed individually in the following subsections.

3.4.2.1 Dry Cleaning

Dry cleaning operations vary in size, type of service, and type of solvent used. Industrial,

commercial, and self-service facilities clean not only personal clothing, but also uniforms, linens, drapes, and other fabric materials. Per previous EPA guidance[23], since emissions for coin operated and commercial/industrial dry cleaning are considered to be nonreactive (i.e., perchloroethylene emissions) only other solvent emissions are reflected in the VOC emissions provided for dry cleaning

Population statistics for the counties examined were obtained from information provided by the Kentucky State Data Center[3,4] and are found in Table 3-1.

Annual tons of VOC were calculated by multiplying the per capita emission factor by the county population. Rule penetration is implicitly applied by using the distinct per capita emission factors for each type of dry cleaning facility.

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The methodology involves multiplying the following per capita VOC emission factors by an area's population to estimate the dry cleaning emissions:

Mineral Spirits & other solvent facilities: 1.1 lb/capita/yr

The calculated annual tons of VOC emissions were then divided by the product of the number of activity days per week and the number of weeks in a year. For dry cleaning, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 5. [1]

The calculations for this category are as follows:

$$TPY = \frac{Other\ Solvents}{(EF \times population)} \times \frac{1\ ton}{2000\ lbs} \qquad TSD = TPY/(5 \times 52)$$

Emissions from dry cleaning activities are provided for individual counties in Table 3-6.

Table 3-6
Summary of Emissions From
Dry Cleaning

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	35.09	0.13
Oldham	27.12	0.10
TOTAL	**62.21**	**0.23**

3.4.2.2 Surface Cleaning

Surface cleaning or degreasing is a physical method of removing grease, wax, or dirt from metal, glass, and fabric surfaces by exposing the material to an organic solvent. Degreasing activity is one of the many production steps associated with industrial categories involving metal furniture, primary metals, fabricated products, machinery, electric equipment, and instrumentation. In addition, there are many miscellaneous degreasing operations associated with auto repair shops, gasoline stations, and maintenance shops. There are three types of degreasers: small cold cleaners, open top vapor degreasers, and conveyorized vapor degreasers.

Surface operations, which include cold cleaning, manufacturing, and vapor in-line cleaning and others use organic solvents as room temperature liquids. Uses include wiping, spraying, or dipping parts in the solvent. In open top vapor degreasing, cleaning takes place by exposing the part to solvent vapor. Conveyorized vapor degreasing entails the same activity as open top degreasing except that the parts to be cleaned continuously move in and out of the degreaser.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. It involves multiplying the following per capita VOC emission factors by an area's population to estimate total surface cleaning emissions. Per EPA guidance[24], to avoid double counting, point source degreasing emissions were subtracted from the area source surface cleaning VOC emissions as appropriate.

Surface Cleaning Total: 4.3 lb/capita/yr
- Cold Cleaning
  - Auto Repair: 2.5 lb/capita/yr
  - Manufacturing: 1.1 lb/capita/yr
- Vapor & In-Line Cleaning
  - Electronics & Electrical : 0.21 lb/capita/yr
  - Other: 0.49 lb/capita/yr

Emissions per typical summer day for this area source category were calculated using section 5.9 of the federal guidance document.[1] The calculated annual tons of VOC divided by the product of the number of activity days per week and the number of weeks in a year. For surface cleaning, as found in Table 5.8-1, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 6[1].

Emissions were calculated using the following method.

$$TPY = ((EF \times population) \times \frac{1\ ton}{2000 lbs}) * .77^{25} \quad \text{Cold Cleaning Auto Repair} \quad --- \quad TSD = TPY / (6 \times 52)$$

+

$$TPY = ((EF \times population) \times \frac{1\ ton}{2000 lbs}) * .77^{25} \quad \text{Cold Cleaning Manufacturing} \quad --- \quad TSD = TPY / (6 \times 52)$$

+

$$((EF \times population) \times \frac{1\ ton}{2000 lbs}) * .77^{25} \quad \text{Vapor \& In-Line} \quad --- \quad TSD = TPY / (6 \times 52)$$

Area Source Surface Cleaning VOC Emissions (TSD) = TSD – Pt. Source Surface Cleaning VOC Emissions[24]

Per EPA guidance[25], perchloroethylene emissions have been removed from the surface cleaning emissions by reducing the emissions by 23 percent. Surface cleaning emissions are provided for individual counties in Table 3-7. Population information is provided in Table 3-1 and perchloroethylene removal and double counting information for surface cleaning is provided in *Appendix E.*

Table 3-7
Summary of Emissions* From
Surface Cleaning Operations

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	105.62	0.35
Oldham	81.63	0.26
TOTAL	**187.25**	**0.61**

*Perchloroethylene emissions have been removed from the surface cleaning emissions by reducing the emissions by 23 percent per EPA's May1993 Helms guidance memorandum[25].

3.4.2.3 Surface Coating

Surface coatings include paints, enamels, varnishes, lacquers and other product finishes. All of these products include either a water-based or solvent-based liquid carrier, which generally

evaporates in the drying or curing process.

VOC emissions result from the evaporation of the paint solvent and any additional solvent used to thin the paint. Substantial emissions also result from the use of solvents in cleaning the surface prior to painting and in cleaning painting equipment after use.

Surface Coating operations are separated into two groups, industrial and nonindustrial. Industrial surface coating operations for such products as appliances, automobiles, paper, fabric and cans are included in the point source inventory. Non-industrial surface coating includes refinishing of automobiles, architectural coating, and traffic paints and are inventoried as area sources.

3.4.2.3.1 Architectural Surface Coating

Architectural surface coatings, often called "trade paints," are used primarily by homeowners and painting contractors to coat the interior/exterior of houses and buildings and on the surfaces of other structures such as pavements, curbs, or signs. Coating materials are applied to surfaces by spray, brush, roller, and dry at ambient conditions. Architectural coatings differ from industrial coatings, which are applied to manufactured products and are usually oven cured. Painting contractors and homeowners are the major users of architectural coatings.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following per capita VOC emission factor by an area's population to estimate the architectural surface coating emissions:

Architectural Surface Coating: 4.6 lb/capita/yr (Represents reactive VOC). Population statistics for all areas examined were obtained from the University of Louisville, Urban Data Center.[3,4] Solvent use, which accounts for 25 to 40 percent of all solvent loss associated with architectural surface coating, is included in this per capita factor. Solvents used in architectural surface coatings or thinning and cleanup contain almost 100 percent reactive compounds.

Emissions per typical summer day for this area source category were calculated using Section 5.9 of Reference 1. The calculated annual tons of VOC were multiplied by an appropriate seasonal adjustment factor and then divided by the product of the number of activity days per week and the number of weeks in a year. For architectural surface coating the seasonal adjustment factor was 1.3 and the activity days per week was 7.[1]

The following calculation was used to estimate emissions from architectural surface coating.

$$TPY = (EF \times Population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TSD = (TPY \times SAF) / (7 \times 52)$$

Architectural surface coating emissions are provided in Table 3-8.

Table 3-8
Summary of Emissions From
Architectural Surface Coating

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	146.74	0.52
Oldham	113.41	0.41
TOTAL	**260.15**	**0.93**

3.4.2.3.2 Automobile Refinishing

Automobile refinishing is the repainting of worn or damaged automobiles, light duty trucks, and other vehicles. Surface coating during manufacturing is not considered refinishing. In automobile refinishing, lacquers and enamels are usually sprayed in paint booths. Since vehicles contain heat sensitive plastics and rubber, the solvent borne coatings are used in low temperature ovens. Paint booths may be equipped with paint arresters or water curtains to handle overspray. Solvents used in auto body refinishing will consist almost entirely of reactive VOC.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following VOC per capita emission factor by an area's population to estimate auto body emissions:

Auto Body Refinishing: 2.3 lb/capita/yr

According to federal guidance, because auto body refinishing may be generally expected to relate to human activity, such a population based approach will provide reasonable emission estimates for this area source category. Population statistics for all areas examined were obtained

from state references.[3,4]

Emissions per typical summer day for this area source category were calculated using federal guidance[1]. The calculated annual tons of VOC divided by the product of the number of activity days per week and by the number of weeks in a year. For auto body refinishing no seasonal adjustment factor was applied since the activity was considered uniform year round. The activity days per week was 5.

The calculations used to figure yearly and daily VOC emissions for this category are as follows.

$$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Auto body refinishing emissions are provided for individual counties in Table 3-9. Population information for individual areas is provided in Table 3-1.

Table 3-9
Summary of Emissions From
Automobile Refinishing

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	73.37	0.28
Oldham	56.71	0.22
TOTAL	**130.08**	**0.50**

3.4.2.3.3 Traffic Markings

Traffic paints are used to mark pavement. These markings include dividing lines for traffic lanes, parking space markings, crosswalks, arrows, and other markings. These markings are usually applied by state or local highway maintenance crews or by contractors during road construction. VOC emissions result from the evaporation of organic solvents during and shortly after the application of the marking paint. Traffic paint emissions are included in the area source inventory

the emissions are not from any specific plant, but instead emanate from the roadways and surfaces where markings are applied.

Federal guidance[1,27,28,29] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following VOC per capita emission factor by an area's population to estimate traffic marking emissions.

Traffic marking: 0.5 lb/capita/yr

According to federal guidance, because traffic marking emissions may be generally expected to relate to human activity, such a population-based approach will provide reasonable emission estimates for this area source category. The activity level was considered 5 days per week. No seasonal adjustment factor was applied for this category since none was provided in Volume I guidance.

The calculations used to derive yearly and daily VOC emissions for this category are as follows.

$$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Traffic marking emissions are provided in Table 3-10. Population statistics for individual areas are provided in Table 3-1.

Table 3-10
Summary of Emissions From
Traffic Markings

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	15.95	0.06
Oldham	12.33	0.05
TOTAL	**28.28**	**0.11**

3.4.2.3.4 Other Small Industrial Surface Coating

Industrial surface coating includes the coating, during manufacture, of magnet wire, automobiles, cans, metal coils, paper, fabric, metal and wood furniture, and miscellaneous products. According to federal guidance[1], to the maximum extent possible, small industrial surface coating

operations should be treated as point sources. Therefore, the division will include small industrial surface coating emissions in the point source emissions inventory.

3.4.2.4 Graphic Arts

The graphic arts or printing industry consists of approximately 60,000 facilities (SIC 27) nationwide. About half of these establishments are in-house printing services in nonprinting industries. Printing newspapers, books, magazines, fabrics, wall coverings, and other materials, is considered a graphic arts application. Five types of printing are used in the industry: letterpress, flexography, lithography, (roto)gravure, and screen process printing.

Solvent use is an integral part of the process and is the primary source of VOC emissions. Associated cleanup operations also require the use of solvents, thereby contributing to VOC emissions for the industry. All solvents used in the graphic arts industry are considered reactive.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following per capita VOC emission factor by an area's population to estimate VOC emissions from graphic art facilities, which emit less than 100 tons:

Graphic Arts: 1.3 lb/capita/yr

In accordance with federal guidance[1], any emissions associated with point source graphic arts facilities, which emit under 100 tons per year, should be subtracted from the area source inventory. Graphic arts emissions from point sources greater than or equal to 100 tons per year should not be subtracted, since they have already been excluded from the area source graphic arts emission factor of 1.3 lb/person/yr.

Population statistics for all areas examined were obtained from state references.[3,4]

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC were then divided by the product of the number of activity days per week and the number of weeks in a year. For graphic arts no seasonal adjustment factor was applied since the activity was considered uniform year round and the activity days per week was 5.[1] Calculations for this category are as follows:

$$TPY = ((EF \times Population) - Point\ Source\ Emissions)) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Graphic arts emissions are provided in Table 3-11. Population information is provided in Table 3-1.

Table 3-11
Summary of Emissions From
Graphic Arts

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	0.00	0.00
Oldham	32.05	0.12
TOTAL	**32.05**	**0.12**

Bullitt County emissions are zero in Table 3-14 because it has a point source whose emissions are included in the point source data and have to be subtracted from the area source calculations.

3.4.2.5 Cutback Asphalt Paving

Cutback asphalt is a type of liquefied road surface that is prepared by blending or "cutting back" asphalt cement with various kinds of petroleum distillates. Cutback asphalt is used as a pavement sealant, tack coat, and as a bonding agent between layers of paving material. VOCs are emitted as the cutback asphalt cures and the petroleum distillates evaporate.

According to federal guidance[1], because paving operations may be generally expected to relate to human activity, a population based approach will provide reasonable emission estimates for this area source category. The emission factor used for this category is as follows.

Cutback Asphalt Paving: 0.37 lb/capita/yr

The activity level was considered to be 5 days per week. The calculations for estimating emissions from this category are as follows.

$$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Cutback asphalt emissions are provided in Table 3-12. Population for individual counties is found in Table 3-1.

Table 3-12
Summary of Emissions From
Cutback Asphalt Paving

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	11.80	0.05
Oldham	9.12	0.04
TOTAL	**20.92**	**0.09**

3.4.2.6 Emulsified Asphalt

Emissions from emulsified asphalts were not calculated. Any emissions from this category would have been negligible since emulsified asphalt is water based.

3.4.2.7 Pesticide Application

Pesticides broadly include any substances used to kill or retard the growth of insects, rodents, fungi, weeds, or microorganisms. Pesticides fall into three basic categories: synthetics, nonsynthetics (petroleum products), and inorganics. Formulations are commonly made by combining synthetic materials with various petroleum products. The synthetic pest killing compounds in such formulation are labeled as "active" ingredients, and the petroleum product solvents acting as carriers or diluents for the active ingredients are labeled "inert." Neither of these toxicological designations, active or inert, should be interpreted as indicators of photochemical reactivity; these designations refer only to their toxicological action.

The federal procedures document[1] described an emissions estimation process which requires the quantity and types of pesticides used in a study area. Contacts with both the Kentucky Department of Agriculture[8] and the University of Kentucky[9] revealed that such data is not available.

The Kentucky Division for Air Quality requested the use of an alternative method on September 30, 1989.[10] Since the largest single source of pesticide use is through agricultural application, the alternative method links pesticide application to harvested acreage. Utilizing the alternative method, VOC emissions were determined by multiplying an emission rate of two pounds

of VOC per harvested acre by an area's 2002 harvested acreage.[21] The product was then multiplied by a factor of 0.9 to approximate the amount that evaporated and can be considered photochemically reactive VOC. This alternative method was approved by the U.S. EPA, Region 4 on November 7, 1989.[11] The yearly emissions were then converted to tons emitted per typical summer day in accordance with Section 5.9 of reference 1. The seasonal adjustment factor was 1.3, and the activity days per week was 6. The calculations for estimating emissions for this category are as follows.

$$TPY = ((Harvested\ Acres \times Emission\ Factor(lbs)) \times 0.9) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = (TPY \times SAF) / (6 \times 52)$$

The emissions, by county, produced by pesticide application are shown in Table 3-13. 2002 harvested acre information[21] used to calculate emissions for this category are found in Table 3-14.

Table 3-13
Summary of Emissions From
Pesticide Application

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	15.68	0.07
Oldham	19.73	0.08
TOTAL	**35.41**	**0.15**

Table 3-14
2002 Harvested Acres

County	Harvested Acres
Bullitt	17,420
Oldham	21,925
TOTAL	**39,345**

3.4.2.8 Commercial/Consumer Solvent Use

Many commercial/consumer products in common use contain VOCs. Some examples are household and automobile cleaners and polishes. These products have varying VOC content and the quantities used are difficult to estimate; therefore, the resulting VOC emissions are considered to be an area source.

EPA guidance[22, 1] provided the methodology the Division used for calculating the VOC emissions for this area source category. The EPA EIIP[22] per capita emission factor for commercial/consumer solvent use of 7.84 lb/capita/yr includes emissions from household products (cleaners, laundry detergents); personal care products (e.g., toiletries, aerosol products); automotive aftermarket products (e.g., rubbing compounds, windshield washing fluids, polishes and waxes); non-industrial adhesives and sealants; pesticide products (home or business); and miscellaneous products.

Population statistics for all areas examined were obtained from state references.[3,4] Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC was divided by the product of the number of activity days per week and the number of weeks in a year. For commercial/consumer solvent use, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week were 7. The calculations for estimating emissions from this category are as follows.

$$TPY = (EF \times Population)_{(lbs)} \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (7 \times 52)$$

Commercial/Consumer solvent use emissions are provided for individual counties in Table 3-15. Population information for individual areas is provided in Table 3-1.

Table 3-15
Summary of Emissions From
Consumer Solvent Usage

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	250.10	0.69
Oldham	193.30	0.53
TOTAL	**443.40**	**1.22**

3.4.3 Waste Management Practices

The handling and management of solid and liquid waste depends on such factors as the type of waste generated and the form and composition of the waste. The following methods of waste disposal were examined in this inventory:

(1) Publicly Owned Treatment Works (POTW);

(2) Industrial Waste Water Treatment;

(3) Hazardous Waste (TSDFs);

(4) Municipal Landfills; and

(5) Solid Waste Incineration -- On-site Incineration and Open Burning

3.4.3.1 Publicly Owned Treatment Works

Federal guidance indicates that research has shown that approximately 85% of all volatile pollutants discharged to unacclimated wastewater treatment systems are stripped to the ambient air. Additionally, the concentration of volatile organic compounds found in POTW influent has been shown to be directly proportional to the industrial contribution to a POTW.

Federal guidance[1] provided the methodology the division used for calculating the VOC emissions for this area source category. The methodology involves multiplying the following emission factor by the number of gallons of industrial wastewater discharged to a POTW:
1.1×10^{-4} (.000110 lbs. of VOC emitted per gallon of industrial wastewater discharged to a POTW.

The amount of industrial wastewater discharged to a POTW was obtained from the Kentucky Division of Water.[12]

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC was multiplied by an appropriate seasonal adjustment

factor and then divided by the product of the number of activity days per week and the number of weeks in a year. For POTW a seasonal adjustment factor of 1.4 was applied and the number of activity days per week were 7.

$$TPY = \frac{\text{Industrial Wastewater Flow (gallons)} \times EF \text{ (lbs)}}{} \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

$$TPD = (TPY \times SAF) / (7 \times 52)$$

POTW VOC emissions are provided for Bullitt and Oldham Counties in Table 3-16. Additionally, total industrial wastewater discharge information to POTW for the nonattainment area is provided in Table 3-17.

Table 3-16
Summary of Emissions From POTW

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	0.24	0.00
Oldham	0.00	0.00
TOTAL	**0.24**	**0.00**

Table 3-17
Industrial Discharge Into POTW

County	POTW (Million Gallons Per Year)
Bullitt	0.01200
Oldham	0.00000
TOTAL	**0.01200**

3.4.3.2 Industrial Wastewater

The first step in estimating emissions from this category was to determine what facilities should be treated as point sources. Radian provided guidance[17] on how to determine what sources should be treated as point sources and what sources could be inventoried as area sources. The

County Business Patterns[5] was used to determine the number of facilities within a given SIC code and the number of employees by facility within that code. In order to determine the number of employees for a particular SIC code a conversion from the NAICS code to the SIC code was completed, since the county business patterns now uses the NAICS code. However, a review of the data indicates that there are no facilities in Bullitt or Oldham Counties with the appropriate NAICS codes. Therefore no emissions are included for this category.

3.4.3.3 Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)

This is a relatively new inventory category. In view of the confusion, and resultant frustration, regarding emission estimates from TSDFs, the Division for Air Quality considered the allowance of one ton of VOC per year per facility in order to report *any* figures for the inventory. However, such a blind apportionment of emissions undermined the intent of the inventory.

Assistance had been requested from Radian, in performing emission calculations for this category. However, in a letter received from Steve McCary, U.S. EPA, Region 4 on November 12, 1992, sufficient guidance is not available to inventory emissions from TSDFs at this time. It is expected that most emissions from these sources will be reported in the point source inventory.

3.4.3.4 Municipal Landfills

VOC emissions are produced from municipal solid waste landfills by three mechanisms: volatilization, chemical reaction, and biological decomposition of liquid and solid compounds into other chemical species. Based on EPA guidance,[1] since Kentucky has an average precipitation level over 23 inches, an emission factor of 13.6 tons of VOC per million tons of refuse in-place plus an additional factor of 2.6 tons per year. No seasonal adjustment was applied since this activity is considered uniform according to *Volume I* guidance.

The amount of refuse in-place at facilities located in the nonattainment area in Kentucky was obtained in a municipal solid waste survey developed by the Kentucky Division for Air Quality.[16]

The calculations used to estimate emissions from this category are as follows.

$$TPY = \text{tons of municipal solid waste} \times \frac{13.6 \text{ tons VOC}}{1{,}000{,}000 \text{ tons of waste}} \times 2.6$$

$$TSD = TPY / (7 \times 52)$$

A summary of emissions for this category may be found in Table 3-18. The tons of solid waste impounded are found in Table 3-19.

Table 3-18

Summary of Emissions From Municipal Landfills

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	12.54	0.03
Oldham	0.00	0.00
TOTAL	**12.54**	**0.03**

Table 3-19
Tons of Solid Waste In Municipal Landfills

County	Landfill Waste (tons)
Bullitt	354,630
Oldham	0
TOTAL	**354,630**

3.4.3.5 Solid Waste Incineration

Solid waste may consist of any discarded solid materials from industrial, commercial, or residential sources. The materials may be combustible or non-combustible and are often burned to reduce bulk, unless direct burial is either available or practical.

The solid waste disposal category includes on-site refuse disposal by residential, industrial, and commercial/institutional sources. On-site incineration is confined burning of waste leaves, landscape refuse, or other refuse or rubbish. Open burning is the unconfined burning of solid waste material.

3.4.3.5.1 On-Site Incineration

A federal guidance document[1] provides waste generation factors to estimate the tons of solid waste burned in on-site incineration. The amount of waste incinerated by residential, commercial/institutional and industrial sources was multiplied by the appropriate VOC, NO_x, and CO emission factors obtained from a federal reference document.[2]

The waste generation factors for on-site incineration appropriate for Region 4 are: 4 tons per 1000 population per year for residential sources; 23 tons per 1000 population per year for commercial/institutional sources; and 395 tons per 1000 manufacturing employees per year for industrial sources. The emission factors applied for on-site incineration are: 1.7 for VOC, 60 for CO, and 11 for NO_x. The emission factors are in pounds of pollutant per ton of solid waste incinerated.

Population statistics and manufacturing employment information for all areas examined for on-site incineration were obtained from state references.[4,5] Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC were divided by the product of the number of activity days per week and the number of weeks in a year. For on-site incineration, no seasonal adjustment factor was applied since activity was considered uniform year round and activity days per week were 7. Calculations for estimating emissions from this category are as follows.

Residential

$$TPY = \left(\frac{4\ \text{Tons of waste}}{1000\ \text{pop.}} \times \frac{\text{county pop.}}{}\right) \times EF\ (\text{lbs}) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

$$TSD = TPY / (7 \times 52)$$

Commercial/Institutional

$$TPY = \left(\frac{23\ \text{Tons of waste}}{1000\ \text{pop.}} \times \frac{\text{county pop.}}{}\right) \times EF\ (\text{lbs}) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

$$TSD = TPY / (7 \times 52)$$

Industrial

$$TPY = \left(\frac{395\ \text{tons}}{1000\ \text{mfg in mfg SICs}} \times \#\ \text{employees}\right) \times EF\ (\text{lbs}) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

employees 20-39

TSD = TPY / (7 x 52)

On-site incineration emissions are provided for the ozone nonattainment area in Table 3-20. Manufacturing employee information for individual areas is provided in Table 3-21.

Table 3-20
Summary of Emissions From
On-Site Incineration

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	2.30	0.01	81.21	0.22	14.89	0.04
Oldham	1.46	0.00	51.66	0.14	9.47	0.03
TOTAL	**3.76**	**0.01**	**132.87**	**0.36**	**24.36**	**0.07**

Table 3-21
Manufacturing Employee Population

County	Manufacturing Employment (Employees)
Bullitt	2,493
Oldham	989
TOTAL	**3,482**

3.4.3.5.2 Open Burning

A federal guidance document[1] provides waste generation factors to estimate the tons of solid waste burned in open burning. The amount of waste burned by residential, commercial/institutional, and industrial sources was multiplied by the appropriate VOC, NO_x, and CO emission factors obtained from a federal reference document.[2] The waste generation factors for open burning appropriate for Region 4 are: 450 tons per 1000 rural population per year for residential sources; 24 tons per 1000 rural population per year for commercial/institutional sources; and 160 tons per 1000 manufacturing employees per year for industrial sources. The emission factors applied for open burning are: 30 for VOC, 85 for CO, and 6 for NO_x. The emission factors are in units of pounds of

pollutant per ton of solid non-agricultural waste burned. For an example of how the above information is utilized for this area source category, please see 3.4.3.5.1 regarding on-site incineration.

Rural population statistics and manufacturing employment information for all areas examined for open burning were obtained from state references.[3,4]

In January 1998, Kentucky adopted revisions to the open burning regulation to prohibit most types of open burning in moderate ozone nonattainment areas within Kentucky during the period of May – September when ozone is most likely. The emission reduction credit taken for this control measure is calculated as 80%. A copy of the regulation outlining this prohibition is included in Appendix F.

Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC was then divided by the product of the number of activity days per week and the number of weeks in a year. For open burning, no seasonal adjustment factor was applied since activity was considered uniform year round and activity days per week was 7. Emissions for this category were calculated as follows.

For the ozone nonattainment portions of Bullitt and Oldham Counties:

Residential

$$\left(TPY = \frac{(450 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county pop.}}{)} \right) \times EF \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Commercial/Institutional

$$\left(TPY = \frac{(24 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county pop.}}{)} \right) \times EF \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Industrial

$$\left(TPY = \frac{(160 \text{ tons in mfg SICs}}{(1000 \text{ mfg employees}} \times \frac{\text{\# employees}}{20\text{-}39)} \right) \times EF \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \times \text{county apportionment factor}$$

$$= TPY / (7 \times 52)$$

For the rest of Bullitt and Oldham Counties:

Residential

$$\left(TPY = \frac{(450 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county) x EF) x pop.}}{\text{pop.}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \right) \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Commercial/Institutional

$$\left(TPY = \frac{(24 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county) x EF x pop.}}{\text{pop.}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \right) \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Industrial

$$\left(TPY = \frac{(160 \text{ tons of mfg employees}}{1000 \text{ mfg employees}} \times \frac{\text{x \# employees) x EF x in mfg SICs 20-39}}{(\text{lbs}))} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \right) \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Open burning emissions are provided for Bullitt and Oldham Counties in Table 3-22. Manufacturing employee information is provided in Table 3-21 and rural population information is provided in Table 3-23.

Table 3-22
Summary of Emissions From
Open Burning of Solid Waste

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	112.02	0.31	317.39	0.87	22.40	0.06
Oldham	74.56	0.20	211.24	0.58	14.91	0.04
TOTAL	**186.58**	**0.51**	**528.63**	**1.45**	**37.31**	**0.10**

Table 3-23
2002 Rural Population

County	Rural Population
Bullitt	22,604
Oldham	17,145
TOTAL	**39,749**

3.4.4 Small Stationary Source Fossil Fuel Use

The category includes small boilers, furnaces, heaters, and other heating units too small to be considered point sources. A federal guidance document[1] indicates that it may not be worthwhile for an agency to perform the detailed procedures to calculate emissions for this entire fuel combustion category if: (1) its primary concern is updating the VOC inventory and (2) if an existing inventory already includes combustion. Since the division meets the aforementioned conditions it did not calculate emissions for this area source category.

3.4.5 Bioprocess Emissions Sources

Bioprocess emissions sources include those sources whose emissions result from biological processes (e.g. fermentation). Source categories include bakeries, breweries, distilleries, wineries, and silage storage.

3.4.5.1 Bakeries

The methodology used to estimate emissions from bakeries was prepared by Radian Corporation.[18] A review of *County Business Patterns*,[5] provided the number of bakeries listed under retail bakeries (SIC 546) and larger manufacturing bakeries (SIC 2051). For the purposes of this inventory, all bakeries in the county were considered area sources and their emissions were calculated using Radian's guidance. A factor of .155 tons VOC/yr/1000 population was applied to county populations. This activity was considered uniform year round and activity days per week were 6.[1]

The calculations used to determine source emissions from this category are as follows.

$$TPY = \frac{\text{Area Source Emissions}}{\left(\frac{.155 \text{ tons}}{1000 \text{ pop.}} \times \text{population}\right)} + \frac{\text{Point Source Emissions}}{\left(\left(\text{lbs produced} \times EF\right) \times \frac{1 \text{ ton}}{2000 \text{ lbs}}\right)}$$

$$TSD = TPY / (6 \times 52)$$

Bakery emissions are shown in Table 3-24. Population information necessary for calculating these emissions is found in Table 3-1.

Table 3-24
Summary of Emissions From Bakeries

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	9.89	0.03
Oldham	7.64	0.02
TOTAL	**17.53**	**0.05**

3.4.5.2 Breweries

A review of *County Business Patterns*[5] showed no breweries in the nonattainment area in Kentucky. Therefore, this category was not inventoried.

3.4.5.3 Wineries

Based on EPA guidance,[1] a review of *County Business Patterns*[5] showed no wineries located in the nonattainment area in Kentucky. Therefore, this category was not inventoried.

3.4.5.4 Distilleries

Emissions for this category are included in the point source portion of this inventory.

3.4.5.5 Silage Storage

EPA guidance[1] stated that this was not a required source category. Since emissions from silage would be typically during the winter months, this category was not inventoried.

3.4.6 Other Area Sources

Sources included in this category are miscellaneous combustion sources and leaking underground storage tanks.

3.4.6.1 Miscellaneous Combustion Sources

Several types of fires and burning activities potentially contribute to this subcategory. They are as follows:

(1) Forest Fires;

(2) Slash Burning and Prescribed Burning;

(3) Agricultural Burning;

(4) Structure Fires; and,

(5) Orchard Heaters.

The division calculated emissions for forest fires and structure fires. The remaining miscellaneous combustion activities were found not to be widespread in Kentucky and therefore were not addressed.

3.4.6.1.1 Forest Fires

A federal guidance document[1] provided the methodology the division used for calculating emissions for this area source category. This methodology involves estimating the amount of material consumed by multiplying the number of acres burned in each area examined by a fuel loading factor (i.e., material consumed per acre of land burned). A fuel loading factor of 6.6 tons of material consumed per acre burned and the number of acres burned in each area examined was obtained from the Kentucky Division of Forestry.[13] Appropriate emission factors from a federal reference document[2] are: 24 for Total Hydrocarbons (THC), 140 for CO, and 4 for NO_x. However, according to another federal reference document,[14] only 79.71 percent of the THC emissions derived from the above THC emission factor are reactive. Therefore, the VOC emission factor utilized for this area source category was 19.13. This VOC emission factor information is based on information derived from a federal reference document.[15] The emission factors are in units of pounds per ton of material burned.

Emissions per typical summer day for this area source category were calculated using a

federal guidance document.[1] The calculated annual tons of VOC emissions was divided by the product of the number of activity days per week and the number of weeks in a year. For forest fires no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 7. The calculations used to determine emissions from this category are as follows.

$$TPY = (\#\ of\ Acres\ Consumed\ (per\ County) \times Tons\ of\ Growth\ per\ Acre\ consumed) \times \frac{EF\ (lbs)}{} \times \frac{1\ ton}{2000\ lbs}$$

$$TSD = TPY / (7 \times 52)$$

Forest fire emissions are provided in Table 3-25. Additionally, acreage burned for individual areas is provided in Table 3-26.

Table 3-25
Summary of Emissions From
Forest Fires

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	0.69	0.00	5.08	0.01	0.15	0.00
Oldham	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	**0.69**	**0.00**	**5.08**	**0.01**	**0.15**	**0.00**

Table 3-26
2002 Acreage Burned By Forest Fires

County	Forest Fires Acres Burned
Bullitt	11
Oldham	0
TOTAL	**11**

3.4.6.1.2 Structure Fires

Federal guidance[1] provided the methodology the division used for calculating emissions for this area source category. This methodology involves estimating the amount of material consumed

by multiplying the number of structure fires occurring in each area examined by a fuel loading factor (i.e., material consumed per structure fire). A fuel loading factor of 6.8 tons of material consumed per fire was provided in a federal guidance document[1] and information on the number of structure fires which occurred in Kentucky in 2002 was derived by assuming an average of 6 fires per 1000 population in an area in accordance with Volume I guidance. Based on federal guidance,[1] the emission factors applied are: 11 for VOC, 60 for CO, and 1.4 for NO_x. The emission factors are in units of pounds per ton of material burned.

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC emissions were divided by the product of the number of activity days per week and the number of weeks in a year. For structure fires no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week were 7. The calculations used to estimate emissions from this category are as follows.

$$TPY = \left(\frac{6\ fires}{1000\ pop.} \times population\right) \times \left(6.8\ tons\ of\ material\ burned\ per\ fire\right) \times \left(EF\ (lbs)\right) \times \left(\frac{1\ ton}{2000\ lbs}\right)$$

$$TSD = TPY / (7 \times 52)$$

Structure fire emissions are provided in Table 3-27. The data used to calculate these emissions is located in Table 3-28.

Table 3-27
Summary of Emissions From
Structure Fires

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	14.32	0.04	78.13	0.21	1.82	0.01
Oldham	11.07	0.03	60.38	0.17	1.41	0.00
TOTAL	**25.39**	**0.07**	**138.51**	**0.38**	**3.23**	**0.01**

Table 3-28
Number of Structure Fires

County	Number of Structure Fires
Bullitt	383
Oldham	296
TOTAL	**679**

3.4.6.1.3 Slash Burning and Prescribed Burning

Information received from the Kentucky Division of Forestry[19] revealed that these activities are not widespread in Kentucky and emissions for this category were not inventoried.

3.4.6.1.4 Agricultural Burning

Information received from the Kentucky Division of Forestry[19] showed that this is not a widespread practice in Kentucky and emissions for this category were not inventoried.

3.4.6.1.5 Orchard Heaters

The use of orchard heaters is not common in Kentucky. Therefore, this category was not inventoried.

3.4.6.2 Leaking Underground Storage Tanks

Leaking underground storage tanks typically do not become quantifiable sources of VOC air emissions until excavation and remediation efforts are initiated. Remediation efforts vary widely depending upon the type of contaminant, magnitude of the leak and the extent of groundwater contamination, if any.

Information obtained from the Division of Waste Management shows no leaking underground storage tank remediation,[20] therefore no emissions were calculated.

Table 3-29
Summary of Area Source Emissions

Bullitt County

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	32.27	0.10				
Gasoline Transit	1.94	0.01				
Total Gas Unloading	181.53	0.63				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	35.09	0.13				
Surface Cleaning Degreasing	105.62	0.35				
Architectural Surface Coating	146.74	0.52				
Auto Refinishing	73.37	0.28				
Traffic Markings	15.95	0.06				
Graphic Arts	0.00	0.00				
Cutback Asphalt Paving	11.80	0.05				
Pesticide Application	15.68	0.07				
Commercial/Consumer Use	250.10	0.69				
POTW	0.24	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	12.54	0.03				
Total Onsite Incineration	2.30	0.01	81.21	0.22	14.89	0.04
Total Open Burning	112.02	0.31	317.39	0.87	22.40	0.06
Bakeries	9.89	0.03	0.00	0.00	0.00	0.00
Forest Fires	0.69	0.00	5.08	0.01	0.15	0.00
Structure Fires	14.32	0.04	78.13	0.21	1.82	0.01
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**1022.09**	**3.31**	**481.81**	**1.31**	**39.26**	**0.11**

Table 3-30
Summary of Area Source Emissions

Oldham County

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	16.55	0.05				
Gasoline Transit	1.24	0.00				
Total Gas Unloading	85.48	0.29				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	27.12	0.10				
Surface Cleaning Degreasing	81.63	0.26				
Architectural Surface Coating	113.41	0.41				
Auto Refinishing	56.71	0.22				
Traffic Markings	12.33	0.05				
Graphic Arts	32.05	0.12				
Cutback Asphalt Paving	9.12	0.04				
Pesticide Application	19.73	0.08				
Commercial/Consumer Use	193.30	0.53				
POTW	0.00	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	0.00	0.00				
Total Onsite Incineration	1.46	0.00	51.66	0.14	9.47	0.03
Total Open Burning	74.56	0.20	211.24	0.58	14.91	0.04
Bakeries	7.64	0.02	0.00	0.00	0.00	0.00
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00
Structure Fires	11.07	0.03	60.38	0.17	1.41	0.00
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**743.40**	**2.40**	**323.28**	**0.89**	**25.79**	**0.07**

Table 3-31
Summary of Area Source Emissions

Bullitt and Oldham Counties

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	48.82	0.15				
Gasoline Transit	3.18	0.01				
Total Gas Unloading	267.01	0.92				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	62.21	0.23				
Surface Cleaning Degreasing	187.25	0.61				
Architectural Surface Coating	260.15	0.93				
Auto Refinishing	130.08	0.50				
Traffic Markings	28.28	0.11				
Graphic Arts	32.05	0.12				
Cutback Asphalt Paving	20.92	0.09				
Pesticide Application	35.41	0.15				
Commercial/Consumer Use	443.40	1.22				
POTW	0.24	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	12.54	0.03				
Total Onsite Incineration	3.76	0.01	132.87	0.36	24.36	0.07
Total Open Burning	186.58	0.51	528.63	1.45	37.31	0.10
Bakeries	17.53	0.05	0.00	0.00	0.00	0.00
Forest Fires	0.69	0.00	5.08	0.01	0.15	0.00
Structure Fires	25.39	0.07	138.51	0.38	3.23	0.01
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**1765.49**	**5.71**	**805.09**	**2.20**	**65.05**	**0.18**

3.5 REFERENCES FOR SECTION 3

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4.0 NON-HIGHWAY EMISSIONS

4.1 INTRODUCTION

This section documents the development of the 2002 nonroad emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). Nonroad sources include motorized vehicles and equipment, which are normally not operated on public roadways to provide transportation. The study and regulation of nonroad emission sources were mandated by the Clean Air Act Amendments of 1990.

4.2 METHODOLOGY AND APPROACH

Nonroad emissions were calculated in accordance with EPA's Mobile Volume IV[1] and EPA's National Emissions Inventory (NEI) development guidance[5]. For this inventory, nonroad emissions have been divided into three categories. Separate emission categories include aircraft, locomotives, and other nonroad (i.e., Non-Highway) sources. Methodologies for each of these categories are discussed separately.

4.3 SUMMARY OF EMISSIONS

Table 4-1 summarizes the inventory results for the other nonroad (i.e., Non-Highway) source emissions. Tables 4-2 and 4-3 summarize emissions from aircrafts. Tables 4-5 and 4-6 summarize emissions from locomotives. Table 4-8 summarizes emissions from all non-highway mobile emission categories.

4.4 DISCUSSION OF NONROAD CATEGORIES

4.4.1 Other Nonroad (i.e., Non-Highway) Sources

Emissions for the other nonroad source categories (e.g., construction and agricultural equipment) were estimated using EPA's Nonroad Model (Core Model Version 2005a, February 2006) in accordance with EPA Region 4 direction[6] and EPA's NEI guidance[5]. As for inputs for the nonroad model RVP and temperature information was provided in accordance with EPA Volume IV guidance[1] and EPA Region 4 direction[6] (*See Appendix C for nonroad model output and Appendix D for more information on temperature determinations*).

The model provided county level ton per day (tpd) emission estimates for base year 2002 and

for the projection years of 2008, 2009, and 2018.

The emissions for this category are provided in Table 4-1.

Table 4-1
Summary of Emissions
Other Non-Highway Mobile Sources

County	Daily VOC Emissions (tons/day)	Daily CO Emissions (tons/day)	Daily NOx Emissions (tons/day)
Bullitt	1.67	11.61	1.21
Oldham	1.58	16.54	1.39
TOTAL	**3.25**	**28.15**	**2.60**

4.4.2 Aircraft Emissions

Emissions from aircraft have not been determined since neither Bullitt nor Oldham Counties have an airport.

4.4.3 Locomotives

Emissions for railroad locomotives within Bullitt and Oldham Counties were calculated based upon December 1997 line haul and yard emission factors[5]. EPA utilized these same emission factors in developing locomotive emissions for the 1999 National Emissions Inventory (NEI)[5]. EPA provided guidance to the Division in utilizing the newer locomotive emission factors[8].

Railroad locomotives used in the United States are primarily of two types: electric and diesel-electric. Electric locomotives are powered by electricity generated at stationary power plants and distributed by either a third rail or overhead catenary system. Emissions are produced only at the electrical generation plant, which is considered a point source and therefore not of interest here. Diesel-electric locomotives, on the other hand, use a diesel engine and an alternator or generator to produce the electricity required to power its traction motors. Emissions produced by these diesel engines are of interest in the non-highway emission inventory development. Emissions for hydrocarbons (HC), carbon monoxide (CO), oxides of nitrogen (NOx), sulfur dioxide (SO_2), and particulate matter (PM) from this source are covered in this chapter.

Railroads can be separated into three classes based on size: Class I, Class II, and Class III.

Class I railroads represent the largest railroad systems in the country. Because of their size, Class I railroads operate over a large geographic area. Also, they carry most of the interstate freight and carry most of the passenger service. They are required to keep detailed records of their operations and to report yearly to the Interstate Commerce Commission (ICC).

Class II and III railroads represent the remainder of the rail transportation system and generally operate within smaller, localized areas. These smaller railroads are not subject to the same reporting requirements, and their record-keeping may be less extensive. Also, their fleet of locomotives tends to be older, with the Class I railroads buying almost all of the new locomotives.

Locomotives within each of the Classes can perform two different types of operations: line haul and yard (or switch). Line haul locomotives generally travel between distant locations, such as from one city to another. Yard locomotives are primarily responsible for moving rail cars within a particular railway yard.

Overview of Recommended Inventory Methodology

4.4.3.1 Line Haul Locomotives

For Class I, II, and III line haul locomotives, emissions were calculated by multiplying the amount of fuel consumed in the inventory area by the appropriate emission factors.

Line Haul Locomotive

Inventory Area Emissions = Fuel Consumption x Emission Factors Fuel Consumption

Line haul locomotive fuel consumption information for Bullitt and Oldham Counties was supplied directly to the Division for Air Quality pursuant to a Division railroad questionnaire that was provided in July 2003 to all railroads operating in the ozone nonattainment area *(Please see a copy of the 2002 railroad questionnaire which is included in Appendix G).* The questionnaire also requested information regarding the number of yard locomotives operating in the nonattainment county.

Emission Factors - Line Haul

With the line haul fuel consumption information obtained from the questionnaire, emissions were determined by multiplying that value by the fleet average emission factors for each pollutant (converted to pounds per gallon of fuel burned (lbs/gal)). The EPA recommended default emission factors[8] that were utilized for all line haul locomotives are as follows.

Line Haul Locomotive Emission Factors

Pollutant	Emission Factor (g/gal)
HC	10
CO	26.6
NOx	270
PM	6.7

* g/gal emission factors converted to lbs/gal by multiplying the g/gal emission factor by .0022046.

4.4.3.2 Yard Locomotives

No yard locomotives were identified in the questionnaire, therefore no emissions were calculated.

Seasonal Considerations Line and Yard Locomotives

Based on consultation with James Hou[2], Region 4 EPA, during March 2006 and Volume IV guidance[1], activity for railroad locomotives is considered to be uniform throughout the year. Additionally, the number of days of operation was assumed to be 365. Therefore, typical summer day emissions for line haul and yard locomotives were derived by using the following equation.

Typical Summer Day Emissions (TSD) = Annual Locomotive Emissions (TYR) / 365 days

Converting from Total Hydrocarbons (THC) to Volatile Organic Compounds (VOC) For Line and Yard Locomotives

In accordance with Volume IV guidance, the following THC to VOC conversion factor was used to determine the VOC emissions for line and yard locomotives.

VOC Locomotive = THCFID Locomotive x 1.005

Emissions for line haul locomotives are provided in Table 4-2. Activity data (i.e., fuel consumed) used to calculate locomotive emissions can be found in Table 4-3. Total Non-Highway emissions are provided in Table 4-4 through Table 4-6.

Table 4-2
Summary of Emissions From Line Haul Locomotives

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	8.10	0.02	21.43	0.06	217.49	0.60
Oldham	3.20	0.01	8.48	0.02	86.06	0.24
TOTAL	**11.30**	**0.03**	**29.91**	**0.08**	**303.55**	**0.84**

Table 4-3
Locomotive Fuel Information

County	Line Haul Locomotive Fuel (Gallons)	Yard Locomotive Fuel (Gallons)
Bullitt	730,755	0
Oldham	289,165	0
TOTAL	**1,019,920**	**0**

Table 4-4
Summary of Emissions From Non-Highway Mobile Sources
Bullitt County

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	1.67	0.00	11.61	0.00	1.21
Locomotive	8.10	0.02	21.43	0.06	217.49	0.60
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	8.10	**1.69**	**21.43**	**11.67**	**217.49**	**1.81**

**Annual other non-highway emissions not reflected in Table 4-4.

Table 4-5
Summary of Emissions From Non-Highway Mobile Sources
Oldham County

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	1.58	0.00	16.54	0.00	1.39
Locomotive	3.20	0.01	8.48	0.02	86.06	0.24
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	3.20	**1.59**	**8.48**	**16.56**	**86.06**	**1.63**

**Annual other non-highway emissions not reflected in Table 4-5.

Table 4-6
Summary of Emissions From Non-Highway Mobile Sources
Bullitt and Oldham Counties

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	3.24	0.00	28.15	0.00	2.60
Locomotive	11.30	0.03	29.91	0.08	303.55	0.84
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	11.30	**3.27**	**29.91**	**28.23**	**303.55**	**3.44**

**Annual other non-highway emissions not reflected in Table 4-6.

4.5 REFERENCES FOR SECTION 4

1. U.S. Environmental Protection Agency, Procedures for the Emission Inventory Preparation, Volume IV: Mobile Sources, EPA-450/4-81-026d (Revised), U.S. EPA, Office of Mobile Sources, Ann Arbor, MI and Office of Air Quality Planning & Standards, RTP, NC, 1992.

2. E-mail communication, James Hou, US EPA, Region 4, to Joe Forgacs, Kentucky Division for Air Quality concerning procedures for inventorying other nonroad engine categories, March 6, 2006.

3. U.S. Department of Transportation, Federal Aviation Administration, Airport Activity Statistics of Certificated Route Air Carriers for 2000, Office of Management Systems, Washington, DC 20591.

4. Kentucky Transportation Cabinet, Aeronautics Division - 2002 Airport Master Records were obtained for general aviation, air taxi, and military aircraft.

5. U.S. Environmental Protection Agency, National Emissions Inventory (NEI) for 1999.

6. Communications with Dale Aspy, EPA Region 4, regarding nonroad emission inventory development, Summer and Fall 2002.

7. Communications with Dale Aspy, EPA Region 4, and Ken Petche, EPA OMS, regarding aircraft emission inventory development, Fall 2002.

8. Communications with Dale Aspy, EPA Region 4, and Chuck Moulis, EPA OMS, regarding locomotive emission inventory development, Fall 2002.

5.0 HIGHWAY VEHICLES

5.1 INTRODUCTION

This section documents the development of the 2002 highway mobile source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. The inventory addresses highway vehicles using gasoline and diesel. The inventory estimates are for a typical weekday during the summer ozone season (March - October), but more specifically for the summer quarter (i.e., June, July, and August).

The U.S. Environmental Protection Agency in conjunction with Sierra Research, Inc.[1], provided guidance for the preparation of this portion of the inventory.[2]

The Daily Vehicle Miles Traveled (DVMT) data was provided by the Kentucky Transportation Cabinet. Emission factors for highway vehicle classes were obtained from EPA's MOBILE6.2 highway mobile source emission factor estimation model. MOBILE6.2 model runs for the nonattainment area were performed by the Kentucky Division for Air Quality.

The highway vehicles inventory discussion is divided into three primary sections. Section 5.2 addresses the emissions estimation process using the MOBILE6.2 model.[3] Section 5.3 addresses the mobile emissions for Bullitt and Oldham Counties. Mobile source references are found in Section 5.4.

5.2 EMISSIONS ESTIMATION PROCESS

5.2.1 Overview of Highway Vehicle Emissions Estimates

Highway vehicle emission estimates for the nonattainment area were calculated using the DVMT estimates and EPA's mobile source emission factor estimation model - MOBILE6.2. The emission factors produced by the MOBILE6.2 model in grams/mile (g/mile) were multiplied by the DVMT estimates and appropriate unit conversions to generate total emissions. Emission estimates were calculated for VOC, NO_x, and CO. Estimates of VOC emissions were made for vehicle exhaust, evaporative, refueling, resting, and running losses. The only sources of NO_x and CO emissions were vehicle exhaust losses. Highway vehicle emission estimates were calculated for base year 2002 and the projection years of 2005, 2008, 2011, 2014, 2017, and 2020. The agency responsible for agencies principally involved in producing the highway vehicle emission estimates were the Divisions of Planning and Multimodal Programs from the Kentucky Transportation Cabinet

and the Kentucky Division for Air Quality. The Division of Planning provided the following mobile source information for Bullitt and Oldham Counties: (1) Road classifications, 2) Daily Vehicle Miles Traveled per road classification per county; and (3) Estimated average speeds for each road classification. The Division for Air Quality conducted all of the MOBILE6.2 model runs.

The inputs used to run the MOBILE6.2 model are described and presented in Section 5.2.2. Mobile source highway 2002 emissions are summarized in Table 5-1.

5.2.2 Inputs to MOBILE6.2

The chief inputs to the MOBILE6.2 model can be grouped into two main categories: the run section and the scenario section. Unless otherwise specified, national default values are used in the MOBILE6.2 model. The values used for each grouping in the area analysis are presented below and justified (*Please see Appendix D for mobile model input and output information).*

5.2.2.1 Run Section Data

The run section is similar to the one-time data section from the MOBILE5 model. In general, the two main values specified in the run section are the Reid Vapor Pressure for conventional gasoline (identified as "Fuel RVP") and the minimum and maximum summer temperatures. Minimum and maximum summer temperature data will vary depending on the area in Kentucky (*Please see Appendix D for temperature information*).

5.2.2.2 Scenario Section Data

The scenario section of Mobile6.2 allows the specification of data for several parameters that can be varied to evaluate many different mobile source emission scenarios. These parameters are described below:

Scenario Record - This parameter is used to indicate a title. For Kentucky's MOBILE6.2 model runs, the road classification is specified. The 12 road classifications (6 rural, 6 urban) that were used for the MOBILE5 model are also used for the MOBILE6.2 model runs.

Calendar Year - The calendar years for the analysis were 2002, 2008, 2009, and 2018.

Evaluation Month – A value of 7 was used to denote a summer MOBILE6.2 model run.

Average Speed - For each of the highway road classifications, a single speed was applied.

Speed data was supplied by the Kentucky Transportation Cabinet.

In the MOBILE6.2 model, there are four main speed categories: freeway, arterial, local, and ramp. For the 12 road classifications used in Kentucky's MOBILE6.2 model runs, each need to be assigned one of the four speed categories. The 12 road classifications are broken down into 3 freeway road classifications, 8 arterial road classifications, and 1 local road classification. It should be noted that Rural Local has a speed category of Arterial, as advised by EPA.

Specific default speed data are used for specific speed categories. Unless specific local speeds are available, the default local speed of 12.9 mile per hour is used.

For the average speed component, it should be noted that additional data are indicated for the 3 freeway road classifications.[4] The Daily Vehicle Miles Traveled (DVMT) distribution data are represented with 4 percentages: freeway, arterial, local, and ramp. For freeways, studies estimate that freeway and ramp represent 92% and 8% of all freeway VMT, respectively. Unless local data are available for the freeway category, the user needs to indicate "92.0 0.0 0.0 8.0".

Local data for VMT distribution was used. For example, the VMT distribution may be "92.4 0.0 0.0 7.6". Local data may even indicate that VMT distribution data are not needed for any of the freeway road classifications. The VMT distribution data will not be indicated in the Mobile6.2 input file for a freeway road classification unless DVMT data are associated with it. The Kentucky Transportation Cabinet has supplied local data for VMT distribution for this emissions inventory that is different from the default values of "92.0 0.0 0.0 8.0". Please see *Appendix D* for more-detailed highway mobile input file and DVMT information.

5.3 Summary of Highway Vehicle Emissions

Highway vehicle emission estimates were calculated by multiplying the Mobile6.2 generated emission factors by the DVMT. Typical Summer Day (TSD) emission totals are listed by county and summarized in Table 5-1.

TABLE 5-1
SUMMARY OF HIGHWAY MOBILE SOURCE EMISSIONS
Kentucky Portion of the Louisville Metropolitan Statistical Area

	Highway Mobile Source Emissions		
County	Total VOC TSD	Total CO TSD	Total NO_x TSD
Bullitt	3.69	45.82	7.48
Oldham	2.22	26.68	4.36
Total	5.91	72.50	11.84

5.4 REFERENCES FOR SECTION 5

1. Sierra Research, Inc., *MOBILE6 On-Road Motor Vehicle Emissions Model: 5-Day Training Course*, Atlanta, Georgia. February 4-8, 2002.

2. U.S. Environmental Protection Agency. *User's Guide to MOBILE6 – Mobile Source Emission Factor Model.* EPA420-R-02-001. Office of Mobile Sources, Ann Arbor, Michigan. January 2002.

3. U.S. Environmental Protection Agency, Instructions provided with the mobile model - MOBILE6.

4. U.S. Environmental Protection Agency, Dale Aspy, Region 4. Electronic mail correspondence with Joe Forgacs, Kentucky Division for Air Quality. Correction in MOBILE6 model to accurately reflect "Freeway" component. September 9, 2002.

6.0 BIOGENIC EMISSIONS

6.1 BACKGROUND

This section documents the development of the biogenic emissions for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. Biogenic emissions are those emissions that are the result of natural processes occurring in vegetation and soils, and marine ecosystems, as a result of geological activity in the form of geysers or volcanoes, as a result of meteorological activity such as lightning, and from fauna, such as ruminants and termites. In accordance with EPA guidance[1], the 2002 biogenic emissions presented were obtained and derived from county-specific biogenic emission estimates that EPA developed to assist states with the Consolidated Emissions Reporting Rule (CERR).

6.2 METHODOLOGY

EPA estimated the biogenic emissions for Kentucky counties using the Biogenic Emissions Inventory System - Version 3 (BEIS3.12). Annual biogenic emissions for Bullitt and Oldham Counties were obtained from the following EPA web site:
ftp://ftp.epa.gov/EmisInventory/prelim2002nei/biogenic/.

Daily biogenic emissions were determined as follows:

Summer Seasonal
Adjustment Factor = (Summer County Emissions (June-August) / Annual County Emissions) / .25

Summer Day Emissions = (Annual County Emissions * Summer Seasonal Adjustment Factor) /365
If applicable, for portions of counties the area apportionment factor provided in Table 1-1 was utilized to apportion emissions.

6.3 SUMMARY OF BIOGENIC EMISSIONS

6.3.1 Ozone Nonattainment Area

Biogenic emissions for Bullitt and Oldham Counties can be found in Table 6-1 and also in *Appendix E*. References for biogenic emissions are provided in Section 6.4.

TABLE 6-1
SUMMARY OF 2002 BIOGENIC EMISSIONS
KENTUCKY PORTION OF THE LOUISVILLE, IN-KY, AREA

COUNTY	VOC EMISSIONS (tons/yr)	VOC EMISSIONS (tons/day)	NOx EMISSIONS (tons/yr)	NOx EMISSIONS (tons/day)
Bullitt	5,435.71	33.81	106.34	0.41
Oldham	3,090.18	19.64	126.51	0.49
Total Emissions	**8,525.89**	**53.45**	**232.85**	**0.90**

6.4 REFERENCES FOR SECTION 6

1. U.S. Environmental Protection Agency. EPA's estimate of 2002 Biogenic Emissions to assist states with the Consolidated Emissions Reporting Rule (CERR). Biogenic annual emission estimates are available at: ftp://ftp.epa.gov/EmisInventory/prelim2002nei/biogenic/. For more information please contact Marc Houyoux, with EPA's Emission Factors and Inventory Group, at (919) 541-3649.

APPENDIX A

Point Source Emissions Inventory Information

2002 Point Source Survey Information

Sample Survey

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000
21

Sample Survey

DNumber: 21

EXINGTON, KY 40511

ttn: *Phone:* (859) 243-828 *Fax:* (859) 243-820

E-mail Address:

---

roup: 009

Operating Schedule						
Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	2	1	50

rocess Unit:

1 PAINT SPRAY BOOTH_____Tons Coating Mix Applied

---

roup: 016

Operating Schedule						
Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	24	5	50

ocess Unit:

)C PLTNG/BRNZE PLTNG_____Tons Plated

---

oup: 017

Operating Schedule						
Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	24	5	50

ocess Unit:

TIN PLTNG/RAWSTCK PRETRMT_____Tons Plated

---

oup: 018

Operating Schedule						
Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	24	5	50

ocess Unit:

ZINC PLATING_____Tons Plated

---

up: 019

Operating Schedule						
Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
5%	25%	25%	25%	24	5	50

ess Unit:

TIN PLTNG/RAWSTCK PRETRMT_____Tons Plated

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000

Sample Survey

21

:5

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	24	7	52

ocess Unit:

4 BOILERS, 22.5 MMBTU-ECH_____Million Cubic Feet Burned
#2 FUEL-STANDBY_____1000 Gallons Burned_____% ASH _____% SULFUR

---

up: 026

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	24	6	50

cess Unit:

CHROMATE WASTE WATERTREAT_____Tons Product

---

up: 027

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	24	6	50

ess Unit:

WASTE WATER TREAT_____Tons Product

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	24	6	50

ess Unit:

BONDAL BRONZE ELEC. PLAT._____Tons Plated

---

up: 029

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	18	5	50

ess Unit:

ELECTRODER PRETREATMENT_____Tons Processed

---

up: 030

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	18	5	50

ess Unit:

ELEC DEPOS WASH TUNNEL_____Tons Processed

---

up: 031

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	18	5	50

ess Unit:

POST RINSE_____Gallons Of Coating

Group: 032

Operating Schedule						
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	18	5	50

Process Unit:

1 BAKE OVEN_____Gallons Of Coating

Group: 033

Operating Schedule						
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	18	5	50

Process Unit:

1 BAKE OVEN_____Gallons Of Coating

Group: 036

Operating Schedule						
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	24	6	50

Process Unit:

1 MOLDING DEPARTMENT_____Tons Processed

Group: 037

Operating Schedule						
Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	16	5	50

Process Unit:

1 2 THERMOPLASTIC MOLDERS_____Tons Product

Group: 038

Operating Schedule						
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	24	5	50

Process Unit:

SLUDGE DRYER_____Gallons
HEAT SOURCE/SLUDGE DRYER_____Million Cubic Feet Burned

Group: 088

Operating Schedule						
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
5%	25%	25%	25%	24	7	50

Process Unit:

HOT ALKALINE DIP_____Tons Plated
ELECTROCLEAN_____Tons Plated

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000
21

Sample Survey

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o)39

Operating Schedule

Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	24	7	52

ocess Unit:

NITRIC ACID STRIP_____Tons Plated
NITRIC ACID STRIP_____Tons Plated
ALUMINUM SOAK CLEANER_____Tons Plated
ALUMINUM ETCH CLEANER_____Tons Plated

---

oup: 090

Operating Schedule

Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
25%	25%	25%	25%	24	7	52

ocess Unit:

ALUMINUM DEOXIDIZER_____Tons Plated
ACID DIP_____Tons Plated
BONDAL CF_____Tons Plated
BONDAL CF_____Tons Plated

---

oup: 091

Operating Schedule

Dec-Feb	*Mar-May*	*Jun-Aug*	*Sep-Nov*	*Hrs/Day*	*Days/Week*	*Wks/Yr*
2	25%	25%	25%	24	7	52

oc Unit:

TIN PLATERS_____Tons Plated
TIN PLATERS_____Tons Plated
COPPER PLATERS_____Tons Plated
COPPER PLATERS_____Tons Plated

reby certify that the information contained on the proceeding pages (number 1 through 4) and on the ached printout is accurate to the best of my knowledge. I understand that this information will be used to calculate l emission fee.

_____, *Company Official*

_____, *Official Title*

_____, *Date of Signature*

r to the attached printout for more detailed information, such as control equipment and emission factors.

attached printout is an informational copy; do not return it with this survey form. Please make a copy of this survey form to keep our records, and return the original in the enclosed envelope.

any questions regarding any of the data contained in the printout or this survey form, please contact Diana Hogan, na Moore, Kim Gray, Steve Hagedorn, or Andrea Wilson at (502) 573-3382.

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

	PLANT LOCATION
LEXINGTON, KY 40511	LEXINGTON, KY 40511

Attn: Phone: (859) 243-828 Fax Number: (859) 243-820

E-mailAddress:

Record Date	UTM Zone	UTM Horiz.	UTM Vert	Owner	Principal Product	Number Of Employees	Area In Acres
9901	16	717.4	4217.2	Facility Not Goverment Owned	ELEC EQUIP	1,500	26

State Plant Classification	SIC Code	SIC Description
X Minor/PTE < all major source levels	3613	Switchgear & Switchboard Apparatus

Program Code	Program Status
N NSR, No Public Part	O Operating
0 SIP Source	O Operating

PLANT EMISSION TOTALS IN TONS PER YEAR

POLLUTANT ID NUMBER	POLLUTANT DESCRIPTION	ACTUAL	UNCONTROLLED	TITLE V PTE	TOTAL POTENTIAL
1310732	SODIUM HYDROXIDE	3.94177	7.808437	20.60584	20.60584
16887006	CHLORIDE	0.0384	0.0384	0.0252	0.0252
7439921	LEAD	0	0	2.33e-4	2.33e-4
	METHANE	0.1524	0.1524	1.18206	1.18206
	PHOSPHORIC ACID	0.01409	0.02738	0.150698	0.150698
766[illegible]3	HYDROGEN FLUORIDE	0.007746	0.007746	0.088892	0.088892
7664417	AMMONIA	0.0528	0.0528	0.1232	0.1232
7664939	SULFURIC ACID	7.8802	7.8802	812.1734	812.1734
7697372	NITRIC ACID	0.007136	0.014272	0.202964	0.202964
7782505	CHLORINE	0.06408	0.06408	0.918565	0.918565
CO	CARBON MONOXIDE	1.778	1.778	14.08822	14.08822
HAP (SPC)	HAZARDOUS AIR POLLUTANTS	0.071826	0.071826	1.00769	1.00769
NO2	NITROGEN DIOXIDE	7.112	7.112	56.37286	56.37286
PM10	PARTICULATE MATTER 10	2.496004	2.803104	7.064387	7.064387
PT	TOTAL PARTICULATE MATTER	2.496004	2.803104	7.11989	7.11989
SO2	SULFUR DIOXIDE	0.03048	0.03048	2.498396	2.498396
VOC	VOLATILE ORGANIC COMPOUNDS	6.90479	6.90479	20.65978	20.65978

Plant Notes:
COMMENTS:

9.167 (PH) TELEPHONE EXTENSION IS 1653. THIS PER A PHONE CONVERSATION OF JUNE 16, 1989.

PLANT BACKGROUND NOTES:

0326 OPERATIONS SHOWN PREVIOUSLY AS POINTS 1 THRU 5 AND 11 HAVE BEEN MOVED AND THEREFORE ARE DELETED.

PERMIT EVAL & REVIEW NOTES:

0068 POINTS 7 AND 8 WILL CEASE OPERATIONS IN MARCH 1979

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

T 34 BOLIERS ACCOUNTED FOR UNDER PT 25.

9.036 C-78-50 REPLACEMENT OF EXISTING PAINT LINE

I SECTION NOTES:

).046 079-17 7/13/79

).080 APPLICATION FOR OPERATING PERMIT, POINTS 14 AND 15, WAS RECEIVED DECEMBER 11, 1978.

).294 4600 ELECTRODEPOSITION PAINT SYSTEM INSTALLATION.

).004 6984 CONSTRUCTION PERMIT FOR WASTE WATER TREATMENT-SPRAY BOOTH-AND ELECTROPLATING PERATION

L.190 B163/ADDITION OF A SLUDGE DRYER.

).274 E583/TRIVIAL ACTIVITY: REPLACEMENT OF A SALT SPRAY CHAMBER. THIS WILL NOT BE ENTERED ON THE S.

ATA PROCESSING NOTES

.121 F559/ PROPOSES THE UPGRADE OF THE PLATING SYSTEM. POINTS 88, 89, 90, 91 ARE TO BE STRUCTED AS ADDITIONAL PLATING LINES.

.0 /788/ADDITIONAL INFO REQUESTED, RESPONSE BY 3/17/86

.008 KYD006386056

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

SSIONS SUMMARY BY GROUP:

Group Description: POINT 009 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
M10	PARTICULATE MATTER 10	0.00525	0.0525	0.021	0.021	000002		
T	TOTAL PARTICULATE MATTER	0.00525	0.0525	0.021	0.021	000002		
OC	VOLATILE ORGANIC COMPOUNDS	0.169	0.169	0.676	0.676			

Group: 16 Group Description: POINT 016 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
664417	AMMONIA	0.0528	0.0528	0.1232	0.1232			
M10	PARTICULATE MATTER 10	0.01077	0.02154	0.02513	0.02513	000005		
T	TOTAL PARTICULATE MATTER	0.01077	0.02154	0.02513	0.02513	000005		

Group: 17 Group Description: POINT 017 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
64393	HYDROGEN FLUORIDE	0.000666	0.000666	0.009823	0.009823			
97372	NITRIC ACID	0.006085	0.01217	0.179484	0.179484			
82505	CHLORINE	0.02472	0.02472	0.364595	0.364595			
(SPC)	HAZARDOUS AIR POLLUTANTS	0.025386	0.025386	0.374418	0.374418			
	PARTICULATE MATTER 10	0.0543	0.1086	0.800871	0.800871	000011		
	TOTAL PARTICULATE MATTER	0.0543	0.1086	0.800871	0.800871	000011		

Group: 8 Group Description: POINT 018 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10732	SODIUM HYDROXIDE	3.866667	7.733334	13.04952	13.04952			
10	PARTICULATE MATTER 10	0.04688	0.09376	0.079107	0.079107	000008		
	TOTAL PARTICULATE MATTER	0.04688	0.09376	0.079107	0.079107	000008		

Group: Group Description: POINT 019 Record Date:

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
4382	PHOSPHORIC ACID	0.01329	0.02658	0.148423	0.148423			
4393	HYDROGEN FLUORIDE	0.00708	0.00708	0.079069	0.079069			
7372	NITRIC ACID	0.001051	0.002102	0.02348	0.02348			
2505	CHLORINE	0.03816	0.03816	0.426171	0.426171			
(SPC)	HAZARDOUS AIR POLLUTANTS	0.04524	0.04524	0.50524	0.50524			
0	PARTICULATE MATTER 10	0.10554	0.21108	1.178671	1.178671	000007		
	TOTAL PARTICULATE MATTER	0.10554	0.21108	1.178671	1.178671	000007		

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

oup Description Record Date
OINT 025

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
39921	LEAD	0	0	2.33e-4	2.33e-4			
28	METHANE	0.1524	0.1524	1.18206	1.18206			
	CARBON MONOXIDE	1.778	1.778	14.06822	14.06822			
P (SPC)	HAZARDOUS AIR POLLUTANTS	0	0	2.33e-4	2.33e-4			
2	NITROGEN DIOXIDE	7.112	7.112	56.27286	56.27286			
10	PARTICULATE MATTER 10	0.1524	0.1524	1.237563	1.237563			
	TOTAL PARTICULATE MATTER	0.1524	0.1524	1.293066	1.293066	000004		
2	SULFUR DIOXIDE	0.03048	0.03048	1.355353	1.355353	000011		
C	VOLATILE ORGANIC COMPOUNDS	0.14224	0.14224	1.114357	1.114357			

oup Group Description Record Date
POINT 026

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0732	SODIUM HYDROXIDE	0.064	0.064	6.390035	6.390035			
4939	SULFURIC ACID	4.0672	4.0672	406.0867	406.0867			

oup Group Description Record Date
POINT 027

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0	SODIUM HYDROXIDE	0.01095	0.01095	1.166182	1.166182			
4939	SULFURIC ACID	3.813	3.813	406.0867	406.0867			
2505	CHLORINE	0.0012	0.0012	0.127799	0.127799			
(SPC)	HAZARDOUS AIR POLLUTANTS	0.0012	0.0012	0.127799	0.127799			

oup Group Description Record Date
POINT 028

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0	PARTICULATE MATTER 10	0.04236	0.08472	0.092768	0.092768	000003		
	TOTAL PARTICULATE MATTER	0.04236	0.08472	0.092768	0.092768	000003		

oup Group Description Record Date
POINT 029

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
382	PHOSPHORIC ACID	0.0008	0.0008	0.002275	0.002275			
0	PARTICULATE MATTER 10	1.01632	1.01632	2.889906	2.889906	000005		
	TOTAL PARTICULATE MATTER	1.01632	1.01632	2.889906	2.889906	000005		

oup Group Description Record Date
POINT 030

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
	SODIUM HYDROXIDE	1.53e-4	1.53e-4	1.01e-4	1.01e-4			
	CHLORIDE	0.0384	0.0384	0.0252	0.0252			
	PARTICULATE MATTER 10	0.68	0.68	0.44625	0.44625	000005		
	TOTAL PARTICULATE MATTER	0.68	0.68	0.44625	0.44625	000005		

KENTUCKY DIVISION FOR AIR QUALITY
Sample Report KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

Group Description: POINT 031 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC	VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group 032 Group Description: POINT 032 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC	VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group 033 Group Description: POINT 033 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC	VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group 036 Group Description: POINT 036 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC	VOLATILE ORGANIC COMPOUNDS	5.25	5.25	6.565	6.565			

Group Description: POINT 037 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
M10	PARTICULATE MATTER 10	0.002	0.002	0.057998	0.057998	000007		
T	TOTAL PARTICULATE MATTER	0.002	0.002	0.057998	0.057998	000007		

Group Description: POINT 038 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
O	CARBON MONOXIDE	0	0	0.02	0.02			
O2	NITROGEN DIOXIDE	0	0	0.1	0.1			
M10	PARTICULATE MATTER 10	0	0	0.00453	0.00453	000011		
	TOTAL PARTICULATE MATTER	0	0	0.00453	0.00453	000011		
2	SULFUR DIOXIDE	0	0	1.143043	1.143043	000011		
C	VOLATILE ORGANIC COMPOUNDS	0	0	0.0053	0.0053			

Group Description: POINT 088 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10	PARTICULATE MATTER 10	0.028908	0.028908	0.011511	0.011511			
	TOTAL PARTICULATE MATTER	0.028908	0.028908	0.011511	0.011511			

Group Description: POINT 089 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
)	PARTICULATE MATTER 10	0.061057	0.061057	0.08364	0.08364			
	TOTAL PARTICULATE MATTER	0.061057	0.061057	0.08364	0.08364			

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

oup Description: INT 090 Record Date:

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10	PARTICULATE MATTER 10	0.167404	0.167404	0.080189	0.080189			
	TOTAL PARTICULATE MATTER	0.167404	0.167404	0.080189	0.080189			

up Group Description: POINT 091 Record Date:

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10	PARTICULATE MATTER 10	0.122815	0.122815	0.055253	0.055253			
	TOTAL PARTICULATE MATTER	0.122815	0.122815	0.055253	0.055253			

mpliance Data by Group

oup	Group Description	Program Compliance Status	Program Code	Program Status
)	POINT 009	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
;	POINT 016	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
'	POINT 017	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
;	POINT 018	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
)	POINT 019	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
;	POINT 025	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
;	POINT 026	1 In Violation-No Schedule	0 SIP Source	O Operating
		1 In Violation-No Schedule	N NSR, No Public Part	O Operating
	POINT 027	1 In Violation-No Schedule	0 SIP Source	O Operating
		1 In Violation-No Schedule	N NSR, No Public Part	O Operating
	POINT 028	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 029	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 030	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 031	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 032	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 033	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 036	4 In Compliance-Certification	0 SIP Source	O Operating
		4 In Compliance-Certification	N NSR, No Public Part	O Operating
	POINT 037	3 In Compliance-Inspection	0 SIP Source	O Operating
		3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 038	4 In Compliance-Certification	0 SIP Source	O Operating
	POINT 088	0 Unknown Compliance Status	0 SIP Source	O Operating
		0 Unknown Compliance Status	N NSR, No Public Part	O Operating
	POINT 089	0 Unknown Compliance Status	0 SIP Source	O Operating
		0 Unknown Compliance Status	N NSR, No Public Part	O Operating
	)INT 090	0 Unknown Compliance Status	0 SIP Source	O Operating
		0 Unknown Compliance Status	N NSR, No Public Part	O Operating
	POINT 091	0 Unknown Compliance Status	0 SIP Source	O Operating
		0 Unknown Compliance Status	N NSR, No Public Part	O Operating

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

AILS BY GROUP:

Description	Operating Schedule Hours/Day	Days/Week	Weeks/Year	% Annual Throughput Dec-Feb	Mar-May	Jun-Aug	Sep-Nov

PROCESS UNIT INFORMATION: Group

Process Number	Site Process Identifier	Fugitive Emissions	Sensitive Data	Source Type	Applicable Regulations	Boiler Capacity mmBTU/hr	Sulfur Content % Sulfur	Ash Content % Ash

STACK INFORMATION:

Stack Number	Stack Description	Stack Height (ft)	Stack Diameter (ft)	Vent Height (ft)	Stack Flow Rate (acfm)	Stack Velocity (ft/sec)	Stack /Vent Temperature (F)

OPERATING INFORMATION:

Process Description

SCC Codes and Description

Construction Date | Log Number | Maximum Hourly Operating Rate (SCC Units/hr) | Annual Process Rate (SCC Units/yr) | Maximum Operation (hrs/yr) | Maximum Operation Limitations

SCC Units

Pollutant Id and Description	Estimated Emissions Method	Emission Factor	Actual Ctrl. Eff.	Abatement Equiptment Code and Description	PTE Ctrl. Eff.	Estimated Emissions (tons/yr)	Emissions (No Control) (tons/yr)	Total Potential Emissions (tons/yr)	Permit Limits (tons/yr

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

2002 Point Source Emissions Bullitt and Oldham Counties

2002 Base Year Point Source Emissions					
			2002 Baseyear (in tpd)		
		SIC	VOC	CO	NOx
FACILITY NAME	**Plant I.D. #**	**Code**	**tpd**	**tpd**	**tpd**
KENTUCKY SOLITE CORP	21-029-00002	3295	0.13	0.10	0.32
JOSEPH SEAGRAM & SONS INC	21-029-00004	2085	3.33	0.00	0.00
JIM BEAM BRANDS CO	21-029-00005	2084	3.75	0.07	0.24
PUBLISHERS PRINTING CO	21-029-00019	2721	0.17	0.00	0.00
PUBLISHERS PRINTING CO	21-029-00032	2721	0.40	0.00	0.00
BULLITT COUNTY TOTAL			**7.78**	**0.17**	**0.56**
NEXANS MAGNET WIRE INC	21-185-00004	3357	0.55	0.01	0.01
OLDHAM COUNTY TOTAL			**0.55**	**0.01**	**0.01**
BULLITT AND OLDHAM TOTALS			**8.33**	**0.18**	**0.57**

2002 CO Point Source Emissions – Bullitt and Oldham Counties

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	CO	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	CO	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	CO	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	CO	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	CO	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
1	N	1	1	0.0	F	25	7	52	0.000	20.000000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	20.000000000000	0.00	0.00
3	N	1	1	0.0	F	25	7	52	0.000	5.000000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	0.600000000000	28.29	0.11
5	N	1	1	54.8	F	35	7	52	0.211	84.000000000000	2.30	0.01
MASAINAME											30.59	0.12
plant_id											30.59	0.12

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	CO	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
7	CO	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
8	CO	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
9	CO	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
10	CO	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
11	CO	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
12	CO	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
13	CO	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
14	CO	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
6	N	1	1	79.65	F	14	6	40	0.1858	35.000000000000	1.39	0.00
7	N	1	1	0.00	F	14	6	40	0.0000	17.000000000000	0.00	0.00
8	N	1	1	0.00	F	8	1	4	0.0000	35.000000000000	0.00	0.00
9	N	1	1	0.00	F	8	1	4	0.0000	5.000000000000	0.00	0.00
10	N	1	1	0.00	F	8	1	4	0.0000	5.000000000000	0.00	0.00
11	N	1	1	13997.00	F	14	6	40	32.6597	5.000000000000	34.99	0.08
12	N	1	1	0.25	F	14	6	40	0.0006	35.000000000000	0.00	0.00
13	N	1	1	8.38	F	25	2	52	0.0805	35.000000000000	0.15	0.00
14	N	1	1	0.00	F	25	2	52	0.0000	5.000000000000	0.00	0.00

MASAINAME
plant_id

36.53	0.08
36.53	0.08

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
15	CO	2102900019	029	00019	001	2	39000699	1.000000000000	0	80	1.000000000000	N
16	CO	2102900019	029	00019	002	2	39000699	1.000000000000	0	80	1.000000000000	N
17	CO	2102900019	029	00019	003	2	39000699	1.000000000000	0	80	1.000000000000	N
18	CO	2102900019	029	00019	004	4	39000699	1.000000000000	0	80	1.000000000000	N
19	CO	2102900019	029	00019	005	4	39000699	1.000000000000	0	80	1.000000000000	N
20	CO	2102900019	029	00019	006	4	39000699	1.000000000000	0	80	1.000000000000	N
21	CO	2102900019	029	00019	007	4	39000699	1.000000000000	0	80	1.000000000000	N
22	CO	2102900019	029	00019	008	4	39000699	1.000000000000	0	80	1.000000000000	N
23	CO	2102900019	029	00019	009	4	39000699	1.000000000000	0	80	1.000000000000	N
24	CO	2102900019	029	00019	010	4	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
15	N	1	1	3.1	F	25	5	52	0.011923	84.000000000000	0.13	0.00
16	N	1	1	2.2	F	25	5	52	0.008462	84.000000000000	0.09	0.00
17	N	1	1	3.4	F	25	5	52	0.013077	84.000000000000	0.14	0.00
18	N	1	1	0.0	F	25	5	52	0.000000	84.000000000000	0.00	0.00
19	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
20	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
21	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
22	N	1	1	2.4	F	25	5	52	0.009231	84.000000000000	0.10	0.00
23	N	1	1	4.0	F	25	5	52	0.015385	84.000000000000	0.17	0.00
24	N	1	1	1.2	F	25	5	52	0.004615	84.000000000000	0.05	0.00
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MASAINAME

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
plant_id											1.01	0.00

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	CO	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
25	N	1	1	2.58	F	25	5	52	0.009923	84.000000000000	0.11	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
26	CO	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
27	CO	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
28	CO	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N
29	CO	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
30	CO	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
31	CO	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N
32	CO	2102900032	029	00032	006	4	39000689	1.000000000000	0	80	1.000000000000	N
33	CO	2102900032	029	00032	007	4	39000689	1.000000000000	0	80	1.000000000000	N
34	CO	2102900032	029	00032	007	10	39000689	1.000000000000	0	80	1.000000000000	N
35	CO	2102900032	029	00032	007	14	39000689	1.000000000000	0	80	1.000000000000	N
36	CO	2102900032	029	00032	007	18	39000689	1.000000000000	0	80	1.000000000000	N
37	CO	2102900032	029	00032	008	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
26	N	1	1	0.00	F	25	5	52	0.000000	84.000000000000	0.00	0.00
27	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
28	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
29	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
30	N	1	1	5.40	F	25	5	52	0.020769	84.000000000000	0.23	0.00
31	N	1	1	0.21	F	25	5	52	0.000808	84.000000000000	0.01	0.00
32	N	1	1	5.47	F	25	5	52	0.021038	84.000000000000	0.23	0.00
33	N	1	1	2.36	F	25	5	52	0.009077	84.000000000000	0.10	0.00
34	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
35	N	1	1	0.00	F	25	5	52	0.000000	84.000000000000	0.00	0.00
36	N	1	1	2.81	F	25	5	52	0.010808	84.000000000000	0.12	0.00
37	N	1	1	2.53	F	25	7	52	0.006951	84.000000000000	0.11	0.00

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
38	CO	2102900032	029	00032	009	4	39000689	1.000000000000	0	80	1.000000000000	N
39	CO	2102900032	029	00032	010	1	39000689	1.000000000000	0	80	1.000000000000	N
40	CO	2102900032	029	00032	010	2	39001099	1.000000000000	0	80	1.000000000000	N
41	CO	2102900032	029	00032	011	1	39000689	1.000000000000	0	80	1.000000000000	N
42	CO	2102900032	029	00032	011	2	39001099	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
38	N	1	1	2.53	F	25	7	52	0.006951	84.000000000000	0.11	0.00
39	N	1	1	4.40	F	25	7	52	0.012088	84.000000000000	0.18	0.00
40	N	1	1	9.30	F	25	7	52	0.025549	2.100000000000	0.01	0.00
41	N	1	1	2.59	F	25	7	52	0.007115	84.000000000000	0.11	0.00
42	N	1	1	7.40	F	25	7	52	0.020330	2.100000000000	0.01	0.00
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MASAINAME											1.89	0.00
plant_id											1.89	0.00
COUNTYN											70.02	0.20
cnty_code											70.02	0.20

ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
43	CO		185	00004	001	2	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	38.13	F	25	7	52	0.10475	84.000000000000	1.60	0.00
44	CO		185	00004	006	1	10200601	1.000000000000	0	80	1.000000000000	N	N	1	1	44.93	F	25	7	52	0.12343	84.000000000000	1.89	0.01
45	CO		185	00004	017	2	10500206	1.000000000000	0	80	1.000000000000	N	N	1	1	2.66	F	25	7	52	0.00731	84.000000000000	0.11	0.00
46	CO		185	00004	020	3	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	11.82	F	25	7	52	0.03247	84.000000000000	0.50	0.00
MASAINAME																							4.10	0.01
plant_id																							4.10	0.01

POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
47	CO	2118500012	185	00012	001	1	10300602	1.000000000000	0	80	1.000000000000	N
48	CO	2118500012	185	00012	001	2	10300501	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
47	N	1	1	44.2700	F	25	7	52	0.12162	84.000000000000	1.86	0.01
48	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	CO	2118500012	185	00012	002	1	10300602	1.000000000000	0	80	1.000000000000	N
50	CO	2118500012	185	00012	002	2	10300501	1.000000000000	0	80	1.000000000000	N
51	CO	2118500012	185	00012	003	1	10300602	1.000000000000	0	80	1.000000000000	N
52	CO	2118500012	185	00012	003	2	10300501	1.000000000000	0	80	1.000000000000	N
53	CO	2118500012	185	00012	006	2	39000699	1.000000000000	0	80	1.000000000000	N
54	CO	2118500012	185	00012	007	1	40200801	1.000000000000	0	80	1.000000000000	N
55	CO	2118500012	185	00012	007	2	39000699	1.000000000000	0	80	1.000000000000	N
56	CO	2118500012	185	00012	008	1	10300602	1.000000000000	0	80	1.000000000000	N
57	CO	2118500012	185	00012	008	2	10300501	1.000000000000	0	80	1.000000000000	N
58	CO	2118500012	185	00012	009	1	10300602	1.000000000000	0	80	1.000000000000	N
59	CO	2118500012	185	00012	009	2	10300501	1.000000000000	0	80	1.000000000000	N
60	CO	2118500012	185	00012	010	1	20200102	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
49	N	1	1	44.2700	F	25	7	52	0.12162	84.000000000000	1.86	0.01
50	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00
51	N	1	1	44.2708	F	25	7	52	0.12162	84.000000000000	1.86	0.01
52	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00
53	N	1	1	51.3370	F	25	5	52	0.19745	20.000000000000	0.51	0.00
54	N	1	1	1.0000	F	25	5	52	0.00385	84.000000000000	0.04	0.00
55	N	1	1	51.3370	F	25	5	52	0.19745	20.000000000000	0.51	0.00
56	N	1	1	51.3370	F	25	7	52	0.14104	84.000000000000	2.16	0.01
57	N	1	1	0.0000	F	25	7	52	0.00000	5.000000000000	0.00	0.00
58	N	1	1	51.3370	F	25	7	52	0.14104	84.000000000000	2.16	0.01
59	N	1	1	0.0000	F	25	7	52	0.00000	5.000000000000	0.00	0.00
60	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS — 16:14 Wednesday, March 29, 2006 845
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	CO	2118500012	185	00012	010	2	20200102	1.000000000000	0	80	1.000000000000	N
62	CO	2118500012	185	00012	010	3	20200401	1.000000000000	0	80	1.000000000000	N
63	CO	2118500012	185	00012	010	4	20200102	1.000000000000	0	80	1.000000000000	N
64	CO	2118500012	185	00012	010	5	20200102	1.000000000000	0	80	1.000000000000	N
65	CO	2118500012	185	00012	010	6	20200102	1.000000000000	0	80	1.000000000000	N
66	CO	2118500012	185	00012	010	7	20200102	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
61	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
62	N	1	1	0.0000	F	25	7	26	0.00000	108.000000000000	0.00	0.00
63	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
64	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
65	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
66	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00

MASAINAME	10.99	0.05
plant_id	10.99	0.05
COUNTYN	15.09	0.06
cnty_code	15.09	0.06

ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
AREA												
POLLN												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
AREA											85.11	0.26
POLLN											85.11	0.26
											85.11	0.26

2002 NO_2 Point Source Emissions – Bullitt and Oldham Counties

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	NO2	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	NO2	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	NO2	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	NO2	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	NO2	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
1	N	1	1	0.0	F	25	7	52	0.000	100.000000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	100.000000000000	0.01	0.00
3	N	1	1	0.0	F	25	7	52	0.000	20.000000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	1.900000000000	89.59	0.34
5	N	1	1	54.8	F	35	7	52	0.211	100.000000000000	2.74	0.01
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MASAINAME											92.34	0.35
plant_id											92.34	0.35

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	NO2	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
7	NO2	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
8	NO2	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
9	NO2	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
10	NO2	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
11	NO2	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
12	NO2	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
13	NO2	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
14	NO2	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
6	N	1	1	79.65	F	14	6	40	0.1858	140.000000000000	5.58	0.01
7	N	1	1	0.00	F	14	6	40	0.0000	120.000000000000	0.00	0.00
8	N	1	1	0.00	F	8	1	4	0.0000	140.000000000000	0.00	0.00
9	N	1	1	0.00	F	8	1	4	0.0000	20.000000000000	0.00	0.00
10	N	1	1	0.00	F	8	1	4	0.0000	55.000000000000	0.00	0.00
11	N	1	1	13997.00	F	14	6	40	32.6597	14.000000000000	97.98	0.23
12	N	1	1	0.25	F	14	6	40	0.0006	140.000000000000	0.02	0.00
13	N	1	1	8.38	F	25	2	52	0.0805	140.000000000000	0.59	0.01
14	N	1	1	0.00	F	25	2	52	0.0000	20.000000000000	0.00	0.00
											104.17	0.25

MASAINAME
plant_id
104.17 0.25

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
15	NO2	2102900019	029	00019	001	2	39000699	1.000000000000	0	80	1.000000000000	N
16	NO2	2102900019	029	00019	002	2	39000699	1.000000000000	0	80	1.000000000000	N
17	NO2	2102900019	029	00019	003	2	39000699	1.000000000000	0	80	1.000000000000	N
18	NO2	2102900019	029	00019	004	4	39000699	1.000000000000	0	80	1.000000000000	N
19	NO2	2102900019	029	00019	005	4	39000699	1.000000000000	0	80	1.000000000000	N
20	NO2	2102900019	029	00019	006	4	39000699	1.000000000000	0	80	1.000000000000	N
21	NO2	2102900019	029	00019	007	4	39000699	1.000000000000	0	80	1.000000000000	N
22	NO2	2102900019	029	00019	008	4	39000699	1.000000000000	0	80	1.000000000000	N
23	NO2	2102900019	029	00019	009	4	39000699	1.000000000000	0	80	1.000000000000	N
24	NO2	2102900019	029	00019	010	4	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
15	N	1	1	3.1	F	25	5	52	0.011923	100.000000000000	0.16	0.00
16	N	1	1	2.2	F	25	5	52	0.008462	100.000000000000	0.11	0.00
17	N	1	1	3.4	F	25	5	52	0.013077	100.000000000000	0.17	0.00
18	N	1	1	0.0	F	25	5	52	0.000000	100.000000000000	0.00	0.00
19	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
20	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
21	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
22	N	1	1	2.4	F	25	5	52	0.009231	100.000000000000	0.12	0.00
23	N	1	1	4.0	F	25	5	52	0.015385	100.000000000000	0.20	0.00
24	N	1	1	1.2	F	25	5	52	0.004615	100.000000000000	0.06	0.00
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MASAINAME											1.24	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND

plant_id											1.24	0.00

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	NO2	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
25	N	1	1	2.58	F	25	5	52	0.009923	100.000000000000	0.13	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
26	NO2	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
27	NO2	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
28	NO2	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N
29	NO2	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
30	NO2	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
31	NO2	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N
32	NO2	2102900032	029	00032	006	4	39000689	1.000000000000	0	80	1.000000000000	N
33	NO2	2102900032	029	00032	007	4	39000689	1.000000000000	0	80	1.000000000000	N
34	NO2	2102900032	029	00032	007	10	39000689	1.000000000000	0	80	1.000000000000	N
35	NO2	2102900032	029	00032	007	14	39000689	1.000000000000	0	80	1.000000000000	N
36	NO2	2102900032	029	00032	007	18	39000689	1.000000000000	0	80	1.000000000000	N
37	NO2	2102900032	029	00032	008	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
26	N	1	1	0.00	F	25	5	52	0.000000	100.000000000000	0.00	0.00
27	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
28	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
29	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
30	N	1	1	5.40	F	25	5	52	0.020769	100.000000000000	0.27	0.00
31	N	1	1	0.21	F	25	5	52	0.000808	100.000000000000	0.01	0.00
32	N	1	1	5.47	F	25	5	52	0.021038	100.000000000000	0.27	0.00
33	N	1	1	2.36	F	25	5	52	0.009077	100.000000000000	0.12	0.00
34	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
35	N	1	1	0.00	F	25	5	52	0.000000	100.000000000000	0.00	0.00
36	N	1	1	2.81	F	25	5	52	0.010808	100.000000000000	0.14	0.00
37	N	1	1	2.53	F	25	7	52	0.006951	100.000000000000	0.13	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
38	NO2	2102900032	029	00032	009	4	39000689	1.000000000000	0	80	1.000000000000	N
39	NO2	2102900032	029	00032	010	1	39000689	1.000000000000	0	80	1.000000000000	N
40	NO2	2102900032	029	00032	010	2	39001099	1.000000000000	0	80	1.000000000000	N
41	NO2	2102900032	029	00032	011	1	39000689	1.000000000000	0	80	1.000000000000	N
42	NO2	2102900032	029	00032	011	2	39001099	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
38	N	1	1	2.53	F	25	7	52	0.006951	100.000000000000	0.13	0.00
39	N	1	1	4.40	F	25	7	52	0.012088	100.000000000000	0.22	0.00
40	N	1	1	9.30	F	25	7	52	0.025549	15.000000000000	0.07	0.00
41	N	1	1	2.59	F	25	7	52	0.007115	100.000000000000	0.13	0.00
42	N	1	1	7.40	F	25	7	52	0.020330	15.000000000000	0.06	0.00
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MASAINAME											2.36	0.00
plant_id											2.36	0.00
COUNTYN											200.11	0.60
cnty_code											200.11	0.60

ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------------------------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc ----------------------------

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
43	NO2		185	00004	001	2	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	38.13	F	25	7	52	0.10475	100.000000000000	1.91	0.01
44	NO2		185	00004	006	1	10200601	1.000000000000	0	80	1.000000000000	N	N	1	1	44.93	F	25	7	52	0.12343	100.000000000000	2.25	0.01
45	NO2		185	00004	017	2	10500206	1.000000000000	0	80	1.000000000000	N	N	1	1	2.66	F	25	7	52	0.00731	100.000000000000	0.13	0.00
46	NO2		185	00004	020	3	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	11.82	F	25	7	52	0.03247	100.000000000000	0.59	0.00
MASAINAME																							4.88	0.02
plant_id																							4.88	0.02

---------------------------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------------------------

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
47	NO2	2118500012	185	00012	001	1	10300602	1.000000000000	0	80	1.000000000000	N
48	NO2	2118500012	185	00012	001	2	10300501	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
47	N	1	1	44.2700	F	25	7	52	0.12162	100.000000000000	2.21	0.01
48	N	1	1	2.0000	F	25	7	52	0.00549	20.000000000000	0.02	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	NO2	2118500012	185	00012	002	1	10300602	1.000000000000	0	80	1.000000000000	N
50	NO2	2118500012	185	00012	002	2	10300501	1.000000000000	0	80	1.000000000000	N
51	NO2	2118500012	185	00012	003	1	10300602	1.000000000000	0	80	1.000000000000	N
52	NO2	2118500012	185	00012	003	2	10300501	1.000000000000	0	80	1.000000000000	N
53	NO2	2118500012	185	00012	006	2	39000699	1.000000000000	0	80	1.000000000000	N
54	NO2	2118500012	185	00012	007	1	40200801	1.000000000000	0	80	1.000000000000	N
55	NO2	2118500012	185	00012	007	2	39000699	1.000000000000	0	80	1.000000000000	N
56	NO2	2118500012	185	00012	008	1	10300602	1.000000000000	0	80	1.000000000000	N
57	NO2	2118500012	185	00012	008	2	10300501	1.000000000000	0	80	1.000000000000	N
58	NO2	2118500012	185	00012	009	1	10300602	1.000000000000	0	80	1.000000000000	N
59	NO2	2118500012	185	00012	009	2	10300501	1.000000000000	0	80	1.000000000000	N
60	NO2	2118500012	185	00012	010	1	20200102	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
49	N	1	1	44.2700	F	25	7	52	0.12162	100.000000000000	2.21	0.01
50	N	1	1	2.0000	F	25	7	52	0.00549	20.000000000000	0.02	0.00
51	N	1	1	44.2708	F	25	7	52	0.12162	100.000000000000	2.21	0.01
52	N	1	1	2.0000	F	25	7	52	0.00549	27.800000000000	0.03	0.00
53	N	1	1	51.3370	F	25	5	52	0.19745	100.000000000000	2.57	0.01
54	N	1	1	1.0000	F	25	5	52	0.00385	100.000000000000	0.05	0.00
55	N	1	1	51.3370	F	25	5	52	0.19745	100.000000000000	2.57	0.01
56	N	1	1	51.3370	F	25	7	52	0.14104	100.000000000000	2.57	0.01
57	N	1	1	0.0000	F	25	7	52	0.00000	20.000000000000	0.00	0.00
58	N	1	1	51.3370	F	25	7	52	0.14104	100.000000000000	2.57	0.01
59	N	1	1	0.0000	F	25	7	52	0.00000	20.000000000000	0.00	0.00
60	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	NO2	2118500012	185	00012	010	2	20200102	1.000000000000	0	80	1.000000000000	N
62	NO2	2118500012	185	00012	010	3	20200401	1.000000000000	0	80	1.000000000000	N
63	NO2	2118500012	185	00012	010	4	20200102	1.000000000000	0	80	1.000000000000	N
64	NO2	2118500012	185	00012	010	5	20200102	1.000000000000	0	80	1.000000000000	N
65	NO2	2118500012	185	00012	010	6	20200102	1.000000000000	0	80	1.000000000000	N
66	NO2	2118500012	185	00012	010	7	20200102	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
61	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
62	N	1	1	0.0000	F	25	7	26	0.00000	489.000000000000	0.00	0.00
63	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
64	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
65	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
66	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00

MASAINAME	17.03	0.07
plant_id	17.03	0.07
COUNTYN	21.91	0.09
cnty_code	21.91	0.09

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
AREA												
POLLN												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
AREA											222.02	0.69
POLLN											222.02	0.69
											222.02	0.69

2002 VOC Point Source Emissions – Bullitt and Oldham Counties

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	VOC	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	VOC	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	VOC	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	VOC	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	VOC	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
1	N	1	1	0.0	F	25	7	52	0.000	2.800000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	2.800000000000	0.00	0.00
3	N	1	1	0.0	F	25	7	52	0.000	0.200000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	0.780000000000	36.78	0.14
5	N	1	1	54.8	F	35	7	52	0.211	5.500000000000	0.15	0.00
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MASAINAME											36.93	0.14
plant_id											36.93	0.14

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00004 MASAINAME=Four Roses Distillery Inc ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	VOC	2102900004	029	00004	002	1	30201003	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
6	N	1	1	375688	F	25	7	52	1032.11	6.900000000000	1296.12	3.56

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
7	VOC	2102900005	029	00005	002	1	39999999	1.000000000000	0	80	1.000000000000	N
8	VOC	2102900005	029	00005	003	1	30201002	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
7	N	1	1	62829.00	F	14	7	40	125.66	0.014000000000	0.44	0.00
8	N	1	1	17742.70	F	14	6	40	41.40	2.600000000000	23.07	0.05

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
9	VOC	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
10	VOC	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
11	VOC	2102900005	029	00005	005	1	30201003	1.000000000000	0	80	1.000000000000	N
12	VOC	2102900005	029	00005	006	1	39999996	1.000000000000	0	80	1.000000000000	N
13	VOC	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
14	VOC	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
15	VOC	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
16	VOC	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
17	VOC	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
18	VOC	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
19	VOC	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N
20	VOC	2102900005	029	00005	010	1	39999996	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
9	N	1	1	79.65	F	14	6	40	0.19	2.800000000000	0.11	0.00
10	N	1	1	0.00	F	14	6	40	0.00	3.000000000000	0.00	0.00
11	N	1	1	385115.00	F	25	7	52	1058.01	6.900000000000	1328.65	3.65
12	N	1	1	12171.40	F	25	7	52	33.44	2.150000000000	13.08	0.04
13	N	1	1	0.00	F	8	1	4	0.00	2.800000000000	0.00	0.00
14	N	1	1	0.00	F	8	1	4	0.00	0.200000000000	0.00	0.00
15	N	1	1	0.00	F	8	1	4	0.00	0.280000000000	0.00	0.00
16	N	1	1	13997.00	F	14	6	40	32.66	0.070000000000	0.49	0.00
17	N	1	1	0.25	F	14	6	40	0.00	2.800000000000	0.00	0.00
18	N	1	1	8.38	F	25	2	52	0.08	2.800000000000	0.01	0.00
19	N	1	1	0.00	F	25	2	52	0.00	0.200000000000	0.00	0.00
20	N	1	1	100105.90	F	25	7	52	275.02	0.638000000000	31.93	0.09

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND

MASAINAME 1397.78 3.83
plant_id 1397.78 3.83

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
21	VOC	2102900019	029	00019	001	1	40500401	1.000000000000	99.5	80	0.204000000000	N
22	VOC	2102900019	029	00019	001	2	39000699	1.000000000000	0.0	80	1.000000000000	N
23	VOC	2102900019	029	00019	001	3	39999999	1.000000000000	99.5	80	0.204000000000	N
24	VOC	2102900019	029	00019	001	4	39999995	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
21	N	1	1	47.7	F	25	5	52	0.18346	768.000000000000	3.74	0.01
22	N	1	1	3.1	F	25	5	52	0.01192	5.500000000000	0.01	0.00
23	N	1	1	3.2	F	25	5	52	0.01231	117.000000000000	0.04	0.00
24	N	1	1	976.0	F	25	5	52	3.75385	6.600000000000	3.22	0.01

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	VOC	2102900019	029	00019	002	1	40500401	1.000000000000	99.5	80	0.204000000000	N
26	VOC	2102900019	029	00019	002	2	39000699	1.000000000000	0.0	80	1.000000000000	N
27	VOC	2102900019	029	00019	002	3	39999999	1.000000000000	99.5	80	0.204000000000	N
28	VOC	2102900019	029	00019	002	4	39999995	1.000000000000	0.0	80	1.000000000000	N
29	VOC	2102900019	029	00019	003	1	40500401	1.000000000000	99.5	80	0.204000000000	N
30	VOC	2102900019	029	00019	003	2	39000699	1.000000000000	0.0	80	1.000000000000	N
31	VOC	2102900019	029	00019	003	3	39999999	1.000000000000	99.5	80	0.204000000000	N
32	VOC	2102900019	029	00019	003	4	39999995	1.000000000000	0.0	80	1.000000000000	N
33	VOC	2102900019	029	00019	004	1	39999999	1.000000000000	99.5	80	0.204000000000	N
34	VOC	2102900019	029	00019	004	2	39999995	1.000000000000	0.0	80	1.000000000000	N
35	VOC	2102900019	029	00019	004	3	40500401	1.000000000000	99.5	80	0.204000000000	N
36	VOC	2102900019	029	00019	004	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
25	N	1	1	15.8	F	25	5	52	0.06077	768.000000000000	1.24	0.00
26	N	1	1	2.2	F	25	5	52	0.00846	5.500000000000	0.01	0.00
27	N	1	1	1.0	F	25	5	52	0.00385	117.000000000000	0.01	0.00
28	N	1	1	324.0	F	25	5	52	1.24615	6.600000000000	1.07	0.00
29	N	1	1	42.6	F	25	5	52	0.16385	768.000000000000	3.34	0.01
30	N	1	1	3.4	F	25	5	52	0.01308	5.500000000000	0.01	0.00
31	N	1	1	3.7	F	25	5	52	0.01423	117.000000000000	0.04	0.00
32	N	1	1	93.0	F	25	5	52	0.35769	6.600000000000	0.31	0.00
33	N	1	1	0.0	F	25	5	52	0.00000	531.900000000000	0.00	0.00
34	N	1	1	0.0	F	25	5	52	0.00000	6.600000000000	0.00	0.00
35	N	1	1	0.0	F	25	5	52	0.00000	768.000000000000	0.00	0.00
36	N	1	1	0.0	F	25	5	52	0.00000	5.500000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
37	VOC	2102900019	029	00019	005	1	39999995	1.000000000000	0.0	80	1.000000000000	N
38	VOC	2102900019	029	00019	005	2	39999999	1.000000000000	99.5	80	0.204000000000	N
39	VOC	2102900019	029	00019	005	3	40500401	1.000000000000	99.5	80	0.204000000000	N
40	VOC	2102900019	029	00019	005	4	39000699	1.000000000000	0.0	80	1.000000000000	N
41	VOC	2102900019	029	00019	006	1	40500401	1.000000000000	99.5	80	0.204000000000	N
42	VOC	2102900019	029	00019	006	2	39999999	1.000000000000	99.5	80	0.204000000000	N
43	VOC	2102900019	029	00019	006	3	39999995	1.000000000000	0.0	80	1.000000000000	N
44	VOC	2102900019	029	00019	006	4	39000699	1.000000000000	0.0	80	1.000000000000	N
45	VOC	2102900019	029	00019	007	1	40500401	1.000000000000	99.5	80	0.204000000000	N
46	VOC	2102900019	029	00019	007	2	39999999	1.000000000000	99.5	80	0.204000000000	N
47	VOC	2102900019	029	00019	007	3	39999995	1.000000000000	0.0	80	1.000000000000	N
48	VOC	2102900019	029	00019	007	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
37	N	1	1	1302.0	F	25	5	52	5.00769	6.600000000000	4.30	0.02
38	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
39	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
40	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00
41	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
42	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
43	N	1	1	1302.0	F	25	5	52	5.00769	6.600000000000	4.30	0.02
44	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00
45	N	1	1	39.8	F	25	5	52	0.15308	768.000000000000	3.12	0.01
46	N	1	1	2.7	F	25	5	52	0.01038	117.000000000000	0.03	0.00
47	N	1	1	814.0	F	25	5	52	3.13077	6.600000000000	2.69	0.01
48	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	VOC	2102900019	029	00019	008	1	40500401	1.000000000000	99.5	80	0.204000000000	N
50	VOC	2102900019	029	00019	008	2	39999999	1.000000000000	99.5	80	0.204000000000	N
51	VOC	2102900019	029	00019	008	3	39999995	1.000000000000	0.0	80	1.000000000000	N
52	VOC	2102900019	029	00019	008	4	39000699	1.000000000000	0.0	80	1.000000000000	N
53	VOC	2102900019	029	00019	009	1	40500401	1.000000000000	99.5	80	0.204000000000	N
54	VOC	2102900019	029	00019	009	2	39999999	1.000000000000	99.5	80	0.204000000000	N
55	VOC	2102900019	029	00019	009	3	39999995	1.000000000000	0.0	80	1.000000000000	N
56	VOC	2102900019	029	00019	009	4	39000699	1.000000000000	0.0	80	1.000000000000	N
57	VOC	2102900019	029	00019	010	1	40500401	1.000000000000	99.5	80	0.204000000000	N
58	VOC	2102900019	029	00019	010	2	39999999	1.000000000000	99.5	80	0.204000000000	N
59	VOC	2102900019	029	00019	010	3	39999995	1.000000000000	0.0	80	1.000000000000	N
60	VOC	2102900019	029	00019	010	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
49	N	1	1	19.9	F	25	5	52	0.07654	768.000000000000	1.56	0.01
50	N	1	1	0.7	F	25	5	52	0.00269	531.940000000000	0.04	0.00
51	N	1	1	407.0	F	25	5	52	1.56538	6.600000000000	1.34	0.01
52	N	1	1	2.4	F	25	5	52	0.00923	5.500000000000	0.01	0.00
53	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
54	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
55	N	1	1	385.0	F	25	5	52	1.48077	2.200000000000	0.42	0.00
56	N	1	1	4.0	F	25	5	52	0.01538	5.500000000000	0.01	0.00
57	N	1	1	19.9	F	25	5	52	0.07654	768.000000000000	1.56	0.01
58	N	1	1	0.7	F	25	5	52	0.00269	531.940000000000	0.04	0.00
59	N	1	1	407.0	F	25	5	52	1.56538	6.600000000000	1.34	0.01
60	N	1	1	1.2	F	25	5	52	0.00462	5.500000000000	0.00	0.00

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND

MASAINAME 48.92 0.19
plant_id 48.92 0.19

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	VOC	2102900032	029	00032	001	1	40500401	1.000000000000	95	80	0.240000000000	N
62	VOC	2102900032	029	00032	001	2	39999995	1.000000000000	0	80	1.000000000000	N
63	VOC	2102900032	029	00032	001	3	39999994	1.000000000000	95	80	0.240000000000	N
64	VOC	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
61	N	1	1	25.00	F	25	5	52	0.0962	758.000000000000	2.27	0.01
62	N	1	1	362.00	F	25	5	52	1.3923	6.600000000000	1.19	0.00
63	N	1	1	2313.00	F	25	5	52	8.8962	1.050000000000	0.29	0.00
64	N	1	1	2.58	F	25	5	52	0.0099	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
65	VOC	2102900032	029	00032	002	1	40500401	1.000000000000	95	80	0.240000000000	N
66	VOC	2102900032	029	00032	002	2	39999995	1.000000000000	0	80	1.000000000000	N
67	VOC	2102900032	029	00032	002	3	39999994	1.000000000000	95	80	0.240000000000	N
68	VOC	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
69	VOC	2102900032	029	00032	002	5	40500401	1.000000000000	95	80	0.240000000000	N
70	VOC	2102900032	029	00032	002	6	39999995	1.000000000000	0	80	1.000000000000	N
71	VOC	2102900032	029	00032	002	7	39999994	1.000000000000	95	80	0.240000000000	N
72	VOC	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
73	VOC	2102900032	029	00032	002	9	40500401	1.000000000000	95	80	0.240000000000	N
74	VOC	2102900032	029	00032	002	10	39999995	1.000000000000	0	80	1.000000000000	N
75	VOC	2102900032	029	00032	002	11	39999994	1.000000000000	95	80	0.240000000000	N
76	VOC	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
65	N	1	1	0.00	F	25	5	52	0.0000	758.000000000000	0.00	0.00
66	N	1	1	0.00	F	25	5	52	0.0000	6.600000000000	0.00	0.00
67	N	1	1	0.00	F	25	5	52	0.0000	0.730000000000	0.00	0.00
68	N	1	1	0.00	F	25	5	52	0.0000	5.500000000000	0.00	0.00
69	N	1	1	49.90	F	25	5	52	0.1919	758.000000000000	4.54	0.02
70	N	1	1	723.00	F	25	5	52	2.7808	6.600000000000	2.39	0.01
71	N	1	1	10551.00	F	25	5	52	40.5808	0.730000000000	0.92	0.00
72	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00
73	N	1	1	59.90	F	25	5	52	0.2304	758.000000000000	5.45	0.02
74	N	1	1	868.00	F	25	5	52	3.3385	6.600000000000	2.86	0.01
75	N	1	1	12662.00	F	25	5	52	48.7000	0.730000000000	1.11	0.00
76	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
77	VOC	2102900032	029	00032	003	1	40500401	1.000000000000	95	80	0.240000000000	N
78	VOC	2102900032	029	00032	003	2	39999995	1.000000000000	0	80	1.000000000000	N
79	VOC	2102900032	029	00032	003	3	39999994	1.000000000000	95	80	0.240000000000	N
80	VOC	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
81	VOC	2102900032	029	00032	004	1	40500401	1.000000000000	95	80	0.240000000000	N
82	VOC	2102900032	029	00032	004	2	39999994	1.000000000000	95	80	0.240000000000	N
83	VOC	2102900032	029	00032	004	3	39999995	1.000000000000	0	80	1.000000000000	N
84	VOC	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
85	VOC	2102900032	029	00032	005	1	40500401	1.000000000000	95	80	0.240000000000	N
86	VOC	2102900032	029	00032	005	2	39999994	1.000000000000	95	80	0.240000000000	N
87	VOC	2102900032	029	00032	005	3	39999995	1.000000000000	0	80	1.000000000000	N
88	VOC	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
77	N	1	1	59.90	F	25	5	52	0.2304	758.000000000000	5.45	0.02
78	N	1	1	868.00	F	25	5	52	3.3385	6.600000000000	2.86	0.01
79	N	1	1	12662.00	F	25	5	52	48.7000	0.730000000000	1.11	0.00
80	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00
81	N	1	1	89.80	F	25	5	52	0.3454	758.000000000000	8.17	0.03
82	N	1	1	18993.00	F	25	5	52	73.0500	0.730000000000	1.66	0.01
83	N	1	1	1302.00	F	25	5	52	5.0077	6.600000000000	4.30	0.02
84	N	1	1	5.40	F	25	5	52	0.0208	5.500000000000	0.01	0.00
85	N	1	1	4.20	F	25	5	52	0.0162	758.000000000000	0.38	0.00
86	N	1	1	886.00	F	25	5	52	3.4077	0.730000000000	0.08	0.00
87	N	1	1	61.00	F	25	5	52	0.2346	6.600000000000	0.20	0.00
88	N	1	1	0.21	F	25	5	52	0.0008	5.500000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
89	VOC	2102900032	029	00032	006	1	40500401	1.000000000000	95.0	80	0.240000000000	N
90	VOC	2102900032	029	00032	006	2	39999994	1.000000000000	95.0	80	0.240000000000	N
91	VOC	2102900032	029	00032	006	3	39999995	1.000000000000	0.0	80	1.000000000000	N
92	VOC	2102900032	029	00032	006	4	39000689	1.000000000000	0.0	80	1.000000000000	N
93	VOC	2102900032	029	00032	007	1	40500401	1.000000000000	95.0	80	0.240000000000	N
94	VOC	2102900032	029	00032	007	2	39999994	1.000000000000	95.0	80	0.240000000000	N
95	VOC	2102900032	029	00032	007	3	39999995	1.000000000000	0.0	80	1.000000000000	N
96	VOC	2102900032	029	00032	007	4	39000689	1.000000000000	0.0	80	1.000000000000	N
97	VOC	2102900032	029	00032	007	7	40500401	1.000000000000	95.0	80	0.240000000000	N
98	VOC	2102900032	029	00032	007	8	39999994	1.000000000000	95.0	80	0.240000000000	N
99	VOC	2102900032	029	00032	007	9	39999995	1.000000000000	0.0	80	1.000000000000	N
100	VOC	2102900032	029	00032	007	10	39000689	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
89	N	1	1	87.80	F	25	5	52	0.3377	758.000000000000	7.99	0.03
90	N	1	1	16962.00	F	25	5	52	65.2385	0.730000000000	1.49	0.01
91	N	1	1	1139.00	F	25	5	52	4.3808	6.600000000000	3.76	0.01
92	N	1	1	5.47	F	25	5	52	0.0210	5.500000000000	0.02	0.00
93	N	1	1	34.60	F	25	5	52	0.1331	758.000000000000	3.15	0.01
94	N	1	1	8481.00	F	25	5	52	32.6192	0.730000000000	0.74	0.00
95	N	1	1	571.00	F	25	5	52	2.1962	6.600000000000	1.88	0.01
96	N	1	1	2.36	F	25	5	52	0.0091	5.500000000000	0.01	0.00
97	N	1	1	75.90	F	25	5	52	0.2919	758.000000000000	6.90	0.03
98	N	1	1	16962.00	F	25	5	52	65.2385	0.730000000000	1.49	0.01
99	N	1	1	1139.00	F	25	5	52	4.3808	6.600000000000	3.76	0.01
100	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
101	VOC	2102900032	029	00032	007	11	40500401	1.000000000000	95.0	80	0.240000000000	N
102	VOC	2102900032	029	00032	007	12	39999994	1.000000000000	95.0	80	0.240000000000	N
103	VOC	2102900032	029	00032	007	13	39999995	1.000000000000	0.0	80	1.000000000000	N
104	VOC	2102900032	029	00032	007	14	39000689	1.000000000000	0.0	80	1.000000000000	N
105	VOC	2102900032	029	00032	007	15	40500401	1.000000000000	95.0	80	0.240000000000	N
106	VOC	2102900032	029	00032	007	16	39999994	1.000000000000	95.0	80	0.240000000000	N
107	VOC	2102900032	029	00032	007	17	39999995	1.000000000000	0.0	80	1.000000000000	N
108	VOC	2102900032	029	00032	007	18	39000689	1.000000000000	0.0	80	1.000000000000	N
109	VOC	2102900032	029	00032	008	1	40500401	1.000000000000	95.0	80	0.240000000000	N
110	VOC	2102900032	029	00032	008	2	39999994	1.000000000000	66.5	80	0.468000000000	N
111	VOC	2102900032	029	00032	008	3	39999995	1.000000000000	0.0	80	1.000000000000	N
112	VOC	2102900032	029	00032	008	4	39000689	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
101	N	1	1	0.00	F	25	5	52	0.0000	758.000000000000	0.00	0.00
102	N	1	1	0.00	F	25	5	52	0.0000	0.730000000000	0.00	0.00
103	N	1	1	0.00	F	25	5	52	0.0000	6.600000000000	0.00	0.00
104	N	1	1	0.00	F	25	5	52	0.0000	5.500000000000	0.00	0.00
105	N	1	1	25.50	F	25	5	52	0.0981	758.000000000000	2.32	0.01
106	N	1	1	10566.00	F	25	5	52	40.6385	0.730000000000	0.93	0.00
107	N	1	1	688.00	F	25	5	52	2.6462	6.600000000000	2.27	0.01
108	N	1	1	2.81	F	25	5	52	0.0108	5.500000000000	0.01	0.00
109	N	1	1	128.20	F	25	7	52	0.3522	758.000000000000	11.66	0.03
110	N	1	1	12627.00	F	25	7	52	34.6896	2.480000000000	7.33	0.02
111	N	1	1	550.00	F	25	7	52	1.5110	2.145600000000	0.59	0.00
112	N	1	1	2.53	F	25	7	52	0.0070	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
113	VOC	2102900032	029	00032	009	1	40500401	1.000000000000	95.0	80	0.240000000000	N
114	VOC	2102900032	029	00032	009	2	39999994	1.000000000000	66.5	80	0.468000000000	N
115	VOC	2102900032	029	00032	009	3	39999995	1.000000000000	0.0	80	1.000000000000	N
116	VOC	2102900032	029	00032	009	4	39000689	1.000000000000	0.0	80	1.000000000000	N
117	VOC	2102900032	029	00032	010	1	39000689	1.000000000000	0.0	80	1.000000000000	N
118	VOC	2102900032	029	00032	010	2	39001099	1.000000000000	0.0	80	1.000000000000	N
119	VOC	2102900032	029	00032	011	1	39000689	1.000000000000	0.0	80	1.000000000000	N
120	VOC	2102900032	029	00032	011	2	39001099	1.000000000000	0.0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
113	N	1	1	120.50	F	25	7	52	0.3310	758.000000000000	10.96	0.03
114	N	1	1	12627.00	F	25	7	52	34.6896	0.200000000000	0.59	0.00
115	N	1	1	440.00	F	25	7	52	1.2088	2.145600000000	0.47	0.00
116	N	1	1	2.53	F	25	7	52	0.0070	5.500000000000	0.01	0.00
117	N	1	1	4.40	F	25	7	52	0.0121	5.500000000000	0.01	0.00
118	N	1	1	9.30	F	25	7	52	0.0255	0.600000000000	0.00	0.00
119	N	1	1	2.59	F	25	7	52	0.0071	5.500000000000	0.01	0.00
120	N	1	1	7.40	F	25	7	52	0.0203	0.600000000000	0.00	0.00
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MASAINAME											113.65	0.38
plant_id											113.65	0.38

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
COUNTYN											2893.40	8.10
cnty_code											2893.40	8.10

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
121	VOC		185	00004	001	1	40201503	1.000000000000	90	80	0.280000000000	N
122	VOC		185	00004	001	2	40201001	1.000000000000	90	80	0.280000000000	N
123	VOC		185	00004	004	1	40299998	1.000000000000	0	80	1.000000000000	N
124	VOC		185	00004	004	2	39999995	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
121	N	1	1	379.05	F	25	7	52	1.041	2000.000000000000	106.13	0.29
122	N	1	1	38.13	F	25	7	52	0.105	5.500000000000	0.03	0.00
123	N	1	1	55.25	F	25	7	52	0.152	9.185190000000	0.25	0.00
124	N	1	1	304.07	F	25	7	52	0.835	8.350000000000	1.27	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
125	VOC		185	00004	006	1	10200601	1.000000000000	0	80	1.000000000000	N
126	VOC		185	00004	007	1	40299998	1.000000000000	0	80	1.000000000000	N
127	VOC		185	00004	010	1	40201503	1.000000000000	98	80	0.216000000000	N
128	VOC		185	00004	012	1	40201503	1.000000000000	95	80	0.240000000000	N
129	VOC		185	00004	013	1	40201503	1.000000000000	97	80	0.224000000000	N
130	VOC		185	00004	015	1	40201503	1.000000000000	96	80	0.232000000000	N
131	VOC		185	00004	017	1	40201503	1.000000000000	96	80	0.232000000000	N
132	VOC		185	00004	017	2	10500206	1.000000000000	90	80	0.280000000000	N
133	VOC		185	00004	018	1	40201503	1.000000000000	97	80	0.224000000000	N
134	VOC		185	00004	019	1	40201503	1.000000000000	98	80	0.216000000000	N
135	VOC		185	00004	019	2	40201599	1.000000000000	0	80	1.000000000000	N
136	VOC		185	00004	020	1	40201503	1.000000000000	90	80	0.280000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
125	N	1	1	44.93	F	25	7	52	0.123	5.500000000000	0.12	0.00
126	N	1	1	182073.00	F	25	7	52	500.201	0.000600000000	0.05	0.00
127	N	1	1	161.55	F	25	7	52	0.444	2000.000000000000	34.89	0.10
128	N	1	1	0.00	F	25	7	52	0.000	2000.000000000000	0.00	0.00
129	N	1	1	37.11	F	25	7	52	0.102	2000.000000000000	8.31	0.02
130	N	1	1	74.61	F	25	7	52	0.205	2000.000000000000	17.31	0.05
131	N	1	1	168.87	F	25	7	52	0.464	2000.000000000000	39.18	0.11
132	N	1	1	2.66	F	25	7	52	0.007	5.500000000000	0.00	0.00
133	N	1	1	50.28	F	25	7	52	0.138	2000.000000000000	11.26	0.03
134	N	1	1	38.30	F	25	7	52	0.105	2000.000000000000	8.27	0.02
135	N	1	1	15.16	F	25	7	52	0.042	2000.000000000000	15.16	0.04
136	N	1	1	20.53	F	25	7	52	0.056	2000.000000000000	5.75	0.02

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
137	VOC		185	00004	020	2	40201599	1.000000000000	0	80	1.000000000000	N
138	VOC		185	00004	020	3	40201001	1.000000000000	90	80	0.280000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
137	N	1	1	15.16	F	25	7	52	0.042	2000.000000000000	15.16	0.04
138	N	1	1	11.82	F	25	7	52	0.032	5.500000000000	0.01	0.00
MASAINAME											263.15	0.72
plant_id											263.15	0.72

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
139	VOC	2118500012	185	00012	001	1	10300602	1.000000000000	0	80	1.000000000000	N
140	VOC	2118500012	185	00012	001	2	10300501	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
139	N	1	1	44.2700	F	25	7	52	0.12162	5.500000000000	0.12	0.00
140	N	1	1	2.0000	F	25	7	52	0.00549	0.340000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
141	VOC	2118500012	185	00012	002	1	10300602	1.000000000000	0	80	1.000000000000	N
142	VOC	2118500012	185	00012	002	2	10300501	1.000000000000	0	80	1.000000000000	N
143	VOC	2118500012	185	00012	003	1	10300602	1.000000000000	0	80	1.000000000000	N
144	VOC	2118500012	185	00012	003	2	10300501	1.000000000000	0	80	1.000000000000	N
145	VOC	2118500012	185	00012	004	1	40200501	1.000000000000	0	80	1.000000000000	N
146	VOC	2118500012	185	00012	004	2	40200601	1.000000000000	0	80	1.000000000000	N
147	VOC	2118500012	185	00012	005	1	40200501	1.000000000000	0	80	1.000000000000	N
148	VOC	2118500012	185	00012	005	2	40200601	1.000000000000	0	80	1.000000000000	N
149	VOC	2118500012	185	00012	006	1	40200801	1.000000000000	0	80	1.000000000000	N
150	VOC	2118500012	185	00012	006	2	39000699	1.000000000000	0	80	1.000000000000	N
151	VOC	2118500012	185	00012	007	1	40200801	1.000000000000	0	80	1.000000000000	N
152	VOC	2118500012	185	00012	007	2	39000699	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
141	N	1	1	44.2700	F	25	7	52	0.12162	5.500000000000	0.12	0.00
142	N	1	1	2.0000	F	25	7	52	0.00549	0.340000000000	0.00	0.00
143	N	1	1	44.2708	F	25	7	52	0.12162	5.500000000000	0.12	0.00
144	N	1	1	2.0000	F	25	7	52	0.00549	0.340000000000	0.00	0.00
145	N	1	1	1.0000	F	25	5	52	0.00385	840.000000000000	0.42	0.00
146	N	1	1	0.0000	F	25	5	52	0.00000	1320.000000000000	0.00	0.00
147	N	1	1	1.0000	F	25	5	52	0.00385	840.000000000000	0.42	0.00
148	N	1	1	0.0000	F	25	5	52	0.00000	1320.000000000000	0.00	0.00
149	N	1	1	1.0000	F	25	5	52	0.00385	82.057800000000	0.04	0.00
150	N	1	1	51.3370	F	25	5	52	0.19745	3.840000000000	0.10	0.00
151	N	1	1	1.0000	F	25	5	52	0.00385	17.000000000000	0.01	0.00
152	N	1	1	51.3370	F	25	5	52	0.19745	3.380000000000	0.09	0.00

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
153	VOC	2118500012	185	00012	008	1	10300602	1.000000000000	0	80	1.000000000000	N
154	VOC	2118500012	185	00012	008	2	10300501	1.000000000000	0	80	1.000000000000	N
155	VOC	2118500012	185	00012	009	1	10300602	1.000000000000	0	80	1.000000000000	N
156	VOC	2118500012	185	00012	009	2	10300501	1.000000000000	0	80	1.000000000000	N
157	VOC	2118500012	185	00012	010	1	20200102	1.000000000000	0	80	1.000000000000	N
158	VOC	2118500012	185	00012	010	2	20200102	1.000000000000	0	80	1.000000000000	N
159	VOC	2118500012	185	00012	010	3	20200401	1.000000000000	0	80	1.000000000000	N
160	VOC	2118500012	185	00012	010	4	20200102	1.000000000000	0	80	1.000000000000	N
161	VOC	2118500012	185	00012	010	5	20200102	1.000000000000	0	80	1.000000000000	N
162	VOC	2118500012	185	00012	010	6	20200102	1.000000000000	0	80	1.000000000000	N
163	VOC	2118500012	185	00012	010	7	20200102	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
153	N	1	1	51.3370	F	25	7	52	0.14104	5.500000000000	0.14	0.00
154	N	1	1	0.0000	F	25	7	52	0.00000	0.340000000000	0.00	0.00
155	N	1	1	51.3370	F	25	7	52	0.14104	5.500000000000	0.14	0.00
156	N	1	1	0.0000	F	25	7	52	0.00000	0.340000000000	0.00	0.00
157	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00
158	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00
159	N	1	1	0.0000	F	25	7	26	0.00000	13.000000000000	0.00	0.00
160	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00
161	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00
162	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00
163	N	1	1	0.0000	F	25	7	26	0.00000	51.200000000000	0.00	0.00

ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
MASAINAME											1.72	0.00
plant_id											1.72	0.00
COUNTYN											264.87	0.72
cnty_code											264.87	0.72
AREA											3158.27	8.82
POLLN											3158.27	8.82
											3158.27	8.82

Jefferson County Point Source Emissions Including 2002

Louisville Metro APCD **04/10/2006 GLF/DSF**

2003 Emissions from APCD SAMS point sources. Projection method adapted from APCD 1999 and 2001 emission inventories.

CORRECTED FINAL ALT 2 (2002 = Proj 2003) **Jefferson County, KY Summer Day Point Source Emissions**		**VOC 2002**	**VOC 2003**	**VOC 2005**	**VOC 2008**	**VOC 2011**	**VOC 2014**	**VOC 2017**	**VOC 2020**
Tons Per Summer Day	**Totals:**	23.62	23.62	23.62	23.55	23.33	23.15	22.96	22.74
Plant ID	**Plant Name**								
0001	CARBIDE INDUSTRIES LLC	1.33	1.33	1.33	1.33	1.31	1.30	1.29	1.28
0002	ALLIED DRUM SERVICES	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12
0004	ALLIED READY-MIX, FRANKFORT AVE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0011	AMERICAN SYNTHETIC RUBBER	1.14	1.14	1.14	1.13	1.12	1.11	1.10	1.09
0014	ALCAN ALUMINUM CORP	0.61	0.61	0.61	0.60	0.59	0.58	0.58	0.57
0015	REYNOLDS METALS, LAM PLANT	0.30	0.30	0.30	0.29	0.29	0.28	0.28	0.28
0016	ANDERSON WOOD PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0019	KENT FEEDS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0020	QUIKRETE - KENTUCKY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0025	BLATZ PAINT	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0026	BLUEGRASS COOPERAGE	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
0028	BORDEN CHEMICAL CO	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14
0029	NORTH AMERICAN GALVANIZING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	BRIDGES SMITH & COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0031	BROWN-FORMAN DISTIL, HOWARD ST	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0034	CALDWELL TANKS	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0036	SUD-CHEMIE, WEST PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0041	CENTRAL STATE HOSPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0042	SUD-CHEMIE, SOUTH PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0044	CISSELL MANUFACTURING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0047	CONCO INC	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
0049	JEFFERSON SMURFIT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0051	CORHART REFRACTORIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0053	COURIER JOURNAL & TIMES	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0059	CHEMCENTRAL/LOUISVILLE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0060	KOSMOS CEMENT CO	0.50	0.50	0.50	0.51	0.51	0.51	0.51	0.51
0061	BIOPRODUCTS, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0062	E I DUPONT DE NEMOURS & CO	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0072	FORD MOTOR CO, LOU ASSY PLT	1.89	1.89	1.89	1.89	1.87	1.86	1.84	1.82
0073	FORD MOTOR CO, KY TRUCK PLT	2.36	2.36	2.36	2.35	2.33	2.31	2.29	2.27
0074	PRODUCER FEEDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0079	GENERAL SHALE PROD	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0082	NOVEON INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0084	BP AMOCO	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
0086	ENGLEHARD CORP, HARSHAW CHEM	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0088	HAZELWOOD ICF/MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0094	HY-KLAS PAINTS INC	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0102	JELLICO CHEMICAL CO	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0103	KELLEY TECHNICAL COATINGS	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0107	INDEPENDENT CONCRETE PIPE CO OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0109	KENTUCKY MFG COMPANY	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26
0110	KENTUCKY METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0115	SWIFT & COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0119	NATIONAL TOBACCO CO	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0125	**ANNUAL NOx - LOU GAS & ELEC, PADDY'S RUN**								
0125	**DAILY NOx - LOU GAS & ELEC, PADDY'S RUN**								
0125	**OTHER - LOU GAS & ELEC, PADDY'S RUN**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0126	**ANNUAL NOx - LOU GAS & ELEC, CANE RUN**								
0126	**DAILY NOx - LOU GAS & ELEC, CANE RUN**								
0126	**OTHER - LOU GAS & ELEC, CANE RUN**	**0.16**	**0.16**	**0.17**	**0.14**	**0.13**	**0.13**	**0.13**	**0.12**
0127	**ANNUAL NOx - LOU GAS & ELEC, MILL CREEK**								
0127	**DAILY NOx - LOU GAS & ELEC, MILL CREEK**								
0127	**OTHER - LOU GAS & ELEC, MILL CREEK**	**0.44**	**0.44**	**0.43**	**0.47**	**0.46**	**0.46**	**0.46**	**0.43**
0132	LOUISVILLE LUMBER & MILLWORK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0133	LOUISVILLE PAVING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0143	MARATHON OIL, LOU TERM	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09
0144	MARCUS PAINT COMPANY	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0145	ROGERS GROUP, AVOCA RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0148	LOU MED CENTER STEAM PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0149	MSD, MORRIS FORMAN PLANT	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01
0150	RIVERSIDE PAVING COMPANY	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0152	COLOR CORP OF AMERICA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0160	NATIONAL PRODUCTS COMPANY LLC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0167	UNITED DISTIL, STITZEL-WELLER	0.38	0.38	0.38	0.37	0.37	0.36	0.36	0.35
0168	PPG ARCH FINISHES, ENTERPRISE	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12
0172	PHILIP MORRIS, LMCP	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0174	PORCELAIN METALS CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0175	PPG ARCH FINISHES, 13TH ST	0.19	0.19	0.19	0.19	0.18	0.18	0.18	0.18
0179	PROGRESS PAINT COMPANY	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0185	AKZO NOBEL RESINS	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
0186	REYNOLDS METALS, FOIL PLANT	2.66	2.65	2.65	2.62	2.58	2.55	2.51	2.47
0187	ECKART ALUMINUM	0.26	0.26	0.26	0.26	0.25	0.25	0.24	0.24
0189	ROHM & HAAS KENTUCKY INC	0.34	0.34	0.34	0.34	0.33	0.33	0.33	0.32

0191	KINDRED HOSPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0193	STONE CONTAINER CORP	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
0206	SOUTHERN GRAPHIC SYSTEMS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0214	CHEVRON USA, LOU TERM	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10
0220	THORTON TRANSPORTATION INC	0.22	0.22	0.23	0.24	0.25	0.26	0.27	0.28
0221	ULRICH CHEMICAL INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0222	TRANSMONTAIGNE TERMINALING, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0223	TEXAS GAS TRANSMISSION	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0225	CITGO PETROLEUM CORP	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08
0227	SYPRIS TECHNOLOGIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0233	CHALLENGER LIFTS	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0242	SOUTHERN BAPTIST SEMINARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0243	HEAVEN HILL DISTILLERIES	2.42	2.41	2.39	2.36	2.32	2.28	2.24	2.20
0244	BROWN-FORMAN DISTIL, EARLY TIMES	2.47	2.46	2.44	2.41	2.37	2.33	2.28	2.24
0246	ASHLAND CHEMICAL CO	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
0251	ALLIED READY-MIX, CANE RUN RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0262	LAMINATING SERVICES INC	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0276	LANNING CHEMICAL CO	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0283	ZEON CHEMICALS KY, INC	0.26	0.26	0.26	0.26	0.26	0.25	0.25	0.25
0288	WIRECRAFTERS, INC	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0290	COMMERCIAL PAVERS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0291	GOLDEN FOODS INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0294	APPLIED SURFACE TECHNOLOGY/ELECTROFIN	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0296	LOU & JEFF CO. RIVERPORT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0299	BEECHMONT PRESS INC	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0317	HESCO PARTS CORP.	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
0322	COMPONENT FINISHING UNL	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05
0323	KENTUCKY-INDIANA LUMBER COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0328	GRIFFIN AND COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0333	V. G. REED & SONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0335	BUILDERS METAL SUPPLY INC	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0338	SCHULER MACHINE & TOOL COMPANY	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0341	MILLER OIL COMPANY	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0350	GREIF BROTHERS CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0357	TRI-STATE PLATING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0363	FIBA TECHNOLOGIES INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0376	AGI MEDIA PACKAGING	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0377	INDUSTRIAL FIBERGLASS SYSTEMS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0386	BOHN FIBERGLASS INDUSTRIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0415	FLYNN BROTHERS CONTRACTING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0426	SULLIVAN SCREEN PRINT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0434	CLIFFORDS INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

0437	AMER BLUEGRASS MARBLE CO	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0439	ACTION GRAPHICS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0440	NELSON BOONE COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0447	AIRGUARD INDUSTRIES INC	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0459	POLYONE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0460	CARDINAL KITCHENS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0461	FLORIDA DISTILLERS	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12
0465	UNIVERSAL MINERALS INTERNATIONAL INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0476	HOSTMANN-STEINBERG	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0481	SERVICE WELDING & MACHINE CO	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
0495	BROWN CULLEN COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0519	HOFFMAN TRAILER COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0529	UNIVERSAL UNIFORMS INC	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0531	IVY HILL CORP	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0532	MGMT)	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0553	POWERSCREEN USA (DBA TEREX) LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0556	LANTECH INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0559	NEFF PACKAGING	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0564	UNITED PARCEL SERVICE	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
0566	RUSSTECH ADMIXTURES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0586	VIVID IMPACT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0592	DECO PAPER PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0601	PACKAGING UNLIMITED	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0615	BOSTIK FINDLEY INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0617	GATEWAY PRESS	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07
0622	SOLAE LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0626	CARDINAL ALUMINUM, PLANT #3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0627	SUPERIOR HARDWOODS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0628	GOHMANN ASPHALT, OUTER LOOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0631	SUPERIOR SOLVENTS & CHEMICALS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0638	MERRICK PRINTING CO	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0662	WHAYNE SUPPLY CO	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0668	LOU GAS & ELEC, WATERSIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0707	SERVICE WELDING AND MACHINE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0711	PALMER PRODUCTS	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
0712	TBELL DEVELOPMENT CO LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0716	BAPTIST HOSPITAL EAST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0730	CARDINAL ALUMINUM, PLANT #1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0738	LOUISVILLE TIN & STOVE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0740	CONE SOLVENTS INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0741	MARATHON ASHLAND, LOU TERM	0.13	0.13	0.13	0.14	0.15	0.15	0.16	0.16
0745	WYNN STARR FOODS OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0751	INLAND CONTAINER CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0754	VERMONT AMER, MULTI-METALS	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0760	CARITAS MEDICAL CENTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0775	PREMIUM FOIL PRODUCTS	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
0776	ZOELLER CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0785	RIVER ROAD TERMINAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0805	STRY LENKOFF	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0808	D D WILLIAMSON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0811	FETTER PRINTING CO	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
0815	PARROT CLEANERS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0818	BOX USA GROUP INC.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0842	FRITO-LAY, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0846	SOUTHERN STANDARD CARTONS	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0852	UNIV OF LOU, BELKNAP CAMPUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0853	VETERANS ADMIN MED CEN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0857	ANDERSON PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0870	G E APPLIANCE PARK	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0885	SHOREWOOD PACKAGING CORP	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11
0908	VOLK CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0911	JETT-A-WAY CLEANERS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0912	COIT DRAPERY	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0923	HIGHLAND CLEANERS	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05
0933	BARBOUR BROTHERS CLEANERS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0958	FASHION CLEANERS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0984	PURITAN UNIFORM RENTAL	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
0989	SAM MEYER FORMAL WEAR	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
1006	AUTO TRUCK AND FIBERGLASS OF LOUISVILLE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1012	HALL'S COLLISION CENTER	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1034	A L HANSEN PAINT & METAL SHOP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1056	RAMCO LEASING INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1061	BILL COLLINS FORD INCORPORATED	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1125	LACROSS ENTERPRISES INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1127	INSTANT PRODUCTS INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1128	HAMILTON PRINTING COMPANY	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1146	PAPA JOHN'S SUPPORT SERVICES	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1148	NIEMCO FABRICATORS INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1157	PARALLEL PRODUCTS	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
1173	RJF INTERNATIONAL CORP	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
1178	PARTS UNLIMITED INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1197	LOUISVILLE PLATE GLASS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1200	MATSUDA INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1216	UNITED DEFENSE	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

1225	ATKEMIX TEN INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1231	FORTH TECHNOLOGIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1239	WEYERHAUSER INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1248	LOU GAS & ELEC, ZORN STA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1259	DUPONT DOW ELASTOMERS	0.90	0.90	0.90	0.89	0.88	0.88	0.87	0.86
1264	ZEOCHEM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1294	ATOFINA	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
1299	ART ETC INC	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1333	OXY VINYLS	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12
1338	APPLIED SURFACE TECH/FISHER TANK LININGS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1354	PAPERCONE CORPORATION	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1365	COVENANT INDUSTRIES INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1374	TRANFLO TERMINAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1381	SPORTPAINT INC PLANT 3	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11
1401	SPORTPAINT INC PLANTS 1 & 2	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
1402	MANNING EQUIPMENT COMPANY	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
1404	FABRICATED METALS/STRONG HOLD/UTILITY	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1406	ANSON INDUSTRIES LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1407	SHIVELY WOOD PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Louisville Metro APCD **04/10/2006 GLF/DSF**

2003 Emissions from APCD SAMS point sources. Projection method adapted from APCD 1999 and 2001 emission inventories.

CORRECTED FINAL ALT 2 (2002 = Proj 2003) **Jefferson County, KY Summer Day Point Source Emissions**		**NOx 2002**	**NOx 2003**	**NOx 2005**	**NOx 2008**	**NOx 2011**	**NOx 2014**	**NOx 2017**	**NOx 2020**
Tons Per Summer Day	**Totals:**	74.76	74.78	53.95	53.63	50.91	51.76	51.24	46.49
Plant ID	**Plant Name**								
0001	CARBIDE INDUSTRIES LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0002	ALLIED DRUM SERVICES	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0004	ALLIED READY-MIX, FRANKFORT AVE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0011	AMERICAN SYNTHETIC RUBBER	1.60	1.60	1.60	1.60	1.58	1.57	1.55	1.54
0014	ALCAN ALUMINUM CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0015	REYNOLDS METALS, LAM PLANT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0016	ANDERSON WOOD PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0019	KENT FEEDS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0020	QUIKRETE - KENTUCKY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0025	BLATZ PAINT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0026	BLUEGRASS COOPERAGE	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0028	BORDEN CHEMICAL CO	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0029	NORTH AMERICAN GALVANIZING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	BRIDGES SMITH & COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0031	BROWN-FORMAN DISTIL, HOWARD ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0034	CALDWELL TANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0036	SUD-CHEMIE, WEST PLANT	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
0041	CENTRAL STATE HOSPITAL	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0042	SUD-CHEMIE, SOUTH PLANT	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0044	CISSELL MANUFACTURING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0047	CONCO INC	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0049	JEFFERSON SMURFIT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0051	CORHART REFRACTORIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0053	COURIER JOURNAL & TIMES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0059	CHEMCENTRAL/LOUISVILLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0060	KOSMOS CEMENT CO	5.41	5.43	5.47	5.53	5.54	5.55	5.55	5.56
0061	BIOPRODUCTS, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0062	E I DUPONT DE NEMOURS & CO	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.19
0072	FORD MOTOR CO, LOU ASSY PLT	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06
0073	FORD MOTOR CO, KY TRUCK PLT	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10
0074	PRODUCER FEEDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0079	GENERAL SHALE PROD	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0082	NOVEON INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0084	BP AMOCO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0086	ENGLEHARD CORP, HARSHAW CHEM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0088	HAZELWOOD ICF/MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0094	HY-KLAS PAINTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0102	JELLICO CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0103	KELLEY TECHNICAL COATINGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0107	INDEPENDENT CONCRETE PIPE CO OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0109	KENTUCKY MFG COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0110	KENTUCKY METAL PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0115	SWIFT & COMPANY	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0119	NATIONAL TOBACCO CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0125	**ANNUAL NOx - LOU GAS & ELEC, PADDY'S RUN**								
0125	**DAILY NOx - LOU GAS & ELEC, PADDY'S RUN**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**
0125	**OTHER - LOU GAS & ELEC, PADDY'S RUN**								
0126	**ANNUAL NOx - LOU GAS & ELEC, CANE RUN**								
0126	**DAILY NOx - LOU GAS & ELEC, CANE RUN**	**19.13**	**19.13**	**20.48**	**18.51**	**16.58**	**17.39**	**17.10**	**15.74**
0126	**OTHER - LOU GAS & ELEC, CANE RUN**								
0127	**ANNUAL NOx - LOU GAS & ELEC, MILL CREEK**								
0127	**DAILY NOx - LOU GAS & ELEC, MILL CREEK**	**43.40**	**43.40**	**21.17**	**22.77**	**22.02**	**22.09**	**21.89**	**18.54**
0127	**OTHER - LOU GAS & ELEC, MILL CREEK**								
0132	LOUISVILLE LUMBER & MILLWORK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0133	LOUISVILLE PAVING CO	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0143	MARATHON OIL, LOU TERM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0144	MARCUS PAINT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0145	ROGERS GROUP, AVOCA RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0148	LOU MED CENTER STEAM PLANT	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.39
0149	MSD, MORRIS FORMAN PLANT	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0150	RIVERSIDE PAVING COMPANY	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0152	COLOR CORP OF AMERICA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0160	NATIONAL PRODUCTS COMPANY LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0167	UNITED DISTIL, STITZEL-WELLER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0168	PPG ARCH FINISHES, ENTERPRISE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0172	PHILIP MORRIS, LMCP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0174	PORCELAIN METALS CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0175	PPG ARCH FINISHES, 13TH ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0179	PROGRESS PAINT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0185	AKZO NOBEL RESINS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0186	REYNOLDS METALS, FOIL PLANT	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0187	ECKART ALUMINUM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0189	ROHM & HAAS KENTUCKY INC	0.79	0.79	0.79	0.79	0.78	0.78	0.77	0.76

0191	KINDRED HOSPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0193	STONE CONTAINER CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0206	SOUTHERN GRAPHIC SYSTEMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0214	CHEVRON USA, LOU TERM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0220	THORTON TRANSPORTATION INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0221	ULRICH CHEMICAL INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0222	TRANSMONTAIGNE TERMINALING, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0223	TEXAS GAS TRANSMISSION	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
0225	CITGO PETROLEUM CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0227	SYPRIS TECHNOLOGIES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0233	CHALLENGER LIFTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0242	SOUTHERN BAPTIST SEMINARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0243	HEAVEN HILL DISTILLERIES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0244	BROWN-FORMAN DISTIL, EARLY TIMES	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15
0246	ASHLAND CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0251	ALLIED READY-MIX, CANE RUN RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0262	LAMINATING SERVICES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0276	LANNING CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0283	ZEON CHEMICALS KY, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0288	WIRECRAFTERS, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0290	COMMERCIAL PAVERS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
0291	GOLDEN FOODS INC	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
0294	APPLIED SURFACE TECHNOLOGY/ELECTROFIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0296	LOU & JEFF CO. RIVERPORT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0299	BEECHMONT PRESS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0317	HESCO PARTS CORP.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0322	COMPONENT FINISHING UNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0323	KENTUCKY-INDIANA LUMBER COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0328	GRIFFIN AND COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0333	V. G. REED & SONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0335	BUILDERS METAL SUPPLY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0338	SCHULER MACHINE & TOOL COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0341	MILLER OIL COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0350	GREIF BROTHERS CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0357	TRI-STATE PLATING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0363	FIBA TECHNOLOGIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0376	AGI MEDIA PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0377	INDUSTRIAL FIBERGLASS SYSTEMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0386	BOHN FIBERGLASS INDUSTRIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0415	FLYNN BROTHERS CONTRACTING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0426	SULLIVAN SCREEN PRINT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0434	CLIFFORDS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0437	AMER BLUEGRASS MARBLE CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0439	ACTION GRAPHICS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0440	NELSON BOONE COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0447	AIRGUARD INDUSTRIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0459	POLYONE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0460	CARDINAL KITCHENS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0461	FLORIDA DISTILLERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0465	UNIVERSAL MINERALS INTERNATIONAL INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0476	HOSTMANN-STEINBERG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0481	SERVICE WELDING & MACHINE CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0495	BROWN CULLEN COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0519	HOFFMAN TRAILER COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0529	UNIVERSAL UNIFORMS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0531	IVY HILL CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0532	OUTER LOOP RECYCLING & DISP (WASTE MGMT)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0553	POWERSCREEN USA (DBA TEREX) LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0556	LANTECH INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0559	NEFF PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0564	UNITED PARCEL SERVICE	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07
0566	RUSSTECH ADMIXTURES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0586	VIVID IMPACT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0592	DECO PAPER PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0601	PACKAGING UNLIMITED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0615	BOSTIK FINDLEY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0617	GATEWAY PRESS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0622	SOLAE LLC	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0626	CARDINAL ALUMINUM, PLANT #3	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
0627	SUPERIOR HARDWOODS	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18
0628	GOHMANN ASPHALT, OUTER LOOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0631	SUPERIOR SOLVENTS & CHEMICALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0638	MERRICK PRINTING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0662	WHAYNE SUPPLY CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0668	LOU GAS & ELEC, WATERSIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0707	SERVICE WELDING AND MACHINE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0711	PALMER PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0712	TBELL DEVELOPMENT CO LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0716	BAPTIST HOSPITAL EAST	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0730	CARDINAL ALUMINUM, PLANT #1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0738	LOUISVILLE TIN & STOVE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0740	CONE SOLVENTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0741	MARATHON ASHLAND, LOU TERM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0745	WYNN STARR FOODS OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0751	INLAND CONTAINER CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0754	VERMONT AMER, MULTI-METALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0760	CARITAS MEDICAL CENTER	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0775	PREMIUM FOIL PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0776	ZOELLER CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0785	RIVER ROAD TERMINAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0805	STRY LENKOFF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0808	D D WILLIAMSON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0811	FETTER PRINTING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0815	PARROT CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0818	BOX USA GROUP INC.	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
0842	FRITO-LAY, INC	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0846	SOUTHERN STANDARD CARTONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0852	UNIV OF LOU, BELKNAP CAMPUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0853	VETERANS ADMIN MED CEN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0857	ANDERSON PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0870	G E APPLIANCE PARK	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.32
0885	SHOREWOOD PACKAGING CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0908	VOLK CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0911	JETT-A-WAY CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0912	COIT DRAPERY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0923	HIGHLAND CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0933	BARBOUR BROTHERS CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0958	FASHION CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0984	PURITAN UNIFORM RENTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0989	SAM MEYER FORMAL WEAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1006	AUTO TRUCK AND FIBERGLASS OF LOUISVILLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1012	HALL'S COLLISION CENTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1034	A L HANSEN PAINT & METAL SHOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1056	RAMCO LEASING INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1061	BILL COLLINS FORD INCORPORATED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1125	LACROSS ENTERPRISES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1127	INSTANT PRODUCTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1128	HAMILTON PRINTING COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1146	PAPA JOHN'S SUPPORT SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1148	NIEMCO FABRICATORS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1157	PARALLEL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1173	RJF INTERNATIONAL CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1178	PARTS UNLIMITED INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1197	LOUISVILLE PLATE GLASS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	MATSUDA INC	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
1216	UNITED DEFENSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1225	ATKEMIX TEN INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1231	FORTH TECHNOLOGIES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1239	WEYERHAUSER INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1248	LOU GAS & ELEC, ZORN STA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1259	DUPONT DOW ELASTOMERS	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1264	ZEOCHEM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1294	ATOFINA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1299	ART ETC INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1333	OXY VINYLS	0.97	0.97	0.97	0.97	0.96	0.95	0.94	0.93
1338	APPLIED SURFACE TECH/FISHER TANK LININGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1354	PAPERCONE CORPORATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1365	COVENANT INDUSTRIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1374	TRANFLO TERMINAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1381	SPORTPAINT INC PLANT 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1401	SPORTPAINT INC PLANTS 1 & 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1402	MANNING EQUIPMENT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1404	FABRICATED METALS/STRONG HOLD/UTILITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1406	ANSON INDUSTRIES LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1407	SHIVELY WOOD PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Louisville Metro APCD

04/10/2006 GLF/DSF

2003 Emissions from APCD SAMS point sources. Projection method adapted from APCD 1999 and 2001 emission inventories.

CORRECTED FINAL ALT 2 (2002 = Proj 2003) **Jefferson County, KY Summer Day Point Source Emissions**		**CO 2002**	**CO 2003**	**CO 2005**	**CO 2008**	**CO 2011**	**CO 2014**	**CO 2017**	**CO 2020**
Tons Per Summer Day	**Totals:**	9.81	9.83	9.82	9.99	9.79	9.83	9.79	9.53
Plant ID	**Plant Name**								
0001	CARBIDE INDUSTRIES LLC	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0002	ALLIED DRUM SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0004	ALLIED READY-MIX, FRANKFORT AVE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0011	AMERICAN SYNTHETIC RUBBER	0.74	0.74	0.74	0.73	0.73	0.72	0.71	0.71
0014	ALCAN ALUMINUM CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0015	REYNOLDS METALS, LAM PLANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0016	ANDERSON WOOD PRODUCTS	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0019	KENT FEEDS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0020	QUIKRETE - KENTUCKY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0025	BLATZ PAINT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0026	BLUEGRASS COOPERAGE	0.24	0.25	0.25	0.25	0.25	0.26	0.26	0.26
0028	BORDEN CHEMICAL CO	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0029	NORTH AMERICAN GALVANIZING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0030	BRIDGES SMITH & COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0031	BROWN-FORMAN DISTIL, HOWARD ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0034	CALDWELL TANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0036	SUD-CHEMIE, WEST PLANT	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0041	CENTRAL STATE HOSPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0042	SUD-CHEMIE, SOUTH PLANT	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0044	CISSELL MANUFACTURING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0047	CONCO INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0049	JEFFERSON SMURFIT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0051	CORHART REFRACTORIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0053	COURIER JOURNAL & TIMES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0059	CHEMCENTRAL/LOUISVILLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0060	KOSMOS CEMENT CO	2.04	2.05	2.06	2.08	2.09	2.09	2.09	2.09
0061	BIOPRODUCTS, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0062	E I DUPONT DE NEMOURS & CO	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0072	FORD MOTOR CO, LOU ASSY PLT	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
0073	FORD MOTOR CO, KY TRUCK PLT	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10
0074	PRODUCER FEEDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0079	GENERAL SHALE PROD	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16
0082	NOVEON INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0084	BP AMOCO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0086	ENGLEHARD CORP, HARSHAW CHEM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0088	HAZELWOOD ICF/MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0094	HY-KLAS PAINTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0102	JELLICO CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0103	KELLEY TECHNICAL COATINGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0107	INDEPENDENT CONCRETE PIPE CO OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0109	KENTUCKY MFG COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0110	KENTUCKY METAL PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0115	SWIFT & COMPANY	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
0119	NATIONAL TOBACCO CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0125	**ANNUAL NOx - LOU GAS & ELEC, PADDY'S RUN**								
0125	**DAILY NOx - LOU GAS & ELEC, PADDY'S RUN**								
0125	**OTHER - LOU GAS & ELEC, PADDY'S RUN**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**
0126	**ANNUAL NOx - LOU GAS & ELEC, CANE RUN**								
0126	**DAILY NOx - LOU GAS & ELEC, CANE RUN**								
0126	**OTHER - LOU GAS & ELEC, CANE RUN**	**1.16**	**1.16**	**1.20**	**1.02**	**0.91**	**0.97**	**0.95**	**0.87**
0127	**ANNUAL NOx - LOU GAS & ELEC, MILL CREEK**								
0127	**DAILY NOx - LOU GAS & ELEC, MILL CREEK**								
0127	**OTHER - LOU GAS & ELEC, MILL CREEK**	**3.19**	**3.19**	**3.12**	**3.43**	**3.35**	**3.35**	**3.33**	**3.15**
0132	LOUISVILLE LUMBER & MILLWORK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0133	LOUISVILLE PAVING CO	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
0143	MARATHON OIL, LOU TERM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0144	MARCUS PAINT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0145	ROGERS GROUP, AVOCA RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0148	LOU MED CENTER STEAM PLANT	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
0149	MSD, MORRIS FORMAN PLANT	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0150	RIVERSIDE PAVING COMPANY	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
0152	COLOR CORP OF AMERICA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0160	NATIONAL PRODUCTS COMPANY LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0167	UNITED DISTIL, STITZEL-WELLER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0168	PPG ARCH FINISHES, ENTERPRISE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0172	PHILIP MORRIS, LMCP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0174	PORCELAIN METALS CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0175	PPG ARCH FINISHES, 13TH ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0179	PROGRESS PAINT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0185	AKZO NOBEL RESINS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0186	REYNOLDS METALS, FOIL PLANT	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0187	ECKART ALUMINUM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0189	ROHM & HAAS KENTUCKY INC	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

0191	KINDRED HOSPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0193	STONE CONTAINER CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0206	SOUTHERN GRAPHIC SYSTEMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0214	CHEVRON USA, LOU TERM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0220	THORTON TRANSPORTATION INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0221	ULRICH CHEMICAL INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0222	TRANSMONTAIGNE TERMINALING, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0223	TEXAS GAS TRANSMISSION	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
0225	CITGO PETROLEUM CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0227	SYPRIS TECHNOLOGIES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0233	CHALLENGER LIFTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0242	SOUTHERN BAPTIST SEMINARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0243	HEAVEN HILL DISTILLERIES	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0244	BROWN-FORMAN DISTIL, EARLY TIMES	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0246	ASHLAND CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0251	ALLIED READY-MIX, CANE RUN RD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0262	LAMINATING SERVICES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0276	LANNING CHEMICAL CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0283	ZEON CHEMICALS KY, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0288	WIRECRAFTERS, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0290	COMMERCIAL PAVERS	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
0291	GOLDEN FOODS INC	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
0294	APPLIED SURFACE TECHNOLOGY/ELECTROFIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0296	LOU & JEFF CO. RIVERPORT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0299	BEECHMONT PRESS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0317	HESCO PARTS CORP.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0322	COMPONENT FINISHING UNL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0323	KENTUCKY-INDIANA LUMBER COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0328	GRIFFIN AND COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0333	V. G. REED & SONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0335	BUILDERS METAL SUPPLY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0338	SCHULER MACHINE & TOOL COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0341	MILLER OIL COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0350	GREIF BROTHERS CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0357	TRI-STATE PLATING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0363	FIBA TECHNOLOGIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0376	AGI MEDIA PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0377	INDUSTRIAL FIBERGLASS SYSTEMS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0386	BOHN FIBERGLASS INDUSTRIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0415	FLYNN BROTHERS CONTRACTING	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0426	SULLIVAN SCREEN PRINT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0434	CLIFFORDS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0437	AMER BLUEGRASS MARBLE CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0439	ACTION GRAPHICS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0440	NELSON BOONE COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0447	AIRGUARD INDUSTRIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0459	POLYONE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0460	CARDINAL KITCHENS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0461	FLORIDA DISTILLERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0465	UNIVERSAL MINERALS INTERNATIONAL INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0476	HOSTMANN-STEINBERG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0481	SERVICE WELDING & MACHINE CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0495	BROWN CULLEN COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0519	HOFFMAN TRAILER COMPANY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0529	UNIVERSAL UNIFORMS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0531	IVY HILL CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0532	OUTER LOOP RECYCLING & DISP (WASTE MGMT)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0553	POWERSCREEN USA (DBA TEREX) LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0556	LANTECH INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0559	NEFF PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0564	UNITED PARCEL SERVICE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0566	RUSSTECH ADMIXTURES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0586	VIVID IMPACT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0592	DECO PAPER PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0601	PACKAGING UNLIMITED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0615	BOSTIK FINDLEY INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0617	GATEWAY PRESS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0622	SOLAE LLC	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0626	CARDINAL ALUMINUM, PLANT #3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0627	SUPERIOR HARDWOODS	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18
0628	GOHMANN ASPHALT, OUTER LOOP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
0631	SUPERIOR SOLVENTS & CHEMICALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0638	MERRICK PRINTING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0662	WHAYNE SUPPLY CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0668	LOU GAS & ELEC, WATERSIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0707	SERVICE WELDING AND MACHINE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0711	PALMER PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0712	TBELL DEVELOPMENT CO LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0716	BAPTIST HOSPITAL EAST	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0730	CARDINAL ALUMINUM, PLANT #1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0738	LOUISVILLE TIN & STOVE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0740	CONE SOLVENTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0741	MARATHON ASHLAND, LOU TERM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0745	WYNN STARR FOODS OF KY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0751	INLAND CONTAINER CORP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0754	VERMONT AMER, MULTI-METALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0760	CARITAS MEDICAL CENTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0775	PREMIUM FOIL PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0776	ZOELLER CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0785	RIVER ROAD TERMINAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0805	STRY LENKOFF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0808	D D WILLIAMSON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0811	FETTER PRINTING CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0815	PARROT CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0818	BOX USA GROUP INC.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0842	FRITO-LAY, INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0846	SOUTHERN STANDARD CARTONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0852	UNIV OF LOU, BELKNAP CAMPUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0853	VETERANS ADMIN MED CEN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0857	ANDERSON PACKAGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0870	G E APPLIANCE PARK	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0885	SHOREWOOD PACKAGING CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0908	VOLK CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0911	JETT-A-WAY CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0912	COIT DRAPERY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0923	HIGHLAND CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0933	BARBOUR BROTHERS CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0958	FASHION CLEANERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0984	PURITAN UNIFORM RENTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0989	SAM MEYER FORMAL WEAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1006	AUTO TRUCK AND FIBERGLASS OF LOUISVILLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1012	HALL'S COLLISION CENTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1034	A L HANSEN PAINT & METAL SHOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1056	RAMCO LEASING INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1061	BILL COLLINS FORD INCORPORATED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1125	LACROSS ENTERPRISES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1127	INSTANT PRODUCTS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1128	HAMILTON PRINTING COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1146	PAPA JOHN'S SUPPORT SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1148	NIEMCO FABRICATORS INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1157	PARALLEL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
1173	RJF INTERNATIONAL CORP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1178	PARTS UNLIMITED INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1197	LOUISVILLE PLATE GLASS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200	MATSUDA INC	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1216	UNITED DEFENSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1225	ATKEMIX TEN INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1231	FORTH TECHNOLOGIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1239	WEYERHAUSER INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1248	LOU GAS & ELEC, ZORN STA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1259	DUPONT DOW ELASTOMERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1264	ZEOCHEM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1294	ATOFINA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1299	ART ETC INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1333	OXY VINYLS	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.31
1338	APPLIED SURFACE TECH/FISHER TANK LININGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1354	PAPERCONE CORPORATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1365	COVENANT INDUSTRIES INC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1374	TRANFLO TERMINAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1381	SPORTPAINT INC PLANT 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1401	SPORTPAINT INC PLANTS 1 & 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1402	MANNING EQUIPMENT COMPANY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1404	FABRICATED METALS/STRONG HOLD/UTILITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1406	ANSON INDUSTRIES LLC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1407	SHIVELY WOOD PRODUCTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX B

Area Source Emissions Inventory Information

2002 Surface Cleaning

VOC Emissions Information

Surface Cleaning Area Source Emissions
Remove Perchloroethlene Emissions From Surface Cleaning Area Sources VOC Emissions
& Address Double Counting From Point Sources Surface Cleaning VOC Emissions

County	County Population	EF	(TPD)	EF	(TPD)	EF	(TPD)	*Surface Cleaning VOC Total Without (Perc) (TPD)	**Point Source VOC Emissions Subtracted From Area Sources (TPD)	Surface Cleaning VOC Final Emissions (TPD)
Bullitt	63,800	2.5	0.20	1.1	0.09	0.7	0.06	0.37814909776	0	0.34
Oldham	49,310	2.5	0.15	1.1	0.07	0.7	0.04		0	0.26
Total	113,110		0.35		0.15		0.10		0	0.60

*Perchlorethylene emissions were removed by reducing surface cleaning VOC emissions by 23% per EPA's May 13, 1993 Helms memorandum

** To avoid double-counting, point source emissions for cold cleaning and vapor degreasing were subtracted from the area source emissions as appropriate

Surface cleaning area source emissions were calculated using the following method:

Cold Cleaning
Auto Repair EF

TPD = ((2.5 x population) / 2000 / (6*52) * .77

+

Cold Cleaning
Manufacturing EF

TPD = ((1.1 x population) / 2000 / (6*52) * .77

+

Vapor & In-Line
Cleaning EF

TPD = ((.70 x Population) / 2000 / (6*52) * .77

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

13 MAY 1993

MEMORANDUM

SUBJECT: Perchloroethylene Emissions from Degreasing

FROM: G. T. Helms, Chief
Ozone/Carbon Monoxide Programs Branch (MD-15)

TO: Air Branch Chiefs, Regions I-X

The Environmental Protection Agency proposed (57 FR 48490, October 26, 1992) to add perchloroethylene (perc) to the list of negligibly reactive compounds in the definition of volatile organic compounds (VOC). Once EPA publishes the final listing of perc as a negligibly reactive compound, States will not be able to include perc in their VOC emissions inventories for determining reasonable further progress under the Clean Air Act and may not take credit for controlling perc emissions in their ozone State Implementation Plans.

States have asked for information on how much of their VOC emissions inventories contain perc from "degreasing" emissions so that they may know how to modify their 1990 rate-of-progress base year inventories for development of their 15 percent rate-of-progress plans, which are due November 15, 1993. This memorandum provides information in anticipation of the expected listing of perc as an exempt compound.

The major solvents used in degreasing, with national consumption data obtained from the Emission Standards Division, Office of Air Quality Planning and Standards are:

	Metric tons/year
trichloroethylene (TCE)	36,000
perchloroethylene	10,900
methylene chloride	7,600
1,1,1 trichloroethane (TCA)	72,200

Of these, only trichloroethylene and perc are currently considered to be VOC. The other two compounds are listed as having negligible photochemical reactivity in the definition of VOC (57 FR 3945).

The above numbers show that perc is about 23 percent of the VOC used for degreasing. Therefore, in the absence of more relevant local information, this national value may be used to

remove perc from the base year VOC inventory in developing the 15 percent rate-of-progress plan.

There is a potential problem with this value when existing inventories are adjusted by the above factor and then projected into the future. 1,1,1 trichloroethane (TCA), a stratospheric ozone depleter, will be phased out of production by January 1, 1996 and will be difficult to obtain after that date. It is expected that previous users will then shift from use of TCA to TCE. Therefore, the use of TCE will significantly rise in 1996, and perc is expected to become smaller than 23 percent of total VOC use for degreasing.

In summary, perc emissions need to be removed from the rate-of-progress base year inventory prior to preparing the 15 percent rate-of-progress plan since reductions in perc will not be creditable toward the 15 percent reduction in VOC emissions. The adjustment for perc will be necessary as a result of EPA's pending publication of the final listing of perc as a negligibly photochemically reactive compound. This memorandum has provided guidance on how to make this adjustment.

It is important not only to continue to collect the data for perc, ethane, and other "negligibly reactive" compounds in order to have a complete inventory, but also to distinguish perc and other compounds with negligible reactivity from the compounds that EPA considers reactive for purposes of the 15 percent plans. This is necessary because these data are needed for purposes of urban airshed modeling (which distinguishes compounds by level of reactivity) and may be useful for other States' inventory exercises such as air toxics, etc. If you have any questions, please address them to Bill Johnson at (919) 541-5245 or Mary Ann Warner-Selph at (919) 541-1192.

cc: D. Mobley
K. Berry
J. Silvasi
D. Cole
L. Schultz
K. Scavo
D. Misenheimer
M. Warner-Selph
S. Wyatt
P. Almodovar

2002 Dry Cleaning

VOC Emissions Information

Dry Cleaning Area Source Emissions
Remove Perchlorethylene Emissions From Dry Cleaning Area Source VOC Emissions

County	Population	EF	(TPD)	EF	(TPD)	EF	(TPD)*	*Dry Cleaning VOC Final Emissions (TPD)
Bullitt	63,800	0.009	0.00	0.73	0.00	1.1	0.13	0.13
Oldham	49,310	0.009	0.00	0.73	0.00	1.1	0.10	0.10
Total	113,110		0.00		0.00		0.23	0.23

*To avoid double counting, per previous EPA guidance, only Other Solvents dry cleaning emissions were included in the dry cleaning area source total VOC emissions. This was done to exclude perchlorethylene emissions.

Coin Operated Dry Cleaning Emission Factor (Excluded Emissions)
TPD = (0.009 x Population) / 2000 / (5*52)

Commercial/Industrial Dry Cleaning Emission Factor (Excluded Emissions)
TPD = (0.73 x Population) / 2000 / (5*52)

*Other Solvents Dry Cleaning Emission Factor *(Included Emissions)
TPD = (1.1 x Population) / 2000 / (5*52)

Total Area Source Dry Cleaning VOC Emissions (TPD) = *Other Solvents Dry Cleaning VOC Emissions (TPD)

APPENDIX C

Non-highway Mobile Runs

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2002 (Lou02)
Typical weekday for Summer Season, 2002
Date of Model Run: Mar 27 11:26:20: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.26	1.21	11.61	0.13	0.12	112.93	0.03	0.07
21185	Oldham County	1.16	1.39	16.54	0.14	0.15	132.85	0.01	0.07
Totals:		**2.42**	**2.60**	**28.15**	**0.28**	**0.26**	**245.79**	**0.05**	**0.15**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2002 (Lou02)

Typical weekday for Summer Season, 2002

Date of Model Run: Mar 27 11:26:20: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.01	0.03	0.01	0.05	0.06	0.14	1.67
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.17	1.58
Totals:		**0.03**	**0.08**	**0.02**	**0.07**	**0.12**	**0.31**	**3.24**

APPENDIX D

Mobile Model Runs and Documentation

Highway Mobile Source

Emissions Summary

2002 HIGHWAY MOBILE SOURCE EMISSIONS SUMMARY -- 8-HOUR OZONE COUNTIES

YEAR:	2002	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	BullittRFG								
SCENARIO:	RFG								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	630,181		1.198	18.167	3.507	0.83	12.62	2.44	
R PRIN ART	7,983		1.219	16.803	2.778	0.01	0.15	0.02	
R MIN ART	159,089		1.270	15.392	2.442	0.22	2.70	0.43	
R MAJ COLL	66,430		1.276	15.255	2.418	0.09	1.12	0.18	
R MIN COLL	44,560		1.309	14.630	2.334	0.06	0.72	0.11	
R LOCAL	72,211		1.356	13.920	2.279	0.11	1.11	0.18	
U INTERST	632,397		1.217	18.347	3.433	0.85	12.79	2.39	
U FREEWAY	0		8.151	44.889	4.329	0.00	0.00	0.00	
U PRIN ART	283,088		1.412	13.858	2.298	0.44	4.33	0.72	
U MIN ART	151,611		1.459	13.950	2.333	0.24	2.33	0.39	
U COLL	53,816		1.382	13.891	2.288	0.08	0.82	0.14	
U LOCAL	143,346		1.992	14.231	2.373	0.31	2.25	0.38	
	2,244,712					3.26	40.94	7.37	

MOBILE6.2 Default Controls

2002

County Apport. Factor: 41.0%

BULLITT -- RFG		
VOC tpd	CO tpd	NOx tpd
1.34	16.78	3.02

YEAR:	2002	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	Bullitt								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	630,181		1.445	21.952	3.587	1.00	15.25	2.49	
R PRIN ART	7,983		1.473	20.254	2.855	0.01	0.18	0.03	
R MIN ART	159,089		1.540	18.481	2.516	0.27	3.24	0.44	
R MAJ COLL	66,430		1.548	18.308	2.492	0.11	1.34	0.18	
R MIN COLL	44,560		1.592	17.515	2.405	0.08	0.86	0.12	
R LOCAL	72,211		1.655	16.609	2.350	0.13	1.32	0.19	
U INTERST	632,397		1.471	22.188	3.514	1.03	15.47	2.45	
U FREEWAY	0		12.161	54.535	4.476	0.00	0.00	0.00	
U PRIN ART	283,088		1.727	16.512	2.370	0.54	5.15	0.74	
U MIN ART	151,611		1.789	16.610	2.406	0.30	2.78	0.40	
U COLL	53,816		1.689	16.564	2.359	0.10	0.98	0.14	
U LOCAL	143,346		2.582	16.725	2.442	0.41	2.64	0.39	
	2,244,712					3.98	49.22	7.56	

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

County Apport. Factor: 59.0%

BULLITT -- DEFAULTS		
VOC tpd	CO tpd	NOx tpd
2.35	29.04	4.46

BULLITT -- TOTAL		
VOC tpd	CO tpd	NOx tpd
3.69	45.82	7.48

YEAR:	2002	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	OldhamRFG								
SCENARIO:	RFG								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	98,029		1.198	18.167	3.507	0.13	1.96	0.38	
R PRIN ART	33,086		1.219	16.803	2.778	0.04	0.61	0.10	
R MIN ART	95,454		1.270	15.392	2.442	0.13	1.62	0.26	
R MAJ COLL	20,300		1.276	15.255	2.418	0.03	0.34	0.05	
R MIN COLL	47,936		1.309	14.630	2.334	0.07	0.77	0.12	
R LOCAL	52,440		1.356	13.920	2.279	0.08	0.80	0.13	
U INTERST	568,088		1.217	18.347	3.433	0.76	11.49	2.15	
U FREEWAY	0		8.151	44.889	4.329	0.00	0.00	0.00	
U PRIN ART	45,977		1.412	13.858	2.298	0.07	0.70	0.12	
U MIN ART	218,761		1.459	13.950	2.333	0.35	3.36	0.56	
U COLL	58,910		1.382	13.891	2.288	0.09	0.90	0.15	
U LOCAL	105,850		1.992	14.231	2.373	0.23	1.66	0.28	
	1,344,831					1.99	24.24	4.30	

MOBILE6.2 Default Controls

2002

County Apport. Factor: 50.0%

OLDHAM -- RFG		
VOC tpd	CO tpd	NOx tpd
1.00	12.12	2.15

YEAR:	2002	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	Oldham								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	98,029		1.445	21.952	3.587	0.16	2.37	0.39	
R PRIN ART	33,086		1.473	20.254	2.855	0.05	0.74	0.10	
R MIN ART	95,454		1.540	18.481	2.516	0.16	1.94	0.26	
R MAJ COLL	20,300		1.548	18.308	2.492	0.03	0.41	0.06	
R MIN COLL	47,936		1.592	17.515	2.405	0.08	0.93	0.13	
R LOCAL	52,440		1.655	16.609	2.350	0.10	0.96	0.14	
U INTERST	568,088		1.471	22.188	3.514	0.92	13.90	2.20	
U FREEWAY	0		12.161	54.535	4.476	0.00	0.00	0.00	
U PRIN ART	45,977		1.727	16.512	2.370	0.09	0.84	0.12	
U MIN ART	218,761		1.789	16.610	2.406	0.43	4.01	0.58	
U COLL	58,910		1.689	16.564	2.359	0.11	1.08	0.15	
U LOCAL	105,850		2.582	16.725	2.442	0.30	1.95	0.28	
	1,344,831					2.44	29.12	4.41	

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

County Apport. Factor: 50.0%

OLDHAM -- DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.22	14.56	2.21

OLDHAM -- TOTAL		
VOC tpd	CO tpd	NOx tpd
2.22	26.68	4.36

Speed and DVMT Data

From

Kentucky Transportation Cabinet

Daily VMT Estimates and Forecasts

Bullitt County

HPMS Roadway Classification (FC)	MOBILE 6 Facility Type	% M6 Freeway	% M6 Ramp	Speed (mph)	Functional Class % 2003 (use for 2002)	Functional Class % 2004 (use for greater than 2002)	2,002	2,003	2,005	2,008	2,011	2,014	2,017	2,020
Rural Interstate	Freeway	98.5	1.5	69.0	49.91%	51.57%	630,181	676,960	770,519	861,959	957,165	1,059,906	1,158,600	1,255,271
Rural Principal Arterial	Arter/Coll			57.0	0.81%	0.81%	7,983	8,739	10,250	10,732	11,617	13,310	14,898	16,434
Rural Minor Arterial	Arter/Coll			47.0	16.20%	15.67%	159,089	172,255	198,588	207,924	225,077	257,863	288,637	318,406
Rural Major Collector	Arter/Coll			46.0	6.76%	6.43%	66,430	71,431	81,432	85,261	92,295	105,739	118,358	130,565
Rural Minor Collector	Arter/Coll			41.0	4.54%	4.27%	44,560	47,735	54,086	56,629	61,301	70,230	78,611	86,719
Rural Local	Arter/Coll			35.0	7.35%	7.10%	72,211	78,127	89,958	94,187	101,957	116,809	130,749	144,234
Urban Interstate	Freeway	92.4	7.6	71.0	50.09%	48.43%	632,397	662,806	723,623	809,497	898,909	995,397	1,088,084	1,178,871
Urban Freeway	Freeway	NA	NA	NA		0.00%	0	0	0	0	0	0	0	0
Urban Principal Arterial	Arter/Coll			31.0	28.82%	34.47%	283,088	334,319	436,782	457,316	495,043	567,154	634,841	700,314
Urban Minor Arterial	Arter/Coll			28.0	15.44%	10.85%	151,611	146,913	137,516	143,981	155,859	178,562	199,872	220,486
Urban Collector	Arter/Coll			33.0	5.48%	5.45%	53,816	58,896	69,055	72,301	78,266	89,667	100,368	110,719
Urban Local	Local			12.9	14.60%	14.95%	143,346	158,701	189,410	198,315	214,675	245,946	275,299	303,691
Total DVMT							2,244,712	2,416,882	2,761,220	2,998,102	3,292,164	3,700,582	4,088,318	4,465,711
Total Interstate					100.00%	100.00%	1,262,578	1,339,766	1,494,142	1,671,456	1,856,074	2,055,302	2,246,684	2,434,142
Total Non-Interstate					100.00%	100.00%	982,134	1,077,115	1,267,078	1,326,647	1,436,089	1,645,280	1,841,634	2,031,569
							2,244,712	2,416,882	2,761,220	2,998,102	3,292,164	3,700,582	4,088,318	4,465,711

NOTE:
VMT taken from 2004-2030 VMT Tables.xls file with latest 2004 data added
Functional Class % taken from VMT04.xls file

Daily VMT Estimates and Forecasts

Oldham County

HPMS Roadway Classification (FC)	MOBILE 6 Facility Type	% M6 Freeway	% M6 Ramp	Speed (mph)	Functional Class % 2003 (use for 2002)	Functional Class % 2004 (use for greater than 2002)	2,002	2,003	2,005	2,008	2,011	2,014	2,017	2,020
Rural Interstate	Freeway	98.5	1.5	69.0	14.72%	14.54%	98,029	102,854	112,502	125,853	139,369	153,215	167,127	181,072
Rural Principal Arterial	Arter/Coll			57.0	4.87%	4.68%	33,086	36,893	44,506	46,018	50,046	59,108	67,726	76,122
Rural Minor Arterial	Arter/Coll			47.0	14.06%	14.22%	95,454	108,731	135,285	139,880	152,126	179,672	205,868	231,390
Rural Major Collector	Arter/Coll			46.0	2.99%	2.84%	20,300	22,534	27,002	27,920	30,364	35,862	41,090	46,184
Rural Minor Collector	Arter/Coll			41.0	7.06%	7.33%	47,936	55,225	69,804	72,176	78,494	92,707	106,224	119,393
Rural Local	Arter/Coll			35.0	7.73%	8.30%	52,440	61,275	78,947	81,629	88,775	104,849	120,136	135,030
Urban Interstate	Freeway	92.4	7.6	71.0	85.28%	85.46%	588,088	599,126	681,202	739,668	819,105	900,482	982,245	1,064,202
Urban Freeway	Freeway	NA	NA	NA		0.00%	0	0	0	0	0	0	0	0
Urban Principal Arterial	Arter/Coll			31.0	6.77%	13.49%	45,977	73,456	128,414	132,776	144,400	170,547	195,412	219,638
Urban Minor Arterial	Arter/Coll			28.0	32.23%	24.72%	218,761	224,262	235,264	243,257	264,553	312,456	358,012	402,395
Urban Collector	Arter/Coll			33.0	8.68%	8.50%	58,910	66,226	80,858	83,605	90,924	107,387	123,044	138,298
Urban Local	Local			12.9	15.60%	15.93%	105,850	121,102	151,606	156,756	170,479	201,348	230,705	259,306
Total DVMT							1,344,829	1,471,682	1,725,389	1,849,537	2,028,636	2,317,633	2,597,591	2,873,029
Total Interstate					100.00%	100.00%	666,117	701,979	773,704	865,521	958,474	1,053,697	1,149,372	1,245,273
Total Non-Interstate					100.00%	100.00%	678,712	769,703	951,684	984,016	1,070,162	1,263,936	1,448,219	1,627,756
							1,344,829	1,471,682	1,725,389	1,849,537	2,028,636	2,317,633	2,597,591	2,873,029

NOTE:
VMT taken from 2004-2030 VMT Tables.xls file with latest 2004 data added
Functional Class % taken from VMT04.xls file

LOUISVILLE 8-HOUR OZONE REDESIGNATION REQUEST

BULLITT AND OLDHAM COUNTIES

HIGHWAY MOBILE SOURCES –

MOBILE6.2 Temperature Data

2001, 2002, 2003

April 2006

Bullitt County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Bullitt	Shepherdsville	07/15/02	0.104	Louisville, KY			
Bullitt	Shepherdsville	07/30/01	0.100	Louisville, KY			
Bullitt	Shepherdsville	08/02/02	0.094	Louisville, KY			
Bullitt	Shepherdsville	06/20/02	0.091	Louisville, KY			
Bullitt	Shepherdsville	07/04/02	0.090	Louisville, KY			
Bullitt	Shepherdsville	07/16/02	0.089	Louisville, KY			
Bullitt	Shepherdsville	08/04/02	0.085	Louisville, KY			
Bullitt	Shepherdsville	08/09/02	0.084	Louisville, KY			
Bullitt	Shepherdsville	08/10/02	0.083	Louisville, KY	06/12/01	68	89
Bullitt	Shepherdsville	06/12/01	0.083	Louisville, KY	07/30/01	69	90
					06/20/02	67	90
					07/04/02	71	94
					07/15/02	66	88
					07/16/02	69	89
					08/02/02	72	95
					08/04/02	73	99
					08/09/02	58	89
					08/10/02	61	93
				Average Min/Max T (Degrees F)		67	92
				Ambient T (Degrees F)		→	**84**
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.100	07/30/01	11
2	.089	05/05/01	11
3	.083	06/12/01	11
4	.082	05/03/01	11
5	.081	05/02/01	11
6	.081	06/13/01	10
7	.081	06/19/01	10
8	.081	08/13/01	11
9	.080	05/06/01	10
10	.080	06/17/01	11
11	.080	07/08/01	14
12	.079	06/18/01	11
13	.079	07/16/01	11
14	.077	05/04/01	11
15	.077	05/15/01	11
16	.077	07/10/01	10
17	.077	07/24/01	11
18	.076	07/19/01	10
19	.076	08/02/01	10
20	.075	05/16/01	10

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.104	07/15/02	11
2	.094	08/02/02	12
3	.092	09/10/02	11
4	.091	06/20/02	11
5	.091	09/08/02	11
6	.090	07/04/02	11
7	.089	07/16/02	11
8	.086	09/07/02	10
9	.085	08/04/02	11
10	.085	09/06/02	11
11	.084	08/09/02	11
12	.084	09/09/02	11
13	.083	08/10/02	11
14	.082	06/21/02	11
15	.080	07/21/02	11
16	.078	06/22/02	11
17	.078	07/08/02	11
18	.078	08/05/02	10
19	.075	06/01/02	11
20	.075	07/05/02	10

Current Date : 03/10/06
Current Time : 14:06

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.076	07/17/03	12
2	.073	06/24/03	11
3	.072	04/14/03	12
4	.072	06/18/03	09
5	.071	04/16/03	11
6	.069	06/25/03	11
7	.068	04/15/03	12
8	.068	06/29/03	11
9	.067	06/22/03	11
10	.066	06/27/03	12
11	.066	06/28/03	11
12	.066	07/03/03	11
13	.066	07/19/03	11
14	.065	06/23/03	11
15	.064	06/05/03	11
16	.064	07/26/03	10
17	.063	04/28/03	10
18	.063	08/20/03	11
19	.063	09/13/03	11
20	.062	05/28/03	11

Oldham County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Oldham	Buckner	07/08/02	0.105	Louisville, KY			
Oldham	Buckner	08/10/02	0.098	Louisville, KY			
Oldham	Buckner	07/09/02	0.091	Louisville, KY			
Oldham	Buckner	07/16/02	0.091	Louisville, KY			
Oldham	Buckner	06/12/01	0.089	Louisville, KY			
Oldham	Buckner	07/24/01	0.089	Louisville, KY			
Oldham	Buckner	06/25/03	0.088	Louisville, KY			
Oldham	Buckner	06/13/01	0.086	Louisville, KY			
Oldham	Buckner	08/22/02	0.086	Louisville, KY	06/12/01	68	89
Oldham	Buckner	06/20/02	0.085	Louisville, KY	06/13/01	69	90
Oldham	Buckner	08/03/02	0.085	Louisville, KY	07/24/01	72	92
Oldham	Buckner	06/23/03	0.085	Louisville, KY	06/20/02	67	90
					07/08/02	64	93
					07/09/02	72	91
					07/16/02	69	89
					08/03/02	71	98
					08/10/02	61	93
					08/22/02	72	96
					06/23/03	58	86
					06/25/03	63	90
				Average Min/Max T (Degrees F)		67	91
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.092	05/05/01	12
2	.089	06/12/01	11
3	.089	07/24/01	12
4	.086	06/13/01	11
5	.084	05/03/01	11
6	.084	05/06/01	11
7	.084	07/16/01	12
8	.083	06/19/01	10
9	.081	05/04/01	11
10	.081	07/23/01	11
11	.081	08/02/01	10
12	.080	06/10/01	11
13	.079	07/25/01	11
14	.079	08/01/01	11
15	.079	08/22/01	11
16	.078	05/16/01	11
17	.078	06/25/01	11
18	.078	07/31/01	09
19	.078	08/07/01	12
20	.076	05/02/01	11

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.105	07/08/02	12
2	.098	08/10/02	12
3	.097	09/07/02	11
4	.091	07/09/02	11
5	.091	07/16/02	11
6	.090	09/09/02	11
7	.086	08/22/02	11
8	.086	09/08/02	11
9	.086	09/10/02	11
10	.085	06/20/02	11
11	.085	08/03/02	11
12	.085	09/13/02	10
13	.084	09/06/02	11
14	.082	06/19/02	11
15	.081	07/04/02	12
16	.081	07/15/02	11
17	.079	08/01/02	10
18	.079	08/09/02	12
19	.078	08/02/02	12
20	.077	06/08/02	12

Current Date : 03/10/06
Current Time : 14:06

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.088	06/25/03	10
2	.085	06/23/03	12
3	.082	07/03/03	11
4	.082	08/25/03	11
5	.079	07/20/03	12
6	.078	06/30/03	10
7	.077	06/18/03	11
8	.076	06/29/03	11
9	.075	06/24/03	11
10	.075	08/27/03	10
11	.074	06/28/03	10
12	.074	07/26/03	10
13	.073	04/16/03	10
14	.073	07/04/03	10
15	.072	07/17/03	12
16	.072	08/26/03	11
17	.070	04/14/03	13
18	.070	08/21/03	11
19	.069	07/27/03	10
20	.069	08/01/03	11

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	Bates Elem. Sch.	07/17/03	0.096	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/16/02	0.094	Louisville, KY			
Jefferson	Bates Elem. Sch.	08/02/02	0.091	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/20/02	0.090	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/15/01	0.086	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/29/02	0.083	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/21/02	0.082	Louisville, KY			
Jefferson	Bates Elem. Sch.	08/02/01	0.081	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/08/02	0.080	Louisville, KY	07/15/01	57	86
Jefferson	Bates Elem. Sch.	07/15/02	0.080	Louisville, KY	08/02/01	72	91
Jefferson	Bates Elem. Sch.	08/04/02	0.080	Louisville, KY	06/20/02	67	90
					06/21/02	67	89
					06/29/02	70	88
					07/08/02	64	93
					07/15/02	66	88
					07/16/02	69	89
					08/02/02	72	95
					08/04/02	73	99
					07/17/03	65	87
				Average Min/Max T (Degrees F)		67	90
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Bates_2001_top 30

Current Date : 03/16/06
Current Time : 18:15

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.086	07/15/01	18
2	.085	05/03/01	19
3	.081	05/02/01	19
4	.081	08/02/01	18
5	.080	05/05/01	18
6	.079	06/12/01	18
7	.077	07/10/01	18
8	.076	05/04/01	17
9	.076	07/24/01	18
10	.075	05/06/01	18
11	.075	07/16/01	00
12	.073	07/08/01	17
13	.073	07/30/01	18
14	.072	07/31/01	18
15	.071	04/29/01	19
16	.071	04/30/01	18
17	.070	06/10/01	17
18	.070	08/04/01	19
19	.070	08/13/01	18
20	.070	08/15/01	18
21	.069	05/15/01	17
22	.069	06/19/01	17
23	.069	08/14/01	19
24	.068	04/27/01	17
25	.068	08/12/01	18
26	.068	09/13/01	18
27	.067	05/28/01	18
28	.067	07/14/01	17
29	.067	08/22/01	19
30	.066	05/16/01	17

Bates_2002_top 30

Current Date : 03/16/06
Current Time : 18:14

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.094	07/16/02	19
2	.091	08/02/02	19
3	.090	06/20/02	18
4	.085	09/08/02	18
5	.084	09/07/02	18
6	.084	09/09/02	18
7	.083	06/29/02	19
8	.083	09/06/02	19
9	.083	09/10/02	18
10	.082	06/21/02	18
11	.080	07/08/02	17
12	.080	07/15/02	18
13	.080	08/04/02	18
14	.078	06/22/02	18
15	.077	07/04/02	18
16	.077	07/25/02	18
17	.076	06/19/02	18
18	.073	05/23/02	19
19	.072	06/02/02	16
20	.072	07/09/02	18
21	.072	08/10/02	18
22	.071	06/30/02	18
23	.070	08/01/02	18
24	.070	08/03/02	18
25	.070	08/22/02	17
26	.069	05/24/02	18
27	.069	07/07/02	19
28	.068	06/10/02	18
29	.068	07/21/02	17
30	.068	08/05/02	18

Bates_2003_top 30

Current Date : 03/16/06
Current Time : 18:14

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.096	07/17/03	19
2	.082	04/14/03	20
3	.076	04/16/03	17
4	.072	04/15/03	00
5	.070	07/03/03	18
6	.067	06/25/03	17
7	.067	06/29/03	18
8	.067	07/26/03	17
9	.066	06/23/03	17
10	.066	09/13/03	17
11	.065	07/20/03	17
12	.064	07/18/03	19
13	.064	08/27/03	17
14	.063	04/28/03	17
15	.063	06/30/03	17
16	.062	04/17/03	00
17	.062	04/29/03	17
18	.062	05/24/03	18
19	.062	06/18/03	18
20	.062	06/24/03	17
21	.062	09/11/03	17
22	.061	04/01/03	19
23	.061	04/19/03	19
24	.061	06/28/03	18
25	.061	10/25/03	19
26	.060	03/24/03	19
27	.060	04/30/03	20
28	.060	06/05/03	18
29	.060	06/22/03	18
30	.060	09/09/03	17

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	Watson Lane	07/04/02	0.104	Louisville, KY	07/31/01	70	92
Jefferson	Watson Lane	07/25/02	0.097	Louisville, KY	06/20/02	67	90
Jefferson	Watson Lane	06/20/02	0.096	Louisville, KY	06/21/02	67	89
Jefferson	Watson Lane	08/09/02	0.093	Louisville, KY	06/22/02	65	87
Jefferson	Watson Lane	06/21/02	0.092	Louisville, KY	07/04/02	71	94
Jefferson	Watson Lane	07/16/02	0.091	Louisville, KY	07/07/02	64	87
Jefferson	Watson Lane	08/02/02	0.089	Louisville, KY	07/15/02	66	88
Jefferson	Watson Lane	06/22/02	0.088	Louisville, KY	07/16/02	69	89
Jefferson	Watson Lane	07/15/02	0.087	Louisville, KY	07/25/02	66	89
Jefferson	Watson Lane	07/31/01	0.086	Louisville, KY	08/02/02	72	95
Jefferson	Watson Lane	07/07/02	0.086	Louisville, KY	08/09/02	58	89
					Average Min/Max T (Degrees F)	67	91
					Ambient T (Degrees F)	→	82
Area:	**Louisville**				**Final Min/Max T For Area:**	67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

WS_2001_top 30

Current Date : 03/16/06
Current Time : 18:12

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.086	07/31/01	18
2	.082	05/05/01	18
3	.082	07/30/01	18
4	.081	06/13/01	18
5	.079	08/02/01	18
6	.078	06/12/01	17
7	.078	06/25/01	19
8	.076	07/24/01	17
9	.075	05/06/01	19
10	.075	06/18/01	18
11	.075	08/15/01	18
12	.075	09/04/01	17
13	.074	07/16/01	19
14	.074	08/04/01	18
15	.074	09/06/01	18
16	.073	09/13/01	18
17	.072	06/17/01	17
18	.072	07/15/01	18
19	.072	09/05/01	18
20	.071	06/09/01	18
21	.071	06/19/01	17
22	.071	06/24/01	18
23	.070	05/03/01	18
24	.070	07/08/01	18
25	.070	08/22/01	18
26	.069	06/27/01	18
27	.069	08/05/01	18
28	.069	08/14/01	19
29	.069	09/12/01	18
30	.068	07/25/01	18

Current Date : 03/16/06
Current Time : 18:11

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.104	07/04/02	17
2	.099	09/08/02	18
3	.097	07/25/02	19
4	.096	06/20/02	18
5	.093	08/09/02	18
6	.093	09/09/02	18
7	.092	06/21/02	18
8	.091	07/16/02	17
9	.089	08/02/02	19
10	.088	06/22/02	18
11	.087	07/15/02	18
12	.087	09/07/02	17
13	.086	07/07/02	18
14	.086	09/06/02	18
15	.085	09/10/02	19
16	.083	08/03/02	17
17	.081	06/19/02	18
18	.081	07/06/02	19
19	.081	08/10/02	18
20	.080	06/01/02	18
21	.080	07/03/02	18
22	.080	08/08/02	19
23	.078	06/10/02	18
24	.078	07/09/02	18
25	.078	08/01/02	18
26	.078	09/04/02	18
27	.078	09/05/02	18
28	.077	07/11/02	20
29	.076	07/08/02	19
30	.076	07/24/02	19

WS_2003_top 30

Current Date : 03/16/06
Current Time : 18:13

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.084	06/22/03	18
2	.081	06/24/03	18
3	.079	06/23/03	18
4	.075	06/29/03	18
5	.074	04/14/03	19
6	.072	06/25/03	18
7	.072	07/19/03	19
8	.072	07/30/03	18
9	.072	08/23/03	18
10	.071	06/18/03	18
11	.071	07/17/03	19
12	.070	06/30/03	17
13	.070	07/26/03	18
14	.070	08/19/03	18
15	.070	08/20/03	18
16	.070	09/09/03	18
17	.069	04/16/03	18
18	.069	09/13/03	18
19	.068	06/05/03	18
20	.068	07/29/03	19
21	.067	05/24/03	18
22	.067	06/07/03	18
23	.066	05/23/03	18
24	.066	05/28/03	18
25	.066	07/03/03	18
26	.066	07/13/03	18
27	.066	07/14/03	18
28	.065	08/24/03	18
29	.064	04/12/03	18
30	.064	06/28/03	18

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	WLKY - TV	08/01/02	0.089	Louisville, KY			
Jefferson	WLKY - TV	08/10/02	0.089	Louisville, KY			
Jefferson	WLKY - TV	06/20/02	0.088	Louisville, KY			
Jefferson	WLKY - TV	07/16/02	0.088	Louisville, KY			
Jefferson	WLKY - TV	07/08/02	0.085	Louisville, KY			
Jefferson	WLKY - TV	08/03/02	0.084	Louisville, KY			
Jefferson	WLKY - TV	06/19/02	0.082	Louisville, KY			
Jefferson	WLKY - TV	06/23/03	0.081	Louisville, KY			
Jefferson	WLKY - TV	06/13/01	0.080	Louisville, KY	06/13/01	69	90
Jefferson	WLKY - TV	08/04/02	0.079	Louisville, KY	06/19/02	62	88
Jefferson	WLKY - TV	06/24/03	0.079	Louisville, KY	06/20/02	67	90
					07/08/02	64	93
					07/16/02	69	89
					08/01/02	69	96
					08/03/02	71	98
					08/04/02	73	99
					08/10/02	61	93
					06/23/03	58	86
					06/24/03	59	86
				Average Min/Max T (Degrees F)		66	92
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

WLKY_2001_top 30

Current Date : 03/16/06
Current Time : 18:07

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.085	05/05/01	18
2	.080	06/13/01	18
3	.078	06/12/01	17
4	.077	08/02/01	18
5	.076	05/06/01	17
6	.075	07/16/01	19
7	.074	06/18/01	18
8	.074	07/24/01	20
9	.074	08/01/01	18
10	.073	06/25/01	19
11	.073	08/15/01	18
12	.073	09/06/01	18
13	.072	05/03/01	18
14	.071	06/19/01	17
15	.070	07/31/01	19
16	.069	04/30/01	18
17	.069	06/27/01	18
18	.068	05/04/01	18
19	.068	05/16/01	18
20	.068	07/21/01	18
21	.067	05/02/01	19
22	.067	06/10/01	17
23	.067	08/06/01	17
24	.067	08/07/01	19
25	.066	07/08/01	18
26	.066	07/15/01	18
27	.065	05/15/01	19
28	.065	08/22/01	18
29	.065	09/12/01	18
30	.064	09/13/01	17

WLKY_2002_top 30

Current Date : 03/16/06
Current Time : 18:09

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.091	09/07/02	18
2	.089	08/01/02	19
3	.089	08/10/02	18
4	.088	06/20/02	19
5	.088	07/16/02	18
6	.087	09/06/02	19
7	.085	07/08/02	18
8	.084	08/03/02	18
9	.082	06/19/02	18
10	.082	09/09/02	18
11	.079	08/04/02	17
12	.079	09/08/02	17
13	.077	07/31/02	18
14	.076	07/21/02	18
15	.076	08/02/02	19
16	.076	09/10/02	18
17	.075	07/04/02	18
18	.075	07/09/02	18
19	.075	08/09/02	18
20	.073	06/21/02	18
21	.073	07/15/02	19
22	.072	08/22/02	17
23	.071	07/25/02	18
24	.069	06/22/02	17
25	.069	07/07/02	19
26	.069	09/01/02	18
27	.069	09/13/02	18
28	.068	06/10/02	20
29	.068	06/29/02	19
30	.068	08/21/02	18

WLKY_2003_top 30

Current Date : 03/16/06
Current Time : 18:10

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.081	06/23/03	17
2	.079	06/24/03	18
3	.074	07/17/03	19
4	.073	06/30/03	17
5	.071	06/28/03	18
6	.069	06/18/03	19
7	.067	04/16/03	17
8	.067	06/29/03	18
9	.067	08/20/03	18
10	.066	06/25/03	18
11	.066	07/26/03	18
12	.063	04/14/03	18
13	.063	06/22/03	18
14	.063	07/03/03	18
15	.063	07/30/03	18
16	.061	05/24/03	18
17	.061	09/13/03	18
18	.060	04/15/03	18
19	.059	07/20/03	18
20	.059	07/27/03	17
21	.058	06/06/03	16
22	.058	07/04/03	17
23	.057	04/27/03	18
24	.057	07/25/03	18
25	.057	08/01/03	18
26	.056	04/26/03	19
27	.056	05/23/03	18
28	.056	09/11/03	18
29	.056	09/17/03	18
30	.055	03/24/03	18

Mobile6.2

Input File

2002

```
* Filenar    d:\Mobile62\Ky_M62\8-HrO3\02-8ozo.in

* This input file is a MOBILE6.2 run for the 8-hour ozone designations and the 2002 emissions
* inventory.  The counties include Boone, Campbell, Kenton (NKY), Boyd (Ashland), Jefferson,
* Bullitt, and Oldham (Louisville) Counties.  OKI will be addressing Boone, Campbell, and
* Kenton Counties.  And the APCDJC will be addressing Jefferson County.  The year will be 2002.

* NOTE:  For some Road Classifications, there are no DVMT.  The lowest speed that the
* MOBILE6 model accepts is 2.5 mph.  For these Road Classifications, 2.5 mph is indicated
* simply to make the model run.  These corresponding emission factors will not influence
* the emission total because DVMT = 0 for that Road Classification.

* According to the EPA document, "Technical Guidance on the Use of MOBILE6.2 for Emission
* Inventory Preparation" (August 2004), Kentucky has amended the standard MOBILE6.2 input
* file to reflect three modifications relating to highway mobile source emission calculations.
* The modifications are:  (1) Do not include Ramp as a single Road Classification entry,
* (2) for Rural Local, change Local in the Average Speed line to Arterial and use KYTC's actual
* Rural Local speed and not 12.9 mph, and (3) replace the Diesel Sulfur value of 500 ppm with a
* state-specific value provided on an EPA web link.

*******************************     Header Section     *********************************
MOBILE6 INPUT FILE :
REPORT FILE         : d:\Mobile62\Ky_M62\8-HrO3\02-8ozo.out
RUN DATA
```

```
FUEL RVP              : 8.6
MIN/MAX TEMP          : 69.0 91.0

* Indicate northern RFG program is in place.
FUEL PROGRAM          : 2 N

*******************************    Scenario Section #5    *********************************

SCENARIO RECORD       : BullittRFG              Rural Interstate 69.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD       : BullittRFG              Rural Principal Arterial 57.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 57.0 Arterial

SCENARIO RECORD       : BullittRFG              Rural Minor Arterial 47.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 47.0 Arterial

SCENARIO RECORD       : BullittRFG              Rural Major Collector 46.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 46.0 Arterial

SCENARIO RECORD       : BullittRFG              Rural Minor Collector 41.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 41.0 Arterial

SCENARIO RECORD       : BullittRFG              Rural Local 35.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
AVERAGE SPEED         : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD       : BullittRFG              Urban Interstate 71.0 mph - CY2002
DIESEL SULFUR         : 323.00
CALENDAR YEAR         : 2002
EVALUATION MONTH      : 7
```

```
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : BullittRFG              Urban Freeway 2.5 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : BullittRFG              Urban Principal Arterial 31.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Minor Arterial 28.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Collector 33.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 33.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Local 12.9 mph Default - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD    : OldhamRFG               Rural Interstate 69.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : OldhamRFG               Rural Principal Arterial 57.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : OldhamRFG               Rural Minor Arterial 47.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : OldhamRFG               Rural Major Collector 46.0 mph - CY2002
```

```
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Minor Collector 41.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Local 35.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : OldhamRFG              Urban Interstate 71.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : OldhamRFG              Urban Freeway 2.5 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Collector 33.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 33.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Local 12.9 mph Default - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SP         : 12.9 Local
```

```
* Note t  2.9 mph is the default MOBILE6 average speed f  cal and cannot be changed.

END OF RUN
**********************    End of Run #2, Begin Run Section #3    ************************

FUEL RVP            : 8.6
MIN/MAX TEMP        : 69.0 91.0

*******************************    Scenario Section #6    *********************************

SCENARIO RECORD     : Bullitt               Rural Interstate 69.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Bullitt               Rural Principal Arterial 57.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Minor Arterial 47.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Major Collector 46.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Minor Collector 41.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Local 35.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt               Urban Interstate 71.0 mph - CY2002
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2002
EVALUATION MONTH    : 7
```

```
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : Bullitt              Urban Freeway 2.5 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : Bullitt              Urban Principal Arterial 31.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : Bullitt              Urban Minor Arterial 28.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : Bullitt              Urban Collector 33.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 33.0 Arterial

SCENARIO RECORD    : Bullitt              Urban Local 12.9 mph Default - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD    : Oldham               Rural Interstate 69.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : Oldham               Rural Principal Arterial 57.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : Oldham               Rural Minor Arterial 47.0 mph - CY2002
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2002
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO R     )   : Oldham               Rural Major Collect      .0 mph - CY2002
```

DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : Oldham Rural Minor Collector 41.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 41.0 Arterial

SCENARIO RECORD : Oldham Rural Local 35.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : Oldham Urban Interstate 71.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD : Oldham Urban Freeway 2.5 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 2.5 Freeway

SCENARIO RECORD : Oldham Urban Principal Arterial 31.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 31.0 Arterial

SCENARIO RECORD : Oldham Urban Minor Arterial 28.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 28.0 Arterial

SCENARIO RECORD : Oldham Urban Collector 33.0 mph - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Oldham Urban Local 12.9 mph Default - CY2002
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2002
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

```
* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

**********************************     End of Run #3     ************************************
END OF RUN
```

Mobile6.2

Output File

2002

```
******** ***************************************************** ************
* MOBILE6 03 (24-Sep-2003)                                               *
* Input file: D:\MOBILE62\KY_M62\8-HRO3\02-8OZO.IN     --               *
***************************************************************************
```

```
***************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                               *
* Input file: D:\MOBILE62\KY_M62\8-HRO3\02-8OZO.IN (file 1, run 2).       *
***************************************************************************
 M616 Comment:
              User has supplied post-1999 sulfur levels.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Interstate 69.0 mph - CY2002
* File 1, Run 2, Scenario 1.
```

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.076	1.251	2.035	1.452	1.418	0.574	0.770	0.443	2.29	1.198
Composite CO :	16.71	20.26	28.89	22.47	22.61	1.583	1.545	3.009	21.31	18.167
Composite NOX :	1.164	1.380	1.740	1.473	5.800	2.582	2.668	25.673	1.65	3.507

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG               Rural Principal Arterial 57.0 mph - CY2002
* File 1, Run 2, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
```

```
                    Altitude:  Low
          Minimum Temperature:  69.0 (F)
          Maximum Temperature:  91.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:  129. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.096	1.280	2.088	1.487	1.420	0.576	0.772	0.446	1.82	1.219
Composite CO :	15.51	19.03	27.62	21.23	17.21	1.462	1.429	2.526	11.12	16.803
Composite NOX :	1.137	1.343	1.700	1.434	5.528	1.952	2.016	17.406	1.44	2.778

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Minor Arterial 47.0 mph - CY2002
* File 1, Run 2, Scenario 3.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                  Calendar Year:  2002
                          Month:  July
                       Altitude:  Low
             Minimum Temperature:  69.0 (F)
             Maximum Temperature:  91.0 (F)
               Absolute Humidity:   75. grains/lb
             Fuel Sulfur Content:  129. ppm

             Exhaust I/M Program:  No
                Evap I/M Program:  No
                     ATP Program:  No
                Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.139	1.331	2.176	1.547	1.506	0.602	0.807	0.489	1.71	1.270

Composite CO :	14.08	17.51	26.08	19.70	14.54	1.420	1.388	2.358	8.51	15.392
Composite NOX :	1.109	1.301	1.657	1.392	5.162	1.521	1.570	13.930	1.21	2.442

---

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2002
* File 1, Run 2, Scenario 4.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 129. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.144	1.337	2.185	1.554	1.519	0.606	0.812	0.496	1.71	1.276
Composite CO :	13.93	17.35	25.91	19.54	14.44	1.421	1.389	2.361	8.57	15.255
Composite NOX :	1.106	1.297	1.653	1.388	5.123	1.492	1.540	13.693	1.20	2.418

---

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2002
* File 1, Run 2, Scenario 5.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July

```
                  Altitude:  Low
Minimum Temperature:  69.0 (F)
Maximum Temperature:  91.0 (F)
  Absolute Humidity:   75. grains/lb
Fuel Sulfur Content:  129. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.170	1.365	2.231	1.587	1.605	0.633	0.847	0.539	1.75	1.309
Composite CO :	13.22	16.59	25.14	18.78	14.59	1.447	1.414	2.466	9.13	14.630
Composite NOX :	1.094	1.277	1.634	1.368	4.941	1.397	1.441	12.925	1.16	2.334

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Local 35.0 mph - CY2002
* File 1, Run 2, Scenario 6.
* # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of 35.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
 M 48 Warning:
          there are no sales for vehicle class HDGV8b

               Calendar Year:  2002
                       Month:  July
                    Altitude:  Low
          Minimum Temperature:  69.0 (F)
          Maximum Temperature:  91.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:  129. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.207	1.403	2.291	1.631	1.760	0.678	0.907	0.613	1.85	1.356

Composite CO :	12.35	15.67	24.19	17.85	15.85	1.519	1.483	2.754	10.31	13.920
Composite NOX :	1.086	1.260	1.618	1.352	4.717	1.345	1.388	12.508	1.13	2.279

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Interstate 71.0 mph - CY2002
* File 1, Run 2, Scenario 7.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.094	1.272	2.064	1.474	1.440	0.581	0.778	0.454	2.26	1.217
Composite CO :	17.01	20.41	29.06	22.63	22.20	1.579	1.542	2.995	20.63	18.347
Composite NOX :	1.173	1.392	1.752	1.484	5.732	2.506	2.589	24.714	1.61	3.433

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Freeway 2.5 mph - CY2002
* File 1, Run 2, Scenario 8.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
            The combined freeway and ramp average speed entered
               ıot be less than  2.7 miles per hour.
```

The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	129. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	8.177	7.898	12.289	9.022	12.423	1.535	2.045	2.020	7.95	8.151
Composite CO :	41.46	42.64	71.29	49.97	93.42	4.533	4.397	14.806	96.27	44.889
Composite NOX :	2.332	2.409	2.977	2.554	3.620	2.511	2.594	24.729	1.04	4.329

* #
* BullittRFG Urban Principal Arterial 31.0 mph - CY2002
* File 1, Run 2, Scenario 9.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	129. ppm

```
            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.250	1.452	2.374	1.688	1.911	0.719	0.961	0.680	1.94	1.412
Composite CO :	12.18	15.44	24.07	17.65	17.58	1.602	1.563	3.084	11.45	13.858
Composite NOX :	1.110	1.276	1.638	1.369	4.575	1.354	1.397	12.581	1.09	2.298

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Minor Arterial 28.0 mph - CY2002
* File 1, Run 2, Scenario 10.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                   Calendar Year:  2002
                           Month:  July
                        Altitude:  Low
                 Minimum Temperature:  69.0 (F)
                 Maximum Temperature:  91.0 (F)
                   Absolute Humidity:   75. grains/lb
                 Fuel Sulfur Content:  129. ppm

                 Exhaust I/M Program:  No
                    Evap I/M Program:  No
                         ATP Program:  No
                    Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.287	1.491	2.439	1.733	2.058	0.756	1.010	0.741	2.03	1.459
Composite CO :	12.17	15.39	24.14	17.63	19.42	1.685	1.644	3.418	12.50	13.950
Composite NOX :	1.137	1.300	1.665	1.393	4.468	1.378	1.422	12.771	1.06	2.333

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittR                Urban Collector 33.0 mph - CY2002
```

* File 1, Run 2, Scenario 11.
* #
M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 129. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.227	1.426	2.330	1.657	1.831	0.697	0.932	0.645	1.89	1.382
Composite CO :	12.27	15.56	24.14	17.76	16.66	1.558	1.521	2.909	10.84	13.891
Composite NOX :	1.097	1.268	1.627	1.360	4.650	1.349	1.392	12.542	1.11	2.288

* #
* BullittRFG Urban Local 12.9 mph Default - CY2002
* File 1, Run 2, Scenario 12.
* #
M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 129. ppm

Exhaust I/M Program: No

```
                Evap I/M Program:  No
                     ATP Program:  No
                Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:                <6000     >6000     (All)
                      ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.4568    0.3091    0.1063              0.0360    0.0008    0.0017    0.0833    0.0060    1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite VOC :     1.719     1.959     3.152     2.264     3.798     1.095     1.461     1.298      2.92     1.992
     Composite CO  :     10.52     14.60     24.41     17.11     43.13     2.668     2.594     7.348     24.12    14.231
     Composite NOX :     1.113     1.229     1.594     1.323     3.907     1.803     1.862    13.972      0.91     2.373
 ---------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Interstate 69.0 mph - CY2002
* File 1, Run 2, Scenario 13.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:                <6000     >6000     (All)
                      ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.4568    0.3091    0.1063              0.0360    0.0008    0.0017    0.0833    0.0060    1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Compos(     OC :     1.076     1.251     2.035     1.452      .418     0.574     0.770     0.443      2.29       .98
```

Composite CO :	16.71	20.26	28.89	22.47	22.61	1.583	1.545	3.009	21.31	.167
Composite NOX :	1.164	1.380	1.740	1.473	5.800	2.582	2.668	25.673	1.65	.507

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2002
* File 1, Run 2, Scenario 14.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 129. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.096	1.280	2.088	1.487	1.420	0.576	0.772	0.446	1.82	1.219
Composite CO :	15.51	19.03	27.62	21.23	17.21	1.462	1.429	2.526	11.12	16.803
Composite NOX :	1.137	1.343	1.700	1.434	5.528	1.952	2.016	17.406	1.44	2.778

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2002
* File 1, Run 2, Scenario 15.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July

```
                    Altitude:  Low
           Minimum Temperature:  69.0 (F)
           Maximum Temperature:  91.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:  129. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.139	1.331	2.176	1.547	1.506	0.602	0.807	0.489	1.71	1.270
Composite CO :	14.08	17.51	26.08	19.70	14.54	1.420	1.388	2.358	8.51	15.392
Composite NOX :	1.109	1.301	1.657	1.392	5.162	1.521	1.570	13.930	1.21	2.442

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Major Collector 46.0 mph - CY2002
* File 1, Run 2, Scenario 16.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                  Calendar Year:  2002
                          Month:  July
                       Altitude:  Low
           Minimum Temperature:  69.0 (F)
           Maximum Temperature:  91.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:  129. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Compos VOC :	1.144	1.337	2.185	1.554	1.519	0.606	0.812	0.496	1.71	276

Composite CO :	13.93	17.35	25.91	19.54	14.44	1.421	1.389	2.361	8.57	5.255
Composite NOX :	1.106	1.297	1.653	1.38	5.123	1.492	1.540	13.693	1.20	2.418

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Minor Collector 41.0 mph - CY2002
* File 1, Run 2, Scenario 17.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.170	1.365	2.231	1.587	1.605	0.633	0.847	0.539	1.75	1.309
Composite CO :	13.22	16.59	25.14	18.78	14.59	1.447	1.414	2.466	9.13	14.630
Composite NOX :	1.094	1.277	1.634	1.368	4.941	1.397	1.441	12.925	1.16	2.334

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Local 35.0 mph - CY2002
* File 1, Run 2, Scenario 18.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                           Month:  July
```

```
                    Altitude:  Low
          Minimum Temperature:  69.0 (F)
          Maximum Temperature:  91.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:  129. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.207	1.403	2.291	1.631	1.760	0.678	0.907	0.613	1.85	1.356
Composite CO :	12.35	15.67	24.19	17.85	15.85	1.519	1.483	2.754	10.31	13.920
Composite NOX :	1.086	1.260	1.618	1.352	4.717	1.345	1.388	12.508	1.13	2.279

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Interstate 71.0 mph - CY2002
* File 1, Run 2, Scenario 19.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.094	1.272	2.064	1.474	1.440	0.581	0.778	0.454	2.26	1.217
Composite CO :	17.01	20.41	29.06	22.63	22.20	1.579	1.542	2.995	20.63	18.347
Composite NOX :	1.173	1.392	1.752	1.484	5.732	2.506	2.589	24.714	1.61	3.433

* #
* OldhamRFG Urban Freeway 2.5 mph - CY2002
* File 1, Run 2, Scenario 20.
* #

M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	129. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	8.177	7.898	12.289	9.022	12.423	1.535	2.045	2.020	7.95	8.151
Composite CO :	41.46	42.64	71.29	49.97	93.42	4.533	4.397	14.806	96.27	44.889
Composite NOX :	2.332	2.409	2.977	2.554	3.620	2.511	2.594	24.729	1.04	4.329

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2002

```
* File 1, Run 2, Scenario 21.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.250	1.452	2.374	1.688	1.911	0.719	0.961	0.680	1.94	1.412
Composite CO :	12.18	15.44	24.07	17.65	17.58	1.602	1.563	3.084	11.45	13.858
Composite NOX :	1.110	1.276	1.638	1.369	4.575	1.354	1.397	12.581	1.09	2.298

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Minor Arterial 28.0 mph - CY2002
* File 1, Run 2, Scenario 22.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm
```

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.287	1.491	2.439	1.733	2.058	0.756	1.010	0.741	2.03	1.459
Composite CO :	12.17	15.39	24.14	17.63	19.42	1.685	1.644	3.418	12.50	13.950
Composite NOX :	1.137	1.300	1.665	1.393	4.468	1.378	1.422	12.771	1.06	2.333

* #
* OldhamRFG Urban Collector 33.0 mph - CY2002
* File 1, Run 2, Scenario 23.
* #

M583 Warning:
The user supplied arterial average speed of 33.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 129. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.227	1.426	2.330	1.657	1.831	0.697	0.932	0.645	1.89	1.382
Composite CO :	12.27	15.56	24.14	17.76	16.66	1.558	1.521	2.909	10.84	13.891
Composite NOX :	1.097	1.268	1.627	1.360	4.650	1.349	1.392	12.542	1.11	2.288

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2002

```
* File 1, Run 2, Scenario 24.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  129. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.719	1.959	3.152	2.264	3.798	1.095	1.461	1.298	2.92	1.992
Composite CO :	10.52	14.60	24.41	17.11	43.13	2.668	2.594	7.348	24.12	14.231
Composite NOX :	1.113	1.229	1.594	1.323	3.907	1.803	1.862	13.972	0.91	2.373

```
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: D:\MOBILE62\KY_M62\8-HRO3\02-8OZO.IN (file 1, run 3).     *
*************************************************************************

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Interstate 69.0 mph - CY2002
* File 1, Run 3, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warn
```

there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.324	1.517	2.399	1.743	1.728	0.574	0.770	0.443	2.64	1.445
Composite CO :	20.35	24.51	34.70	27.12	27.42	1.583	1.545	3.009	24.74	21.952
Composite NOX :	1.242	1.472	1.823	1.562	5.999	2.582	2.668	25.673	1.65	3.587

* #
* Bullitt Rural Principal Arterial 57.0 mph - CY2002
* File 1, Run 3, Scenario 2.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.349	1.552	2.464	1.785	1.744	0.576	0.772	0.446	2.17	1.473
Composite CO :	18.83	22.95	33.09	25.54	20.87	1.462	1.429	2.526	12.91	20.254
Composite NOX :	1.213	1.431	1.780	1.521	5.717	1.952	2.016	17.406	1.44	2.855

* #
* Bullitt Rural Minor Arterial 47.0 mph - CY2002
* File 1, Run 3, Scenario 3.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.409	1.619	2.576	1.864	1.862	0.602	0.807	0.489	2.06	1.540
Composite CO :	17.02	21.03	31.13	23.62	17.63	1.420	1.388	2.358	9.89	18.481
Composite NOX :	1.181	1.386	1.735	1.475	5.338	1.521	1.570	13.930	1.21	2.516

* #
* Bullitt Rural Major Collector 46.0 mph - CY2002
* File 1, Run 3, Scenario 4.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.417	1.627	2.588	1.873	1.879	0.606	0.812	0.496	2.06	1.548
Composite CO :	16.83	20.83	30.93	23.41	17.51	1.421	1.389	2.361	9.95	18.308
Composite NOX :	1.178	1.381	1.731	1.471	5.299	1.492	1.540	13.693	1.20	2.492

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2002
* File 1, Run 3, Scenario 5.
* #
M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi

Fuel Sulfur Content: 279. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.457	1.663	2.645	1.914	1.988	0.633	0.847	0.539	2.10	1.592
Composite CO :	15.93	19.87	29.95	22.45	17.70	1.447	1.414	2.466	10.60	17.515
Composite NOX :	1.165	1.360	1.710	1.449	5.110	1.397	1.441	12.925	1.16	2.405

* #
* Bullitt Rural Local 35.0 mph - CY2002
* File 1, Run 3, Scenario 6.
* #

M583 Warning:
The user supplied arterial average speed of 35.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 279. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.514	1.712	2.723	1.971	2.175	0.678	0.907	0.613	2.20	1.655
Composite CO :	14.83	18.70	28.75	21.27	19.22	1.519	1.483	2.754	11.96	609
Composite NOX :	1.154	1.341	1.693	1.431	4.878	1.345	1.388	12.508	1.13	350

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Interstate 71.0 mph - CY2002
* File 1, Run 3, Scenario 7.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0     speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  279. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.350	1.544	2.436	1.772	1.757	0.581	0.778	0.454	2.61	1.471
Composite CO :	20.74	24.70	34.91	27.32	26.92	1.579	1.542	2.995	23.95	22.188
Composite NOX :	1.253	1.484	1.835	1.574	5.929	2.506	2.589	24.714	1.61	3.514

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Freeway 2.5 mph - CY2002
* File 1, Run 3, Scenario 8.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
              The combined freeway and ramp average speed entered
             cannot be less than  2.7 miles per hour.
```

The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
          Calendar Year:  2002
                  Month:  July
               Altitude:  Low
Minimum Temperature:  69.0 (F)
Maximum Temperature:  91.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:  279. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	12.735	11.635	17.571	13.155	18.217	1.535	2.045	2.020	8.31	12.161
Composite CO :	50.65	52.20	87.16	61.15	113.29	4.533	4.397	14.806	111.76	54.535
Composite NOX :	2.498	2.573	3.124	2.714	3.744	2.511	2.594	24.729	1.04	4.476

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Urban Principal Arterial 31.0 mph - CY2002
* File 1, Run 3, Scenario 9.
* # # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
          Calendar Year:  2002
                  Month:  July
               Altitude:  Low
Minimum Temperature:  69.0 (F)
Maximum Temperature:  91.0 (F)
  Absolute Humidity:   75. grains/lb
```

```
          Nominal Fuel RVP:   8.6 psi
             Weathered RVP:   8.2 psi
       Fuel Sulfur Content:   279. ppm

       Exhaust I/M Program:   No
          Evap I/M Program:   No
               ATP Program:   No
          Reformulated Gas:   No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.577	1.775	2.826	2.044	2.354	0.719	0.961	0.680	2.30	1.727
Composite CO :	14.61	18.41	28.59	21.01	21.32	1.602	1.563	3.084	13.30	16.512
Composite NOX :	1.181	1.359	1.714	1.450	4.732	1.354	1.397	12.581	1.09	2.370

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Urban Minor Arterial 28.0 mph - CY2002
* File 1, Run 3, Scenario 10.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

               Calendar Year:  2002
                       Month:  July
                    Altitude:  Low
          Minimum Temperature:  69.0 (F)
          Maximum Temperature:  91.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:  279. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.633	1.827	2.909	2.104	2.527	0.756	1.010	0.741	2.38	1.789

Composite CO :	14.60	18.34	28.66	20.99	23.56	1.685	1.644	3.418	14.51	16.610
Composite NOX :	1.210	1.384	1.742	1.475	4.621	1.378	1.422	12.771	1.06	2.406

---

* #
* Bullitt Urban Collector 33.0 mph - CY2002
* File 1, Run 3, Scenario 11.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.543	1.742	2.771	2.005	2.259	0.697	0.932	0.645	2.25	1.689
Composite CO :	14.73	18.56	28.67	21.15	20.21	1.558	1.521	2.909	12.59	16.564
Composite NOX :	1.167	1.349	1.703	1.440	4.809	1.349	1.392	12.542	1.11	2.359

---

* #
* Bullitt Urban Local 12.9 mph Default - CY2002
* File 1, Run 3, Scenario 12.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002

```
                    Month:  July
                 Altitude:  Low
       Minimum Temperature:  69.0 (F)
       Maximum Temperature:  91.0 (F)
         Absolute Humidity:   75. grains/lb
          Nominal Fuel RVP:   8.6 psi
             Weathered RVP:   8.2 psi
       Fuel Sulfur Content:  279. ppm

       Exhaust I/M Program:  No
          Evap I/M Program:  No
               ATP Program:  No
          Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.368	2.539	3.925	2.893	4.639	1.095	1.461	1.298	3.27	2.582
Composite CO :	12.37	17.25	28.89	20.23	52.31	2.668	2.594	7.348	28.00	16.725
Composite NOX :	1.184	1.308	1.667	1.400	4.040	1.803	1.862	13.972	0.91	2.442

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Interstate 69.0 mph - CY2002
* File 1, Run 3, Scenario 13.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 69.0     speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                  Calendar Year:  2002
                          Month:  July
                       Altitude:  Low
             Minimum Temperature:  69.0 (F)
             Maximum Temperature:  91.0 (F)
               Absolute Humidity:   75. grains/lb
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
             Fuel Sulfur Content:  279. ppm
```

```
            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.324	1.517	2.399	1.743	1.728	0.574	0.770	0.443	2.64	1.445
Composite CO :	20.35	24.51	34.70	27.12	27.42	1.583	1.545	3.009	24.74	21.952
Composite NOX :	1.242	1.472	1.823	1.562	5.999	2.582	2.668	25.673	1.65	3.587

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Principal Arterial 57.0 mph - CY2002
* File 1, Run 3, Scenario 14.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                     Calendar Year:  2002
                             Month:  July
                          Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  279. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.349	1.552	2.464	1.785	1.744	0.576	0.772	0.446	2.17	1.473
Composite CO :	18.83	22.95	33.09	25.54	20.87	1.462	1.429	2.526	12.91	20.254
Composite NOX :	1.213	1.431	1.780	1.521	5.717	1.952	2.016	17.406	1.44	2.855

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Minor Arterial 47.0 mph - CY2002
* File 1, Run 3, Scenario 15.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
                Maximum Temperature:  91.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  279. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.409	1.619	2.576	1.864	1.862	0.602	0.807	0.489	2.06	1.540
Composite CO :	17.02	21.03	31.13	23.62	17.63	1.420	1.388	2.358	9.89	18.481
Composite NOX :	1.181	1.386	1.735	1.475	5.338	1.521	1.570	13.930	1.21	2.516

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Major Collector 46.0 mph - CY2002
* File 1, Run 3, Scenario 16.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2002
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  69.0 (F)
```

Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 279. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.417	1.627	2.588	1.873	1.879	0.606	0.812	0.496	2.06	1.548
Composite CO :	16.83	20.83	30.93	23.41	17.51	1.421	1.389	2.361	9.95	18.308
Composite NOX :	1.178	1.381	1.731	1.471	5.299	1.492	1.540	13.693	1.20	2.492

* #
* Oldham Rural Minor Collector 41.0 mph - CY2002
* File 1, Run 3, Scenario 17.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 279. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0360	0.0008	0.0017	0.0833	0.0060	000

Composite Emission Factors (g/mi):

Composite VOC :	1.457	1.663	2.645	1.91	1.988	0.633	0.847	0.539	2.10	1.592
Composite CO :	15.93	19.87	29.95	22.45	17.70	1.447	1.414	2.466	10.60	17.515
Composite NOX :	1.165	1.360	1.710	1.449	5.110	1.397	1.441	12.925	1.16	2.405

---

* #
* Oldham Rural Local 35.0 mph - CY2002
* File 1, Run 3, Scenario 18.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.514	1.712	2.723	1.971	2.175	0.678	0.907	0.613	2.20	1.655
Composite CO :	14.83	18.70	28.75	21.27	19.22	1.519	1.483	2.754	11.96	16.609
Composite NOX :	1.154	1.341	1.693	1.431	4.878	1.345	1.388	12.508	1.13	2.350

---

* #
* Oldham Urban Interstate 71.0 mph - CY2002
* File 1, Run 3, Scenario 19.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July
Altitude: Low
Minimum Temperature: 69.0 (F)
Maximum Temperature: 91.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 279. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.350	1.544	2.436	1.772	1.757	0.581	0.778	0.454	2.61	1.471
Composite CO :	20.74	24.70	34.91	27.32	26.92	1.579	1.542	2.995	23.95	22.188
Composite NOX :	1.253	1.484	1.835	1.574	5.929	2.506	2.589	24.714	1.61	3.514

* #
* Oldham Urban Freeway 2.5 mph - CY2002
* File 1, Run 3, Scenario 20.
* #
M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2002
Month: July

```
                    Altitude:  Low
       Minimum Temperature:  69.0 (F)
       Maximum Temperature:  91.0 (F)
         Absolute Humidity:   75. grains/lb
          Nominal Fuel RVP:   8.6 psi
             Weathered RVP:   8.2 psi
       Fuel Sulfur Content:  279. ppm

       Exhaust I/M Program:  No
          Evap I/M Program:  No
               ATP Program:  No
          Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	12.735	11.635	17.571	13.155	18.217	1.535	2.045	2.020	8.31	12.161
Composite CO :	50.65	52.20	87.16	61.15	113.29	4.533	4.397	14.806	111.76	54.535
Composite NOX :	2.498	2.573	3.124	2.714	3.744	2.511	2.594	24.729	1.04	4.476

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Principal Arterial 31.0 mph - CY2002
* File 1, Run 3, Scenario 21.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2002
                         Month:  July
                      Altitude:  Low
            Minimum Temperature:  69.0 (F)
            Maximum Temperature:  91.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:  279. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.577	1.775	2.826	2.044	2.354	0.719	0.961	0.680	2.30	1.727
Composite CO :	14.61	18.41	28.59	21.01	21.32	1.602	1.563	3.084	13.30	16.512
Composite NOX :	1.181	1.359	1.714	1.450	4.732	1.354	1.397	12.581	1.09	2.370

* #
* Oldham Urban Minor Arterial 28.0 mph - CY2002
* File 1, Run 3, Scenario 22.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.633	1.827	2.909	2.104	2.527	0.756	1.010	0.741	2.38	1.789
Composite CO :	14.60	18.34	28.66	20.99	23.56	1.685	1.644	3.418	14.51	16.610
Composite NOX :	1.210	1.384	1.742	1.475	4.621	1.378	1.422	12.771	1.06	2.406

* #
* Oldham Urban Collector 33.0 mph - CY2002
* File 1, Run 3, Scenario 23.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
been assigned to the arterial/collector roadwa

type for all hours of the day and all vehicle typ
M 48 Wa[illegible]:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.543	1.742	2.771	2.005	2.259	0.697	0.932	0.645	2.25	1.689
Composite CO :	14.73	18.56	28.67	21.15	20.21	1.558	1.521	2.909	12.59	16.564
Composite NOX :	1.167	1.349	1.703	1.440	4.809	1.349	1.392	12.542	1.11	2.359

* #
* Oldham Urban Local 12.9 mph Default - CY2002
* File 1, Run 3, Scenario 24.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2002
Month:	July
Altitude:	Low
Minimum Temperature:	69.0 (F)
Maximum Temperature:	91.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	279. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No

Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4568	0.3091	0.1063		0.0360	0.0008	0.0017	0.0833	0.0060	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.368	2.539	3.925	2.893	4.639	1.095	1.461	1.298	3.27	2.582
Composite CO :	12.37	17.25	28.89	20.23	52.31	2.668	2.594	7.348	28.00	16.725
Composite NOX :	1.184	1.308	1.667	1.400	4.040	1.803	1.862	13.972	0.91	2.442

APPENDIX E

Biogenic Emissions Inventory

Table 6-1
Summary of the 2002 Biogenic Emissions
Kentucky Portion of the Louisville KY-IN, Area

County	VOC Emissions (tons/yr)	VOC Emissions (tons/day)	NOx Emissions (tons/yr)	NOx Emissions (tons/day)
Bullitt	5435.71	33.81	106.34	1.42
Oldham	3090.18	19.64	126.51	0.49
Total Emissions	**8525.89**	**53.45**	**232.85**	**1.91**

APPENDIX F

401 KAR 63:005 Open Burning

401 KAR 63:005. Open burning.

RELATES TO: KRS 149.400, 224.10-100, 224.20-100, 224.20-110, 224.20-120, 42 U.S.C. 7401-7671q
STATUTORY AUTHORITY: KRS 224.10-100, 224.20-110
NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. KRS 224.20-110 prohibits any person from directly or indirectly, emitting into or discharging into the air under the jurisdiction of the commonwealth, or causing, permitting, or allowing to be emitted or discharged into the air, any contaminants as provided for in subsection (1) of KRS 224.01-010 that shall cause or contribute to the pollution of the air of the commonwealth in contravention of any of the rules, administrative regulations, or orders of the cabinet. This administrative regulation establishes requirements for the control of open burning.

Section 1. Definitions.
(1) "Clean lumber" means wood or wood products that have been cut or shaped and includes wet, air-dried, and kiln-dried wood products and does not include commercial or industrial waste or wood products that have been painted, pigment-stained, or pressure-treated using any hazardous or toxic compounds.
(2) "Fire training" means the instruction of industrial, public and private firefighters conducted in accordance with safety standards and procedures as accepted by the Kentucky State Fire Marshal, the Kentucky Fire Commission or the National Wildfire Coordinating Group.
(3) "Garbage" means putrescible animal and vegetable matter accumulated in the course of ordinary day-to-day living.
(4) "Household rubbish" means waste material and trash normally accumulated by a family in a residence in the course of ordinary day-to-day living, except for garbage, cans, glass, plastic, or other potentially hazardous waste materials.
(5) "Land clearing" means clearing of land for agricultural, residential, industrial, or commercial development purposes, including the construction of roads.
(6) "Open burning" means the burning of any matter without a burn chamber approved by the Kentucky Division for Air Quality, or without a stack or chimney with control devices approved by the Kentucky Division for Air Quality.
(7) "Priority I Region" means a region classified as Priority I in 401 KAR 50:020, Appendix A.
(8) "Recognized agricultural, silvicultural, range, ecological, or wildlife management practices" means burning recognized by the Kentucky Department of Agriculture, the United States Department of Agriculture, the Kentucky Division of Forestry, the United States Forest Service, the Kentucky Department of Fish and Wildlife, the Kentucky State Nature Preserves Commission, or the United States Fish and Wildlife Service as necessary to promote cultivation of crops, range, and forest lands, weed and understory abatement and pest control and prevention.
(9) "Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), felled trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings and shavings. Wood waste does not include:
(a) Yard waste;
(b) Construction, renovation, or demolition wastes; or
(c) Clean lumber.
(10) "Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs, which come from residential, commercial, retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include:
(a) Construction, renovation, and demolition wastes; or
(b) Clean lumber.

Section 2. Applicability. This administrative regulation shall apply to all open burning that is not subject to another administrative regulation in 401 KAR Chapters 50 to 65.

Section 3. Prohibition of Open Burning. Except as provided in Sections 4 and 5 of this administrative regulation, open burning shall be prohibited.

Section 4. Allowable Open Burning. Subject to the limitations contained in this section and the restrictions contained in Section 5 of this administrative regulation, open burning shall be allowed for:
(1) Fires set for the cooking of food for human consumption;
(2) Fires set for recreational or ceremonial purposes;
(3) Small fires set by construction and other workers for comfort heating purposes if:
(a) The ambient temperature is below fifty (50) degrees Fahrenheit;
(b) Excessive or unusual smoke is not created;
(c) Only clean lumber or vegetative matter is burned; and
(d) The fire is burned in a container not exceeding fifty-five (55) gallons in size;
(4) Fires set for the purpose of weed abatement, disease, and pest prevention;
(5) Fires set for prevention of a fire hazard, including the disposal of dangerous materials if no safe alternative is available;
(6) Fires set for the purpose of instruction and training of public and industrial employees in the methods of fighting fires as set forth in Section 6 of this administrative regulation;
(7) Fires set for recognized agricultural, silvicultural, range, ecological, and wildlife management practices;
(8) Fires set by individual homeowners for burning of leaves except in cities greater than 8,000 population located in a Priority I Region;
(9) Fires for disposal of household rubbish, which shall not include garbage, originating at dwellings of five (5) family units or less, if the fires are maintained by an occupant of the dwelling at the dwelling, except in cities greater than 8,000 population located in a Priority I Region;
(10) Fires set for the purpose of disposing of accidental spills or leaks of crude oil, petroleum products or other organic materials, and the disposal of absorbent material used in their removal, if no other economically feasible means of disposal is available and practical. Permission shall be obtained from the cabinet prior to burning;
(11) Fires set for disposal of natural growth for land clearing and maintenance, and trees and tree limbs felled by storms if no extraneous materials, such as tires or heavy oil which tend to produce dense smoke, are used to cause ignition or aid combustion and the burning is done on days when conditions do not pose a threat of igniting a forest fire. In regions classified Priority I, with respect to particulate matter pursuant to 401 KAR 50:020, Appendix A, the emissions from these fires shall not be equal to or greater than forty (40) percent opacity;
(12) Heating ropes that are set on fire to repair steel rails during cold weather; and
(13) Fires set by county or municipal governments to dispose of wood waste or clean lumber. This activity shall not be considered in violation of 401 KAR 47:030, Section 10.

Section 5. Restrictions to Open Burning. (1) For those counties, or portions of counties, which are, or were previously, designated

moderate nonattainment for the one (1) hour ozone or nonattainment for the National Ambient Air Quality Standards (NAAQS) PM_{10} or those counties, or portions of counties, which are, or were designated nonattainment for the eight (8) hour ozone or $PM_{2.5}$ national ambient air quality standards, pursuant to 401 KAR 51:010, fires may be set in accordance with this administrative regulation except during the months of May, June, July, August, and September. During these months, the only open burning activities allowed shall be:

(a) Fires set for the cooking of food for human consumption;

(b) Fires set for prevention of a fire hazard, including disposal of dangerous materials if no safe alternative is available;

(c) Fires set for the purpose of bona fide instruction and training of public and industrial employees in the methods of fighting fires;

(d) Fires set for recognized agricultural, silvicultural, range, ecological, and wildlife management practices;

(e) Fires set for the purpose of disposing of accidental spills or leaks of crude oil, petroleum products or other organic materials, and the disposal of absorbent material used in their removal, if no other economically feasible means of disposal is available and practical. Permission shall be obtained from the cabinet prior to burning; and

(f) Fires set for recreational or ceremonial purposes.

(2) Open burning shall comply with the fire hazard season requirements of KRS 149.400.

(3) Open burning for land clearing purposes associated with residential, commercial, or industrial development shall be limited to a maximum of two (2) contiguous acres at any one (1) time.

(4) This administrative regulation shall not authorize open burning that is prohibited by any local ordinance.

Section 6. Procedures for Fire Training. Burning conducted in conjunction with training for public, private and industrial firefighters shall be subject to the following criteria:

(1) Excluding fire training that has been approved by the Kentucky State Fire Marshal, or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group, any entity intending to conduct fire training shall submit written notification to the local Division for Air Quality regional office a minimum of fifteen (15) days prior to the scheduled training. The written notification shall state the location and the date of the proposed fire training, the name and contact information for the on-site training coordinator, the number of firefighters to be trained, the goals and the objectives of the training, and a brief summary of what is to be taught.

(2) Any materials that contain asbestos shall not be burned.

(3) Materials likely to produce hazardous or toxic emissions shall be removed prior to the fire training burning event, to the extent practicable, and properly disposed.

(4) Excluding fire training approved by the Kentucky Division of Forestry or the Kentucky State Fire Marshal, or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group, entities conducting fire training shall be limited to one burning event related to training per year for every ten firefighters under their supervision.

(5) Excluding fire training approved by the Kentucky Division of Forestry or the Kentucky State Fire Marshal, or which has been certified by the Kentucky State Fire Commission, or which is conducted in accordance with standards adopted by the National Wildfire Coordinating Group, between May 1 and September 30, fire training shall not be conducted in any counties, or portions of counties, which are, or were previously, designated moderate nonattainment for ozone, or designated, or previously designated, nonattainment for the eight (8) hour ozone or $PM_{2.5}$ (particulate matter) national ambient air quality standard, pursuant to 401 KAR 51:010. (WP-1; 1 Ky.R. 760; Am. 1381; eff. 7-2-75; 12 Ky.R. 504; eff. 12-10-85; 15 Ky.R. 282; 1005; 1257; eff. 10-26-88; 16 Ky.R. 599; 1191; eff. 1-9-90; 23 Ky.R. 1633; 2766; eff. 5-14-97; 31 Ky.R. 1354; 32 Ky.R. 63; eff. 7-13-05.)

Appendix E

Mobile Model Runs and Documentation

Highway Mobile Source

Emissions Summary

YEAR:	2003	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	BullittRFG								
SCENARIO:	RFG								2003
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	676,960	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.128	16.895	3.264	0.84	12.61	2.44	
R PRIN ART	8,739		1.148	15.619	2.612	0.01	0.15	0.03	
R MIN ART	172,255		1.196	14.283	2.288	0.23	2.71	0.43	
R MAJ COLL	71,431		1.202	14.152	2.264	0.09	1.11	0.18	
R MIN COLL	47,735		1.233	13.555	2.182	0.06	0.71	0.11	
R LOCAL	78,127		1.277	12.873	2.128	0.11	1.11	0.18	
U INTERST	662,806		1.146	17.058	3.200	0.84	12.47	2.34	
U FREEWAY	0		7.813	41.230	4.062	0.00	0.00	0.00	
U PRIN ART	334,319		1.328	12.801	2.147	0.49	4.72	0.79	
U MIN ART	146,913		1.371	12.877	2.179	0.22	2.09	0.35	
U COLL	58,896		1.301	12.839	2.137	0.08	0.83	0.14	
U LOCAL	158,701		1.866	13.042	2.253	0.33	2.28	0.39	
	2,416,882					3.31	40.79	7.39	

County Apport. Factor ↓ 41.0%

BULLITT – RFG		
VOC tpd	CO tpd	NOx tpd
1.36	16.73	3.03

YEAR:	2003	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Bullitt							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	676,960	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.356	20.388	3.351	1.01	15.22	2.50
R PRIN ART	8,739		1.382	18.804	2.696	0.01	0.18	0.03
R MIN ART	172,255		1.447	17.134	2.367	0.27	3.25	0.45
R MAJ COLL	71,431		1.455	16.970	2.343	0.11	1.34	0.18
R MIN COLL	47,735		1.496	16.218	2.259	0.08	0.85	0.12
R LOCAL	78,127		1.555	15.354	2.203	0.13	1.32	0.19
U INTERST	662,806		1.380	20.600	3.287	1.01	15.05	2.40
U FREEWAY	0		11.491	50.091	4.219	0.00	0.00	0.00
U PRIN ART	334,319		1.622	15.250	2.223	0.60	5.62	0.82
U MIN ART	146,913		1.679	15.331	2.258	0.27	2.48	0.37
U COLL	58,896		1.586	15.305	2.213	0.10	0.99	0.14
U LOCAL	158,701		2.411	15.350	2.328	0.42	2.69	0.41
	2,416,882					4.03	49.00	7.61

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

County Apport. Factor ↓ 59.0%

BULLITT – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
2.38	28.91	4.49

BULLITT – TOTAL		
VOC tpd	CO tpd	NOx tpd
3.74	45.64	7.52

YEAR:	2003	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	OldhamRFG								
SCENARIO:	RFG								2003
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	102,854	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.128	16.895	3.264	0.13	1.92	0.37	
R PRIN ART	36,893		1.148	15.619	2.612	0.05	0.64	0.11	
R MIN ART	108,731		1.196	14.283	2.288	0.14	1.71	0.27	
R MAJ COLL	22,534		1.202	14.152	2.264	0.03	0.35	0.06	
R MIN COLL	55,225		1.233	13.555	2.182	0.08	0.83	0.13	
R LOCAL	61,275		1.277	12.873	2.128	0.09	0.87	0.14	
U INTERST	599,126		1.146	17.058	3.200	0.76	11.27	2.11	
U FREEWAY	0		7.813	41.230	4.062	0.00	0.00	0.00	
U PRIN ART	73,456		1.328	12.801	2.147	0.11	1.04	0.17	
U MIN ART	224,262		1.371	12.877	2.179	0.34	3.18	0.54	
U COLL	66,226		1.301	12.839	2.137	0.09	0.94	0.16	
U LOCAL	121,102		1.866	13.042	2.253	0.25	1.74	0.30	
	1,471,682					2.06	24.48	4.37	

County Apport. Factor ↓ 50.0%

OLDHAM – RFG		
VOC tpd	CO tpd	NOx tpd
1.03	12.24	2.18

YEAR:	2003	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Oldham							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	102,854	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.356	20.388	3.351	0.15	2.31	0.38
R PRIN ART	36,893		1.382	18.804	2.696	0.06	0.76	0.11
R MIN ART	108,731		1.447	17.134	2.367	0.17	2.05	0.28
R MAJ COLL	22,534		1.455	16.970	2.343	0.04	0.42	0.06
R MIN COLL	55,225		1.496	16.218	2.259	0.09	0.99	0.14
R LOCAL	61,275		1.555	15.354	2.203	0.11	1.04	0.15
U INTERST	599,126		1.380	20.600	3.287	0.91	13.61	2.17
U FREEWAY	0		11.491	50.091	4.219	0.00	0.00	0.00
U PRIN ART	73,456		1.622	15.250	2.223	0.13	1.24	0.18
U MIN ART	224,262		1.679	15.331	2.258	0.42	3.79	0.56
U COLL	66,226		1.586	15.305	2.213	0.12	1.12	0.16
U LOCAL	121,102		2.411	15.350	2.328	0.32	2.05	0.31
	1,471,682					2.51	29.38	4.50

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

County Apport. Factor ↓ 50.0%

OLDHAM – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.26	14.69	2.25

OLDHAM – TOTAL		
VOC tpd	CO tpd	NOx tpd
2.29	26.93	4.43

YEAR:	2005	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	BullittRFG							
SCENARIO:	RFG							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	770,519	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.920	13.969	2.798	0.78	11.87	2.38
R PRIN ART	10,250		0.937	12.893	2.271	0.01	0.15	0.03
R MIN ART	198,588		0.979	11.769	1.981	0.21	2.58	0.43
R MAJ COLL	81,432		0.984	11.659	1.960	0.09	1.05	0.18
R MIN COLL	54,086		1.010	11.158	1.886	0.06	0.67	0.11
R LOCAL	89,958		1.048	10.586	1.837	0.10	1.05	0.18
U INTERST	723,623		0.934	14.084	2.745	0.75	11.24	2.19
U FREEWAY	0		6.610	34.777	3.519	0.00	0.00	0.00
U PRIN ART	436,782		1.089	10.538	1.853	0.52	5.07	0.89
U MIN ART	137,516		1.125	10.616	1.883	0.17	1.61	0.29
U COLL	69,055		1.067	10.563	1.845	0.08	0.80	0.14
U LOCAL	189,410		1.537	10.916	1.989	0.32	2.28	0.42
	2,761,220					3.10	38.36	7.23

MOBILE6.2 Default Controls

2005

County Apport. Factor: 41.0%

BULLITT -- RFG		
VOC tpd	CO tpd	NOx tpd
1.27	15.73	2.96

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

YEAR:	2005	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Bullitt							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	770,519	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.065	15.161	2.799	0.90	12.88	2.38
R PRIN ART	10,250		1.089	14.002	2.272	0.01	0.16	0.03
R MIN ART	198,588		1.146	12.804	1.982	0.25	2.80	0.43
R MAJ COLL	81,432		1.153	12.688	1.961	0.10	1.14	0.18
R MIN COLL	54,086		1.188	12.160	1.887	0.07	0.73	0.11
R LOCAL	89,958		1.239	11.560	1.838	0.12	1.15	0.18
U INTERST	723,623		1.083	15.280	2.747	0.86	12.19	2.19
U FREEWAY	0		9.506	38.535	3.521	0.00	0.00	0.00
U PRIN ART	436,782		1.293	11.523	1.855	0.62	5.55	0.89
U MIN ART	137,516		1.339	11.620	1.884	0.20	1.76	0.29
U COLL	69,055		1.265	11.543	1.846	0.10	0.88	0.14
U LOCAL	189,410		1.924	12.126	1.990	0.40	2.53	0.42
	2,761,220					3.65	41.76	7.23

County Apport. Factor: 59.0%

BULLITT -- DEFAULTS		
VOC tpd	CO tpd	NOx tpd
2.16	24.64	4.27

BULLITT -- TOTAL		
VOC tpd	CO tpd	NOx tpd
3.43	40.37	7.23

YEAR:	2005	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	OldhamRFG							
SCENARIO:	RFG							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	112,502	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.920	13.969	2.798	0.11	1.73	0.35
R PRIN ART	44,506		0.937	12.893	2.271	0.05	0.63	0.11
R MIN ART	135,285		0.979	11.769	1.981	0.15	1.76	0.30
R MAJ COLL	27,002		0.984	11.659	1.960	0.03	0.35	0.06
R MIN COLL	69,804		1.010	11.158	1.886	0.08	0.86	0.15
R LOCAL	78,947		1.048	10.586	1.837	0.09	0.92	0.16
U INTERST	661,202		0.934	14.084	2.745	0.68	10.27	2.00
U FREEWAY	0		6.610	34.777	3.519	0.00	0.00	0.00
U PRIN ART	128,414		1.089	10.538	1.853	0.15	1.49	0.26
U MIN ART	235,264		1.125	10.616	1.883	0.29	2.75	0.49
U COLL	80,858		1.067	10.563	1.845	0.10	0.94	0.16
U LOCAL	151,606		1.537	10.916	1.989	0.26	1.82	0.33
	1,725,389					1.98	23.53	4.37

MOBILE6.2 Default Controls

2005

County Apport. Factor: 50.0%

OLDHAM -- RFG		
VOC tpd	CO tpd	NOx tpd
0.99	11.76	2.18

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

YEAR:	2005	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Oldham							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	112,502	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	1.065	15.161	2.799	0.13	1.88	0.35
R PRIN ART	44,506		1.089	14.002	2.272	0.05	0.69	0.11
R MIN ART	135,285		1.146	12.804	1.982	0.17	1.91	0.30
R MAJ COLL	27,002		1.153	12.688	1.961	0.03	0.38	0.06
R MIN COLL	69,804		1.188	12.160	1.887	0.09	0.94	0.15
R LOCAL	78,947		1.239	11.560	1.838	0.11	1.01	0.16
U INTERST	661,202		1.083	15.280	2.747	0.79	11.14	2.00
U FREEWAY	0		9.506	38.535	3.521	0.00	0.00	0.00
U PRIN ART	128,414		1.293	11.523	1.855	0.18	1.63	0.26
U MIN ART	235,264		1.339	11.620	1.884	0.35	3.01	0.49
U COLL	80,858		1.265	11.543	1.846	0.11	1.03	0.16
U LOCAL	151,606		1.924	12.126	1.990	0.32	2.03	0.33
	1,725,389					2.34	25.64	4.37

County Apport. Factor: 50.0%

OLDHAM -- DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.17	12.82	2.18

OLDHAM -- TOTAL		
VOC tpd	CO tpd	NOx tpd
2.16	24.58	4.36

YEAR:	2008	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	BullittRFG							
SCENARIO:	RFG							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	861,959	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.717	10.610	2.115	0.68	10.08	2.01
R PRIN ART	10,732		0.730	9.821	1.731	0.01	0.12	0.02
R MIN ART	207,924		0.761	9.004	1.508	0.17	2.06	0.35
R MAJ COLL	85,261		0.765	8.925	1.492	0.07	0.84	0.14
R MIN COLL	56,629		0.784	8.565	1.435	0.05	0.53	0.09
R LOCAL	94,187		0.813	8.155	1.399	0.08	0.85	0.15
U INTERST	809,497		0.727	10.664	2.076	0.65	9.52	1.85
U FREEWAY	0		4.969	26.344	2.656	0.00	0.00	0.00
U PRIN ART	457,316		0.844	8.139	1.411	0.43	4.10	0.71
U MIN ART	143,981		0.870	8.213	1.433	0.14	1.30	0.23
U COLL	72,301		0.827	8.147	1.404	0.07	0.65	0.11
U LOCAL	198,315		1.177	8.809	1.539	0.26	1.93	0.34
	2,998,102					2.61	31.98	5.99

MOBILE6.2 Default Controls

2008

County Apport. Factor: 41.0%

BULLITT – RFG		
VOC tpd	CO tpd	NOx tpd
1.07	13.11	2.46

YEAR:	2008	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Bullitt							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	861,959	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.827	11.462	2.115	0.79	10.89	2.01
R PRIN ART	10,732		0.846	10.612	1.730	0.01	0.13	0.02
R MIN ART	207,924		0.888	9.742	1.507	0.20	2.23	0.35
R MAJ COLL	85,261		0.893	9.658	1.491	0.08	0.91	0.14
R MIN COLL	56,629		0.920	9.279	1.435	0.06	0.58	0.09
R LOCAL	94,187		0.958	8.850	1.398	0.10	0.92	0.15
U INTERST	809,497		0.840	11.517	2.076	0.75	10.28	1.85
U FREEWAY	0		7.125	28.883	2.655	0.00	0.00	0.00
U PRIN ART	457,316		0.998	8.841	1.410	0.50	4.46	0.71
U MIN ART	143,981		1.032	8.929	1.433	0.16	1.42	0.23
U COLL	72,301		0.977	8.846	1.404	0.08	0.71	0.11
U LOCAL	198,315		1.467	9.693	1.539	0.32	2.12	0.34
	2,998,102					3.06	34.64	5.99

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

County Apport. Factor: 59.0%

BULLITT – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.80	20.43	3.53

BULLITT – TOTAL		
VOC tpd	CO tpd	NOx tpd
2.87	33.54	5.99

YEAR:	2008	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	OldhamRFG							
SCENARIO:	RFG							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	125,853	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.717	10.610	2.115	0.10	1.47	0.29
R PRIN ART	46,018		0.730	9.821	1.731	0.04	0.50	0.09
R MIN ART	139,880		0.761	9.004	1.508	0.12	1.39	0.23
R MAJ COLL	27,920		0.765	8.925	1.492	0.02	0.27	0.05
R MIN COLL	72,176		0.784	8.565	1.435	0.06	0.68	0.11
R LOCAL	81,629		0.813	8.155	1.399	0.07	0.73	0.13
U INTERST	739,668		0.727	10.664	2.076	0.59	8.70	1.69
U FREEWAY	0		4.969	26.344	2.656	0.00	0.00	0.00
U PRIN ART	132,776		0.844	8.139	1.411	0.12	1.19	0.21
U MIN ART	243,257		0.870	8.213	1.433	0.23	2.20	0.38
U COLL	83,605		0.827	8.147	1.404	0.08	0.75	0.13
U LOCAL	156,756		1.177	8.809	1.539	0.20	1.52	0.27
	1,849,537					1.64	19.41	3.58

MOBILE6.2 Default Controls

2008

County Apport. Factor: 50.0%

OLDHAM – RFG		
VOC tpd	CO tpd	NOx tpd
0.82	9.71	1.79

YEAR:	2008	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.		
COUNTY:	Oldham							
SCENARIO:	M6.2 Defaults							
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	125,853	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.827	11.462	2.115	0.11	1.59	0.29
R PRIN ART	46,018		0.846	10.612	1.730	0.04	0.54	0.09
R MIN ART	139,880		0.888	9.742	1.507	0.14	1.50	0.23
R MAJ COLL	27,920		0.893	9.658	1.491	0.03	0.30	0.05
R MIN COLL	72,176		0.920	9.279	1.435	0.07	0.74	0.11
R LOCAL	81,629		0.958	8.850	1.398	0.09	0.80	0.13
U INTERST	739,668		0.840	11.517	2.076	0.69	9.39	1.69
U FREEWAY	0		7.125	28.883	2.655	0.00	0.00	0.00
U PRIN ART	132,776		0.998	8.841	1.410	0.15	1.29	0.21
U MIN ART	243,257		1.032	8.929	1.433	0.28	2.39	0.38
U COLL	83,605		0.977	8.846	1.404	0.09	0.82	0.13
U LOCAL	156,756		1.467	9.693	1.539	0.25	1.68	0.27
	1,849,537					1.93	21.03	3.58

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

County Apport. Factor: 50.0%

OLDHAM – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
0.97	10.52	1.79

OLDHAM – TOTAL		
VOC tpd	CO tpd	NOx tpd
1.79	20.23	3.58

YEAR:	2011	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	BullittRFG								
SCENARIO:	RFG								2011
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	957,165	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.581	8.841	1.535	0.61	9.33	1.62	
R PRIN ART	11,617		0.589	8.193	1.274	0.01	0.10	0.02	
R MIN ART	225,077		0.611	7.517	1.116	0.15	1.87	0.28	
R MAJ COLL	92,295		0.614	7.452	1.105	0.06	0.76	0.11	
R MIN COLL	61,301		0.628	7.150	1.065	0.04	0.48	0.07	
R LOCAL	101,957		0.649	6.805	1.039	0.07	0.76	0.12	
U INTERST	898,909		0.588	8.877	1.509	0.58	8.80	1.50	
U FREEWAY	0		3.693	21.845	1.961	0.00	0.00	0.00	
U PRIN ART	495,043		0.673	6.800	1.048	0.37	3.71	0.57	
U MIN ART	155,859		0.693	6.867	1.064	0.12	1.18	0.18	
U COLL	78,266		0.660	6.802	1.043	0.06	0.59	0.09	
U LOCAL	214,675		0.927	7.526	1.148	0.22	1.78	0.27	
	3,292,164					2.30	29.36	4.83	

County Apport. Factor: 41.0%

BULLITT – RFG		
VOC tpd	CO tpd	NOx tpd
0.94	12.04	1.98

YEAR:	2011	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.
COUNTY:	Bullitt					
SCENARIO:	M6.2 Defaults					
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	957,165	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.666	9.483	1.535	0.70	10.01	1.62
R PRIN ART	11,617		0.678	8.787	1.273	0.01	0.11	0.02
R MIN ART	225,077		0.709	8.069	1.116	0.18	2.00	0.28
R MAJ COLL	92,295		0.712	8.000	1.105	0.07	0.81	0.11
R MIN COLL	61,301		0.732	7.684	1.065	0.05	0.52	0.07
R LOCAL	101,957		0.760	7.322	1.038	0.09	0.82	0.12
U INTERST	898,909		0.675	9.519	1.508	0.67	9.43	1.49
U FREEWAY	0		5.267	23.747	1.960	0.00	0.00	0.00
U PRIN ART	495,043		0.789	7.323	1.048	0.43	4.00	0.57
U MIN ART	155,859		0.815	7.401	1.064	0.14	1.27	0.18
U COLL	78,266		0.774	7.322	1.043	0.07	0.63	0.09
U LOCAL	214,675		1.148	8.194	1.148	0.27	1.94	0.27
	3,292,164					2.67	31.55	4.83

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

County Apport. Factor: 59.0%

BULLITT – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.58	18.62	2.85

BULLITT – TOTAL		
VOC tpd	CO tpd	NOx tpd
2.52	30.66	4.83

YEAR:	2011	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	OldhamRFG								
SCENARIO:	RFG								2011
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	139,369	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.581	8.841	1.535	0.09	1.36	0.24	
R PRIN ART	50,046		0.589	8.193	1.274	0.03	0.45	0.07	
R MIN ART	152,126		0.611	7.517	1.116	0.10	1.26	0.19	
R MAJ COLL	30,364		0.614	7.452	1.105	0.02	0.25	0.04	
R MIN COLL	78,494		0.628	7.150	1.065	0.05	0.62	0.09	
R LOCAL	88,775		0.649	6.805	1.039	0.06	0.67	0.10	
U INTERST	819,105		0.588	8.877	1.509	0.53	8.02	1.36	
U FREEWAY	0		3.693	21.845	1.961	0.00	0.00	0.00	
U PRIN ART	144,400		0.673	6.800	1.048	0.11	1.08	0.17	
U MIN ART	264,553		0.693	6.867	1.064	0.20	2.00	0.31	
U COLL	90,924		0.660	6.802	1.043	0.07	0.68	0.10	
U LOCAL	170,479		0.927	7.526	1.148	0.17	1.41	0.22	
	2,028,636					1.44	17.80	2.88	

County Apport. Factor: 50.0%

OLDHAM – RFG		
VOC tpd	CO tpd	NOx tpd
0.72	8.90	1.44

YEAR:	2011	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.
COUNTY:	Oldham					
SCENARIO:	M6.2 Defaults					
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd
R INTERST	139,369	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.666	9.483	1.535	0.10	1.46	0.24
R PRIN ART	50,046		0.678	8.787	1.273	0.04	0.48	0.07
R MIN ART	152,126		0.709	8.069	1.116	0.12	1.35	0.19
R MAJ COLL	30,364		0.712	8.000	1.105	0.02	0.27	0.04
R MIN COLL	78,494		0.732	7.684	1.065	0.06	0.66	0.09
R LOCAL	88,775		0.760	7.322	1.038	0.07	0.72	0.10
U INTERST	819,105		0.675	9.519	1.508	0.61	8.60	1.36
U FREEWAY	0		5.267	23.747	1.960	0.00	0.00	0.00
U PRIN ART	144,400		0.789	7.323	1.048	0.13	1.17	0.17
U MIN ART	264,553		0.815	7.401	1.064	0.24	2.16	0.31
U COLL	90,924		0.774	7.322	1.043	0.08	0.73	0.10
U LOCAL	170,479		1.148	8.194	1.148	0.22	1.54	0.22
	2,028,636					1.69	19.14	2.88

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

County Apport. Factor: 50.0%

OLDHAM – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
0.84	9.57	1.44

OLDHAM – TOTAL		
VOC tpd	CO tpd	NOx tpd
1.56	18.47	2.88

YEAR:	2014	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	BullittRFG								
SCENARIO:	RFG								2014
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	1,059,906	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.476	7.656	1.078	0.56	8.95	1.26	
R PRIN ART	13,310		0.481	7.091	0.908	0.01	0.10	0.01	
R MIN ART	257,863		0.497	6.505	0.805	0.14	1.85	0.23	
R MAJ COLL	105,739		0.499	6.448	0.797	0.06	0.75	0.09	
R MIN COLL	70,230		0.510	6.188	0.770	0.04	0.48	0.06	
R LOCAL	116,809		0.526	5.889	0.752	0.07	0.76	0.10	
U INTERST	995,397		0.481	7.680	1.061	0.53	8.43	1.16	
U FREEWAY	0		2.895	18.899	1.416	0.00	0.00	0.00	
U PRIN ART	567,154		0.545	5.893	0.759	0.34	3.68	0.47	County Apport. Factor
U MIN ART	178,562		0.561	5.957	0.771	0.11	1.17	0.15	
U COLL	89,667		0.535	5.891	0.756	0.05	0.58	0.07	
U LOCAL	245,946		0.751	6.678	0.827	0.20	1.81	0.22	
									BULLITT – RFG
									VOC tpd / CO tpd / NOx tpd
	3,700,582					2.11	28.57	3.84	41.0% → 0.86 / 11.71 / 1.57

YEAR:	2014	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.
COUNTY:	Bullitt								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	1,059,906	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.541	8.204	1.078	0.63	9.59	1.26	
R PRIN ART	13,310		0.549	7.597	0.908	0.01	0.11	0.01	County Apport. Factor
R MIN ART	257,863		0.572	6.975	0.805	0.16	1.98	0.23	
R MAJ COLL	105,739		0.575	6.916	0.797	0.07	0.81	0.09	
R MIN COLL	70,230		0.590	6.642	0.770	0.05	0.51	0.06	
R LOCAL	116,809		0.611	6.329	0.752	0.08	0.82	0.10	
U INTERST	995,397		0.548	8.228	1.061	0.60	9.03	1.16	
U FREEWAY	0		4.113	20.537	1.416	0.00	0.00	0.00	
U PRIN ART	567,154		0.635	6.339	0.759	0.40	3.96	0.47	
U MIN ART	178,562		0.655	6.411	0.771	0.13	1.26	0.15	
U COLL	89,667		0.622	6.334	0.755	0.06	0.63	0.07	
U LOCAL	245,946		0.927	7.253	0.826	0.25	1.97	0.22	
									BULLITT – DEFAULTS
									VOC tpd / CO tpd / NOx tpd
	3,700,582					2.43	30.67	3.84	59.0% → 1.44 / 18.09 / 2.27
									BULLITT – TOTAL
									VOC tpd / CO tpd / NOx tpd
									2.30 / 29.80 / 3.84

YEAR:	2014	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls
COUNTY:	OldhamRFG								
SCENARIO:	RFG								2014
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	153,215	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.476	7.656	1.078	0.08	1.29	0.18	
R PRIN ART	59,108		0.481	7.091	0.908	0.03	0.46	0.06	
R MIN ART	179,672		0.497	6.505	0.805	0.10	1.29	0.16	
R MAJ COLL	35,862		0.499	6.448	0.797	0.02	0.25	0.03	
R MIN COLL	92,707		0.510	6.188	0.770	0.05	0.63	0.08	
R LOCAL	104,849		0.526	5.889	0.752	0.06	0.68	0.09	
U INTERST	900,482		0.481	7.680	1.061	0.48	7.62	1.05	
U FREEWAY	0		2.895	18.899	1.416	0.00	0.00	0.00	
U PRIN ART	170,547		0.545	5.893	0.759	0.10	1.11	0.14	County Apport. Factor
U MIN ART	312,456		0.561	5.957	0.771	0.19	2.05	0.27	
U COLL	107,387		0.535	5.891	0.756	0.06	0.70	0.09	
U LOCAL	201,348		0.751	6.678	0.827	0.17	1.48	0.18	
									OLDHAM – RFG
									VOC tpd / CO tpd / NOx tpd
	2,317,633					1.35	17.58	2.33	50.0% → 0.67 / 8.79 / 1.17

YEAR:	2014	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.
COUNTY:	Oldham								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	153,215	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.541	8.204	1.078	0.09	1.39	0.18	
R PRIN ART	59,108		0.549	7.597	0.908	0.04	0.50	0.06	County Apport. Factor
R MIN ART	179,672		0.572	6.975	0.805	0.11	1.38	0.16	
R MAJ COLL	35,862		0.575	6.916	0.797	0.02	0.27	0.03	
R MIN COLL	92,707		0.590	6.642	0.770	0.06	0.68	0.08	
R LOCAL	104,849		0.611	6.329	0.752	0.07	0.73	0.09	
U INTERST	900,482		0.548	8.228	1.061	0.54	8.17	1.05	
U FREEWAY	0		4.113	20.537	1.416	0.00	0.00	0.00	
U PRIN ART	170,547		0.635	6.339	0.759	0.12	1.19	0.14	
U MIN ART	312,456		0.655	6.411	0.771	0.23	2.21	0.27	
U COLL	107,387		0.622	6.334	0.755	0.07	0.75	0.09	
U LOCAL	201,348		0.927	7.253	0.826	0.21	1.61	0.18	
									OLDHAM – DEFAULTS
									VOC tpd / CO tpd / NOx tpd
	2,317,633					1.56	18.88	2.33	50.0% → 0.78 / 9.44 / 1.17
									OLDHAM – TOTAL
									VOC tpd / CO tpd / NOx tpd
									1.45 / 18.23 / 2.34

YEAR:	2017	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	BullittRFG								
SCENARIO:	RFG								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	1,158,600	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.407	7.019	0.799	0.52	8.97	1.02	
R PRIN ART	14,898		0.411	6.496	0.681	0.01	0.11	0.01	
R MIN ART	288,637		0.424	5.958	0.610	0.13	1.90	0.19	
R MAJ COLL	118,358		0.426	5.906	0.605	0.06	0.77	0.08	
R MIN COLL	78,611		0.436	5.669	0.586	0.04	0.49	0.05	
R LOCAL	130,749		0.450	5.397	0.573	0.06	0.78	0.08	
U INTERST	1,088,084		0.411	7.037	0.787	0.49	8.44	0.94	
U FREEWAY	0		2.495	17.442	1.085	0.00	0.00	0.00	
U PRIN ART	634,841		0.466	5.407	0.578	0.33	3.78	0.40	
U MIN ART	199,872		0.480	5.469	0.588	0.11	1.21	0.13	
U COLL	100,368		0.457	5.402	0.575	0.05	0.60	0.06	
U LOCAL	275,299		0.648	6.232	0.624	0.20	1.89	0.19	
	4,088,318					1.99	28.93	3.17	

MOBILE6.2 Default Controls

2017

County Apport. Factor: 41.0%

BULLITT – RFG		
VOC tpd	CO tpd	NOx tpd
0.82	11.86	1.30

YEAR:	2017	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	Bullitt								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	1,158,600	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.461	7.520	0.799	0.59	9.61	1.02	
R PRIN ART	14,898		0.468	6.958	0.681	0.01	0.11	0.01	
R MIN ART	288,637		0.486	6.388	0.610	0.15	2.03	0.19	
R MAJ COLL	118,358		0.489	6.333	0.604	0.06	0.83	0.08	
R MIN COLL	78,611		0.502	6.083	0.585	0.04	0.53	0.05	
R LOCAL	130,749		0.521	5.799	0.573	0.08	0.84	0.08	
U INTERST	1,088,084		0.467	7.539	0.787	0.56	9.04	0.94	
U FREEWAY	0		3.518	18.957	1.084	0.00	0.00	0.00	
U PRIN ART	634,841		0.541	5.813	0.578	0.38	4.07	0.40	
U MIN ART	199,872		0.559	5.884	0.588	0.12	1.30	0.13	
U COLL	100,368		0.530	5.806	0.575	0.06	0.64	0.06	
U LOCAL	275,299		0.799	6.760	0.624	0.24	2.05	0.19	
	4,088,318					2.30	31.05	3.17	

Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.

County Apport. Factor: 59.0%

BULLITT – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
1.36	18.32	1.87

BULLITT – TOTAL		
VOC tpd	CO tpd	NOx tpd
2.18	30.18	3.17

YEAR:	2017	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	OldhamRFG								
SCENARIO:	RFG								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	167,127	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.407	7.019	0.799	0.07	1.29	0.15	
R PRIN ART	67,726		0.411	6.496	0.681	0.03	0.49	0.05	
R MIN ART	205,868		0.424	5.958	0.610	0.10	1.35	0.14	
R MAJ COLL	41,090		0.426	5.906	0.605	0.02	0.27	0.03	
R MIN COLL	106,224		0.436	5.669	0.586	0.05	0.66	0.07	
R LOCAL	120,136		0.450	5.397	0.573	0.06	0.71	0.08	
U INTERST	982,245		0.411	7.037	0.787	0.45	7.62	0.85	
U FREEWAY	0		2.495	17.442	1.085	0.00	0.00	0.00	
U PRIN ART	195,412		0.466	5.407	0.578	0.10	1.16	0.12	
U MIN ART	358,012		0.480	5.469	0.588	0.19	2.16	0.23	
U COLL	123,044		0.457	5.402	0.575	0.06	0.73	0.08	
U LOCAL	230,705		0.648	6.232	0.624	0.16	1.59	0.16	
	2,597,591					1.29	18.04	1.95	

MOBILE6.2 Default Controls

2017

County Apport. Factor: 50.0%

OLDHAM – RFG		
VOC tpd	CO tpd	NOx tpd
0.65	9.02	0.98

YEAR:	2017	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			
COUNTY:	Oldham								
SCENARIO:	M6.2 Defaults								
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd	
R INTERST	167,127	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.461	7.520	0.799	0.08	1.39	0.15	
R PRIN ART	67,726		0.468	6.958	0.681	0.03	0.52	0.05	
R MIN ART	205,868		0.486	6.388	0.610	0.11	1.45	0.14	
R MAJ COLL	41,090		0.489	6.333	0.604	0.02	0.29	0.03	
R MIN COLL	106,224		0.502	6.083	0.585	0.06	0.71	0.07	
R LOCAL	120,136		0.521	5.799	0.573	0.07	0.77	0.08	
U INTERST	982,245		0.467	7.539	0.787	0.51	8.16	0.85	
U FREEWAY	0		3.518	18.957	1.084	0.00	0.00	0.00	
U PRIN ART	195,412		0.541	5.813	0.578	0.12	1.25	0.12	
U MIN ART	358,012		0.559	5.884	0.588	0.22	2.32	0.23	
U COLL	123,044		0.530	5.806	0.575	0.07	0.79	0.08	
U LOCAL	230,705		0.799	6.760	0.624	0.20	1.72	0.16	
	2,597,591					1.50	19.37	1.95	

Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.

County Apport. Factor: 50.0%

OLDHAM – DEFAULTS		
VOC tpd	CO tpd	NOx tpd
0.75	9.68	0.98

OLDHAM – TOTAL		
VOC tpd	CO tpd	NOx tpd
1.40	18.70	1.96

YEAR:	2020	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls	
COUNTY:	BullittRFG									
SCENARIO:	RFG								2020	
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd		
R INTERST	1,255,271	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.351	6.653	0.621	0.49	9.21	0.86		
R PRIN ART	16,434		0.354	6.152	0.543	0.01	0.11	0.01		
R MIN ART	318,406		0.366	5.637	0.491	0.13	1.98	0.17		
R MAJ COLL	130,565		0.368	5.588	0.487	0.05	0.80	0.07		
R MIN COLL	86,719		0.377	5.362	0.473	0.04	0.51	0.05		
R LOCAL	144,234		0.390	5.103	0.463	0.06	0.81	0.07		
U INTERST	1,178,871		0.355	6.670	0.614	0.46	8.67	0.80		
U FREEWAY	0		2.230	16.622	0.883	0.00	0.00	0.00		
U PRIN ART	700,314		0.405	5.115	0.468	0.31	3.95	0.36	County Apport. Factor	
U MIN ART	220,486		0.418	5.175	0.476	0.10	1.26	0.12		
U COLL	110,719		0.397	5.108	0.465	0.05	0.62	0.06		
U LOCAL	303,691		0.572	5.944	0.504	0.19	1.99	0.17		
									BULLITT – RFG	
									VOC tpd	CO tpd NOx tpd
	4,465,711					1.89	29.92	2.73	41.0%	0.77 12.27 1.12

YEAR:	2020	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			Currently, Bullitt County's ozone maintenance area represents 41% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 41% of the county and (2) Without RFG for the remainder of the county, or 59%.	
COUNTY:	Bullitt									
SCENARIO:	M6.2 Defaults									
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd		
R INTERST	1,255,271	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.397	7.116	0.621	0.55	9.85	0.86		
R PRIN ART	16,434		0.402	6.578	0.543	0.01	0.12	0.01		
R MIN ART	318,406		0.418	6.033	0.491	0.15	2.12	0.17	County Apport. Factor	
R MAJ COLL	130,565		0.420	5.981	0.487	0.06	0.86	0.07		
R MIN COLL	86,719		0.432	5.744	0.473	0.04	0.55	0.05		
R LOCAL	144,234		0.449	5.473	0.463	0.07	0.87	0.07	BULLITT – DEFAULTS	
U INTERST	1,178,871		0.402	7.133	0.614	0.52	9.27	0.80	VOC tpd	CO tpd NOx tpd
U FREEWAY	0		3.055	18.049	0.882	0.00	0.00	0.00	59.0%	1.28 18.91 1.61
U PRIN ART	700,314		0.467	5.489	0.468	0.36	4.24	0.36		
U MIN ART	220,486		0.483	5.558	0.476	0.12	1.35	0.12		
U COLL	110,719		0.457	5.480	0.465	0.06	0.67	0.06		
U LOCAL	303,691		0.702	6.436	0.504	0.24	2.15	0.17	BULLITT – TOTAL	
									VOC tpd	CO tpd NOx tpd
	4,465,711					2.17	32.05	2.73	2.05	31.18 2.73

YEAR:	2020	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			MOBILE6.2 Default Controls	
COUNTY:	OldhamRFG									
SCENARIO:	RFG								2020	
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd		
R INTERST	181,072	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.351	6.653	0.621	0.07	1.33	0.12		
R PRIN ART	76,122		0.354	6.152	0.543	0.03	0.52	0.05		
R MIN ART	231,390		0.366	5.637	0.491	0.09	1.44	0.13		
R MAJ COLL	46,184		0.368	5.588	0.487	0.02	0.28	0.02		
R MIN COLL	119,393		0.377	5.362	0.473	0.05	0.71	0.06		
R LOCAL	135,030		0.390	5.103	0.463	0.06	0.76	0.07		
U INTERST	1,064,202		0.355	6.670	0.614	0.42	7.83	0.72		
U FREEWAY	0		2.230	16.622	0.883	0.00	0.00	0.00		
U PRIN ART	219,638		0.405	5.115	0.468	0.10	1.24	0.11	County Apport. Factor	
U MIN ART	402,395		0.418	5.175	0.476	0.19	2.30	0.21		
U COLL	138,298		0.397	5.108	0.465	0.06	0.78	0.07		
U LOCAL	259,306		0.572	5.944	0.504	0.16	1.70	0.14		
									OLDHAM – RFG	
									VOC tpd	CO tpd NOx tpd
	2,873,029					1.24	18.87	1.71	50.0%	0.62 9.44 0.86

YEAR:	2020	Mobile Model Used:	M6.2			THE ENTIRE COUNTY IS CONSIDERED. IN THIS CASE, THE COUNTY HAS "RFG" AND "NO RFG" PORTIONS.			Currently, Oldham County's ozone maintenance area represents 50% of the entire county. The maintenance area requires the use of RFG. Therefore, two MOBILE6.2 runs are needed: (1) RFG for the 50% of the county and (2) Without RFG for the remainder of the county, or 50%.	
COUNTY:	Oldham									
SCENARIO:	M6.2 Defaults									
ROAD CLASS	DVMT		VOC EF	CO EF	NOx EF	VOC tpd	CO tpd	NOx tpd		
R INTERST	181,072	Min/Max temperatures used: 67 and 92 (Degrees F), based on 2001-2003 data from UK Agricultural Weahter Center Website.	0.397	7.116	0.621	0.08	1.42	0.12		
R PRIN ART	76,122		0.402	6.578	0.543	0.03	0.55	0.05		
R MIN ART	231,390		0.418	6.033	0.491	0.11	1.54	0.13	County Apport. Factor	
R MAJ COLL	46,184		0.420	5.981	0.487	0.02	0.30	0.02		
R MIN COLL	119,393		0.432	5.744	0.473	0.06	0.76	0.06		
R LOCAL	135,030		0.449	5.473	0.463	0.07	0.81	0.07	OLDHAM – DEFAULTS	
U INTERST	1,064,202		0.402	7.133	0.614	0.47	8.37	0.72	VOC tpd	CO tpd NOx tpd
U FREEWAY	0		3.055	18.049	0.882	0.00	0.00	0.00	50.0%	0.72 10.11 0.86
U PRIN ART	219,638		0.467	5.489	0.468	0.11	1.33	0.11		
U MIN ART	402,395		0.483	5.558	0.476	0.21	2.47	0.21		
U COLL	138,298		0.457	5.480	0.465	0.07	0.84	0.07		
U LOCAL	259,306		0.702	6.436	0.504	0.20	1.84	0.14	OLDHAM – TOTAL	
									VOC tpd	CO tpd NOx tpd
	2,873,029					1.43	20.23	1.71	1.34	19.55 1.72

Louisville Metro APCD **01/31/2006 GLF**

County	VMT from KIPDA TDM Current Jan 2006		MOBILE6 Emission Factors From APCD suite 62SIP_D7			County Emissions					
	Year	KIPDA VMT/day	VOC g/mi	CO g/mi	NOx g/mi	VOC kg/day	CO kg/day	NOx kg/day	VOC TPSD	CO TPSD	NOx TPSD
Bullitt, KY	2002	2330708	1.378	19.139	3.345	3212	44607	7796	3.54	49.17	8.59
Clark, IN	2002	3909739	1.389	17.188	2.954	5431	67201	11549	5.99	74.07	12.73
Floyd, IN	2002	2604741	1.431	17.183	2.891	3727	44757	7530	4.11	49.34	8.30
Jefferson, KY	2002	20433203	1.191	14.877	2.945	24336	303985	60176	26.83	335.08	66.33
Oldham, KY	2002	1382441	1.356	18.027	3.218	1875	24921	4449	2.07	27.47	4.90
5-County Area	2002	30660832				38580	485471	91500	**42.53**	535.13	**100.86**
1-hr NAA	2002	28588370				35739	446569	84655	39.40	492.25	93.31
New 8-hr "ring"	2002	2072462				2841	38902	6845	**3.13**	42.88	**7.55**
Bullitt, KY	2003	2398169	1.291	17.895	3.165	3096	42915	7590	3.41	47.31	8.37
Clark, IN	2003	3979739	1.300	16.121	2.804	5174	64157	11159	5.70	70.72	12.30
Floyd, IN	2003	2637975	1.341	16.043	2.741	3538	42321	7231	3.90	46.65	7.97
Jefferson, KY	2003	20691774	1.111	13.658	2.775	22989	282608	57420	25.34	311.52	63.29
Oldham, KY	2003	1417884	1.270	16.723	3.030	1801	23711	4296	1.98	26.14	4.74
5-County Area	2003	31125541				36596	455713	87696	**40.34**	502.33	**96.67**
1-hr NAA	2003	28995360				33861	418418	81049	37.32	461.22	89.34
New 8-hr "ring"	2003	2130181				2735	37295	6647	**3.02**	41.11	**7.33**
Bullitt, KY	2005	*2548351*	1.048	14.079	2.612	2671	35878	6656	2.94	39.55	7.34
Clark, IN	2005	*4169325*	1.045	12.211	2.294	4357	50912	9564	4.80	56.12	10.54
Floyd, IN	2005	*2744618*	1.077	12.107	2.244	2956	33229	6159	3.26	36.63	6.79
Jefferson, KY	2005	*21243050*	0.984	12.149	2.347	20903	258082	49857	23.04	284.48	54.96
Oldham, KY	2005	*1493854*	1.041	13.384	2.512	1555	19994	3753	1.71	22.04	4.14
5-County Area	2005	*32199197*				32442	398094	75990	**35.76**	438.82	**83.76**
1-hr NAA	2005	*29941977*				30081	366830	70168	33.16	404.35	77.35
New 8-hr "ring"	2005	*2257220*				2360	31264	5822	**2.60**	34.46	**6.42**

Note: Italicized VMT estimates above are interpolated -- others are directly from KIPDA travel demand model

Louisville Metro APCD **01/31/2006 GLF**

County	VMT from KIPDA TDM Current Jan 2006		MOBILE6 Emission Factors From APCD suite 62SIP_D7			County Emissions					
	Year	KIPDA VMT/day	VOC g/mi	CO g/mi	NOx g/mi	VOC kg/day	CO kg/day	NOx kg/day	VOC TPSD	CO TPSD	NOx TPSD
Bullitt, KY	2008	*2773623*	0.835	10.644	1.884	2316	29522	5226	2.55	32.54	5.76
Clark, IN	2008	*4453704*	0.887	10.139	1.725	3950	45156	7683	4.35	49.78	8.47
Floyd, IN	2008	*2904583*	0.911	10.056	1.686	2646	29208	4897	2.92	32.20	5.40
Jefferson, KY	2008	*22069963*	0.790	9.332	1.708	17435	205957	37695	19.22	227.02	41.55
Oldham, KY	2008	*1607808*	0.831	10.132	1.808	1336	16290	2907	1.47	17.96	3.20
5-County Area	2008	*33809681*				27684	326134	58408	**30.52**	359.50	**64.38**
1-hr NAA	2008	*31361902*				25643	300488	53857	28.27	331.23	59.37
New 8-hr "ring"	2008	*2447779*				2041	25646	4551	**2.25**	28.27	**5.02**
Bullitt, KY	2009	2848714	0.772	10.020	1.672	2199	28544	4763	2.42	31.46	5.25
Clark, IN	2009	4548497	0.823	9.548	1.538	3743	43429	6996	4.13	47.87	7.71
Floyd, IN	2009	2957904	0.844	9.470	1.506	2496	28011	4455	2.75	30.88	4.91
Jefferson, KY	2009	22345601	0.731	8.787	1.521	16335	196351	33988	18.01	216.44	37.46
Oldham, KY	2009	1645793	0.768	9.541	1.607	1264	15703	2645	1.39	17.31	2.92
5-County Area	2009	34346509				26038	312038	52846	**28.70**	343.96	**58.25**
1-hr NAA	2009	31835211				24102	287266	48700	26.57	316.65	53.68
New 8-hr "ring"	2009	2511298				1935	24772	4146	**2.13**	27.31	**4.57**
Bullitt, KY	2011	*3002273*	0.655	8.885	1.284	1966	26675	3855	2.17	29.40	4.25
Clark, IN	2011	*4698217*	0.696	8.454	1.190	3270	39719	5591	3.60	43.78	6.16
Floyd, IN	2011	*3127524*	0.731	8.405	1.171	2286	26287	3662	2.52	28.98	4.04
Jefferson, KY	2011	*22811447*	0.616	7.832	1.178	14052	178659	26872	15.49	196.93	29.62
Oldham, KY	2011	*1728106*	0.642	8.462	1.230	1109	14623	2126	1.22	16.12	2.34
5-County Area	2011	*35367568*				22684	285963	42106	**25.00**	315.22	**46.41**
1-hr NAA	2011	*32724074*				20964	262838	38758	23.11	289.72	42.72
New 8-hr "ring"	2011	*2643493*				1720	23125	3348	**1.90**	25.49	**3.69**

Note: Italicized VMT estimates above are interpolated -- others are directly from KIPDA travel demand model

Louisville Metro APCD **01/31/2006 GLF**

County	VMT from KIPDA TDM Current Jan 2006		MOBILE6 Emission Factors From APCD suite 62SIP_D7			County Emissions					
	Year	KIPDA VMT/day	VOC g/mi	CO g/mi	NOx g/mi	VOC kg/day	CO kg/day	NOx kg/day	VOC TPSD	CO TPSD	NOx TPSD
Bullitt, KY	2012	3079053	0.595	8.383	1.095	1832	25812	3372	2.02	28.45	3.72
Clark, IN	2012	4773077	0.633	7.954	1.022	3021	37965	4878	3.33	41.85	5.38
Floyd, IN	2012	3212334	0.663	7.910	1.007	2130	25410	3235	2.35	28.01	3.57
Jefferson, KY	2012	23044370	0.559	7.389	1.008	12882	170275	23229	14.20	187.69	25.60
Oldham, KY	2012	1769263	0.583	7.983	1.051	1031	14124	1859	1.14	15.57	2.05
5-County Area	2012	35878097				20896	273585	36573	**23.03**	301.57	**40.31**
1-hr NAA	2012	33168506				19295	251222	33644	21.27	276.92	37.09
New 8-hr "ring"	2012	2709591				1602	22363	2928	**1.77**	24.65	**3.23**
Bullitt, KY	2014	*3229822*	0.501	7.656	0.824	1618	24728	2661	1.78	27.26	2.93
Clark, IN	2014	*4952071*	0.535	7.250	0.776	2649	35903	3843	2.92	39.58	4.24
Floyd, IN	2014	*3291687*	0.561	7.217	0.767	1847	23756	2525	2.04	26.19	2.78
Jefferson, KY	2014	*23468106*	0.473	6.741	0.764	11100	158199	17930	12.24	174.38	19.76
Oldham, KY	2014	*1860715*	0.492	7.288	0.794	915	13561	1477	1.01	14.95	1.63
5-County Area	2014	*36802401*				18130	256146	28436	**19.98**	282.35	**31.34**
1-hr NAA	2014	*33957743*				16713	234706	26120	18.42	258.72	28.79
New 8-hr "ring"	2014	*2844658*				1417	21439	2316	**1.56**	23.63	**2.55**
Bullitt, KY	2017	*3455974*	0.421	6.921	0.552	1455	23919	1908	1.60	26.37	2.10
Clark, IN	2017	*5220563*	0.443	6.626	0.538	2313	34591	2809	2.55	38.13	3.10
Floyd, IN	2017	*3410717*	0.475	6.608	0.531	1620	22538	1811	1.79	24.84	2.00
Jefferson, KY	2017	*24103710*	0.396	6.130	0.522	9545	147756	12582	10.52	162.87	13.87
Oldham, KY	2017	*1997893*	0.411	6.565	0.533	821	13116	1065	0.91	14.46	1.17
5-County Area	2017	*38188857*				15754	241920	20174	**17.37**	266.67	**22.24**
1-hr NAA	2017	*35141597*				14481	221183	18511	15.96	243.81	20.40
New 8-hr "ring"	2017	*3047260*				1273	20737	1663	**1.40**	22.86	**1.83**

Note: Italicized VMT estimates above are interpolated -- others are directly from KIPDA travel demand model

Louisville Metro APCD **01/31/2006 GLF**

County	VMT from KIPDA TDM Current Jan 2006		MOBILE6 Emission Factors From APCD suite 62SIP_D7			County Emissions					
	Year	KIPDA VMT/day	VOC g/mi	CO g/mi	NOx g/mi	VOC kg/day	CO kg/day	NOx kg/day	VOC TPSD	CO TPSD	NOx TPSD
Bullitt, KY	2020	3682127	0.370	6.520	0.424	1362	24007	1561	1.50	26.46	1.72
Clark, IN	2020	5489054	0.389	6.227	0.419	2135	34180	2300	2.35	37.68	2.54
Floyd, IN	2020	3529747	0.418	6.217	0.415	1475	21944	1465	1.63	24.19	1.61
Jefferson, KY	2020	24739314	0.349	5.774	0.404	8634	142845	9995	9.52	157.46	11.02
Oldham, KY	2020	2135071	0.362	6.183	0.411	773	13201	878	0.85	14.55	0.97
5-County Area	2020	39575313				14380	236178	16198	**15.85**	260.34	**17.86**
1-hr NAA	2020	36325452				13186	215346	14834	14.53	237.37	16.35
New 8-hr "ring"	2020	3249861				1194	20832	1364	**1.32**	22.96	**1.50**
Bullitt, KY	2030	4448245	0.329	6.206	0.326	1463	27606	1450	1.61	30.43	1.60
Clark, IN	2030	6329459	0.343	5.957	0.328	2171	37705	2076	2.39	41.56	2.29
Floyd, IN	2030	4103313	0.382	6.039	0.329	1567	24780	1350	1.73	27.31	1.49
Jefferson, KY	2030	27262669	0.307	5.535	0.316	8370	150899	8615	9.23	166.33	9.50
Oldham, KY	2030	2569829	0.317	5.859	0.317	815	15057	815	0.90	16.60	0.90
5-County Area	2030	44713515				14386	256046	14306	**15.86**	282.24	**15.77**
1-hr NAA	2030	40792174				13111	232152	13039	14.45	255.90	14.37
New 8-hr "ring"	2030	3921341				1275	23894	1267	**1.41**	26.34	**1.40**

Note: Italicized VMT estimates above are interpolated -- others are directly from KIPDA travel demand model

Speed and DVMT Data

From

Kentucky Transportation Cabinet

Daily VMT Estimates and Forecasts

Bullitt County

HPMS Roadway Classification (FC)	MOBILE 6 Facility Type	% M6 Freeway	% M6 Ramp	Speed (mph)	Functional Class % 2003 (use for 2002)	Functional Class % 2004 (use for greater than 2002)	2,002	2,003	2,005	2,008	2,011	2,014	2,017	2,020
Rural Interstate	Freeway	98.5	1.5	69.0	49.91%	51.57%	630,181	676,960	770,519	861,959	957,165	1,059,906	1,158,600	1,255,271
Rural Principal Arterial	Arter/Coll			57.0	0.81%	0.81%	7,983	8,739	10,250	10,732	11,617	13,310	14,898	16,434
Rural Minor Arterial	Arter/Coll			47.0	16.20%	15.67%	159,089	172,255	198,588	207,924	225,077	257,863	288,637	318,406
Rural Major Collector	Arter/Coll			46.0	6.76%	6.43%	66,430	71,431	81,432	85,261	92,295	105,739	118,358	130,565
Rural Minor Collector	Arter/Coll			41.0	4.54%	4.27%	44,560	47,735	54,086	56,629	61,301	70,230	78,611	86,719
Rural Local	Arter/Coll			35.0	7.35%	7.10%	72,211	78,127	89,958	94,187	101,957	116,809	130,749	144,234
Urban Interstate	Freeway	92.4	7.6	71.0	50.09%	48.43%	632,397	662,806	723,623	809,497	898,909	995,397	1,088,084	1,178,871
Urban Freeway	Freeway	NA	NA	NA		0.00%	0	0	0	0	0	0	0	0
Urban Principal Arterial	Arter/Coll			31.0	28.82%	34.47%	283,088	334,319	436,782	457,316	495,043	567,154	634,841	700,314
Urban Minor Arterial	Arter/Coll			28.0	15.44%	10.85%	151,611	146,913	137,516	143,981	155,859	178,562	199,872	220,486
Urban Collector	Arter/Coll			33.0	5.48%	5.45%	53,816	58,896	69,055	72,301	78,266	89,667	100,368	110,719
Urban Local	Local			12.9	14.60%	14.95%	143,346	158,701	189,410	198,315	214,675	245,946	275,299	303,691
Total DVMT							2,244,712	2,416,882	2,761,220	2,998,102	3,292,164	3,700,582	4,088,318	4,465,711
Total Interstate					100.00%	100.00%	1,262,578	1,339,766	1,494,142	1,671,456	1,856,074	2,055,302	2,246,684	2,434,142
Total Non-Interstate					100.00%	100.00%	982,134	1,077,115	1,267,078	1,326,647	1,436,089	1,645,280	1,841,634	2,031,569
							2,244,712	2,416,882	2,761,220	2,998,102	3,292,164	3,700,582	4,088,318	4,465,711

NOTE:
VMT taken from 2004-2030 VMT Tables.xls file with latest 2004 data added
Functional Class % taken from VMT04.xls file

Daily VMT Estimates and Forecasts

Oldham County

HPMS Roadway Classification (FC)	MOBILE 6 Facility Type	% M6 Freeway	% M6 Ramp	Speed (mph)	Functional Class % 2003 (use for 2002)	Functional Class % 2004 (use for greater than 2002)	2,002	2,003	2,005	2,008	2,011	2,014	2,017	2,020
Rural Interstate	Freeway	98.5	1.5	69.0	14.72%	14.54%	98,029	102,854	112,502	125,853	139,369	153,215	167,127	181,072
Rural Principal Arterial	Arter/Coll			57.0	4.87%	4.68%	33,086	36,893	44,506	46,018	50,046	59,108	67,726	76,122
Rural Minor Arterial	Arter/Coll			47.0	14.06%	14.22%	95,454	108,731	135,285	139,880	152,126	179,672	205,868	231,390
Rural Major Collector	Arter/Coll			46.0	2.99%	2.84%	20,300	22,534	27,002	27,920	30,364	35,862	41,090	46,184
Rural Minor Collector	Arter/Coll			41.0	7.06%	7.33%	47,936	55,225	69,804	72,176	78,494	92,707	106,224	119,393
Rural Local	Arter/Coll			35.0	7.73%	8.30%	52,440	61,275	78,947	81,629	88,775	104,849	120,136	135,030
Urban Interstate	Freeway	92.4	7.6	71.0	85.28%	85.46%	568,088	599,126	661,202	739,668	819,105	900,482	982,245	1,064,202
Urban Freeway	Freeway	NA	NA	NA		0.00%	0	0	0	0	0	0	0	0
Urban Principal Arterial	Arter/Coll			31.0	6.77%	13.49%	45,977	73,456	128,414	132,776	144,400	170,547	195,412	219,638
Urban Minor Arterial	Arter/Coll			28.0	32.23%	24.72%	218,761	224,262	235,264	243,257	264,553	312,456	358,012	402,395
Urban Collector	Arter/Coll			33.0	8.68%	8.50%	58,910	66,226	80,858	83,605	90,924	107,387	123,044	138,298
Urban Local	Local			12.9	15.60%	15.93%	105,850	121,102	151,606	156,756	170,479	201,348	230,705	259,306
Total DVMT							1,344,829	1,471,682	1,725,389	1,849,537	2,028,636	2,317,633	2,597,591	2,873,029
Total Interstate					100.00%	100.00%	666,117	701,979	773,704	865,521	958,474	1,053,697	1,149,372	1,245,273
Total Non-Interstate					100.00%	100.00%	678,712	769,703	951,684	984,016	1,070,162	1,263,936	1,448,219	1,627,756
							1,344,829	1,471,682	1,725,389	1,849,537	2,028,636	2,317,633	2,597,591	2,873,029

NOTE:
VMT taken from 2004-2030 VMT Tables.xls file with latest 2004 data added
Functional Class % taken from VMT04.xls file

Procedures and Planning Assumptions

From

Kentucky Transportation Cabinet and KIPDA

Emission Calculation Procedure

The KIPDA travel model is run and provides output in the form of a series of links with each link having certain associated data such as county, number of lanes, daily capacity, facility type, area type, functional class, directional volumes, and directional free-flow speeds. The hourly capacity of each link can be calculated from the daily capacity.

The KIPDA post-processor processes each link in the following manner:

The following steps are undertaken once for each link for each direction.

(1) Based on the data from the travel model, the link is designated as being in a particular county.

(2) Based on the county and functional class of the link, the daily directional link volume is adjusted using the appropriate volume adjustment factor. (These adjustment factors were developed using model base year data and are consistent with guidance in the federal conformity rule, 40 CFR 93.)

(3) Based on the county and functional class, the link is designated as contributing to one of the four MOBILE6 facility type categories for the appropriate county.

(4) Based on the functional class of the link, the link is designated to use the data from one of the local Automatic Continuous Traffic Recorders (ATRs) for purposes of dividing the adjusted daily link volume into 24 one-hour volumes.

(5) Based on the functional class of the link, the link directional free-flow speed from the travel model is adjusted using the appropriate speed adjustment factor.

The following steps are undertaken once for each hour for each link.

(6) The volume percentage from the appropriate ATR is multiplied by the adjusted directional link volume to calculate the directional volume for the hour under consideration.

(7) Using the directional hourly volume from (6), the adjusted free-flow speed from (5), and the capacity and BPR formula from the travel model, the directional speed is calculated for the hour under consideration.

(8) Using the directional hourly volume from (6) and the length of the link from the travel model, the directional VMT is calculated for the hour under consideration.

(9) The directional VMT calculated in (8) is assigned to the appropriate speed bin using the directional speed calculated in (7), the county determined in (1), and the MOBILE6 facility type determined in (3).

The four distributions (one for each MOBILE6 facility type) of VMT by speed bin for each county will then be transmitted to the Louisville Metro Air Pollution Control District to be used in MOBILE 6 to calculate the emission levels.

For a more thorough explanation of the development of the emission factors and emissions, please contact the Louisville Metro Air Pollution Control District.

The steps are basically as follows.

(1) The VMT by speed bin distributions are used as inputs to the MOBILE6 model along with information concerning control programs (e.g. inspection/ maintenance, reformulated or reduced Reid Vapor Pressure gasoline, etc.) and other pertinent information.

(2) The MOBILE6 model is run to develop emission factors for vehicles from each county and for vehicles from areas external to the five counties.

(3) Composite emission factors and county-level emission estimates are calculated using the emission factors developed in (2) and factors that indicate what fraction of each county's VMT is from that county, what fraction is from each of the other four counties, and what fraction is from areas external to the five counties.

The composite emission factors and emission estimates are transmitted to KIPDA.

The KIPDA post-processor is rerun using the new emission factors, and the results are compared to emission estimates developed by APCD.

LOUISVILLE 8-HOUR OZONE REDESIGNATION REQUEST

BULLITT AND OLDHAM COUNTIES

HIGHWAY MOBILE SOURCES –

MOBILE6.2 Temperature Data

2001, 2002, 2003

April 2006

Bullitt County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Bullitt	Shepherdsville	07/15/02	0.104	Louisville, KY			
Bullitt	Shepherdsville	07/30/01	0.100	Louisville, KY			
Bullitt	Shepherdsville	08/02/02	0.094	Louisville, KY			
Bullitt	Shepherdsville	06/20/02	0.091	Louisville, KY			
Bullitt	Shepherdsville	07/04/02	0.090	Louisville, KY			
Bullitt	Shepherdsville	07/16/02	0.089	Louisville, KY			
Bullitt	Shepherdsville	08/04/02	0.085	Louisville, KY			
Bullitt	Shepherdsville	08/09/02	0.084	Louisville, KY			
Bullitt	Shepherdsville	08/10/02	0.083	Louisville, KY	06/12/01	68	89
Bullitt	Shepherdsville	06/12/01	0.083	Louisville, KY	07/30/01	69	90
					06/20/02	67	90
					07/04/02	71	94
					07/15/02	66	88
					07/16/02	69	89
					08/02/02	72	95
					08/04/02	73	99
					08/09/02	58	89
					08/10/02	61	93
				Average Min/Max T (Degrees F)		67	92
				Ambient T (Degrees F)		→	84
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.100	07/30/01	11
2	.089	05/05/01	11
3	.083	06/12/01	11
4	.082	05/03/01	11
5	.081	05/02/01	11
6	.081	06/13/01	10
7	.081	06/19/01	10
8	.081	08/13/01	11
9	.080	05/06/01	10
10	.080	06/17/01	11
11	.080	07/08/01	14
12	.079	06/18/01	11
13	.079	07/16/01	11
14	.077	05/04/01	11
15	.077	05/15/01	11
16	.077	07/10/01	10
17	.077	07/24/01	11
18	.076	07/19/01	10
19	.076	08/02/01	10
20	.075	05/16/01	10

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.104	07/15/02	11
2	.094	08/02/02	12
3	.092	09/10/02	11
4	.091	06/20/02	11
5	.091	09/08/02	11
6	.090	07/04/02	11
7	.089	07/16/02	11
8	.086	09/07/02	10
9	.085	08/04/02	11
10	.085	09/06/02	11
11	.084	08/09/02	11
12	.084	09/09/02	11
13	.083	08/10/02	11
14	.082	06/21/02	11
15	.080	07/21/02	11
16	.078	06/22/02	11
17	.078	07/08/02	11
18	.078	08/05/02	10
19	.075	06/01/02	11
20	.075	07/05/02	10

Current Date : 03/10/06
Current Time : 14:06

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : H7
Logger Name : Shepherdsville (Bullitt Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.076	07/17/03	12
2	.073	06/24/03	11
3	.072	04/14/03	12
4	.072	06/18/03	09
5	.071	04/16/03	11
6	.069	06/25/03	11
7	.068	04/15/03	12
8	.068	06/29/03	11
9	.067	06/22/03	11
10	.066	06/27/03	12
11	.066	06/28/03	11
12	.066	07/03/03	11
13	.066	07/19/03	11
14	.065	06/23/03	11
15	.064	06/05/03	11
16	.064	07/26/03	10
17	.063	04/28/03	10
18	.063	08/20/03	11
19	.063	09/13/03	11
20	.062	05/28/03	11

Oldham County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Oldham	Buckner	07/08/02	0.105	Louisville, KY			
Oldham	Buckner	08/10/02	0.098	Louisville, KY			
Oldham	Buckner	07/09/02	0.091	Louisville, KY			
Oldham	Buckner	07/16/02	0.091	Louisville, KY			
Oldham	Buckner	06/12/01	0.089	Louisville, KY			
Oldham	Buckner	07/24/01	0.089	Louisville, KY			
Oldham	Buckner	06/25/03	0.088	Louisville, KY			
Oldham	Buckner	06/13/01	0.086	Louisville, KY			
Oldham	Buckner	08/22/02	0.086	Louisville, KY	06/12/01	68	89
Oldham	Buckner	06/20/02	0.085	Louisville, KY	06/13/01	69	90
Oldham	Buckner	08/03/02	0.085	Louisville, KY	07/24/01	72	92
Oldham	Buckner	06/23/03	0.085	Louisville, KY	06/20/02	67	90
					07/08/02	64	93
					07/09/02	72	91
					07/16/02	69	89
					08/03/02	71	98
					08/10/02	61	93
					08/22/02	72	96
					06/23/03	58	86
					06/25/03	63	90
				Average Min/Max T (Degrees F)		67	91
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.092	05/05/01	12
2	.089	06/12/01	11
3	.089	07/24/01	12
4	.086	06/13/01	11
5	.084	05/03/01	11
6	.084	05/06/01	11
7	.084	07/16/01	12
8	.083	06/19/01	10
9	.081	05/04/01	11
10	.081	07/23/01	11
11	.081	08/02/01	10
12	.080	06/10/01	11
13	.079	07/25/01	11
14	.079	08/01/01	11
15	.079	08/22/01	11
16	.078	05/16/01	11
17	.078	06/25/01	11
18	.078	07/31/01	09
19	.078	08/07/01	12
20	.076	05/02/01	11

Current Date : 03/10/06
Current Time : 14:05

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.105	07/08/02	12
2	.098	08/10/02	12
3	.097	09/07/02	11
4	.091	07/09/02	11
5	.091	07/16/02	11
6	.090	09/09/02	11
7	.086	08/22/02	11
8	.086	09/08/02	11
9	.086	09/10/02	11
10	.085	06/20/02	11
11	.085	08/03/02	11
12	.085	09/13/02	10
13	.084	09/06/02	11
14	.082	06/19/02	11
15	.081	07/04/02	12
16	.081	07/15/02	11
17	.079	08/01/02	10
18	.079	08/09/02	12
19	.078	08/02/02	12
20	.077	06/08/02	12

Current Date : 03/10/06
Current Time : 14:06

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : C7
Logger Name : Buckner DOT (Oldham Co.)
Avg Interval: 08 hour

Parameter : OZONE
Units : PPM
Avg Type : Forward

Rank	Average	Date	Hour
1	.088	06/25/03	10
2	.085	06/23/03	12
3	.082	07/03/03	11
4	.082	08/25/03	11
5	.079	07/20/03	12
6	.078	06/30/03	10
7	.077	06/18/03	11
8	.076	06/29/03	11
9	.075	06/24/03	11
10	.075	08/27/03	10
11	.074	06/28/03	10
12	.074	07/26/03	10
13	.073	04/16/03	10
14	.073	07/04/03	10
15	.072	07/17/03	12
16	.072	08/26/03	11
17	.070	04/14/03	13
18	.070	08/21/03	11
19	.069	07/27/03	10
20	.069	08/01/03	11

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	Bates Elem. Sch.	07/17/03	0.096	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/16/02	0.094	Louisville, KY			
Jefferson	Bates Elem. Sch.	08/02/02	0.091	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/20/02	0.090	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/15/01	0.086	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/29/02	0.083	Louisville, KY			
Jefferson	Bates Elem. Sch.	06/21/02	0.082	Louisville, KY			
Jefferson	Bates Elem. Sch.	08/02/01	0.081	Louisville, KY			
Jefferson	Bates Elem. Sch.	07/08/02	0.080	Louisville, KY	07/15/01	57	86
Jefferson	Bates Elem. Sch.	07/15/02	0.080	Louisville, KY	08/02/01	72	91
Jefferson	Bates Elem. Sch.	08/04/02	0.080	Louisville, KY	06/20/02	67	90
					06/21/02	67	89
					06/29/02	70	88
					07/08/02	64	93
					07/15/02	66	88
					07/16/02	69	89
					08/02/02	72	95
					08/04/02	73	99
					07/17/03	65	87
				Average Min/Max T (Degrees F)		67	90
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Bates_2001_top 30

Current Date : 03/16/06
Current Time : 18:15

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.086	07/15/01	18
2	.085	05/03/01	19
3	.081	05/02/01	19
4	.081	08/02/01	18
5	.080	05/05/01	18
6	.079	06/12/01	18
7	.077	07/10/01	18
8	.076	05/04/01	17
9	.076	07/24/01	18
10	.075	05/06/01	18
11	.075	07/16/01	00
12	.073	07/08/01	17
13	.073	07/30/01	18
14	.072	07/31/01	18
15	.071	04/29/01	19
16	.071	04/30/01	18
17	.070	06/10/01	17
18	.070	08/04/01	19
19	.070	08/13/01	18
20	.070	08/15/01	18
21	.069	05/15/01	17
22	.069	06/19/01	17
23	.069	08/14/01	19
24	.068	04/27/01	17
25	.068	08/12/01	18
26	.068	09/13/01	18
27	.067	05/28/01	18
28	.067	07/14/01	17
29	.067	08/22/01	19
30	.066	05/16/01	17

Bates_2002_top 30

Current Date : 03/16/06
Current Time : 18:14

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.094	07/16/02	19
2	.091	08/02/02	19
3	.090	06/20/02	18
4	.085	09/08/02	18
5	.084	09/07/02	18
6	.084	09/09/02	18
7	.083	06/29/02	19
8	.083	09/06/02	19
9	.083	09/10/02	18
10	.082	06/21/02	18
11	.080	07/08/02	17
12	.080	07/15/02	18
13	.080	08/04/02	18
14	.078	06/22/02	18
15	.077	07/04/02	18
16	.077	07/25/02	18
17	.076	06/19/02	18
18	.073	05/23/02	19
19	.072	06/02/02	16
20	.072	07/09/02	18
21	.072	08/10/02	18
22	.071	06/30/02	18
23	.070	08/01/02	18
24	.070	08/03/02	18
25	.070	08/22/02	17
26	.069	05/24/02	18
27	.069	07/07/02	19
28	.068	06/10/02	18
29	.068	07/21/02	17
30	.068	08/05/02	18

Bates_2003_top 30

Current Date : 03/16/06
Current Time : 18:14

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : BA
Logger Name : Bates Elementary School
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.096	07/17/03	19
2	.082	04/14/03	20
3	.076	04/16/03	17
4	.072	04/15/03	00
5	.070	07/03/03	18
6	.067	06/25/03	17
7	.067	06/29/03	18
8	.067	07/26/03	17
9	.066	06/23/03	17
10	.066	09/13/03	17
11	.065	07/20/03	17
12	.064	07/18/03	19
13	.064	08/27/03	17
14	.063	04/28/03	17
15	.063	06/30/03	17
16	.062	04/17/03	00
17	.062	04/29/03	17
18	.062	05/24/03	18
19	.062	06/18/03	18
20	.062	06/24/03	17
21	.062	09/11/03	17
22	.061	04/01/03	19
23	.061	04/19/03	19
24	.061	06/28/03	18
25	.061	10/25/03	19
26	.060	03/24/03	19
27	.060	04/30/03	20
28	.060	06/05/03	18
29	.060	06/22/03	18
30	.060	09/09/03	17

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	Watson Lane	07/04/02	0.104	Louisville, KY			
Jefferson	Watson Lane	07/25/02	0.097	Louisville, KY			
Jefferson	Watson Lane	06/20/02	0.096	Louisville, KY			
Jefferson	Watson Lane	08/09/02	0.093	Louisville, KY			
Jefferson	Watson Lane	06/21/02	0.092	Louisville, KY			
Jefferson	Watson Lane	07/16/02	0.091	Louisville, KY			
Jefferson	Watson Lane	08/02/02	0.089	Louisville, KY			
Jefferson	Watson Lane	06/22/02	0.088	Louisville, KY			
Jefferson	Watson Lane	07/15/02	0.087	Louisville, KY	07/31/01	70	92
Jefferson	Watson Lane	07/31/01	0.086	Louisville, KY	06/20/02	67	90
Jefferson	Watson Lane	07/07/02	0.086	Louisville, KY	06/21/02	67	89
					06/22/02	65	87
					07/04/02	71	94
					07/07/02	64	87
					07/15/02	66	88
					07/16/02	69	89
					07/25/02	66	89
					08/02/02	72	95
					08/09/02	58	89
				Average Min/Max T (Degrees F)		67	90
				Ambient T (Degrees F)		→	82
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

Current Date : 03/16/06
Current Time : 18:12

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.086	07/31/01	18
2	.082	05/05/01	18
3	.082	07/30/01	18
4	.081	06/13/01	18
5	.079	08/02/01	18
6	.078	06/12/01	17
7	.078	06/25/01	19
8	.076	07/24/01	17
9	.075	05/06/01	19
10	.075	06/18/01	18
11	.075	08/15/01	18
12	.075	09/04/01	17
13	.074	07/16/01	19
14	.074	08/04/01	18
15	.074	09/06/01	18
16	.073	09/13/01	18
17	.072	06/17/01	17
18	.072	07/15/01	18
19	.072	09/05/01	18
20	.071	06/09/01	18
21	.071	06/19/01	17
22	.071	06/24/01	18
23	.070	05/03/01	18
24	.070	07/08/01	18
25	.070	08/22/01	18
26	.069	06/27/01	18
27	.069	08/05/01	18
28	.069	08/14/01	19
29	.069	09/12/01	18
30	.068	07/25/01	18

Current Date : 03/16/06
Current Time : 18:11

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.104	07/04/02	17
2	.099	09/08/02	18
3	.097	07/25/02	19
4	.096	06/20/02	18
5	.093	08/09/02	18
6	.093	09/09/02	18
7	.092	06/21/02	18
8	.091	07/16/02	17
9	.089	08/02/02	19
10	.088	06/22/02	18
11	.087	07/15/02	18
12	.087	09/07/02	17
13	.086	07/07/02	18
14	.086	09/06/02	18
15	.085	09/10/02	19
16	.083	08/03/02	17
17	.081	06/19/02	18
18	.081	07/06/02	19
19	.081	08/10/02	18
20	.080	06/01/02	18
21	.080	07/03/02	18
22	.080	08/08/02	19
23	.078	06/10/02	18
24	.078	07/09/02	18
25	.078	08/01/02	18
26	.078	09/04/02	18
27	.078	09/05/02	18
28	.077	07/11/02	20
29	.076	07/08/02	19
30	.076	07/24/02	19

WS_2003_top 30

Current Date : 03/16/06
Current Time : 18:13

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : WS
Logger Name : Watson Ln. Elem. Valley Statio
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.084	06/22/03	18
2	.081	06/24/03	18
3	.079	06/23/03	18
4	.075	06/29/03	18
5	.074	04/14/03	19
6	.072	06/25/03	18
7	.072	07/19/03	19
8	.072	07/30/03	18
9	.072	08/23/03	18
10	.071	06/18/03	18
11	.071	07/17/03	19
12	.070	06/30/03	17
13	.070	07/26/03	18
14	.070	08/19/03	18
15	.070	08/20/03	18
16	.070	09/09/03	18
17	.069	04/16/03	18
18	.069	09/13/03	18
19	.068	06/05/03	18
20	.068	07/29/03	19
21	.067	05/24/03	18
22	.067	06/07/03	18
23	.066	05/23/03	18
24	.066	05/28/03	18
25	.066	07/03/03	18
26	.066	07/13/03	18
27	.066	07/14/03	18
28	.065	08/24/03	18
29	.064	04/12/03	18
30	.064	06/28/03	18

Jefferson County's Temperatures Based on Top Ten 8-Hour Ozone Values (June-August 2001-2003)

County	Site	Date	ppm	Weather Station Used from UK Web Site	Chronological Unique Dates	Min T (Degrees F) Source: UK	Max T (Degrees F) Source: UK
Jefferson	WLKY - TV	08/01/02	0.089	Louisville, KY			
Jefferson	WLKY - TV	08/10/02	0.089	Louisville, KY			
Jefferson	WLKY - TV	06/20/02	0.088	Louisville, KY			
Jefferson	WLKY - TV	07/16/02	0.088	Louisville, KY			
Jefferson	WLKY - TV	07/08/02	0.085	Louisville, KY			
Jefferson	WLKY - TV	08/03/02	0.084	Louisville, KY			
Jefferson	WLKY - TV	06/19/02	0.082	Louisville, KY			
Jefferson	WLKY - TV	06/23/03	0.081	Louisville, KY			
Jefferson	WLKY - TV	06/13/01	0.080	Louisville, KY	06/13/01	69	90
Jefferson	WLKY - TV	08/04/02	0.079	Louisville, KY	06/19/02	62	88
Jefferson	WLKY - TV	06/24/03	0.079	Louisville, KY	06/20/02	67	90
					07/08/02	64	93
					07/16/02	69	89
					08/01/02	69	96
					08/03/02	71	98
					08/04/02	73	99
					08/10/02	61	93
					06/23/03	58	86
					06/24/03	59	86
				Average Min/Max T (Degrees F)		66	92
				Ambient T (Degrees F)		→	83
Area:	**Louisville**			**Final Min/Max T For Area:**		67	92

Local climatological data from the University of Kentucky's Agricultural Weather Center Web Site were used. The station selected was Louisville, Kentucky. The temperature guidance can be found in "Procedures for Emission Inventory Preparation, Volume 4: Mobile Sources" and was last updated with the MOBILE4.1 model.

WLKY_2001_top 30

Current Date : 03/16/06
Current Time : 18:07

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/01 thru 10/31/01

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.085	05/05/01	18
2	.080	06/13/01	18
3	.078	06/12/01	17
4	.077	08/02/01	18
5	.076	05/06/01	17
6	.075	07/16/01	19
7	.074	06/18/01	18
8	.074	07/24/01	20
9	.074	08/01/01	18
10	.073	06/25/01	19
11	.073	08/15/01	18
12	.073	09/06/01	18
13	.072	05/03/01	18
14	.071	06/19/01	17
15	.070	07/31/01	19
16	.069	04/30/01	18
17	.069	06/27/01	18
18	.068	05/04/01	18
19	.068	05/16/01	18
20	.068	07/21/01	18
21	.067	05/02/01	19
22	.067	06/10/01	17
23	.067	08/06/01	17
24	.067	08/07/01	19
25	.066	07/08/01	18
26	.066	07/15/01	18
27	.065	05/15/01	19
28	.065	08/22/01	18
29	.065	09/12/01	18
30	.064	09/13/01	17

WLKY_2002_top 30

Current Date : 03/16/06
Current Time : 18:09

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/02 thru 10/31/02

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.091	09/07/02	18
2	.089	08/01/02	19
3	.089	08/10/02	18
4	.088	06/20/02	19
5	.088	07/16/02	18
6	.087	09/06/02	19
7	.085	07/08/02	18
8	.084	08/03/02	18
9	.082	06/19/02	18
10	.082	09/09/02	18
11	.079	08/04/02	17
12	.079	09/08/02	17
13	.077	07/31/02	18
14	.076	07/21/02	18
15	.076	08/02/02	19
16	.076	09/10/02	18
17	.075	07/04/02	18
18	.075	07/09/02	18
19	.075	08/09/02	18
20	.073	06/21/02	18
21	.073	07/15/02	19
22	.072	08/22/02	17
23	.071	07/25/02	18
24	.069	06/22/02	17
25	.069	07/07/02	19
26	.069	09/01/02	18
27	.069	09/13/02	18
28	.068	06/10/02	20
29	.068	06/29/02	19
30	.068	08/21/02	18

WLKY_2003_top 30

Current Date : 03/16/06
Current Time : 18:10

Maximum Hourly Averages Report - Validated DataBase
Environmental Systems Corporation

03/01/03 thru 10/31/03

Logger Id : WK
Logger Name : WLKY TV in Butchertown
Avg Interval: 08 hour

Parameter : O3
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.081	06/23/03	17
2	.079	06/24/03	18
3	.074	07/17/03	19
4	.073	06/30/03	17
5	.071	06/28/03	18
6	.069	06/18/03	19
7	.067	04/16/03	17
8	.067	06/29/03	18
9	.067	08/20/03	18
10	.066	06/25/03	18
11	.066	07/26/03	18
12	.063	04/14/03	18
13	.063	06/22/03	18
14	.063	07/03/03	18
15	.063	07/30/03	18
16	.061	05/24/03	18
17	.061	09/13/03	18
18	.060	04/15/03	18
19	.059	07/20/03	18
20	.059	07/27/03	17
21	.058	06/06/03	16
22	.058	07/04/03	17
23	.057	04/27/03	18
24	.057	07/25/03	18
25	.057	08/01/03	18
26	.056	04/26/03	19
27	.056	05/23/03	18
28	.056	09/11/03	18
29	.056	09/17/03	18
30	.055	03/24/03	18

LOUISVILLE 8-HOUR OZONE REDESIGNATION REQUEST

BULLITT AND OLDHAM COUNTIES

HIGHWAY MOBILE SOURCES –

MOBILE6.2 Input File

2003, 2005, 2008, 2011, 2014, 2017, 2020

```
* Filename:  d:\Mobile62\Ky_M62\Lville\red-req.in

* This input file is a MOBILE6.2 run for the 8-hour ozone redesignation request for Bullitt
* and Oldham Counties.  The baseyear of 2002 is not included as that year has already been
* addressed in a previous submittal.  The years for this MOBILE6.2 input file will be 2003,
* 2005, 2008, 2011, 2014, 2017, and 2020.  The LMAPCD will be addressing Jefferson County.

* NOTE:  For some Road Classifications, there are no DVMT.  The lowest speed that the
* MOBILE6 model accepts is 2.5 mph.  For these Road Classifications, 2.5 mph is indicated
* simply to make the model run.  These corresponding emission factors will not influence
* the emission total because DVMT = 0 for that Road Classification.

* According to the EPA document, "Technical Guidance on the Use of MOBILE6.2 for Emission
* Inventory Preparation" (August 2004), Kentucky has amended the standard MOBILE6.2 input
* file to reflect three modifications relating to highway mobile source emission calculations.
* The modifications are:  (1) Do not include Ramp as a single Road Classification entry,
* (2) for Rural Local, change Local in the Average Speed line to Arterial and use KYTC's actual
* Rural Local speed and not 12.9 mph, and (3) replace the Diesel Sulfur value of 500 ppm with a
* state-specific value provided on an EPA web link.

*******************************     Header Section     *********************************
MOBILE6 INPUT FILE :
REPORT FILE         : d:\Mobile62\Ky_M62\Lville\red-req.out
RUN DATA

*******************************     Run Section #1     *********************************

FUEL RVP            : 8.6
MIN/MAX TEMP        : 67.0 92.0

* Indicate northern RFG program is in place.
FUEL PROGRAM        : 2 N

*******************************    Scenario Section #1   *********************************

* RFG, YEAR 2003

SCENARIO RECORD     : BullittRFG                Rural Interstate 69.0 mph - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : BullittRFG                Rural Principal Arterial 57.0 mph - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : BullittRFG                Rural Minor Arterial 47.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial
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SCENARIO RECORD     : BullittRFG              Rural Major Collector 46.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Minor Collector 41.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Local 35.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : BullittRFG              Urban Interstate 71.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : BullittRFG              Urban Freeway 2.5 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : BullittRFG              Urban Principal Arterial 31.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : OldhamRFG              Rural Interstate 69.0 mph - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : OldhamRFG              Rural Principal Arterial 57.0 mph - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : OldhamRFG              Rural Minor Arterial 47.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : OldhamRFG              Rural Major Collector 46.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : OldhamRFG              Rural Minor Collector 41.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : OldhamRFG              Rural Local 35.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : OldhamRFG              Urban Interstate 71.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : OldhamRFG              Urban Freeway 2.5 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
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AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : OldhamRFG             Urban Principal Arterial 31.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : OldhamRFG             Urban Minor Arterial 28.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : OldhamRFG             Urban Collector 33.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG             Urban Local 12.9 mph Default - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* RFG, YEAR 2005

SCENARIO RECORD     : BullittRFG             Rural Interstate 69.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : BullittRFG             Rural Principal Arterial 57.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Minor Arterial 47.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Major Collector 46.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION M   TH   : 7
AVERAGE SP          : 46.0 Arterial
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SCENARIO RECORD     : BullittRFG              Rural Minor Collector 41.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Local 35.0 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : BullittRFG              Urban Interstate 71.0 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : BullittRFG              Urban Freeway 2.5 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : BullittRFG              Urban Principal Arterial 31.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.
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SCENARIO RECORD    : OldhamRFG              Rural Interstate 69.0 mph - CY2005
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : OldhamRFG              Rural Principal Arterial 57.0 mph - CY2005
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Minor Arterial 47.0 mph - CY2005
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Major Collector 46.0 mph - CY2005
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Minor Collector 41.0 mph - CY2005
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Local 35.0 mph - CY2005
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : OldhamRFG              Urban Interstate 71.0 mph - CY2005
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : OldhamRFG              Urban Freeway 2.5 mph - CY2005
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2005
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2005
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2005
EVALUATION H       : 7
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AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Collector 33.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Local 12.9 mph Default - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* RFG, YEAR 2008

SCENARIO RECORD     : BullittRFG              Rural Interstate 69.0 mph - CY2008
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : BullittRFG              Rural Principal Arterial 57.0 mph - CY2008
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Minor Arterial 47.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Major Collector 46.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Minor Collector 41.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial
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SCENARIO RECORD    : BullittRFG              Rural Local 35.0 mph - CY2008
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : BullittRFG              Urban Interstate 71.0 mph - CY2008
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : BullittRFG              Urban Freeway 2.5 mph - CY2008
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : BullittRFG              Urban Principal Arterial 31.0 mph - CY2008
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Minor Arterial 28.0 mph - CY2008
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Collector 33.0 mph - CY2008
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 33.0 Arterial

SCENARIO RECORD    : BullittRFG              Urban Local 12.9 mph Default - CY2008
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPEED      : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD    : OldhamRFG               Rural Interstate 69.0 mph - CY2008
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2008
EVALUATION MONTH   : 7
AVERAGE SPF        : 69.0 Freeway 98.5 0.0 0.0 1.5
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SCENARIO RECORD     : OldhamRFG             Rural Principal Arterial 57.0 mph - CY2008
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : OldhamRFG             Rural Minor Arterial 47.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : OldhamRFG             Rural Major Collector 46.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : OldhamRFG             Rural Minor Collector 41.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : OldhamRFG             Rural Local 35.0 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : OldhamRFG             Urban Interstate 71.0 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : OldhamRFG             Urban Freeway 2.5 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : OldhamRFG             Urban Principal Arterial 31.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : OldhamRFG             Urban Minor Arterial 28.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
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AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Collector 33.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Local 12.9 mph Default - CY2008
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* RFG, YEAR 2011

SCENARIO RECORD     : BullittRFG              Rural Interstate 69.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : BullittRFG              Rural Principal Arterial 57.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Minor Arterial 47.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Major Collector 46.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Minor Collector 41.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : BullittRFG              Rural Local 35.0 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial
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* Unless a[illegible]cific local speed is available, a default MOBIL[illegible]verage speed of 12.9 mph is used.

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SCENARIO RECORD     : BullittRFG              Urban Interstate 71.0 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : BullittRFG              Urban Freeway 2.5 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : BullittRFG              Urban Principal Arterial 31.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local
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* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

```
SCENARIO RECORD     : OldhamRFG               Rural Interstate 69.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : OldhamRFG               Rural Principal Arterial 57.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial
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SCENARIO RECORD    : OldhamRFG              Rural Minor Arterial 47.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Major Collector 46.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Minor Collector 41.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Local 35.0 mph - CY2011
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : OldhamRFG              Urban Interstate 71.0 mph - CY2011
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : OldhamRFG              Urban Freeway 2.5 mph - CY2011
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Collector 33.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION     H   : 7
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AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Local 12.9 mph Default - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* RFG, YEAR 2014

SCENARIO RECORD     : BullittRFG             Rural Interstate 69.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : BullittRFG             Rural Principal Arterial 57.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Minor Arterial 47.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Major Collector 46.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Minor Collector 41.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : BullittRFG             Rural Local 35.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : BullittRFG             Urban Interstate 71.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : BullittRFG              Urban Freeway 2.5 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : BullittRFG              Urban Principal Arterial 31.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : OldhamRFG               Rural Interstate 69.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : OldhamRFG               Rural Principal Arterial 57.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Minor Arterial 47.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial
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SCENARIO RECORD    : OldhamRFG              Rural Major Col?   or 46.0 mph - CY2014
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Minor Collector 41.0 mph - CY2014
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : OldhamRFG              Rural Local 35.0 mph - CY2014
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : OldhamRFG              Urban Interstate 71.0 mph - CY2014
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : OldhamRFG              Urban Freeway 2.5 mph - CY2014
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2014
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2014
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Collector 33.0 mph - CY2014
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
AVERAGE SPEED      : 33.0 Arterial

SCENARIO RECORD    : OldhamRFG              Urban Local 12.9 mph Default - CY2014
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2014
EVALUATION MONTH   : 7
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AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

* RFG, YEAR 2017

SCENARIO RECORD : BullittRFG Rural Interstate 69.0 mph - CY2017
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : BullittRFG Rural Principal Arterial 57.0 mph - CY2017
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 57.0 Arterial

SCENARIO RECORD : BullittRFG Rural Minor Arterial 47.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 47.0 Arterial

SCENARIO RECORD : BullittRFG Rural Major Collector 46.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : BullittRFG Rural Minor Collector 41.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 41.0 Arterial

SCENARIO RECORD : BullittRFG Rural Local 35.0 mph - CY2017
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : BullittRFG Urban Interstate 71.0 mph - CY2017
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD : BullittRFG Urban Freeway 2.5 mph - CY2017
DIESEL SULF : 323.00
CALENDAR Y : 2017

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EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : BullittRFG              Urban Principal Arterial 31.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : OldhamRFG               Rural Interstate 69.0 mph - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : OldhamRFG               Rural Principal Arterial 57.0 mph - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Minor Arterial 47.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Major Collector 46.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial
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SCENARIO RECORD     : OldhamRFG              Rural Minor Collector 41.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : OldhamRFG              Rural Local 35.0 mph - CY2017
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : OldhamRFG              Urban Interstate 71.0 mph - CY2017
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : OldhamRFG              Urban Freeway 2.5 mph - CY2017
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Collector 33.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Local 12.9 mph Default - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* RFG, YEA(    .0
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SCENARIO RECORD    : BullittRFG              Rural Intersta    9.0 mph - CY2020
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : BullittRFG              Rural Principal Arterial 57.0 mph - CY2020
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : BullittRFG              Rural Minor Arterial 47.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : BullittRFG              Rural Major Collector 46.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : BullittRFG              Rural Minor Collector 41.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : BullittRFG              Rural Local 35.0 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : BullittRFG              Urban Interstate 71.0 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : BullittRFG              Urban Freeway 2.5 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : BullittRFG              Urban Principal Arterial 31.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Minor Arterial 28.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Collector 33.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : BullittRFG              Urban Local 12.9 mph Default - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : OldhamRFG               Rural Interstate 69.0 mph - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : OldhamRFG               Rural Principal Arterial 57.0 mph - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Minor Arterial 47.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Major Collector 46.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : OldhamRFG               Rural Minor Collector 41.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial
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SCENARIO RECORD     : OldhamRFG              Rural Local 35.0    h - CY2020
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : OldhamRFG              Urban Interstate 71.0 mph - CY2020
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : OldhamRFG              Urban Freeway 2.5 mph - CY2020
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : OldhamRFG              Urban Principal Arterial 31.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Minor Arterial 28.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Collector 33.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : OldhamRFG              Urban Local 12.9 mph Default - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


END OF RUN
**********    End of Run #1, Begin Run Section #2    **********

FUEL RVP            : 8.6
MIN/MAX TEMP        : 67.0 92.0

**********    Scenario Section #2    **********
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* NO RFG, YEAR 2003

SCENARIO RECORD : Bullitt Rural Interstate 69.0 mph - CY2003
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : Bullitt Rural Principal Arterial 57.0 mph - CY2003
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 57.0 Arterial

SCENARIO RECORD : Bullitt Rural Minor Arterial 47.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 47.0 Arterial

SCENARIO RECORD : Bullitt Rural Major Collector 46.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : Bullitt Rural Minor Collector 41.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 41.0 Arterial

SCENARIO RECORD : Bullitt Rural Local 35.0 mph - CY2003
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : Bullitt Urban Interstate 71.0 mph - CY2003
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD : Bullitt Urban Freeway 2.5 mph - CY2003
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 2.5 Freeway

SCENARIO R : Bullitt Urban Principal Ar 31.0 mph - CY2003

DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 31.0 Arterial

SCENARIO RECORD : Bullitt Urban Minor Arterial 28.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 28.0 Arterial

SCENARIO RECORD : Bullitt Urban Collector 33.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Bullitt Urban Local 12.9 mph Default - CY2003
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

SCENARIO RECORD : Oldham Rural Interstate 69.0 mph - CY2003
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : Oldham Rural Principal Arterial 57.0 mph - CY2003
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 57.0 Arterial

SCENARIO RECORD : Oldham Rural Minor Arterial 47.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 47.0 Arterial

SCENARIO RECORD : Oldham Rural Major Collector 46.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : Oldham Rural Minor Collector 41.0 mph - CY2003
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2003
EVALUATION MONTH : 7

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AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Oldham              Rural Local 35.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Oldham              Urban Interstate 71.0 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Oldham              Urban Freeway 2.5 mph - CY2003
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Oldham              Urban Principal Arterial 31.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Oldham              Urban Minor Arterial 28.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Oldham              Urban Collector 33.0 mph - CY2003
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Oldham              Urban Local 12.9 mph Default - CY2003
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2003
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* NO RFG, YEAR 2005

SCENARIO RECORD     : Bullitt             Rural Interstate 69.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Bullitt              Rural Principal Arterial 57.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Arterial 47.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Major Collector 46.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Collector 41.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Local 35.0 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt              Urban Interstate 71.0 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Bullitt              Urban Freeway 2.5 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Bullitt              Urban Principal Arterial 31.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Bullitt              Urban Minor Arterial 28.0 mph - CY2005
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DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Collector 33.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Local 12.9 mph Default - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : Oldham                Rural Interstate 69.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Oldham                Rural Principal Arterial 57.0 mph - CY2005
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Oldham                Rural Minor Arterial 47.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Oldham                Rural Major Collector 46.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Oldham                Rural Minor Collector 41.0 mph - CY2005
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2005
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Oldham                Rural Local 35.0 mph - CY2005
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2005
EVALUATION      H   : 7
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AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : Oldham Urban Interstate 71.0 mph - CY2005
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD : Oldham Urban Freeway 2.5 mph - CY2005
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 2.5 Freeway

SCENARIO RECORD : Oldham Urban Principal Arterial 31.0 mph - CY2005
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 31.0 Arterial

SCENARIO RECORD : Oldham Urban Minor Arterial 28.0 mph - CY2005
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 28.0 Arterial

SCENARIO RECORD : Oldham Urban Collector 33.0 mph - CY2005
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Oldham Urban Local 12.9 mph Default - CY2005
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

* NO RFG, YEAR 2008

SCENARIO RECORD : Bullitt Rural Interstate 69.0 mph - CY2008
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : Bullitt Rural Principal Arterial 57.0 mph - CY2008
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2008

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EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Arterial 47.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Major Collector 46.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Collector 41.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Local 35.0 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt              Urban Interstate 71.0 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Bullitt              Urban Freeway 2.5 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Bullitt              Urban Principal Arterial 31.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Bullitt              Urban Minor Arterial 28.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RI         : Bullitt              Urban Collector 33      h - CY2008
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DIESEL SULFUR : 324.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Bullitt Urban Local 12.9 mph Default - CY2008
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

SCENARIO RECORD : Oldham Rural Interstate 69.0 mph - CY2008
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : Oldham Rural Principal Arterial 57.0 mph - CY2008
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 57.0 Arterial

SCENARIO RECORD : Oldham Rural Minor Arterial 47.0 mph - CY2008
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 47.0 Arterial

SCENARIO RECORD : Oldham Rural Major Collector 46.0 mph - CY2008
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : Oldham Rural Minor Collector 41.0 mph - CY2008
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 41.0 Arterial

SCENARIO RECORD : Oldham Rural Local 35.0 mph - CY2008
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2008
EVALUATION MONTH : 7
AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : Oldham Urban Interstate 71.0 mph - CY2008
DIESEL SULFUR : 323.00

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CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Oldham              Urban Freeway 2.5 mph - CY2008
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Oldham              Urban Principal Arterial 31.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Oldham              Urban Minor Arterial 28.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Oldham              Urban Collector 33.0 mph - CY2008
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Oldham              Urban Local 12.9 mph Default - CY2008
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2008
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* NO RFG, YEAR 2011

SCENARIO RECORD     : Bullitt              Rural Interstate 69.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Bullitt              Rural Principal Arterial 57.0 mph - CY2011
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Arterial 47.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Major Collector 46.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Collector 41.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Local 35.0 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt              Urban Interstate 71.0 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Bullitt              Urban Freeway 2.5 mph - CY2011
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Bullitt              Urban Principal Arterial 31.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Bullitt              Urban Minor Arterial 28.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Bullitt              Urban Collector 33.0 mph - CY2011
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2011
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Bullitt              Urban Local 12.9 mph Default - CY2011
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DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD    : Oldham              Rural Interstate 69.0 mph - CY2011
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : Oldham              Rural Principal Arterial 57.0 mph - CY2011
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : Oldham              Rural Minor Arterial 47.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : Oldham              Rural Major Collector 46.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : Oldham              Rural Minor Collector 41.0 mph - CY2011
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : Oldham              Rural Local 35.0 mph - CY2011
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : Oldham              Urban Interstate 71.0 mph - CY2011
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2011
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : Oldham              Urban Freeway 2.5 mph  CY2011
DIESEL SUL         : 323.00
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CALENDAR YE          : 2011
EVALUATION MTH       : 7
AVERAGE SPEED        : 2.5 Freeway

SCENARIO RECORD      : Oldham              Urban Principal Arterial 31.0 mph - CY2011
DIESEL SULFUR        : 324.00
CALENDAR YEAR        : 2011
EVALUATION MONTH     : 7
AVERAGE SPEED        : 31.0 Arterial

SCENARIO RECORD      : Oldham              Urban Minor Arterial 28.0 mph - CY2011
DIESEL SULFUR        : 324.00
CALENDAR YEAR        : 2011
EVALUATION MONTH     : 7
AVERAGE SPEED        : 28.0 Arterial

SCENARIO RECORD      : Oldham              Urban Collector 33.0 mph - CY2011
DIESEL SULFUR        : 324.00
CALENDAR YEAR        : 2011
EVALUATION MONTH     : 7
AVERAGE SPEED        : 33.0 Arterial

SCENARIO RECORD      : Oldham              Urban Local 12.9 mph Default - CY2011
DIESEL SULFUR        : 325.00
CALENDAR YEAR        : 2011
EVALUATION MONTH     : 7
AVERAGE SPEED        : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* NO RFG, YEAR 2014

SCENARIO RECORD      : Bullitt              Rural Interstate 69.0 mph - CY2014
DIESEL SULFUR        : 325.00
CALENDAR YEAR        : 2014
EVALUATION MONTH     : 7
AVERAGE SPEED        : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD      : Bullitt              Rural Principal Arterial 57.0 mph - CY2014
DIESEL SULFUR        : 325.00
CALENDAR YEAR        : 2014
EVALUATION MONTH     : 7
AVERAGE SPEED        : 57.0 Arterial

SCENARIO RECORD      : Bullitt              Rural Minor Arterial 47.0 mph - CY2014
DIESEL SULFUR        : 324.00
CALENDAR YEAR        : 2014
EVALUATION MONTH     : 7
AVERAGE SPEED        : 47.0 Arterial

SCENARIO RECORD      : Bullitt              Rural Major Collector 46.0 mph - CY2014
DIESEL SULFUR        : 324.00
CALENDAR YEAR        : 2014
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EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Minor Collector 41.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Bullitt               Rural Local 35.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt               Urban Interstate 71.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Bullitt               Urban Freeway 2.5 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Bullitt               Urban Principal Arterial 31.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Minor Arterial 28.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Collector 33.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Local 12.9 mph Default - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note tha(     9 mph is the default MOBILE6 average speed for     l and cannot be changed.
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SCENARIO RECORD     : Oldham              Rural Interstate 69.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Oldham              Rural Principal Arterial 57.0 mph - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Oldham              Rural Minor Arterial 47.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Oldham              Rural Major Collector 46.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Oldham              Rural Minor Collector 41.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 41.0 Arterial

SCENARIO RECORD     : Oldham              Rural Local 35.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Oldham              Urban Interstate 71.0 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Oldham              Urban Freeway 2.5 mph - CY2014
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Oldham              Urban Principal Arterial 31.0 mph - CY2014
DIESEL SULFUR       : 324.00
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CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Oldham              Urban Minor Arterial 28.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Oldham              Urban Collector 33.0 mph - CY2014
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Oldham              Urban Local 12.9 mph Default - CY2014
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2014
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


* NO RFG, YEAR 2017

SCENARIO RECORD     : Bullitt              Rural Interstate 69.0 mph - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Bullitt              Rural Principal Arterial 57.0 mph - CY2017
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 57.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Arterial 47.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 47.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Major Collector 46.0 mph - CY2017
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2017
EVALUATION MONTH    : 7
AVERAGE SPEED       : 46.0 Arterial

SCENARIO RECORD     : Bullitt              Rural Minor Collector 41.0 mph - CY2017
DIESEL SULFU        : 324.00
CALENDAR YE         : 2017
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EVALUATION NTH : 7
AVERAGE SI : 41.0 Arterial

SCENARIO RECORD : Bullitt Rural Local 35.0 mph - CY2017
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD : Bullitt Urban Interstate 71.0 mph - CY2017
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD : Bullitt Urban Freeway 2.5 mph - CY2017
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 2.5 Freeway

SCENARIO RECORD : Bullitt Urban Principal Arterial 31.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 31.0 Arterial

SCENARIO RECORD : Bullitt Urban Minor Arterial 28.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 28.0 Arterial

SCENARIO RECORD : Bullitt Urban Collector 33.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Bullitt Urban Local 12.9 mph Default - CY2017
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

SCENARIO RECORD : Oldham Rural Interstate 69.0 mph - CY2017
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7

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AVERAGE SPEED      : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD    : Oldham              Rural Principal Arterial 57.0 mph - CY2017
DIESEL SULFUR      : 325.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 57.0 Arterial

SCENARIO RECORD    : Oldham              Rural Minor Arterial 47.0 mph - CY2017
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : Oldham              Rural Major Collector 46.0 mph - CY2017
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : Oldham              Rural Minor Collector 41.0 mph - CY2017
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : Oldham              Rural Local 35.0 mph - CY2017
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : Oldham              Urban Interstate 71.0 mph - CY2017
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : Oldham              Urban Freeway 2.5 mph - CY2017
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : Oldham              Urban Principal Arterial 31.0 mph - CY2017
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2017
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : Oldham              Urban Minor Arterial [illegible].0 mph - CY2017
DIESEL SULFUR      : 324.00
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CALENDAR Y : 2017
EVALUATION NTH : 7
AVERAGE SP : 28.0 Arterial

SCENARIO RECORD : Oldham Urban Collector 33.0 mph - CY2017
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 33.0 Arterial

SCENARIO RECORD : Oldham Urban Local 12.9 mph Default - CY2017
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2017
EVALUATION MONTH : 7
AVERAGE SPEED : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.

* NO RFG, YEAR 2020

SCENARIO RECORD : Bullitt Rural Interstate 69.0 mph - CY2020
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2020
EVALUATION MONTH : 7
AVERAGE SPEED : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD : Bullitt Rural Principal Arterial 57.0 mph - CY2020
DIESEL SULFUR : 325.00
CALENDAR YEAR : 2020
EVALUATION MONTH : 7
AVERAGE SPEED : 57.0 Arterial

SCENARIO RECORD : Bullitt Rural Minor Arterial 47.0 mph - CY2020
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2020
EVALUATION MONTH : 7
AVERAGE SPEED : 47.0 Arterial

SCENARIO RECORD : Bullitt Rural Major Collector 46.0 mph - CY2020
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2020
EVALUATION MONTH : 7
AVERAGE SPEED : 46.0 Arterial

SCENARIO RECORD : Bullitt Rural Minor Collector 41.0 mph - CY2020
DIESEL SULFUR : 324.00
CALENDAR YEAR : 2020
EVALUATION MONTH : 7
AVERAGE SPEED : 41.0 Arterial

SCENARIO RECORD : Bullitt Rural Local 35.0 mph - CY2020
DIESEL SULFUR : 323.00
CALENDAR YEAR : 2020

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EVALUATION MONTH    : 7
AVERAGE SPEED       : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD     : Bullitt               Urban Interstate 71.0 mph - CY2020
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD     : Bullitt               Urban Freeway 2.5 mph - CY2020
DIESEL SULFUR       : 323.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 2.5 Freeway

SCENARIO RECORD     : Bullitt               Urban Principal Arterial 31.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 31.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Minor Arterial 28.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 28.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Collector 33.0 mph - CY2020
DIESEL SULFUR       : 324.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Bullitt               Urban Local 12.9 mph Default - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


SCENARIO RECORD     : Oldham              Rural Interstate 69.0 mph - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 69.0 Freeway 98.5 0.0 0.0 1.5

SCENARIO RECORD     : Oldham              Rural Principal Arterial 57.0 mph - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
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AVERAGE SP[illegible]      : 57.0 Arterial

SCENARIO [illegible]ORD    : Oldham              Rural Minor Arterial 47.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 47.0 Arterial

SCENARIO RECORD    : Oldham              Rural Major Collector 46.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 46.0 Arterial

SCENARIO RECORD    : Oldham              Rural Minor Collector 41.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 41.0 Arterial

SCENARIO RECORD    : Oldham              Rural Local 35.0 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 35.0 Arterial

* Unless a specific local speed is available, a default MOBILE6 average speed of 12.9 mph is used.

SCENARIO RECORD    : Oldham              Urban Interstate 71.0 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 71.0 Freeway 92.4 0.0 0.0 7.6

SCENARIO RECORD    : Oldham              Urban Freeway 2.5 mph - CY2020
DIESEL SULFUR      : 323.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 2.5 Freeway

SCENARIO RECORD    : Oldham              Urban Principal Arterial 31.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 31.0 Arterial

SCENARIO RECORD    : Oldham              Urban Minor Arterial 28.0 mph - CY2020
DIESEL SULFUR      : 324.00
CALENDAR YEAR      : 2020
EVALUATION MONTH   : 7
AVERAGE SPEED      : 28.0 Arterial

SCENARIO RECORD    : Oldham              Urban Collector 33.0 mph - CY2020
DIESEL SULFUR      : 324.00
```

```
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 33.0 Arterial

SCENARIO RECORD     : Oldham              Urban Local 12.9 mph Default - CY2020
DIESEL SULFUR       : 325.00
CALENDAR YEAR       : 2020
EVALUATION MONTH    : 7
AVERAGE SPEED       : 12.9 Local

* Note that 12.9 mph is the default MOBILE6 average speed for Local and cannot be changed.


**********************************    End of Run #2    ************************************
END OF RUN
```

LOUISVILLE 8-HOUR OZONE REDESIGNATION REQUEST

BULLITT AND OLDHAM COUNTIES

HIGHWAY MOBILE SOURCES –

MOBILE6.2 Output File

2003, 2005, 2008, 2011, 2014, 2017, 2020

```
***********  *********************************************  ***********
* MOBILE6    3 (24-Sep-2003)                                           *
* Input fi   D:\MOBILE62\KY_M62\LVILLE\RED-REQ.IN (file 1, run 1).     *
************************************************************************
 M616 Comment:
            User has supplied post-1999 sulfur levels.

* # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Interstate 69.0 mph - CY2003
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # # #
 M 96 Warning:
              69.0     speed reduced to 65 mph maximum
 M515 Warning:
         The combined freeway and ramp average speed entered
         cannot be greater than 64.2 miles per hour.
         The average speed will be reset to this value.
 M582 Warning:
         The user supplied freeway average speed of 64.2
         will be used for all hours of the day. 100% of VMT
         has been assigned to a fixed combination of freeways
         and freeway ramps for all hours of the day and all
          vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b

                 Calendar Year:  2003
                         Month:  July
                      Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:  120. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
             Reformulated Gas:  Yes

     Vehicle Type:    LDGV    LDGT12   LDGT34    LDGT     HDGV     LDDV     LDDT     HDDV       MC   All Veh
             GVWR:             <6000    >6000    (All)
                     ------   ------   ------   ------   ------   ------   ------   ------   ------   ------
 VMT Distribution:   0.4424   0.3195   0.1099            0.0361   0.0007   0.0017   0.0839   0.0059   1.0000
 ------------------------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
   Composite VOC :    1.013    1.184    1.865    1.358    1.334    0.577    0.766    0.391     2.30    1.128
   Composite CO  :    15.93    19.01    24.85    20.51    18.74    1.602    1.532    2.834    21.54   16.895
   Composite NOX :    1.109    1.336    1.664    1.420    5.699    2.445    2.632   23.151     1.65    3.264
 ------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Principal Arterial 57.0 mph - CY2003
* File 1, Run 1, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.033	1.211	1.913	1.391	1.339	0.579	0.768	0.394	1.84	1.148
Composite CO :	14.79	17.85	23.58	19.32	14.27	1.481	1.417	2.379	11.25	15.619
Composite NOX :	1.083	1.298	1.624	1.382	5.431	1.849	1.989	15.865	1.44	2.612

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2003
* File 1, Run 1, Scenario 3.
* #
M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.075	1.260	1.992	1.447	1.417	0.605	0.802	0.432	1.72	1.196
Composite CO :	13.43	16.42	22.02	17.86	12.05	1.438	1.377	2.220	8.62	14.283
Composite NOX :	1.054	1.256	1.581	1.339	5.072	1.442	1.549	12.548	1.21	2.288

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2003
* File 1, Run 1, Scenario 4.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.080	1.265	2.001	1.454	1.429	0.609	0.808	0.438	1.72	1.202
Composite CO :	13.29	16.28	21.86	17.71	11.97	1.439	1.378	2.224	8.67	14.152
Composite NOX :	1.051	1.252	1.577	1.335	5.034	1.414	1.519	12.322	1.20	2.264

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2003
* File 1, Run 1, Scenario 5.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.105	1.292	2.043	1.484	1.504	0.634	0.842	0.476	1.77	1.233
Composite CO :	12.61	15.56	21.08	16.98	12.10	1.466	1.403	2.322	9.24	13.555
Composite NOX :	1.038	1.232	1.557	1.315	4.854	1.324	1.422	11.590	1.16	2.182

* #
* BullittRFG Rural Local 35.0 mph - CY2003
* File 1, Run 1, Scenario 6.
* #
M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.140	1.328	2.098	1.526	1.639	0.679	0.901	0.541	1.86	1.277
Composite CO :	11.78	14.69	20.13	16.08	13.14	1.538	1.471	2.593	10.42	12.873
Composite NOX :	1.029	1.214	1.541	1.298	4.635	1.275	1.369	11.191	1.13	2.128

* #
* BullittRFG Urban Interstate 71.0 mph - CY2003
* File 1, Run 1, Scenario 7.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.030	1.203	1.892	1.379	1.354	0.584	0.774	0.401	2.27	1.146
Composite CO :	16.20	19.15	24.97	20.64	18.40	1.598	1.528	2.821	20.85	17.058

Composite NOX :	1.118	1.346	1.676	1.430	5.632	2.372	2.553	22.319	1.61	3.200

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Freeway 2.5 mph - CY2003
* File 1, Run 1, Scenario 8.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
            The combined freeway and ramp average speed entered
           cannot be less than  2.7 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of  2.7
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2003
                         Month:  July
                      Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:  120. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	7.915	7.580	11.588	8.605	11.532	1.520	2.022	1.782	7.96	7.813
Composite CO :	38.99	40.01	60.54	45.27	77.44	4.566	4.330	13.942	97.23	41.230
Composite NOX :	2.222	2.336	2.889	2.477	3.557	2.377	2.559	22.340	1.04	4.062

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Principal Arterial 31.0 mph - CY2003
* File 1, Run 1, Scenario 9.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warr
```

there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.181	1.373	2.173	1.578	1.771	0.719	0.954	0.600	1.96	1.328
Composite CO :	11.62	14.48	19.96	15.88	14.58	1.621	1.549	2.904	11.58	12.801
Composite NOX :	1.052	1.231	1.560	1.315	4.495	1.283	1.379	11.261	1.10	2.147

* #
* BullittRFG Urban Minor Arterial 28.0 mph - CY2003
* File 1, Run 1, Scenario 10.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.217	1.409	2.231	1.619	1.898	0.755	1.003	0.654	2.04	1.371
Composite CO :	11.62	14.44	19.99	15.86	16.10	1.705	1.629	3.219	12.64	12.877
Composite NOX :	1.078	1.253	1.586	1.339	4.390	1.306	1.403	11.442	1.07	2.179

* #
* BullittRFG Urban Collector 33.0 mph - CY2003
* File 1, Run 1, Scenario 11.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.160	1.349	2.133	1.550	1.701	0.697	0.926	0.569	1.91	1.301
Composite CO :	11.70	14.59	20.05	15.99	13.81	1.577	1.508	2.739	10.97	12.839
Composite NOX :	1.039	1.222	1.550	1.306	4.569	1.279	1.374	11.224	1.11	2.137

* #
* BullittRFG Urban Local 12.9 mph Default - CY2003
* File 1, Run 1, Scenario 12.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
here are no sales for vehicle class HDGV8b

```
          Calendar Year:  2003
                  Month:  July
               Altitude:  Low
  Minimum Temperature:  67.0 (F)
  Maximum Temperature:  92.0 (F)
    Absolute Humidity:   75. grains/lb
  Fuel Sulfur Content:  120. ppm

  Exhaust I/M Program:  No
     Evap I/M Program:  No
          ATP Program:  No
     Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.628	1.843	2.890	2.111	3.411	1.088	1.446	1.145	2.93	1.866
Composite CO :	10.06	13.69	20.00	15.30	35.75	2.692	2.561	6.919	24.37	13.042
Composite NOX :	1.056	1.189	1.516	1.273	3.838	1.708	1.837	13.012	0.91	2.253

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Interstate 69.0 mph - CY2003
* File 1, Run 1, Scenario 13.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                69.0     speed reduced to 65 mph maximum
  M515 Warning:
           The combined freeway and ramp average speed entered
           cannot be greater than 64.2 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of 64.2
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

          Calendar Year:  2003
                  Month:  July
               Altitude:  Low
  Minimum Temperature:  67.0 (F)
  Maximum Temperature:  92.0 (F)
    Absolute Humidity:   75. grains/lb
  Fuel Sulfur Content:  120. ppm

  Exhaust I/M Program:  No
     Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.013	1.184	1.865	1.358	1.334	0.577	0.766	0.391	2.30	1.128
Composite CO :	15.93	19.01	24.85	20.51	18.74	1.602	1.532	2.834	21.54	16.895
Composite NOX :	1.109	1.336	1.664	1.420	5.699	2.445	2.632	23.151	1.65	3.264

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2003
* File 1, Run 1, Scenario 14.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.033	1.211	1.913	1.391	1.339	0.579	0.768	0.394	1.84	1.148
Composite CO :	14.79	17.85	23.58	19.32	14.27	1.481	1.417	2.379	11.25	15.619
Composite NOX :	1.083	1.298	1.624	1.382	5.431	1.849	1.989	15.865	1.44	2.612

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2003
* File 1, Run 1, Scenario 15.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.075	1.260	1.992	1.447	1.417	0.605	0.802	0.432	1.72	1.196
Composite CO :	13.43	16.42	22.02	17.86	12.05	1.438	1.377	2.220	8.62	14.283
Composite NOX :	1.054	1.256	1.581	1.339	5.072	1.442	1.549	12.548	1.21	2.288

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2003
* File 1, Run 1, Scenario 16.
* #
M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.080	1.265	2.001	1.454	1.429	0.609	0.808	0.438	1.72	1.202
Composite CO :	13.29	16.28	21.86	17.71	11.97	1.439	1.378	2.224	8.67	14.152
Composite NOX :	1.051	1.252	1.577	1.335	5.034	1.414	1.519	12.322	1.20	2.264

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2003
* File 1, Run 1, Scenario 17.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.105	1.292	2.043	1.484	1.504	0.634	0.842	0.476	1.77	1.233
Composite CO :	12.61	15.56	21.08	16.98	12.10	1.466	1.403	2.322	9.24	13.555
Composite NOX :	1.038	1.232	1.557	1.315	4.854	1.324	1.422	11.590	1.16	2.182

* #
* OldhamRFG Rural Local 35.0 mph - CY2003
* File 1, Run 1, Scenario 18.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.140	1.328	2.098	1.526	1.639	0.679	0.901	0.541	1.86	1.277
Composite CO :	11.78	14.69	20.13	16.08	13.14	1.538	1.471	2.593	10.42	12.873
Composite NOX :	1.029	1.214	1.541	1.298	4.635	1.275	1.369	11.191	1.13	2.128

* #
* OldhamRFG Urban Interstate 71.0 mph - CY2003
* File 1, Run 1, Scenario 19.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low

```
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:  120. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.030	1.203	1.892	1.379	1.354	0.584	0.774	0.401	2.27	1.146
Composite CO :	16.20	19.15	24.97	20.64	18.40	1.598	1.528	2.821	20.85	17.058
Composite NOX :	1.118	1.346	1.676	1.430	5.632	2.372	2.553	22.319	1.61	3.200

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Freeway 2.5 mph - CY2003
* File 1, Run 1, Scenario 20.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                  Calendar Year:  2003
                          Month:  July
                       Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:  120. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.4424	0.3195	0.1099		.0361	0.0007	0.0017	0.0839	0.0059	.0000

Composite ission Factors (g/mi):

Composite VOC :	7.915	7.580	11.588	8.605	11.532	1.520	2.022	1.782	7.96	7.813
Composite CO :	38.99	40.01	60.54	45.27	77.44	4.566	4.330	13.942	97.23	41.230
Composite NOX :	2.222	2.336	2.889	2.477	3.557	2.377	2.559	22.340	1.04	4.062

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2003
* File 1, Run 1, Scenario 21.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.181	1.373	2.173	1.578	1.771	0.719	0.954	0.600	1.96	1.328
Composite CO :	11.62	14.48	19.96	15.88	14.58	1.621	1.549	2.904	11.58	12.801
Composite NOX :	1.052	1.231	1.560	1.315	4.495	1.283	1.379	11.261	1.10	2.147

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2003
* File 1, Run 1, Scenario 22.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.217	1.409	2.231	1.619	1.898	0.755	1.003	0.654	2.04	1.371
Composite CO :	11.62	14.44	19.99	15.86	16.10	1.705	1.629	3.219	12.64	12.877
Composite NOX :	1.078	1.253	1.586	1.339	4.390	1.306	1.403	11.442	1.07	2.179

* #
* OldhamRFG Urban Collector 33.0 mph - CY2003
* File 1, Run 1, Scenario 23.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 120. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.160	1.349	2.133	1.550	1.701	0.697	0.926	0.569	1.91	1.301
Composite CO :	11.70	14.59	20.05	15.99	13.81	1.577	1.508	2.739	10.97	12.839
Composite NOX :	1.039	1.222	1.550	1.306	4.569	1.279	1.374	11.224	1.11	2.137

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2003
* File 1, Run 1, Scenario 24.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	120. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.628	1.843	2.890	2.111	3.411	1.088	1.446	1.145	2.93	1.866
Composite CO :	10.06	13.69	20.00	15.30	35.75	2.692	2.561	6.919	24.37	13.042
Composite NOX :	1.056	1.189	1.516	1.273	3.838	1.708	1.837	13.012	0.91	2.253

* #
* BullittRFG Rural Interstate 69.0 mph - CY2005
* File 1, Run 1, Scenario 25.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:

The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.840	0.923	1.486	1.067	1.128	0.460	0.634	0.346	2.30	0.920
Composite CO :	13.61	15.28	19.27	16.30	15.13	1.440	1.260	2.563	21.54	13.969
Composite NOX :	0.963	1.192	1.520	1.276	5.140	2.093	2.179	19.048	1.65	2.798

* #
* BullittRFG Rural Principal Arterial 57.0 mph - CY2005
* File 1, Run 1, Scenario 26.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.858	0.946	1.524	1.094	1.133	0.462	0.636	0.348	1.83	0.937
Composite CO :	12.63	14.33	18.24	15.33	11.51	1.331	1.166	2.151	11.25	12.893
Composite NOX :	0.938	1.157	1.483	1.241	4.899	1.584	1.648	13.288	1.44	2.271

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2005
* File 1, Run 1, Scenario 27.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.896	0.986	1.590	1.141	1.199	0.482	0.664	0.382	1.71	0.979
Composite CO :	11.46	13.15	16.96	14.12	9.73	1.293	1.133	2.008	8.62	11.769
Composite NOX :	0.911	1.117	1.442	1.200	4.574	1.236	1.284	10.385	1.21	1.981

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2005
* File 1, Run 1, Scenario 28.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.900	0.991	1.597	1.146	1.209	0.485	0.669	0.387	1.72	0.984
Composite CO :	11.34	13.03	16.82	14.00	9.66	1.294	1.134	2.011	8.67	11.659
Composite NOX :	0.908	1.113	1.438	1.196	4.540	1.212	1.259	10.187	1.20	1.960

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2005
* File 1, Run 1, Scenario 29.
* #
M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.922	1.013	1.632	1.171	1.270	0.506	0.698	0.421	1.76	1.010
Composite CO :	10.76	12.44	16.18	13.40	9.76	1.318	1.154	2.100	9.24	11.158
Composite NOX :	0.896	1.095	1.419	1.178	4.378	1.135	1.179	9.546	1.16	1.886

* #
* BullittRFG Rural Local 35.0 mph - CY2005
* File 1, Run 1, Scenario 30.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.953	1.043	1.678	1.206	1.380	0.540	0.747	0.478	1.86	1.048
Composite CO :	10.05	11.73	15.40	12.67	10.60	1.383	1.210	2.345	10.42	10.586
Composite NOX :	0.886	1.077	1.404	1.161	4.180	1.093	1.136	9.197	1.13	1.837

* #
* BullittRFG Urban Interstate 71.0 mph - CY2005
* File 1, Run 1, Scenario 31.
* #

```
 M 96 Warning:
              71.0      speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b

                Calendar Year:  2005
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   90. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.854	0.938	1.507	1.083	1.144	0.466	0.641	0.354	2.27	0.934
Composite CO :	13.81	15.39	19.36	16.40	14.85	1.437	1.258	2.551	20.85	14.084
Composite NOX :	0.969	1.199	1.529	1.283	5.080	2.031	2.114	18.396	1.61	2.745

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Freeway 2.5 mph - CY2005
* File 1, Run 1, Scenario 32.
* # # # # # # # # # # # # # # # # # # # # # # # #
 M514 Warning:
           The combined freeway and ramp average speed entered
          cannot be less than  2.7 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of  2.7
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warn
```

there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	6.838	6.255	9.552	7.099	9.788	1.203	1.691	1.576	7.96	6.610
Composite CO :	33.29	33.50	48.92	37.45	62.51	4.100	3.565	12.608	97.23	34.777
Composite NOX :	1.949	2.092	2.668	2.240	3.208	2.035	2.119	18.419	1.04	3.519

* #
* BullittRFG Urban Principal Arterial 31.0 mph - CY2005
* File 1, Run 1, Scenario 33.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.987	1.079	1.736	1.247	1.486	0.572	0.792	0.531	1.95	1.089
Composite CO :	9.92	11.57	15.28	12.52	11.77	1.457	1.275	2.627	11.58	10.538
Composite NOX :	0.907	1.093	1.421	1.177	4.054	1.101	1.143	9.258	1.10	1.853

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Minor Arterial 28.0 mph - CY2005
* File 1, Run 1, Scenario 34.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                   Calendar Year:  2005
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   90. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.017	1.108	1.782	1.280	1.589	0.601	0.833	0.578	2.04	1.125
Composite CO :	9.92	11.56	15.33	12.52	13.00	1.532	1.340	2.911	12.64	10.616
Composite NOX :	0.930	1.113	1.446	1.198	3.960	1.120	1.163	9.417	1.07	1.883

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Collector 33.0 mph - CY2005
* File 1, Run 1, Scenario 35.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 War
```

there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.969	1.060	1.705	1.225	1.430	0.555	0.769	0.503	1.90	1.067
Composite CO :	9.98	11.65	15.35	12.60	11.15	1.418	1.241	2.477	10.97	10.563
Composite NOX :	0.896	1.085	1.412	1.168	4.121	1.097	1.139	9.226	1.11	1.845

* #
* BullittRFG Urban Local 12.9 mph Default - CY2005
* File 1, Run 1, Scenario 36.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC :	1.363	1.459	2.309	1.676	2.812	0.863	1.207	1.012	2.93	1.537
Composite CO :	8.73	11.14	15.43	12.23	28.86	2.418	2.108	6.257	24.37	10.916
Composite NOX :	0.916	1.065	1.393	1.149	3.462	1.463	1.522	11.220	0.91	1.989

* #
* OldhamRFG Rural Interstate 69.0 mph - CY2005
* File 1, Run 1, Scenario 37.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.840	0.923	1.486	1.067	1.128	0.460	0.634	0.346	2.30	0.920
Composite CO :	13.61	15.28	19.27	16.30	15.13	1.440	1.260	2.563	21.54	13.969
Composite NOX :	0.963	1.192	1.520	1.276	5.140	2.093	2.179	19.048	1.65	2.798

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2005
* File 1, Run 1, Scenario 38.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No.
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.858	0.946	1.524	1.094	1.133	0.462	0.636	0.348	1.83	0.937
Composite CO :	12.63	14.33	18.24	15.33	11.51	1.331	1.166	2.151	11.25	12.893
Composite NOX :	0.938	1.157	1.483	1.241	4.899	1.584	1.648	13.288	1.44	2.271

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2005
* File 1, Run 1, Scenario 39.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.896	0.986	1.590	1.141	1.199	0.482	0.664	0.382	1.71	0.979
Composite CO :	11.46	13.15	16.96	14.12	9.73	1.293	1.133	2.008	8.62	11.769
Composite NOX :	0.911	1.117	1.442	1.200	4.574	1.236	1.284	10.385	1.21	1.981

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2005
* File 1, Run 1, Scenario 40.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.900	0.991	1.597	1.146	1.209	0.485	0.669	0.387	1.72	0.984
Composite CO :	11.34	13.03	16.82	14.00	9.66	1.294	1.134	2.011	8.67	11.659
Composite NOX :	0.908	1.113	1.438	1.196	4.540	1.212	1.259	10.187	1.20	1.960

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2005
* File 1, Run 1, Scenario 41.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.922	1.013	1.632	1.171	1.270	0.506	0.698	0.421	1.76	1.010
Composite CO :	10.76	12.44	16.18	13.40	9.76	1.318	1.154	2.100	9.24	11.158
Composite NOX :	0.896	1.095	1.419	1.178	4.378	1.135	1.179	9.546	1.16	1.886

* #
* OldhamRFG Rural Local 35.0 mph - CY2005
* File 1, Run 1, Scenario 42.
* #
M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.953	1.043	1.678	1.206	1.380	0.540	0.747	0.478	1.86	1.048
Composite CO :	10.05	11.73	15.40	12.67	10.60	1.383	1.210	2.345	10.42	10.586
Composite NOX :	0.886	1.077	1.404	1.161	4.180	1.093	1.136	9.197	1.13	1.837

* #
* OldhamRFG Urban Interstate 71.0 mph - CY2005
* File 1, Run 1, Scenario 43.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.854	0.938	1.507	1.083	1.144	0.466	0.641	0.354	2.27	.934
Compo CO :	13.81	15.39	19.36	16.40	1.85	1.437	1.258	2.551	20.85	084

Composite NOX :	0.969	1.199	1.529	1.283	5.080	2.031	2.114	18.396	1.61	2.745

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Freeway 2.5 mph - CY2005
* File 1, Run 1, Scenario 44.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                   Calendar Year:  2005
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   90. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	6.838	6.255	9.552	7.099	9.788	1.203	1.691	1.576	7.96	6.610
Composite CO :	33.29	33.50	48.92	37.45	62.51	4.100	3.565	12.608	97.23	34.777
Composite NOX :	1.949	2.092	2.668	2.240	3.208	2.035	2.119	18.419	1.04	3.519

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Principal Arterial 31.0 mph - CY2005
* File 1, Run 1, Scenario 45.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
```

there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.987	1.079	1.736	1.247	1.486	0.572	0.792	0.531	1.95	1.089
Composite CO :	9.92	11.57	15.28	12.52	11.77	1.457	1.275	2.627	11.58	10.538
Composite NOX :	0.907	1.093	1.421	1.177	4.054	1.101	1.143	9.258	1.10	1.853

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2005
* File 1, Run 1, Scenario 46.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.017	1.108	1.782	1.280	1.589	0.601	0.833	0.578	2.04	1.125
Composite CO :	9.92	11.56	15.33	12.52	13.00	1.532	1.340	2.911	12.64	10.616
Composite NOX :	0.930	1.113	1.446	1.198	3.960	1.120	1.163	9.417	1.07	1.883

* #
* OldhamRFG Urban Collector 33.0 mph - CY2005
* File 1, Run 1, Scenario 47.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	90. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.969	1.060	1.705	1.225	1.430	0.555	0.769	0.503	1.90	1.067
Composite CO :	9.98	11.65	15.35	12.60	11.15	1.418	1.241	2.477	10.97	10.563
Composite NOX :	0.896	1.085	1.412	1.168	4.121	1.097	1.139	9.226	1.11	1.845

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2005
* File 1, Run 1, Scenario 48.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
                Calendar Year:  2005
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:   90. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.363	1.459	2.309	1.676	2.812	0.863	1.207	1.012	2.93	1.537
Composite CO :	8.73	11.14	15.43	12.23	28.86	2.418	2.108	6.257	24.37	10.916
Composite NOX :	0.916	1.065	1.393	1.149	3.462	1.463	1.522	11.220	0.91	1.989

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Interstate 69.0 mph - CY2008
* File 1, Run 1, Scenario 49.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
            69.0      speed reduced to 65 mph maximum
  M515 Warning:
           The combined freeway and ramp average speed entered
           cannot be greater than 64.2 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of 64.2
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                Calendar Year:  2008
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.647	0.702	1.151	0.817	0.867	0.224	0.423	0.286	2.28	0.717
Composite CO :	10.18	11.37	15.06	12.31	11.13	0.991	0.841	1.945	21.54	10.610
Composite NOX :	0.701	0.894	1.270	0.990	3.533	1.094	1.503	14.258	1.65	2.115

* #
* BullittRFG Rural Principal Arterial 57.0 mph - CY2008
* File 1, Run 1, Scenario 50.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.662	0.717	1.180	0.836	0.872	0.225	0.425	0.288	1.81	0.730
Composite CO :	9.49	10.69	14.25	11.60	8.47	0.905	0.770	1.633	11.25	9.821
Composite NOX :	0.684	0.869	1.241	0.964	3.367	0.827	1.134	10.088	1.44	1.731

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2008
* File 1, Run 1, Scenario 51.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.691	0.745	1.231	0.869	0.920	0.236	0.446	0.316	1.70	0.761
Composite CO :	8.67	9.85	13.24	10.72	7.16	0.876	0.745	1.524	8.62	9.004
Composite NOX :	0.665	0.840	1.208	0.934	3.144	0.643	0.882	7.858	1.21	1.508

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2008
* File 1, Run 1, Scenario 52.
* #
M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.695	0.748	1.237	0.873	0.927	0.237	0.450	0.320	1.70	0.765
Composite CO :	8.58	9.77	13.14	10.63	7.11	0.876	0.745	1.526	8.67	8.925
Composite NOX :	0.663	0.837	1.205	0.931	3.121	0.631	0.864	7.707	1.20	1.492

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2008
* File 1, Run 1, Scenario 53.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.712	0.763	1.263	0.891	0.969	0.248	0.472	0.348	1.74	0.784
Composite CO :	8.17	9.35	12.63	10.19	7.18	0.895	0.761	1.594	9.24	8.565
Composite NOX :	0.655	0.824	1.190	0.917	3.009	0.590	0.809	7.214	1.16	1.435

* #
* BullittRFG Rural Local 35.0 mph - CY2008
* File 1, Run 1, Scenario 54.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.735	0.784	1.299	0.916	1.044	0.267	0.509	0.395	1.84	0.813
Composite CO :	7.66	8.84	12.02	9.66	7.80	0.946	0.803	1.780	10.42	8.155
Composite NOX :	0.649	0.811	1.178	0.905	2.873	0.568	0.778	6.947	1.13	1.399

* #
* BullittRFG Urban Interstate 71.0 mph - CY2008
* File 1, Run 1, Scenario 55.
* #
M 96 Warning:
71.0 speed reduced to 65 mph maximum
M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low

```
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
            Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.657	0.711	1.166	0.828	0.878	0.227	0.429	0.293	2.25	0.727
Composite CO :	10.29	11.42	15.10	12.36	10.93	0.988	0.839	1.936	20.85	10.664
Composite NOX :	0.705	0.898	1.277	0.995	3.492	1.062	1.458	13.780	1.61	2.076

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Freeway 2.5 mph - CY2008
* File 1, Run 1, Scenario 56.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8h

                  Calendar Year:  2008
                          Month:  July
                       Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                  Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	5.109	4.559	7.512	5.314	7.272	0.628	1.223	1.303	7.94	4.969
Composite CO :	25.62	25.11	35.12	27.67	45.98	3.079	2.582	9.569	97.23	26.344
Composite NOX :	1.418	1.556	2.205	1.722	2.205	1.064	1.461	13.800	1.04	2.656

* #
* BullittRFG Urban Principal Arterial 31.0 mph - CY2008
* File 1, Run 1, Scenario 57.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.761	0.809	1.342	0.945	1.117	0.285	0.543	0.439	1.93	0.844
Composite CO :	7.59	8.76	11.93	9.57	8.65	1.004	0.852	1.993	11.58	8.139
Composite NOX :	0.663	0.822	1.192	0.917	2.787	0.572	0.784	6.994	1.10	1.411

* #
* BullittRFG Urban Minor Arterial 28.0 mph - CY2008
* File 1, Run 1, Scenario 58.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types

M 48 War

there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.783	0.829	1.376	0.969	1.186	0.300	0.574	0.478	2.02	0.870
Composite CO :	7.61	8.77	11.96	9.59	9.56	1.063	0.901	2.209	12.64	8.213
Composite NOX :	0.680	0.837	1.212	0.933	2.722	0.582	0.798	7.115	1.07	1.433

* #
* BullittRFG Urban Collector 33.0 mph - CY2008
* File 1, Run 1, Scenario 59.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.747	0.795	1.319	0.929	1.078	0.276	0.525	0.416	1.88	0.827
Composite CO :	7.63	8.80	11.98	9.61	8.20	0.973	0.826	1.880	10.97	8.147
Composite NOX :	0.656	0.816	1.184	0.911	2.833	0.570	0.781	6.969	1.11	1.404

* #
* BullittRFG Urban Local 12.9 mph Default - CY2008
* File 1, Run 1, Scenario 60.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.041	1.080	1.781	1.259	2.014	0.443	0.857	0.837	2.91	1.177
Composite CO :	7.12	8.85	12.30	9.73	21.23	1.759	1.481	4.749	24.37	8.809
Composite NOX :	0.676	0.813	1.179	0.906	2.380	0.763	1.047	8.676	0.91	1.539

* #
* OldhamRFG Rural Interstate 69.0 mph - CY2008
* File 1, Run 1, Scenario 61.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 War:

he user supplied freeway average speed of 64.2
ll be used for all hours of the day. 100% of VM
as been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.647	0.702	1.151	0.817	0.867	0.224	0.423	0.286	2.28	0.717
Composite CO :	10.18	11.37	15.06	12.31	11.13	0.991	0.841	1.945	21.54	10.610
Composite NOX :	0.701	0.894	1.270	0.990	3.533	1.094	1.503	14.258	1.65	2.115

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2008
* File 1, Run 1, Scenario 62.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.662	0.717	1.180	0.836	0.872	0.225	0.425	0.288	1.81	0.730
Composite CO :	9.49	10.69	14.25	11.60	8.47	0.905	0.770	1.633	11.25	9.821
Composite NOX :	0.684	0.869	1.241	0.964	3.367	0.827	1.134	10.088	1.44	1.731

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2008
* File 1, Run 1, Scenario 63.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.691	0.745	1.231	0.869	0.920	0.236	0.446	0.316	1.70	0.761
Composite CO :	8.67	9.85	13.24	10.72	7.16	0.876	0.745	1.524	8.62	9.004
Composite NOX :	0.665	0.840	1.208	0.934	3.144	0.643	0.882	7.858	1.21	1.508

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2008
* File 1, Run 1, Scenario 64.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.695	0.748	1.237	0.873	0.927	0.237	0.450	0.320	1.70	0.765
Composite CO :	8.58	9.77	13.14	10.63	7.11	0.876	0.745	1.526	8.67	8.925
Composite NOX :	0.663	0.837	1.205	0.931	3.121	0.631	0.864	7.707	1.20	1.492

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2008
* File 1, Run 1, Scenario 65.
* #
M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.712	0.763	1.263	0.891	0.969	0.248	0.472	0.348	1.74	0.784
Composite CO :	8.17	9.35	12.63	10.19	7.18	0.895	0.761	1.594	9.24	8.565
Composite NOX :	0.655	0.824	1.190	0.917	3.009	0.590	0.809	7.214	1.16	1.435

* #
* OldhamRFG Rural Local 35.0 mph - CY2008
* File 1, Run 1, Scenario 66.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.735	0.784	1.299	0.916	1.044	0.267	0.509	0.395	1.84	0.813
Composite CO :	7.66	8.84	12.02	9.66	7.80	0.946	0.803	1.780	10.42	8.155
Composite NOX :	0.649	0.811	1.178	0.905	2.873	0.568	0.778	6.947	1.13	1.399

* #
* OldhamRFG Urban Interstate 71.0 mph - CY2008
* File 1, Run 1, Scenario 67.
* #

```
 M 96 Warning:
          71.0      speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b

                Calendar Year:  2008
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.657	0.711	1.166	0.828	0.878	0.227	0.429	0.293	2.25	0.727
Composite CO :	10.29	11.42	15.10	12.36	10.93	0.988	0.839	1.936	20.85	10.664
Composite NOX :	0.705	0.898	1.277	0.995	3.492	1.062	1.458	13.780	1.61	2.076

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Freeway 2.5 mph - CY2008
* File 1, Run 1, Scenario 68.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
 M514 Warning:
           The combined freeway and ramp average speed entered
          cannot be less than  2.7 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of  2.7
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
```

there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	5.109	4.559	7.512	5.314	7.272	0.628	1.223	1.303	7.94	4.969
Composite CO :	25.62	25.11	35.12	27.67	45.98	3.079	2.582	9.569	97.23	26.344
Composite NOX :	1.418	1.556	2.205	1.722	2.205	1.064	1.461	13.800	1.04	2.656

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2008
* File 1, Run 1, Scenario 69.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.761	0.809	1.342	0.945	1.117	0.285	0.543	0.439	1.93	0.844
Composite CO :	7.59	8.76	11.93	9.57	8.65	1.004	0.852	1.993	11.58	8.139
Composite NOX :	0.663	0.822	1.192	0.917	2.787	0.572	0.784	6.994	1.10	1.411

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2008
* File 1, Run 1, Scenario 70.
* #

M583 Warning:
The user supplied arterial average speed of 28.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.783	0.829	1.376	0.969	1.186	0.300	0.574	0.478	2.02	0.870
Composite CO :	7.61	8.77	11.96	9.59	9.56	1.063	0.901	2.209	12.64	8.213
Composite NOX :	0.680	0.837	1.212	0.933	2.722	0.582	0.798	7.115	1.07	1.433

* #
* OldhamRFG Urban Collector 33.0 mph - CY2008
* File 1, Run 1, Scenario 71.
* #

M583 Warning:
The user supplied arterial average speed of 33.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.747	0.795	1.319	0.929	1.078	0.276	0.525	0.416	1.88	0.827
Composite CO :	7.63	8.80	11.98	9.61	8.20	0.973	0.826	1.880	10.97	8.147
Composite NOX :	0.656	0.816	1.184	0.911	2.833	0.570	0.781	6.969	1.11	1.404

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2008
* File 1, Run 1, Scenario 72.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Dis tion:	0.3728	0.3705	0.1273		0359	0.0004	0.0019	0.0857	0.0055	000

Composite Emission Factors (g/mi):										
Composite VOC :	1.041	1.080	1.781	1.259	2.014	0.443	0.857	0.837	2.91	1.177
Composite CO :	7.12	8.85	12.30	9.73	21.23	1.759	1.481	4.749	24.37	8.809
Composite NOX :	0.676	0.813	1.179	0.906	2.380	0.763	1.047	8.676	0.91	1.539

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Interstate 69.0 mph - CY2011
* File 1, Run 1, Scenario 73.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
               69.0     speed reduced to 65 mph maximum
  M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 64.2 miles per hour.
          The average speed will be reset to this value.
  M582 Warning:
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
  M 48 Warning:
          there are no sales for vehicle class HDGV8b

                Calendar Year:  2011
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.492	0.564	0.981	0.671	0.672	0.120	0.298	0.238	2.27	0.581
Composite CO :	8.53	9.41	12.65	10.23	7.78	0.775	0.620	1.283	21.54	8.841
Composite NOX :	0.537	0.685	1.070	0.783	2.395	0.549	1.006	9.760	1.65	1.535

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Principal Arterial 57.0 mph - CY2011
* File 1, Run 1, Scenario 74.
* # # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.502	0.574	1.004	0.684	0.678	0.121	0.299	0.239	1.80	0.589
Composite CO :	7.97	8.84	11.95	9.64	5.92	0.704	0.565	1.077	11.25	8.193
Composite NOX :	0.524	0.666	1.046	0.763	2.283	0.414	0.759	6.957	1.44	1.274

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2011
* File 1, Run 1, Scenario 75.
* #
M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.522	0.592	1.044	0.708	0.710	0.127	0.315	0.262	1.69	0.611
Composite CO :	7.29	8.15	11.09	8.90	5.00	0.679	0.545	1.005	8.62	7.517
Composite NOX :	0.510	0.644	1.020	0.740	2.132	0.322	0.589	5.411	1.21	1.116

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2011
* File 1, Run 1, Scenario 76.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.525	0.594	1.049	0.710	0.715	0.128	0.317	0.266	1.69	0.614
Composite CO :	7.21	8.08	11.00	8.82	4.97	0.680	0.546	1.006	8.67	7.452
Composite NOX :	0.508	0.642	1.017	0.738	2.116	0.316	0.578	5.306	1.20	1.105

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2011
* File 1, Run 1, Scenario 77.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.537	0.605	1.070	0.724	0.742	0.134	0.333	0.289	1.73	0.628
Composite CO :	6.88	7.73	10.57	8.46	5.02	0.695	0.558	1.051	9.24	7.150
Composite NOX :	0.502	0.632	1.006	0.728	2.040	0.295	0.541	4.964	1.16	1.065

* #
* BullittRFG Rural Local 35.0 mph - CY2011
* File 1, Run 1, Scenario 78.
* #
M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.553	0.619	1.098	0.742	0.788	0.145	0.361	0.329	1.83	0.649
Composite CO :	6.46	7.31	10.04	8.01	5.45	0.737	0.591	1.174	10.42	6.805
Composite NOX :	0.497	0.623	0.996	0.718	1.948	0.284	0.520	4.778	1.13	1.039

* #
* BullittRFG Urban Interstate 71.0 mph - CY2011
* File 1, Run 1, Scenario 79.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.499	0.571	0.993	0.679	0.680	0.122	0.302	0.243	2.24	0.588
Composite CO :	8.60	9.44	12.68	10.27	7.64	0.773	0.618	1.277	20.85	8.877

Composite NOX :	0.539	0.687	1.075	0.786	2.367	0.533	0.976	9.436	1.61	1.509

* #
* BullittRFG Urban Freeway 2.5 mph - CY2011
* File 1, Run 1, Scenario 80.
* #

M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.600	3.349	6.069	4.045	5.128	0.355	0.882	1.082	7.93	3.693
Composite CO :	21.69	21.10	28.81	23.07	32.15	2.498	1.975	6.311	97.23	21.845
Composite NOX :	1.087	1.182	1.841	1.350	1.495	0.534	0.978	9.451	1.04	1.961

* #
* BullittRFG Urban Principal Arterial 31.0 mph - CY2011
* File 1, Run 1, Scenario 81.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types

M 48 War

there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.572	0.637	1.132	0.764	0.832	0.155	0.386	0.364	1.92	0.673
Composite CO :	6.41	7.26	9.98	7.96	6.05	0.786	0.629	1.315	11.58	6.800
Composite NOX :	0.508	0.631	1.009	0.727	1.889	0.286	0.524	4.811	1.10	1.048

* #
* BullittRFG Urban Minor Arterial 28.0 mph - CY2011
* File 1, Run 1, Scenario 82.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b.

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.588	0.653	1.160	0.783	0.873	0.165	0.408	0.397	2.01	0.693
Composite CO :	6.45	7.29	10.02	7.99	6.68	0.834	0.667	1.457	12.64	6.867
Composite NOX :	0.521	0.642	1.025	0.740	1.845	0.291	0.533	4.895	1.07	1.064

* #
* BullittRFG Urban Collector 33.0 mph - CY2011
* File 1, Run 1, Scenario 83.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.562	0.628	1.114	0.752	0.808	0.150	0.373	0.345	1.87	0.660
Composite CO :	6.44	7.29	10.01	7.98	5.73	0.760	0.608	1.240	10.97	6.802
Composite NOX :	0.502	0.626	1.002	0.723	1.920	0.285	0.522	4.794	1.11	1.043

* #
* BullittRFG Urban Local 12.9 mph Default - CY2011
* File 1, Run 1, Scenario 84.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
here are no sales for vehicle class HDGV8b

```
            Calendar Year:  2011
                    Month:  July
                 Altitude:  Low
       Minimum Temperature:  67.0 (F)
       Maximum Temperature:  92.0 (F)
         Absolute Humidity:   75. grains/lb
       Fuel Sulfur Content:   30. ppm

       Exhaust I/M Program:  No
          Evap I/M Program:  No
               ATP Program:  No
          Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.777	0.844	1.494	1.010	1.368	0.247	0.615	0.695	2.90	0.927
Composite CO :	6.36	7.59	10.50	8.34	14.84	1.408	1.118	3.132	24.37	7.526
Composite NOX :	0.525	0.632	1.001	0.727	1.613	0.382	0.700	6.038	0.91	1.148

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Interstate 69.0 mph - CY2011
* File 1, Run 1, Scenario 85.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 69.0     speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

            Calendar Year:  2011
                    Month:  July
                 Altitude:  Low
       Minimum Temperature:  67.0 (F)
       Maximum Temperature:  92.0 (F)
         Absolute Humidity:   75. grains/lb
       Fuel Sulfur Content:   30. ppm

       Exhaust I/M Program:  No
          Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.492	0.564	0.981	0.671	0.672	0.120	0.298	0.238	2.27	0.581
Composite CO :	8.53	9.41	12.65	10.23	7.78	0.775	0.620	1.283	21.54	8.841
Composite NOX :	0.537	0.685	1.070	0.783	2.395	0.549	1.006	9.760	1.65	1.535

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2011
* File 1, Run 1, Scenario 86.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.502	0.574	1.004	0.684	0.678	0.121	0.299	0.239	1.80	0.589
Composite CO :	7.97	8.84	11.95	9.64	5.92	0.704	0.565	1.077	11.25	8.193
Composite NOX :	0.524	0.666	1.046	0.763	2.283	0.414	0.759	6.957	1.44	1.274

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2011
* File 1, Run 1, Scenario 87.
* #

M583 Warning:
e user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.522	0.592	1.044	0.708	0.710	0.127	0.315	0.262	1.69	0.611
Composite CO :	7.29	8.15	11.09	8.90	5.00	0.679	0.545	1.005	8.62	7.517
Composite NOX :	0.510	0.644	1.020	0.740	2.132	0.322	0.589	5.411	1.21	1.116

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2011
* File 1, Run 1, Scenario 88.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.525	0.594	1.049	0.710	0.715	0.128	0.317	0.266	1.69	0.614
Composite CO :	7.21	8.08	11.00	8.82	4.97	0.680	0.546	1.006	8.67	7.452
Composite NOX :	0.508	0.642	1.017	0.738	2.116	0.316	0.578	5.306	1.20	1.105

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2011
* File 1, Run 1, Scenario 89.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.537	0.605	1.070	0.724	0.742	0.134	0.333	0.289	1.73	0.628
Composite CO :	6.88	7.73	10.57	8.46	5.02	0.695	0.558	1.051	9.24	7.150
Composite NOX :	0.502	0.632	1.006	0.728	2.040	0.295	0.541	4.964	1.16	1.065

* #
* OldhamRFG Rural Local 35.0 mph - CY2011
* File 1, Run 1, Scenario 90.
* #

M583 Warning:
e user supplied arterial average speed of 35.0
ll be used for all hours of the day. 100% of VM
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.553	0.619	1.098	0.742	0.788	0.145	0.361	0.329	1.83	0.649
Composite CO :	6.46	7.31	10.04	8.01	5.45	0.737	0.591	1.174	10.42	6.805
Composite NOX :	0.497	0.623	0.996	0.718	1.948	0.284	0.520	4.778	1.13	1.039

* #
* OldhamRFG Urban Interstate 71.0 mph - CY2011
* File 1, Run 1, Scenario 91.
* #
M 96 Warning:
71.0 speed reduced to 65 mph maximum
M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low

```
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.499	0.571	0.993	0.679	0.680	0.122	0.302	0.243	2.24	0.588
Composite CO :	8.60	9.44	12.68	10.27	7.64	0.773	0.618	1.277	20.85	8.877
Composite NOX :	0.539	0.687	1.075	0.786	2.367	0.533	0.976	9.436	1.61	1.509

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG              Urban Freeway 2.5 mph - CY2011
* File 1, Run 1, Scenario 92.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                   Calendar Year:  2011
                           Month:  July
                        Altitude:  Low
                 Minimum Temperature:  67.0 (F)
                 Maximum Temperature:  92.0 (F)
                   Absolute Humidity:   75. grains/lb
                 Fuel Sulfur Content:   30. ppm

                 Exhaust I/M Program:  No
                    Evap I/M Program:  No
                         ATP Program:  No
                    Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.3367	0.3972	0.1365		.0360	0.0003	0.0020	0.0860	0.0054	0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.600	3.349	6.069	4.045	5.128	0.355	0.882	1.082	7.93	3.693
Composite CO :	21.69	21.10	28.81	23.07	32.15	2.498	1.975	6.311	97.23	21.845
Composite NOX :	1.087	1.182	1.841	1.350	1.495	0.534	0.978	9.451	1.04	1.961

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2011
* File 1, Run 1, Scenario 93.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.572	0.637	1.132	0.764	0.832	0.155	0.386	0.364	1.92	0.673
Composite CO :	6.41	7.26	9.98	7.96	6.05	0.786	0.629	1.315	11.58	6.800
Composite NOX :	0.508	0.631	1.009	0.727	1.889	0.286	0.524	4.811	1.10	1.048

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2011
* File 1, Run 1, Scenario 94.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.588	0.653	1.160	0.783	0.873	0.165	0.408	0.397	2.01	0.693
Composite CO :	6.45	7.29	10.02	7.99	6.68	0.834	0.667	1.457	12.64	6.867
Composite NOX :	0.521	0.642	1.025	0.740	1.845	0.291	0.533	4.895	1.07	1.064

* #
* OldhamRFG Urban Collector 33.0 mph - CY2011
* File 1, Run 1, Scenario 95.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.562	0.628	1.114	0.752	0.808	0.150	0.373	0.345	1.87	0.660
Composite CO :	6.44	7.29	10.01	7.98	5.73	0.760	0.608	1.240	10.97	6.802
Composite NOX :	0.502	0.626	1.002	0.723	1.920	0.285	0.522	4.794	1.11	1.043

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2011
* File 1, Run 1, Scenario 96.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.777	0.844	1.494	1.010	1.368	0.247	0.615	0.695	2.90	0.927
Composite CO :	6.36	7.59	10.50	8.34	14.84	1.408	1.118	3.132	24.37	7.526
Composite NOX :	0.525	0.632	1.001	0.727	1.613	0.382	0.700	6.038	0.91	1.148

* #
* BullittRFG Rural Interstate 69.0 mph - CY2014
* File 1, Run 1, Scenario 97.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:

```
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b
 M 48 Warning:
            there are no sales for vehicle class LDDT12

                 Calendar Year:  2014
                         Month:  July
                      Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.378	0.462	0.819	0.553	0.530	0.080	0.243	0.202	2.27	0.476
Composite CO :	7.28	8.14	10.95	8.86	7.20	0.668	0.537	0.762	21.54	7.656
Composite NOX :	0.407	0.529	0.901	0.624	1.516	0.288	0.726	6.216	1.65	1.078

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Rural Principal Arterial 57.0 mph - CY2014
* File 1, Run 1, Scenario 98.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of 57.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b
 M 48 Warning:
            there are no sales for vehicle class LDDT12

                 Calendar Year:  2014
                         Month:  July
                      Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
```

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.385	0.468	0.836	0.562	0.535	0.080	0.244	0.203	1.80	0.481
Composite CO :	6.81	7.65	10.33	8.33	5.48	0.607	0.490	0.640	11.25	7.091
Composite NOX :	0.398	0.515	0.881	0.608	1.444	0.217	0.548	4.433	1.44	0.908

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2014
* File 1, Run 1, Scenario 99.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.399	0.481	0.866	0.579	0.559	0.085	0.257	0.223	1.69	0.497
Composite CO :	6.24	7.05	9.56	7.69	4.63	0.585	0.473	0.597	8.62	6.505
Composite NOX :	0.386	0.498	0.860	0.590	1.349	0.169	0.426	3.451	1.21	0.805

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2014
* File 1, Run 1, Scenario 100.
* #

M583 Warning:
The user supplied arterial average speed of 46.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.401	0.483	0.869	0.581	0.562	0.085	0.259	0.226	1.69	0.499
Composite CO :	6.18	6.99	9.48	7.62	4.60	0.586	0.474	0.598	8.67	6.448
Composite NOX :	0.385	0.496	0.858	0.589	1.339	0.166	0.418	3.384	1.20	0.797

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2014
* File 1, Run 1, Scenario 101.
* #

M583 Warning:
The user supplied arterial average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

```
            Calendar Year:  2014
                    Month:  July
                 Altitude:  Low
        Minimum Temperature:  67.0 (F)
        Maximum Temperature:  92.0 (F)
          Absolute Humidity:   75. grains/lb
        Fuel Sulfur Content:   30. ppm

        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
           Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.410	0.491	0.885	0.591	0.583	0.090	0.271	0.245	1.73	0.510
Composite CO :	5.89	6.69	9.10	7.31	4.65	0.599	0.484	0.624	9.24	6.188
Composite NOX :	0.380	0.488	0.848	0.580	1.291	0.155	0.391	3.167	1.16	0.770

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG               Rural Local 35.0 mph - CY2014
* File 1, Run 1, Scenario 102.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.422	0.501	0.907	0.605	0.619	0.097	0.292	0.279	1.83	0.526
Composite CO :	5.55	6.32	8.64	6.92	5.05	0.635	0.512	0.697	10.42	5.889
Composite NOX :	0.376	0.481	0.840	0.573	1.233	0.149	0.377	3.049	1.13	0.752

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Interstate 71.0 mph - CY2014
* File 1, Run 1, Scenario 103.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.383	0.466	0.828	0.559	0.536	0.081	0.247	0.207	2.24	0.481
Composite CO :	7.34	8.17	10.97	8.88	7.07	0.666	0.535	0.758	20.85	7.680
Composite NOX :	0.408	0.530	0.906	0.626	1.498	0.279	0.704	6.009	1.61	1.061

```
* # # #      # # # # # # # # # # # # # # # # # # #
```

```
* BullittR                Urban Freeway 2.5 mph - CY2014
* File 1,    1, Scenario 104.
* # # # # #  # # # # # # # # # # # # # # # # # # #
  M514 Warning:
            The combined freeway and ramp average speed entered
           cannot be less than  2.7 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of  2.7
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.695	2.661	4.802	3.208	3.909	0.238	0.699	0.919	7.93	2.895
Composite CO :	18.81	18.39	24.41	19.93	29.75	2.162	1.686	3.749	97.23	18.899
Composite NOX :	0.830	0.905	1.536	1.067	0.946	0.280	0.706	6.018	1.04	1.416

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG               Urban Principal Arterial 31.0 mph - CY2014
* File 1, Run 1, Scenario 105.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 31.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
```

there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.437	0.516	0.933	0.623	0.652	0.104	0.312	0.309	1.92	0.545
Composite CO :	5.52	6.29	8.58	6.88	5.60	0.677	0.544	0.781	11.58	5.893
Composite NOX :	0.385	0.487	0.850	0.580	1.196	0.150	0.379	3.069	1.10	0.759

* #
* BullittRFG Urban Minor Arterial 28.0 mph - CY2014
* File 1, Run 1, Scenario 106.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Veh Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	Veh

	GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.449	0.528	0.955	0.637	0.684	0.110	0.329	0.337	2.01	0.561
Composite CO :	5.56	6.32	8.62	6.91	6.19	0.720	0.577	0.866	12.64	5.957
Composite NOX :	0.395	0.496	0.864	0.590	1.168	0.153	0.386	3.123	1.07	0.771

* #
* BullittRFG Urban Collector 33.0 mph - CY2014
* File 1, Run 1, Scenario 107.
* #

M583 Warning:
The user supplied arterial average speed of 33.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.429	0.508	0.920	0.613	0.634	0.100	0.302	0.293	1.87	0.535
Composite CO :	5.53	6.31	8.61	6.90	5.31	0.655	0.527	0.737	10.97	5.891
Composite NOX :	0.380	0.484	0.845	0.576	1.215	0.150	0.378	3.058	1.11	0.756

* #
* BullittRFG Urban Local 12.9 mph Default - CY2014
* File 1, Run 1, Scenario 108.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway

type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.597	0.684	1.223	0.822	1.059	0.166	0.490	0.590	2.90	0.751
Composite CO :	5.76	6.72	9.12	7.34	13.73	1.217	0.959	1.860	24.37	6.678
Composite NOX :	0.405	0.492	0.844	0.582	1.021	0.201	0.506	3.844	0.91	0.827

* #
* OldhamRFG Rural Interstate 69.0 mph - CY2014
* File 1, Run 1, Scenario 109.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July

```
                 Altitude:  Low
        Minimum Temperature:  67.0 (F)
        Maximum Temperature:  92.0 (F)
          Absolute Humidity:   75. grains/lb
        Fuel Sulfur Content:   30. ppm

        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
           Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.378	0.462	0.819	0.553	0.530	0.080	0.243	0.202	2.27	0.476
Composite CO :	7.28	8.14	10.95	8.86	7.20	0.668	0.537	0.762	21.54	7.656
Composite NOX :	0.407	0.529	0.901	0.624	1.516	0.288	0.726	6.216	1.65	1.078

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Principal Arterial 57.0 mph - CY2014
* File 1, Run 1, Scenario 110.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.385	0.468	0.836	0.562	0.535	0.080	0.244	0.203	1.80	0.481
Composite CO :	6.81	7.65	10.33	8.33	5.48	0.607	0.490	0.640	11.25	7.091
Composite NOX :	0.398	0.515	0.881	0.608	1.444	0.217	0.548	4.433	1.44	0.908

---

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2014
* File 1, Run 1, Scenario 111.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.399	0.481	0.866	0.579	0.559	0.085	0.257	0.223	1.69	0.497
Composite CO :	6.24	7.05	9.56	7.69	4.63	0.585	0.473	0.597	8.62	6.505
Composite NOX :	0.386	0.498	0.860	0.590	1.349	0.169	0.426	3.451	1.21	0.805

---

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2014
* File 1, Run 1, Scenario 112.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types

M 48 War

there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.401	0.483	0.869	0.581	0.562	0.085	0.259	0.226	1.69	0.499
Composite CO :	6.18	6.99	9.48	7.62	4.60	0.586	0.474	0.598	8.67	6.448
Composite NOX :	0.385	0.496	0.858	0.589	1.339	0.166	0.418	3.384	1.20	0.797

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2014
* File 1, Run 1, Scenario 113.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.410	0.491	0.885	0.591	0.583	0.090	0.271	0.245	1.73	0.510
Composite CO :	5.89	6.69	9.10	7.31	4.65	0.599	0.484	0.624	9.24	6.188
Composite NOX :	0.380	0.488	0.848	0.580	1.291	0.155	0.391	3.167	1.16	0.770

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Local 35.0 mph - CY2014
* File 1, Run 1, Scenario 114.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.422	0.501	0.907	0.605	0.619	0.097	0.292	0.279	1.83	0.526
Composite CO :	5.55	6.32	8.64	6.92	5.05	0.635	0.512	0.697	10.42	5.889
Composite NOX :	0.376	0.481	0.840	0.573	1.233	0.149	0.377	3.049	1.13	0.752

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Interstate 71.0 mph - CY2014
* File 1, Run 1, Scenario 115.
* # # # # # # # # # # # # # # # # # # # # # # # #
```

```
 M 96 Warning:
              71.0      speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b
 M 48 Warning:
           there are no sales for vehicle class LDDT12

                Calendar Year:  2014
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes

     Vehicle Type:      LDGV     LDGT12     LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC    All Veh
          GVWR:                  <6000      >6000      (All)
                    ------    ------     ------     ------    ------    ------    ------    ------    ------    ------
 VMT Distribution:    0.3099    0.4167     0.1431               0.0360    0.0003    0.0021    0.0866    0.0053    1.0000
 ---------------------------------------------------------------------------------------------------------------------
Composite Emission Factors (g/mi):
   Composite VOC :      0.383     0.466      0.828     0.559     0.536     0.081     0.247     0.207      2.24     0.481
   Composite CO  :       7.34      8.17      10.97      8.88      7.07     0.666     0.535     0.758     20.85     7.680
   Composite NOX :      0.408     0.530      0.906     0.626     1.498     0.279     0.704     6.009      1.61     1.061
 ---------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG              Urban Freeway 2.5 mph - CY2014
* File 1, Run 1, Scenario 116.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
 M514 Warning:
           The combined freeway and ramp average speed entered
          cannot be less than  2.7 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of  2.7
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
```

vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.695	2.661	4.802	3.208	3.909	0.238	0.699	0.919	7.93	2.895
Composite CO :	18.81	18.39	24.41	19.93	29.75	2.162	1.686	3.749	97.23	18.899
Composite NOX :	0.830	0.905	1.536	1.067	0.946	0.280	0.706	6.018	1.04	1.416

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2014
* File 1, Run 1, Scenario 117.
* #
M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.437	0.516	0.933	0.623	0.652	0.104	0.312	0.309	1.92	0.545
Composite CO :	5.52	6.29	8.58	6.88	5.60	0.677	0.544	0.781	11.58	5.893
Composite NOX :	0.385	0.487	0.850	0.580	1.196	0.150	0.379	3.069	1.10	0.759

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2014
* File 1, Run 1, Scenario 118.
* #

M583 Warning:
The user supplied arterial average speed of 28.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.449	0.528	0.955	0.637	0.684	0.110	0.329	0.337	2.01	0.561
Composite CO :	5.56	6.32	8.62	6.91	6.19	0.720	0.577	0.866	12.64	5.957
Composite NOX :	0.395	0.496	0.864	0.590	1.168	0.153	0.386	3.123	1.07	0.771

* #
* OldhamRFG Urban Collector 33.0 mph - CY2014

```
* File 1, Run 1, Scenario 119.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
                  Minimum Temperature:  67.0 (F)
                  Maximum Temperature:  92.0 (F)
                    Absolute Humidity:   75. grains/lb
                  Fuel Sulfur Content:   30. ppm

                  Exhaust I/M Program:  No
                     Evap I/M Program:  No
                          ATP Program:  No
                     Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.429	0.508	0.920	0.613	0.634	0.100	0.302	0.293	1.87	0.535
Composite CO :	5.53	6.31	8.61	6.90	5.31	0.655	0.527	0.737	10.97	5.891
Composite NOX :	0.380	0.484	0.845	0.576	1.215	0.150	0.378	3.058	1.11	0.756

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Local 12.9 mph Default - CY2014
* File 1, Run 1, Scenario 120.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
                  Minimum Temperature:  67.0 (F)
                   aximum Temperature:  92.0 (F)
```

```
          Absolute Humidity:   75. grains/lb
        Fuel Sulfur Content:   30. ppm

        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
           Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.597	0.684	1.223	0.822	1.059	0.166	0.490	0.590	2.90	0.751
Composite CO :	5.76	6.72	9.12	7.34	13.73	1.217	0.959	1.860	24.37	6.678
Composite NOX :	0.405	0.492	0.844	0.582	1.021	0.201	0.506	3.844	0.91	0.827

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Rural Interstate 69.0 mph - CY2017
* File 1, Run 1, Scenario 121.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
               69.0     speed reduced to 65 mph maximum
  M515 Warning:
           The combined freeway and ramp average speed entered
           cannot be greater than 64.2 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of 64.2
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

                Calendar Year:  2017
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.305	0.401	0.690	0.475	0.423	0.059	0.206	0.181	2.27	0.407
Composite CO :	6.59	7.47	9.94	8.10	7.08	0.599	0.484	0.533	21.54	7.019
Composite NOX :	0.321	0.431	0.764	0.516	1.018	0.155	0.554	4.150	1.65	0.799

* #
* BullittRFG Rural Principal Arterial 57.0 mph - CY2017
* File 1, Run 1, Scenario 122.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.311	0.407	0.703	0.483	0.427	0.059	0.206	0.183	1.80	0.411
Composite CO :	6.16	7.02	9.37	7.62	5.39	0.544	0.442	0.447	11.25	6.496
Composite NOX :	0.314	0.419	0.746	0.503	0.970	0.117	0.418	2.944	1.44	0.681

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2017
* File 1, Run 1, Scenario 123.
* #

M583 Warning:
user supplied arterial average speed of 47.0

ill be used for all hours of the day. 100% of VM
s been assigned to the arterial/collector roadw
ype for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.323	0.418	0.728	0.497	0.447	0.063	0.216	0.200	1.69	0.424
Composite CO :	5.65	6.47	8.67	7.03	4.55	0.525	0.428	0.418	8.62	5.958
Composite NOX :	0.305	0.405	0.728	0.488	0.906	0.091	0.326	2.294	1.21	0.610

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2017
* File 1, Run 1, Scenario 124.
* #
M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

```
            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes

     Vehicle Type:      LDGV    LDGT12    LDGT34     LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
             GVWR:                <6000     >6000    (All)
                     ------    ------    ------   ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.2912    0.4304    0.1478             0.0361    0.0003    0.0022    0.0869    0.0052    1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite VOC :      0.324     0.419     0.730    0.499     0.449     0.063     0.218     0.203      1.69     0.426
    Composite CO  :       5.60      6.41      8.60     6.97      4.52     0.525     0.428     0.418      8.67     5.906
    Composite NOX :      0.304     0.404     0.726    0.486     0.899     0.090     0.320     2.250      1.20     0.605
 ---------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Rural Minor Collector 41.0 mph - CY2017
* File 1, Run 1, Scenario 125.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes

     Vehicle Type:      LDGV    LDGT12    LDGT34     LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
             GVWR:                <6000     >6000    (All)
                     ------    ------    ------   ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.2912    0.4304    0.1478             0.0361    0.0003    0.0022    0.0869    0.0052    1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite VOC :      0.332     0.426     0.744    0.508     0.467     0.066     0.228     0.221      1.73     0.436
    Composite CO  :       5.35      6.14      8.25     6.68      4.57     0.537     0.437     0.437      9.24     5.669
    Composite NOX :      0.301     0.397     0.717    0.479     0.867     0.084     0.299     2.106      1.16     0.586
 ---------------------------------------------------------------------------------------------------------------------
```

* #
* BullittRFG Rural Local 35.0 mph - CY2017
* File 1, Run 1, Scenario 126.
* #

M583 Warning:
The user supplied arterial average speed of 35.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.343	0.436	0.762	0.519	0.496	0.072	0.245	0.251	1.83	0.450
Composite CO :	5.04	5.80	7.82	6.32	4.96	0.570	0.462	0.488	10.42	5.397
Composite NOX :	0.298	0.391	0.710	0.473	0.828	0.081	0.288	2.028	1.13	0.573

* #
* BullittRFG Urban Interstate 71.0 mph - CY2017
* File 1, Run 1, Scenario 127.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.309	0.405	0.697	0.480	0.428	0.060	0.208	0.186	2.24	0.411
Composite CO :	6.63	7.50	9.96	8.13	6.95	0.598	0.483	0.530	20.85	7.037
Composite NOX :	0.322	0.432	0.768	0.518	1.006	0.151	0.537	4.011	1.61	0.787

* #
* BullittRFG Urban Freeway 2.5 mph - CY2017
* File 1, Run 1, Scenario 128.
* #
M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.265	2.360	4.005	2.780	3.155	0.177	0.574	0.826	7.93	2.495
Composite CO :	17.14	17.08	22.37	18.43	29.26	1.948	1.507	2.622	97.23	17.442
Composite NOX :	0.666	0.742	1.306	0.886	0.635	0.151	0.538	4.017	1.04	1.085

* #
* BullittRFG Urban Principal Arterial 31.0 mph - CY2017
* File 1, Run 1, Scenario 129.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.355	0.449	0.784	0.534	0.522	0.077	0.261	0.278	1.92	0.466
Composite CO :	5.02	5.78	7.78	6.29	5.51	0.608	0.491	0.546	11.58	5.407
Composite NOX :	0.305	0.396	0.719	0.479	0.803	0.081	0.290	2.042	1.10	0.578

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Minor Arterial 28.0 mph - CY2017
* File 1, Run 1, Scenario 130.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2017
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                       ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.366	0.460	0.803	0.548	0.548	0.081	0.275	0.303	2.01	0.480
Composite CO :	5.06	5.81	7.82	6.33	6.08	0.646	0.520	0.605	12.64	5.469
Composite NOX :	0.313	0.404	0.731	0.487	0.784	0.083	0.295	2.078	1.07	0.588

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG                Urban Collector 33.0 mph - CY2017
* File 1, Run 1, Scenario 131.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12
```

```
            Calendar Year:  2017
                    Month:  July
                 Altitude:  Low
        Minimum Temperature:  67.0 (F)
        Maximum Temperature:  92.0 (F)
          Absolute Humidity:   75. grains/lb
        Fuel Sulfur Content:   30. ppm

        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
           Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.349	0.442	0.772	0.526	0.508	0.074	0.253	0.264	1.87	0.457
Composite CO :	5.03	5.79	7.80	6.31	5.22	0.588	0.475	0.515	10.97	5.402
Composite NOX :	0.301	0.394	0.714	0.476	0.816	0.081	0.289	2.035	1.11	0.575

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG              Urban Local 12.9 mph Default - CY2017
* File 1, Run 1, Scenario 132.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

            Calendar Year:  2017
                    Month:  July
                 Altitude:  Low
        Minimum Temperature:  67.0 (F)
        Maximum Temperature:  92.0 (F)
          Absolute Humidity:   75. grains/lb
        Fuel Sulfur Content:   30. ppm

        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
           Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000

Composite Emission Factors (g/mi):										
Composite VOC :	0.494	0.601	1.031	0.711	0.851	0.123	0.405	0.531	2.90	0.648
Composite CO :	5.40	6.26	8.36	6.79	13.51	1.095	0.860	1.301	24.37	6.232
Composite NOX :	0.324	0.401	0.712	0.480	0.686	0.108	0.386	2.548	0.91	0.624

* #
* OldhamRFG Rural Interstate 69.0 mph - CY2017
* File 1, Run 1, Scenario 133.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2017
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.305	0.401	0.690	0.475	0.423	0.059	0.206	0.181	2.27	0.407
Composite CO :	6.59	7.47	9.94	8.10	7.08	0.599	0.484	0.533	21.54	7.019
Composite NOX :	0.321	0.431	0.764	0.516	1.018	0.155	0.554	4.150	1.65	0.799

* #
* OldhamRF Rural Principal Arterial 57.0 mph - 17

* File 1, Run 1, Scenario 134.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.311	0.407	0.703	0.483	0.427	0.059	0.206	0.183	1.80	0.411
Composite CO :	6.16	7.02	9.37	7.62	5.39	0.544	0.442	0.447	11.25	6.496
Composite NOX :	0.314	0.419	0.746	0.503	0.970	0.117	0.418	2.944	1.44	0.681

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2017
* File 1, Run 1, Scenario 135.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)

Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.323	0.418	0.728	0.497	0.447	0.063	0.216	0.200	1.69	0.424
Composite CO :	5.65	6.47	8.67	7.03	4.55	0.525	0.428	0.418	8.62	5.958
Composite NOX :	0.305	0.405	0.728	0.488	0.906	0.091	0.326	2.294	1.21	0.610

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2017
* File 1, Run 1, Scenario 136.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Compo(VOC :	0.324	0.419	0.730	0.499	0.449	0.063	0.218	0.203	1.69	426

Compo[illegible]e CO :	5.60	6.41	8.60	6.97	4.52	0.525	0.428	0.418	8.67	5.906
Compo[illegible] NOX :	0.304	0.404	0.726	0.486	0.899	0.090	0.320	2.250	1.20	0.605

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Minor Collector 41.0 mph - CY2017
* File 1, Run 1, Scenario 137.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2017
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.332	0.426	0.744	0.508	0.467	0.066	0.228	0.221	1.73	0.436
Composite CO :	5.35	6.14	8.25	6.68	4.57	0.537	0.437	0.437	9.24	5.669
Composite NOX :	0.301	0.397	0.717	0.479	0.867	0.084	0.299	2.106	1.16	0.586

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Rural Local 35.0 mph - CY2017
* File 1, Run 1, Scenario 138.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
```

there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.343	0.436	0.762	0.519	0.496	0.072	0.245	0.251	1.83	0.450
Composite CO :	5.04	5.80	7.82	6.32	4.96	0.570	0.462	0.488	10.42	5.397
Composite NOX :	0.298	0.391	0.710	0.473	0.828	0.081	0.288	2.028	1.13	0.573

* #
* OldhamRFG Urban Interstate 71.0 mph - CY2017
* File 1, Run 1, Scenario 139.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

```
          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
            Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.309	0.405	0.697	0.480	0.428	0.060	0.208	0.186	2.24	0.411
Composite CO :	6.63	7.50	9.96	8.13	6.95	0.598	0.483	0.530	20.85	7.037
Composite NOX :	0.322	0.432	0.768	0.518	1.006	0.151	0.537	4.011	1.61	0.787

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Freeway 2.5 mph - CY2017
* File 1, Run 1, Scenario 140.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                  Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	2.265	2.360	4.005	2.780	3.155	0.177	0.574	0.826	7.93	2.495
Composite CO :	17.14	17.08	22.37	18.43	29.26	1.948	1.507	2.622	97.23	17.442
Composite NOX :	0.666	0.742	1.306	0.886	0.635	0.151	0.538	4.017	1.04	1.085

---

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2017
* File 1, Run 1, Scenario 141.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.355	0.449	0.784	0.534	0.522	0.077	0.261	0.278	1.92	0.466
Composite CO :	5.02	5.78	7.78	6.29	5.51	0.608	0.491	0.546	11.58	5.407
Composite NOX :	0.305	0.396	0.719	0.479	0.803	0.081	0.290	2.042	1.10	0.578

---

* #
* OldhamRFG Urban Minor Arterial 28.0 mph - CY2017
* File 1, Run 1, Scenario 142.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 War

there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

```
                Calendar Year:  2017
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.366	0.460	0.803	0.548	0.548	0.081	0.275	0.303	2.01	0.480
Composite CO :	5.06	5.81	7.82	6.33	6.08	0.646	0.520	0.605	12.64	5.469
Composite NOX :	0.313	0.404	0.731	0.487	0.784	0.083	0.295	2.078	1.07	0.588

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Collector 33.0 mph - CY2017
* File 1, Run 1, Scenario 143.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

```
                Calendar Year:  2017
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  Yes
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.349	0.442	0.772	0.526	0.508	0.074	0.253	0.264	1.87	0.457
Composite CO :	5.03	5.79	7.80	6.31	5.22	0.588	0.475	0.515	10.97	5.402
Composite NOX :	0.301	0.394	0.714	0.476	0.816	0.081	0.289	2.035	1.11	0.575

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2017
* File 1, Run 1, Scenario 144.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.494	0.601	1.031	0.711	0.851	0.123	0.405	0.531	2.90	0.648
Composite CO :	5.40	6.26	8.36	6.79	13.51	1.095	0.860	1.301	24.37	6.232
Composite NOX :	0.324	0.401	0.712	0.480	0.686	0.108	0.386	2.548	0.91	0.624

* #
* BullittRFG Rural Interstate 69.0 mph - CY2020
* File 1, Run 1, Scenario 145.
* #

M 96 War

69.0 speed reduced to 65 mph maximum

M515 War : e combined freeway and ramp average speed entere cannot be greater than 64.2 miles per hour. The average speed will be reset to this value.

M582 Warning: The user supplied freeway average speed of 64.2 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning: there are no sales for vehicle class HDGV8b

M 48 Warning: there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.260	0.351	0.567	0.406	0.341	0.048	0.162	0.170	2.27	0.351
Composite CO :	6.23	7.12	9.23	7.66	7.00	0.571	0.416	0.388	21.54	6.653
Composite NOX :	0.271	0.386	0.674	0.459	0.710	0.099	0.415	2.735	1.65	0.621

* #
* BullittRFG Rural Principal Arterial 57.0 mph - CY2020
* File 1, Run 1, Scenario 146.
* #

M583 Warning: The user supplied arterial average speed of 57.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning: there are no sales for vehicle class HDGV8b

M 48 Warning: there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.265	0.356	0.578	0.412	0.344	0.049	0.162	0.171	1.80	0.354
Composite CO :	5.84	6.68	8.69	7.20	5.33	0.518	0.379	0.326	11.25	6.152
Composite NOX :	0.265	0.375	0.658	0.447	0.677	0.075	0.314	1.971	1.44	0.543

* #
* BullittRFG Rural Minor Arterial 47.0 mph - CY2020
* File 1, Run 1, Scenario 147.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.276	0.366	0.598	0.425	0.361	0.051	0.170	0.188	1.69	0.366
Composite CO :	5.36	6.15	8.03	6.63	4.50	0.499	0.366	0.304	8.62	5.637
Composite NOX :	0.258	0.362	0.641	0.434	0.632	0.058	0.245	1.525	1.21	0.491

* #
* BullittRFG Rural Major Collector 46.0 mph - CY2020
* File 1, Run 1, Scenario 148.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.277	0.367	0.600	0.427	0.363	0.052	0.171	0.190	1.69	0.368
Composite CO :	5.31	6.09	7.96	6.57	4.47	0.500	0.366	0.305	8.67	5.588
Composite NOX :	0.258	0.361	0.640	0.432	0.628	0.057	0.240	1.495	1.20	0.487

* #
* BullittRFG Rural Minor Collector 41.0 mph - CY2020
* File 1, Run 1, Scenario 149.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway

type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.285	0.374	0.612	0.434	0.378	0.054	0.179	0.207	1.73	0.377
Composite CO :	5.07	5.83	7.63	6.29	4.52	0.511	0.375	0.318	9.24	5.362
Composite NOX :	0.255	0.355	0.632	0.426	0.605	0.054	0.225	1.397	1.16	0.473

* #
* BullittRFG Rural Local 35.0 mph - CY2020
* File 1, Run 1, Scenario 150.
* #
M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.295	0.383	0.627	0.445	0.403	0.059	0.193	0.235	1.83	0.390
Composite CO :	4.77	5.51	7.23	5.95	4.91	0.543	0.397	0.355	10.42	5.103
Composite NOX :	0.253	0.350	0.625	0.420	0.578	0.052	0.216	1.343	1.13	0.463

* #
* BullittRFG Urban Interstate 71.0 mph - CY2020
* File 1, Run 1, Scenario 151.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.263	0.354	0.573	0.410	0.345	0.049	0.164	0.174	2.24	0.355
Composite CO :	6.28	7.14	9.24	7.68	6.88	0.569	0.415	0.387	20.85	6.670
Composite NOX :	0.272	0.387	0.678	0.461	0.702	0.096	0.403	2.646	1.61	0.614

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG            Urban Freeway 2.5 mph - CY2020
* File 1, Run 1, Scenario 152.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
           The combined freeway and ramp average speed entered
          cannot be less than  2.7 miles per hour.
          The average speed will be reset to this value.
  M582 Warning:
          The user supplied freeway average speed of  2.7
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

                  Calendar Year:  2020
                          Month:  July
                       Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  Yes
```

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.051	2.150	3.368	2.461	2.672	0.145	0.454	0.775	7.93	2.230
Composite CO :	16.29	16.41	20.93	17.56	28.94	1.859	1.324	1.911	97.23	16.622
Composite NOX :	0.575	0.669	1.158	0.794	0.443	0.097	0.404	2.651	1.04	0.883

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittRFG            Urban Principal Arterial 31.0 mph - CY2020
* File 1, Run 1, Scenario 153.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            user supplied arterial average speed of 31.0
```

will be used for all hours of the day. 100% of VM
s been assigned to the arterial/collector roadwa
pe for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.306	0.394	0.646	0.459	0.426	0.063	0.205	0.261	1.92	0.405
Composite CO :	4.76	5.49	7.20	5.92	5.45	0.579	0.422	0.398	11.58	5.115
Composite NOX :	0.259	0.354	0.633	0.426	0.560	0.052	0.218	1.353	1.10	0.468

* #
* BullittRFG Urban Minor Arterial 28.0 mph - CY2020
* File 1, Run 1, Scenario 154.
* #
M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.316	0.405	0.663	0.471	0.448	0.067	0.217	0.284	2.01	0.418
Composite CO :	4.80	5.52	7.24	5.96	6.02	0.615	0.448	0.441	12.64	5.175
Composite NOX :	0.266	0.361	0.644	0.433	0.547	0.053	0.221	1.377	1.07	0.476

* #
* BullittRFG Urban Collector 33.0 mph - CY2020
* File 1, Run 1, Scenario 155.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.300	0.388	0.636	0.452	0.414	0.061	0.199	0.247	1.87	0.397
Composite CO :	4.77	5.50	7.22	5.94	5.16	0.560	0.409	0.375	10.97	5.108
Composite NOX :	0.255	0.352	0.629	0.423	0.570	0.052	0.217	1.348	1.11	0.465

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* BullittR                  Urban Local 12.9 mph Default - CY2
* File 1, Run 1, Scenario 156.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
                         Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  Yes

      Vehicle Type:       LDGV    LDGT12     LDGT34       LDGT       HDGV       LDDV       LDDT       HDDV         MC    All Veh
             GVWR:                 <6000      >6000      (All)
                        ------    ------     ------     ------     ------     ------     ------     ------     ------     ------
   VMT Distribution:    0.2788    0.4388     0.1507                0.0365     0.0003     0.0022     0.0876     0.0051     1.0000
  ---------------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite VOC  :      0.434     0.537      0.862      0.620      0.705      0.101      0.320      0.498       2.90      0.572
     Composite CO   :       5.21      5.97       7.79       6.44      13.36      1.044      0.750      0.948      24.37      5.944
     Composite NOX  :      0.277     0.357      0.625      0.426      0.478      0.069      0.290      1.746       0.91      0.504
  ---------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                  Rural Interstate 69.0 mph - CY2020
* File 1, Run 1, Scenario 157.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
```

there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.260	0.351	0.567	0.406	0.341	0.048	0.162	0.170	2.27	0.351
Composite CO :	6.23	7.12	9.23	7.66	7.00	0.571	0.416	0.388	21.54	6.653
Composite NOX :	0.271	0.386	0.674	0.459	0.710	0.099	0.415	2.735	1.65	0.621

* #
* OldhamRFG Rural Principal Arterial 57.0 mph - CY2020
* File 1, Run 1, Scenario 158.
* #
M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.265	0.356	0.578	0.412	0.344	0.049	0.162	0.171	1.80	0.354
Composite CO :	5.84	6.68	8.69	7.20	5.33	0.518	0.379	0.326	11.25	6.152
Composite NOX :	0.265	0.375	0.658	0.447	0.677	0.075	0.314	1.971	1.44	0.543

* #
* OldhamRFG Rural Minor Arterial 47.0 mph - CY2020
* File 1, Run 1, Scenario 159.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.276	0.366	0.598	0.425	0.361	0.051	0.170	0.188	1.69	0.366
Composite CO :	5.36	6.15	8.03	6.63	4.50	0.499	0.366	0.304	8.62	5.637
Composite NOX :	0.258	0.362	0.641	0.434	0.632	0.058	0.245	1.525	1.21	0.491

* #
* OldhamRFG Rural Major Collector 46.0 mph - CY2020
* File 1, Run 1, Scenario 160.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.277	0.367	0.600	0.427	0.363	0.052	0.171	0.190	1.69	0.368
Composite CO :	5.31	6.09	7.96	6.57	4.47	0.500	0.366	0.305	8.67	5.588
Composite NOX :	0.258	0.361	0.640	0.432	0.628	0.057	0.240	1.495	1.20	0.487

* #
* OldhamRFG Rural Minor Collector 41.0 mph - CY2020
* File 1, Run 1, Scenario 161.
* #
M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.285	0.374	0.612	0.434	0.378	0.054	0.179	0.207	1.73	0.377
Composite CO :	5.07	5.83	7.63	6.29	4.52	0.511	0.375	0.318	9.24	5.362
Composite NOX :	0.255	0.355	0.632	0.426	0.605	0.054	0.225	1.397	1.16	0.473

* #
* OldhamRFG Rural Local 35.0 mph - CY2020
* File 1, Run 1, Scenario 162.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.295	0.383	0.627	0.445	0.403	0.059	0.193	0.235	1.83	0.390
Composite CO :	4.77	5.51	7.23	5.95	4.91	0.543	0.397	0.355	10.42	5.103
Composite NOX :	0.253	0.350	0.625	0.420	0.578	0.052	0.216	1.343	1.13	0.463

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG              Urban Interstate 71.0 mph - CY2020
* File 1, Run 1, Scenario 163.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                71.0     speed reduced to 65 mph maximum
  M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
  M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

                 Calendar Year:  2020
                         Month:  July
                      Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
             Reformulated Gas:   Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.263	0.354	0.573	0.410	0.345	0.049	0.164	0.174	2.24	0.355
Composite CO :	6.28	7.14	9.24	7.68	6.88	0.569	0.415	0.387	20.85	6.670
Composite NOX :	0.272	0.387	0.678	0.461	0.702	0.096	0.403	2.646	1.61	0.614

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG              Urban Freeway 2.5 mph - CY2020
* File 1, Run 1, Scenario 164.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
           The combined freeway and ramp average speed entered
            not be less than  2.7 miles per hour.
```

he average speed will be reset to this value.

M582 War :
ne user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.051	2.150	3.368	2.461	2.672	0.145	0.454	0.775	7.93	2.230
Composite CO :	16.29	16.41	20.93	17.56	28.94	1.859	1.324	1.911	97.23	16.622
Composite NOX :	0.575	0.669	1.158	0.794	0.443	0.097	0.404	2.651	1.04	0.883

* #
* OldhamRFG Urban Principal Arterial 31.0 mph - CY2020
* File 1, Run 1, Scenario 165.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)

```
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
              Reformulated Gas:   Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.306	0.394	0.646	0.459	0.426	0.063	0.205	0.261	1.92	0.405
Composite CO :	4.76	5.49	7.20	5.92	5.45	0.579	0.422	0.398	11.58	5.115
Composite NOX :	0.259	0.354	0.633	0.426	0.560	0.052	0.218	1.353	1.10	0.468

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* OldhamRFG                Urban Minor Arterial 28.0 mph - CY2020
* File 1, Run 1, Scenario 166.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

                 Calendar Year:  2020
                         Month:  July
                      Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
              Reformulated Gas:   Yes
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Compos VOC :	0.316	0.405	0.663	0.471	0.448	0.067	0.217	0.284	2.01	418

Composite CO :	4.80	5.52	7.24	5.96	6.02	0.615	0.448	0.441	12.64	5.175
Composite NOX :	0.266	0.361	0.644	0.433	0.547	0.053	0.221	1.377	1.07	0.476

* #
* OldhamRFG Urban Collector 33.0 mph - CY2020
* File 1, Run 1, Scenario 167.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.300	0.388	0.636	0.452	0.414	0.061	0.199	0.247	1.87	0.397
Composite CO :	4.77	5.50	7.22	5.94	5.16	0.560	0.409	0.375	10.97	5.108
Composite NOX :	0.255	0.352	0.629	0.423	0.570	0.052	0.217	1.348	1.11	0.465

* #
* OldhamRFG Urban Local 12.9 mph Default - CY2020
* File 1, Run 1, Scenario 168.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: Yes

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.434	0.537	0.862	0.620	0.705	0.101	0.320	0.498	2.90	0.572
Composite CO :	5.21	5.97	7.79	6.44	13.36	1.044	0.750	0.948	24.37	5.944
Composite NOX :	0.277	0.357	0.625	0.426	0.478	0.069	0.290	1.746	0.91	0.504

****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: D:\MOBILE62\KY_M62\LVILLE\RED-REQ.IN (file 1, run 2). *
****

```
* # # # #   # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Interstate 69.0 mph - CY2003
* File 1, Run 2, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M 96 Warning:
               69.0     speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 64.2 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b

                  Calendar Year:  2003
                          Month:  July
                       Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:  259. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.241	1.422	2.207	1.623	1.629	0.577	0.766	0.391	2.76	1.356
Composite CO :	19.37	22.90	29.90	24.69	22.95	1.602	1.532	2.834	25.00	20.388
Composite NOX :	1.198	1.433	1.748	1.514	5.909	2.445	2.632	23.151	1.65	3.351

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Principal Arterial 57.0 mph - CY2003
* File 1, Run 2, Scenario 2.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
          The user supplied arterial average speed of 57.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
```

type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 259. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.267	1.457	2.266	1.664	1.645	0.579	0.768	0.394	2.29	1.382
Composite CO :	17.93	21.44	28.31	23.20	17.47	1.481	1.417	2.379	13.06	18.804
Composite NOX :	1.167	1.392	1.706	1.472	5.631	1.849	1.989	15.865	1.44	2.696

* #
* Bullitt Rural Minor Arterial 47.0 mph - CY2003
* File 1, Run 2, Scenario 3.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 259. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.326	1.521	2.370	1.739	1.753	0.605	0.802	0.432	2.18	1.447
Composite CO :	16.23	19.66	26.36	21.37	14.76	1.438	1.377	2.220	10.00	17.134
Composite NOX :	1.134	1.345	1.660	1.426	5.259	1.442	1.549	12.548	1.21	2.367

* #
* Bullitt Rural Major Collector 46.0 mph - CY2003
* File 1, Run 2, Scenario 4.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2003
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 259. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.333	1.529	2.381	1.747	1.768	0.609	0.808	0.438	2.18	1.455
Composite CO :	16.05	19.47	26.15	21.18	14.66	1.439	1.378	2.224	10.07	16.970
Composite NOX :	1.131	1.341	1.655	1.421	5.220	1.414	1.519	12.322	1.20	2.343

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2003

```
* File 1, Run 2, Scenario 5.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  259. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.372	1.563	2.434	1.786	1.864	0.634	0.842	0.476	2.22	1.496
Composite CO :	15.19	18.58	25.17	20.27	14.81	1.466	1.403	2.322	10.73	16.218
Composite NOX :	1.116	1.319	1.635	1.400	5.033	1.324	1.422	11.590	1.16	2.259

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Local 35.0 mph - CY2003
* File 1, Run 2, Scenario 6.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
```

```
            Nominal Fuel RVP:   8.6 psi
               Weathered RVP:   8.2 psi
          Fuel Sulfur Content:  259. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.426	1.610	2.505	1.839	2.030	0.679	0.901	0.541	2.32	1.555
Composite CO :	14.15	17.49	23.98	19.15	16.09	1.538	1.471	2.593	12.10	15.354
Composite NOX :	1.104	1.299	1.617	1.380	4.806	1.275	1.369	11.191	1.13	2.203

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Interstate 71.0 mph - CY2003
* File 1, Run 2, Scenario 7.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0     speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                  Calendar Year:  2003
                          Month:  July
                       Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
                 Nominal Fuel RVP:   8.6 psi
                    Weathered RVP:   8.2 psi
              Fuel Sulfur Content:  259. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.266	1.447	2.242	1.651	1.654	0.584	0.774	0.401	2.73	1.380
Composite CO :	19.73	23.08	30.06	24.86	22.54	1.598	1.528	2.821	24.21	20.600
Composite NOX :	1.207	1.444	1.760	1.525	5.840	2.372	2.553	22.319	1.61	3.287

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Freeway 2.5 mph - CY2003
* File 1, Run 2, Scenario 8.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
            The combined freeway and ramp average speed entered
           cannot be less than  2.7 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of  2.7
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2003
                         Month:  July
                      Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:  259. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	12.148	10.957	16.433	12.358	16.833	1.520	2.022	1.782	8.43	11.491
Composite CO :	47.54	48.77	74.76	55.42	94.83	4.566	4.330	13.942	112.87	50.091
Composite NOX :	2.405	2.508	3.038	2.644	3.688	2.377	2.559	22.340	1.04	4.219

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Principal Arterial 31.0 mph - C    3
* File 1, Run 2, Scenario 9.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  259. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.486	1.668	2.599	1.906	2.188	0.719	0.954	0.600	2.41	1.622
Composite CO :	13.94	17.22	23.77	18.89	17.85	1.621	1.549	2.904	13.45	15.250
Composite NOX :	1.130	1.317	1.637	1.399	4.661	1.283	1.379	11.261	1.10	2.223

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Minor Arterial 28.0 mph - CY2003
* File 1, Run 2, Scenario 10.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
```

```
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:  259. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.539	1.716	2.675	1.961	2.339	0.755	1.003	0.654	2.50	1.679
Composite CO :	13.93	17.16	23.79	18.86	19.72	1.705	1.629	3.219	14.67	15.331
Composite NOX :	1.159	1.341	1.665	1.424	4.552	1.306	1.403	11.442	1.07	2.258

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Collector 33.0 mph - CY2003
* File 1, Run 2, Scenario 11.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2003
                         Month:  July
                      Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  259. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.454	1.637	2.549	1.871	2.104	0.697	0.926	0.569	2.36	1.586
Composite CO :	14.05	17.36	23.88	19.03	16.91	1.577	1.508	2.739	12.73	15.305
Composite NOX :	1.117	1.307	1.627	1.389	4.738	1.279	1.374	11.224	1.11	2.213

---

* #
* Bullitt Urban Local 12.9 mph Default - CY2003
* File 1, Run 2, Scenario 12.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	2.234	2.365	3.613	2.684	4.199	1.088	1.446	1.145	3.39	2.411
Composite CO :	11.86	16.15	23.78	18.10	43.78	2.692	2.561	6.919	28.29	15.350
Composite NOX :	1.134	1.272	1.591	1.354	3.980	1.708	1.837	13.012	0.91	2.328

---

* #
* Oldham Rural Interstate 69.0 mph - CY2003
* File 1, Run 2, Scenario 13.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:

The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.241	1.422	2.207	1.623	1.629	0.577	0.766	0.391	2.76	1.356
Composite CO :	19.37	22.90	29.90	24.69	22.95	1.602	1.532	2.834	25.00	20.388
Composite NOX :	1.198	1.433	1.748	1.514	5.909	2.445	2.632	23.151	1.65	3.351

* #
* Oldham Rural Principal Arterial 57.0 mph - CY2003
* File 1, Run 2, Scenario 14.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi

```
          Fuel Sulfur Content:  259. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.267	1.457	2.266	1.664	1.645	0.579	0.768	0.394	2.29	1.382
Composite CO :	17.93	21.44	28.31	23.20	17.47	1.481	1.417	2.379	13.06	18.804
Composite NOX :	1.167	1.392	1.706	1.472	5.631	1.849	1.989	15.865	1.44	2.696

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Minor Arterial 47.0 mph - CY2003
* File 1, Run 2, Scenario 15.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:  259. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.326	1.521	2.370	1.739	1.753	0.605	0.802	0.432	2.18	1.447
Composite CO :	16.23	19.66	26.36	21.37	14.76	1.438	1.377	2.220	10.00	17.134
Composite NOX :	1.134	1.345	1.660	1.426	5.259	1.442	1.549	12.548	1.21	2.367

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Major Collector 46.0 mph - CY2003
* File 1, Run 2, Scenario 16.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                           Month:  July
                        Altitude:  Low
                  Minimum Temperature:  67.0 (F)
                  Maximum Temperature:  92.0 (F)
                    Absolute Humidity:   75. grains/lb
                     Nominal Fuel RVP:   8.6 psi
                        Weathered RVP:   8.2 psi
                  Fuel Sulfur Content:  259. ppm

                  Exhaust I/M Program:  No
                     Evap I/M Program:  No
                          ATP Program:  No
                     Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.333	1.529	2.381	1.747	1.768	0.609	0.808	0.438	2.18	1.455
Composite CO :	16.05	19.47	26.15	21.18	14.66	1.439	1.378	2.224	10.07	16.970
Composite NOX :	1.131	1.341	1.655	1.421	5.220	1.414	1.519	12.322	1.20	2.343

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Minor Collector 41.0 mph - CY2003
* File 1, Run 2, Scenario 17.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2003
                           Month:  July
```

```
                  Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:  259. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.372	1.563	2.434	1.786	1.864	0.634	0.842	0.476	2.22	1.496
Composite CO :	15.19	18.58	25.17	20.27	14.81	1.466	1.403	2.322	10.73	16.218
Composite NOX :	1.116	1.319	1.635	1.400	5.033	1.324	1.422	11.590	1.16	2.259

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Local 35.0 mph - CY2003
* File 1, Run 2, Scenario 18.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2003
                         Month:  July
                      Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:  259. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh

VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.426	1.610	2.505	1.839	2.030	0.679	0.901	0.541	2.32	1.555
Composite CO :	14.15	17.49	23.98	19.15	16.09	1.538	1.471	2.593	12.10	15.354
Composite NOX :	1.104	1.299	1.617	1.380	4.806	1.275	1.369	11.191	1.13	2.203

* #
* Oldham Urban Interstate 71.0 mph - CY2003
* File 1, Run 2, Scenario 19.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.266	1.447	2.242	1.651	1.654	0.584	0.774	0.401	2.73	1.380
Composite CO :	19.73	23.08	30.06	24.86	22.54	1.598	1.528	2.821	24.21	20.600
Composite NOX :	1.207	1.444	1.760	1.525	5.840	2.372	2.553	22.319	1.61	3.287

* #

* Oldham Urban Freeway 2.5 mph - CY2003
* File 1, Run 2, Scenario 20.
* #

M514 Warning:
The combined freeway and ramp average speed entered cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	12.148	10.957	16.433	12.358	16.833	1.520	2.022	1.782	8.43	11.491
Composite CO :	47.54	48.77	74.76	55.42	94.83	4.566	4.330	13.942	112.87	50.091
Composite NOX :	2.405	2.508	3.038	2.644	3.688	2.377	2.559	22.340	1.04	4.219

* #
* Oldham Urban Principal Arterial 31.0 mph - CY2003
* File 1, Run 2, Scenario 21.
* #

M583 Warning:
The user supplied arterial average speed of 31.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
                Calendar Year:  2003
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:  259. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
             Reformulated Gas:   No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.486	1.668	2.599	1.906	2.188	0.719	0.954	0.600	2.41	1.622
Composite CO :	13.94	17.22	23.77	18.89	17.85	1.621	1.549	2.904	13.45	15.250
Composite NOX :	1.130	1.317	1.637	1.399	4.661	1.283	1.379	11.261	1.10	2.223

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Minor Arterial 28.0 mph - CY2003
* File 1, Run 2, Scenario 22.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                Calendar Year:  2003
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:  259. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
             Reformulated Gas:   No
```

Veh/ Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.539	1.716	2.675	1.961	2.339	0.755	1.003	0.654	2.50	1.679
Composite CO :	13.93	17.16	23.79	18.86	19.72	1.705	1.629	3.219	14.67	15.331
Composite NOX :	1.159	1.341	1.665	1.424	4.552	1.306	1.403	11.442	1.07	2.258

* #
* Oldham Urban Collector 33.0 mph - CY2003
* File 1, Run 2, Scenario 23.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.454	1.637	2.549	1.871	2.104	0.697	0.926	0.569	2.36	1.586
Composite CO :	14.05	17.36	23.88	19.03	16.91	1.577	1.508	2.739	12.73	15.305
Composite NOX :	1.117	1.307	1.627	1.389	4.738	1.279	1.374	11.224	1.11	2.213

* #
* Oldham Urban Local 12.9 mph Default - CY2003
* File 1, Run 2, Scenario 24.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway

type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2003
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	259. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4424	0.3195	0.1099		0.0361	0.0007	0.0017	0.0839	0.0059	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	2.234	2.365	3.613	2.684	4.199	1.088	1.446	1.145	3.39	2.411
Composite CO :	11.86	16.15	23.78	18.10	43.78	2.692	2.561	6.919	28.29	15.350
Composite NOX :	1.134	1.272	1.591	1.354	3.980	1.708	1.837	13.012	0.91	2.328

* #
* Bullitt Rural Interstate 69.0 mph - CY2005
* File 1, Run 2, Scenario 25.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
nimum Temperature:	67.0 (F)

```
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   92. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.980	1.067	1.717	1.233	1.367	0.460	0.634	0.346	2.75	1.065
Composite CO :	14.51	16.53	21.50	17.80	18.32	1.440	1.260	2.563	25.00	15.161
Composite NOX :	0.964	1.194	1.520	1.277	5.150	2.093	2.179	19.048	1.65	2.799

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Principal Arterial 57.0 mph - CY2005
* File 1, Run 2, Scenario 26.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                 Calendar Year:  2005
                         Month:  July
                      Altitude:  Low
               Minimum Temperature:  67.0 (F)
               Maximum Temperature:  92.0 (F)
                 Absolute Humidity:   75. grains/lb
                  Nominal Fuel RVP:   8.6 psi
                     Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   92. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.006	1.096	1.767	1.268	1.382	0.462	0.636	0.348	2.29	1.089
Composite CO :	13.48	15.53	20.39	16.77	13.94	1.331	1.166	2.151	13.06	14.002
Composite NOX :	0.939	1.159	1.483	1.242	4.908	1.584	1.648	13.288	1.44	2.272

---

* #
* Bullitt Rural Minor Arterial 47.0 mph - CY2005
* File 1, Run 2, Scenario 27.
* #

M583 Warning:
The user supplied arterial average speed of 47.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	92. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	1.062	1.150	1.855	1.330	1.472	0.482	0.664	0.382	2.17	1.146
Composite CO :	12.25	14.29	19.02	15.50	11.78	1.293	1.133	2.008	10.00	12.804
Composite NOX :	0.912	1.118	1.442	1.201	4.583	1.236	1.284	10.385	1.21	1.982

---

* #
* Bullitt Rural Major Collector 46.0 mph - CY2005
* File 1, Run 2, Scenario 28.
* #

M583 Warning:
The user supplied arterial average speed of 46.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types

M 48 War

there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.068	1.156	1.865	1.337	1.484	0.485	0.669	0.387	2.18	1.153
Composite CO :	12.12	14.16	18.88	15.37	11.70	1.294	1.134	2.011	10.07	12.688
Composite NOX :	0.909	1.114	1.438	1.197	4.549	1.212	1.259	10.187	1.20	1.961

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2005
* File 1, Run 2, Scenario 29.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.103	1.184	1.909	1.370	1.562	0.506	0.698	0.421	2.22	1.188
Composite CO :	11.51	13.54	18.20	14.73	11.82	1.318	1.154	2.100	10.73	12.160
Composite NOX :	0.897	1.096	1.420	1.178	4.387	1.135	1.179	9.546	1.16	1.887

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Local 35.0 mph - CY2005
* File 1, Run 2, Scenario 30.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   92. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.152	1.223	1.970	1.414	1.695	0.540	0.747	0.478	2.32	1.239
Composite CO :	10.75	12.79	17.36	13.96	12.84	1.383	1.210	2.345	12.10	11.560
Composite NOX :	0.887	1.078	1.404	1.162	4.188	1.093	1.136	9.197	1.13	1.838

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Interstate 71.0 mph - CY2005
* File 1, Run 2, Scenario 31.
* # # # # #     # # # # # # # # # # # # # # # # #
```

M 96 Warning:
71.0 speed reduced to 65 mph maximum
M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	92. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.999	1.084	1.743	1.253	1.388	0.466	0.641	0.354	2.73	1.083
Composite CO :	14.72	16.64	21.61	17.91	17.99	1.437	1.258	2.551	24.21	15.280
Composite NOX :	0.970	1.200	1.529	1.284	5.090	2.031	2.114	18.396	1.61	2.747

* #
* Bullitt Urban Freeway 2.5 mph - CY2005
* File 1, Run 2, Scenario 32.
* #
M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all

vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
      Calendar Year:  2005
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   92. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	10.248	8.785	13.511	9.994	14.164	1.203	1.691	1.576	8.43	9.506
Composite CO :	35.99	37.05	56.39	42.00	75.69	4.100	3.565	12.608	112.87	38.535
Composite NOX :	1.951	2.094	2.669	2.241	3.214	2.035	2.119	18.419	1.04	3.521

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Principal Arterial 31.0 mph - CY2005
* File 1, Run 2, Scenario 33.
* # # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
      Calendar Year:  2005
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   92. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.201	1.268	2.042	1.466	1.821	0.572	0.792	0.531	2.41	1.293
Composite CO :	10.62	12.64	17.26	13.82	14.25	1.457	1.275	2.627	13.45	11.523
Composite NOX :	0.908	1.094	1.421	1.178	4.062	1.101	1.143	9.258	1.10	1.855

* #
* Bullitt Urban Minor Arterial 28.0 mph - CY2005
* File 1, Run 2, Scenario 34.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.244	1.305	2.101	1.508	1.942	0.601	0.833	0.578	2.50	1.339
Composite CO :	10.64	12.63	17.32	13.83	15.74	1.532	1.340	2.911	14.67	11.620
Composite NOX :	0.931	1.114	1.446	1.199	3.967	1.120	1.163	9.417	1.07	1.884

* #
* Bullitt Urban Collector 33.0 mph - CY2005

```
* File 1, Run 2, Scenario 35.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   92. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.175	1.244	2.004	1.439	1.754	0.555	0.769	0.503	2.36	1.265
Composite CO :	10.69	12.72	17.31	13.89	13.50	1.418	1.241	2.477	12.73	11.543
Composite NOX :	0.897	1.086	1.412	1.169	4.129	1.097	1.139	9.226	1.11	1.846

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Local 12.9 mph Default - CY2005
* File 1, Run 2, Scenario 36.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
```

```
          Weathered RVP:   8.2 psi
      Fuel Sulfur Content:   92. ppm

     Exhaust I/M Program:  No
        Evap I/M Program:  No
             ATP Program:  No
       Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.809	1.802	2.833	2.066	3.428	0.863	1.207	1.012	3.39	1.924
Composite CO :	9.48	12.32	17.63	13.68	34.94	2.418	2.108	6.257	28.29	12.126
Composite NOX :	0.917	1.066	1.393	1.150	3.469	1.463	1.522	11.220	0.91	1.990

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Interstate 69.0 mph - CY2005
* File 1, Run 2, Scenario 37.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
               69.0      speed reduced to 65 mph maximum
  M515 Warning:
           The combined freeway and ramp average speed entered
           cannot be greater than 64.2 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of 64.2
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                Calendar Year:  2005
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:   92. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.980	1.067	1.717	1.233	1.367	0.460	0.634	0.346	2.75	1.065
Composite CO :	14.51	16.53	21.50	17.80	18.32	1.440	1.260	2.563	25.00	15.161
Composite NOX :	0.964	1.194	1.520	1.277	5.150	2.093	2.179	19.048	1.65	2.799

* #
* Oldham Rural Principal Arterial 57.0 mph - CY2005
* File 1, Run 2, Scenario 38.
* #

M583 Warning:
The user supplied arterial average speed of 57.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	92. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.006	1.096	1.767	1.268	1.382	0.462	0.636	0.348	2.29	1.089
Composite CO :	13.48	15.53	20.39	16.77	13.94	1.331	1.166	2.151	13.06	14.002
Composite NOX :	0.939	1.159	1.483	1.242	4.908	1.584	1.648	13.288	1.44	2.272

* #
* Oldham Rural Minor Arterial 47.0 mph - CY2005
* File 1, Run 2, Scenario 39.
* #

M583 Warnir
user supplied arterial average speed of 47.0

ll be used for all hours of the day. 100% of VM
s been assigned to the arterial/collector roadwa
ype for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	92. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.062	1.150	1.855	1.330	1.472	0.482	0.664	0.382	2.17	1.146
Composite CO :	12.25	14.29	19.02	15.50	11.78	1.293	1.133	2.008	10.00	12.804
Composite NOX :	0.912	1.118	1.442	1.201	4.583	1.236	1.284	10.385	1.21	1.982

* #
* Oldham Rural Major Collector 46.0 mph - CY2005
* File 1, Run 2, Scenario 40.
* #
M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2005
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.068	1.156	1.865	1.337	1.484	0.485	0.669	0.387	2.18	1.153
Composite CO :	12.12	14.16	18.88	15.37	11.70	1.294	1.134	2.011	10.07	12.688
Composite NOX :	0.909	1.114	1.438	1.197	4.549	1.212	1.259	10.187	1.20	1.961

* #
* Oldham Rural Minor Collector 41.0 mph - CY2005
* File 1, Run 2, Scenario 41.
* #

M583 Warning:
The user supplied arterial average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.103	1.184	1.909	1.370	1.562	0.506	0.698	0.421	2.22	1.188
Composite CO :	11.51	13.54	18.20	14.73	11.82	1.318	1.154	2.100	10.73	12.160
Composite NOX :	0.897	1.096	1.420	1.178	4.387	1.135	1.179	9.546	1.16	1.887

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Local 35.0 mph - CY2005
* File 1, Run 2, Scenario 42.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   92. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.152	1.223	1.970	1.414	1.695	0.540	0.747	0.478	2.32	1.239
Composite CO :	10.75	12.79	17.36	13.96	12.84	1.383	1.210	2.345	12.10	11.560
Composite NOX :	0.887	1.078	1.404	1.162	4.188	1.093	1.136	9.197	1.13	1.838

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Urban Interstate 71.0 mph - CY2005
* File 1, Run 2, Scenario 43.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
```

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.999	1.084	1.743	1.253	1.388	0.466	0.641	0.354	2.73	1.083
Composite CO :	14.72	16.64	21.61	17.91	17.99	1.437	1.258	2.551	24.21	15.280
Composite NOX :	0.970	1.200	1.529	1.284	5.090	2.031	2.114	18.396	1.61	2.747

* #
* Oldham Urban Freeway 2.5 mph - CY2005
* File 1, Run 2, Scenario 44.
* #

M514 Warning:
The combined freeway and ramp average speed entered cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi

Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	10.248	8.785	13.511	9.994	14.164	1.203	1.691	1.576	8.43	9.506
Composite CO :	35.99	37.05	56.39	42.00	75.69	4.100	3.565	12.608	112.87	38.535
Composite NOX :	1.951	2.094	2.669	2.241	3.214	2.035	2.119	18.419	1.04	3.521

* #
* Oldham Urban Principal Arterial 31.0 mph - CY2005
* File 1, Run 2, Scenario 45.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2005
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 92. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.201	1.268	2.042	1.466	1.821	0.572	0.792	0.531	2.41	1.293
Composite CO :	10.62	12.64	17.26	13.82	14.25	1.457	1.275	2.627	13.45	11.523
Composite NOX :	0.908	1.094	1.421	1.178	4.062	1.101	1.143	9.258	1.10	1.855

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Minor Arterial 28.0 mph - CY2005
* File 1, Run 2, Scenario 46.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   92. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.244	1.305	2.101	1.508	1.942	0.601	0.833	0.578	2.50	1.339
Composite CO :	10.64	12.63	17.32	13.83	15.74	1.532	1.340	2.911	14.67	11.620
Composite NOX :	0.931	1.114	1.446	1.199	3.967	1.120	1.163	9.417	1.07	1.884

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Collector 33.0 mph - CY2005
* File 1, Run 2, Scenario 47.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2005
                           Month:  July
```

```
                    Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   92. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.175	1.244	2.004	1.439	1.754	0.555	0.769	0.503	2.36	1.265
Composite CO :	10.69	12.72	17.31	13.89	13.50	1.418	1.241	2.477	12.73	11.543
Composite NOX :	0.897	1.086	1.412	1.169	4.129	1.097	1.139	9.226	1.11	1.846

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Local 12.9 mph Default - CY2005
* File 1, Run 2, Scenario 48.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                  Calendar Year:  2005
                          Month:  July
                       Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
                 Nominal Fuel RVP:   8.6 psi
                    Weathered RVP:   8.2 psi
              Fuel Sulfur Content:   92. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.4158	0.3387	0.1165		0.0360	0.0006	0.0019	0.0849	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC :	1.809	1.802	2.833	2.066	3.428	0.863	1.207	1.012	3.39	1.924
Composite CO :	9.48	12.32	17.63	13.68	34.94	2.418	2.108	6.257	28.29	12.126
Composite NOX :	0.917	1.066	1.393	1.150	3.469	1.463	1.522	11.220	0.91	1.990

* #
* Bullitt Rural Interstate 69.0 mph - CY2008
* File 1, Run 2, Scenario 49.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC :	0.750	0.809	1.334	0.943	1.051	0.224	0.423	0.286	2.74	0.827
Composite CO :	10.81	12.25	16.56	13.35	13.35	0.991	0.841	1.945	25.00	11.462
Composite NOX :	0.700	0.894	1.269	0.990	3.538	1.094	1.503	14.258	1.65	2.115

* # # # # # " # # # # # # # # # # # # # # # #
* Bullitt Rural Principal Arterial 57.0 mph - C

```
* File 1, R  2, Scenario 50.
* # # # #    # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2008
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.771	0.829	1.373	0.968	1.065	0.225	0.425	0.288	2.27	0.846
Composite CO :	10.09	11.54	15.69	12.60	10.16	0.905	0.770	1.633	13.06	10.612
Composite NOX :	0.683	0.868	1.240	0.963	3.372	0.827	1.134	10.088	1.44	1.730

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Rural Minor Arterial 47.0 mph - CY2008
* File 1, Run 2, Scenario 51.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2008
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
```

```
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.813	0.866	1.442	1.014	1.131	0.236	0.446	0.316	2.16	0.888
Composite CO :	9.22	10.66	14.62	11.67	8.58	0.876	0.745	1.524	10.00	9.742
Composite NOX :	0.665	0.839	1.207	0.933	3.148	0.643	0.882	7.858	1.21	1.507

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Major Collector 46.0 mph - CY2008
* File 1, Run 2, Scenario 52.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2008
                         Month:  July
                      Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
                 Nominal Fuel RVP:   8.6 psi
                    Weathered RVP:   8.2 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Compo(OC :	0.819	0.870	1.450	1.019	.140	0.237	0.450	0.320	2.16	393

Composite CO :	9.13	10.57	14.50	11.57	8.53	0.876	0.745	1.526	10.07	1.658
Composite NOX :	0.663	0.837	1.204	0.930	3.125	0.631	0.864	7.707	1.20	1.491

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2008
* File 1, Run 2, Scenario 53.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.845	0.890	1.485	1.042	1.195	0.248	0.472	0.348	2.20	0.920
Composite CO :	8.69	10.13	13.97	11.11	8.61	0.895	0.761	1.594	10.73	9.279
Composite NOX :	0.655	0.823	1.189	0.917	3.014	0.590	0.809	7.214	1.16	1.435

* #
* Bullitt Rural Local 35.0 mph - CY2008
* File 1, Run 2, Scenario 54.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

```
                Calendar Year:  2008
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.882	0.918	1.533	1.075	1.288	0.267	0.509	0.395	2.30	0.958
Composite CO :	8.17	9.59	13.31	10.54	9.35	0.946	0.803	1.780	12.10	8.850
Composite NOX :	0.648	0.810	1.177	0.904	2.877	0.568	0.778	6.947	1.13	1.398

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Urban Interstate 71.0 mph - CY2008
* File 1, Run 2, Scenario 55.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
               71.0     speed reduced to 65 mph maximum
  M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
  M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
  M 48 Warning:
          there are no sales for vehicle class HDGV8b

                Calendar Year:  2008
                        Month:  July
                     Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           el Sulfur Content:   30. ppm
```

```
        Exhaust I/M Program:  No
           Evap I/M Program:  No
                ATP Program:  No
          Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.763	0.820	1.353	0.956	1.067	0.227	0.429	0.293	2.71	0.840
Composite CO :	10.92	12.31	16.61	13.41	13.11	0.988	0.839	1.936	24.21	11.517
Composite NOX :	0.704	0.897	1.276	0.994	3.496	1.062	1.458	13.780	1.61	2.076

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Freeway 2.5 mph - CY2008
* File 1, Run 2, Scenario 56.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
            The combined freeway and ramp average speed entered
           cannot be less than  2.7 miles per hour.
           The average speed will be reset to this value.
  M582 Warning:
           The user supplied freeway average speed of  2.7
           will be used for all hours of the day. 100% of VMT
           has been assigned to a fixed combination of freeways
           and freeway ramps for all hours of the day and all
            vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2008
                         Month:  July
                      Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
                 Nominal Fuel RVP:   8.6 psi
                    Weathered RVP:   8.2 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	7.590	6.415	10.810	7.539	10.624	0.628	1.223	1.303	8.41	7.125
Composite CO :	27.56	27.45	39.29	30.48	55.15	3.079	2.582	9.569	112.87	28.883
Composite NOX :	1.416	1.555	2.203	1.721	2.208	1.064	1.461	13.800	1.04	2.655

---

* #
* Bullitt Urban Principal Arterial 31.0 mph - CY2008
* File 1, Run 2, Scenario 57.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.919	0.949	1.587	1.112	1.376	0.285	0.543	0.439	2.40	0.998
Composite CO :	8.09	9.51	13.22	10.46	10.38	1.004	0.852	1.993	13.45	8.841
Composite NOX :	0.663	0.822	1.191	0.916	2.791	0.572	0.784	6.994	1.10	1.410

---

* #
* Bullitt Urban Minor Arterial 28.0 mph - CY2008
* File 1, Run 2, Scenario 58.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
e for all hours of the day and all vehicle type

M 48 War

there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.951	0.976	1.632	1.143	1.459	0.300	0.574	0.478	2.48	1.032
Composite CO :	8.12	9.53	13.26	10.48	11.47	1.063	0.901	2.209	14.67	8.929
Composite NOX :	0.679	0.837	1.211	0.933	2.725	0.582	0.798	7.115	1.07	1.433

* #
* Bullitt Urban Collector 33.0 mph - CY2008
* File 1, Run 2, Scenario 59.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.900	0.932	1.559	1.093	1.329	0.276	0.525	0.416	2.35	0.977
Composite CO :	8.13	9.55	13.27	10.50	9.84	0.973	0.826	1.880	12.73	8.846
Composite NOX :	0.655	0.816	1.184	0.910	2.836	0.570	0.781	6.969	1.11	1.404

* #
* Bullitt Urban Local 12.9 mph Default - CY2008
* File 1, Run 2, Scenario 60.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway type for all hours of the day for all vehicle types with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.369	1.334	2.206	1.557	2.493	0.443	0.857	0.837	3.37	1.467
Composite CO :	7.69	9.70	13.75	10.73	25.46	1.759	1.481	4.749	28.29	9.693
Composite NOX :	0.676	0.812	1.178	0.906	2.383	0.763	1.047	8.676	0.91	1.539

* #
* Oldham Rural Interstate 69.0 mph - CY2008
* File 1, Run 2, Scenario 61.
* # # # # # " " # # # # # # # # # # # # # # # #

M 96 War

```
          69.0      speed reduced to 65 mph maximum
M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 64.2 miles per hour.
          The average speed will be reset to this value.
M582 Warning:
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2008
                         Month:  July
                      Altitude:  Low
             Minimum Temperature:  67.0 (F)
             Maximum Temperature:  92.0 (F)
               Absolute Humidity:   75. grains/lb
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  No
                Evap I/M Program:  No
                     ATP Program:  No
                Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.750	0.809	1.334	0.943	1.051	0.224	0.423	0.286	2.74	0.827
Composite CO :	10.81	12.25	16.56	13.35	13.35	0.991	0.841	1.945	25.00	11.462
Composite NOX :	0.700	0.894	1.269	0.990	3.538	1.094	1.503	14.258	1.65	2.115

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Principal Arterial 57.0 mph - CY2008
* File 1, Run 2, Scenario 62.
* # # # # # # # # # # # # # # # # # # # # # # # # #
M583 Warning:
          The user supplied arterial average speed of 57.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2008
                         Month:  July
```

```
                    Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.771	0.829	1.373	0.968	1.065	0.225	0.425	0.288	2.27	0.846
Composite CO :	10.09	11.54	15.69	12.60	10.16	0.905	0.770	1.633	13.06	10.612
Composite NOX :	0.683	0.868	1.240	0.963	3.372	0.827	1.134	10.088	1.44	1.730

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham               Rural Minor Arterial 47.0 mph - CY2008
* File 1, Run 2, Scenario 63.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                  Calendar Year:  2008
                          Month:  July
                       Altitude:  Low
           Minimum Temperature:  67.0 (F)
           Maximum Temperature:  92.0 (F)
             Absolute Humidity:   75. grains/lb
              Nominal Fuel RVP:   8.6 psi
                 Weathered RVP:   8.2 psi
           Fuel Sulfur Content:   30. ppm

           Exhaust I/M Program:  No
              Evap I/M Program:  No
                   ATP Program:  No
              Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.813	0.866	1.442	1.014	1.131	0.236	0.446	0.316	2.16	0.888
Composite CO :	9.22	10.66	14.62	11.67	8.58	0.876	0.745	1.524	10.00	9.742
Composite NOX :	0.665	0.839	1.207	0.933	3.148	0.643	0.882	7.858	1.21	1.507

* #
* Oldham Rural Major Collector 46.0 mph - CY2008
* File 1, Run 2, Scenario 64.
* #

M583 Warning:
The user supplied arterial average speed of 46.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.819	0.870	1.450	1.019	1.140	0.237	0.450	0.320	2.16	0.893
Composite CO :	9.13	10.57	14.50	11.57	8.53	0.876	0.745	1.526	10.07	9.658
Composite NOX :	0.663	0.837	1.204	0.930	3.125	0.631	0.864	7.707	1.20	1.491

* #
* Oldham Rural Minor Collector 41.0 mph - CY2008
* File 1, Run 2, Scenario 65.
* #

M583 Warning:
The user supplied arterial average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway

type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.845	0.890	1.485	1.042	1.195	0.248	0.472	0.348	2.20	0.920
Composite CO :	8.69	10.13	13.97	11.11	8.61	0.895	0.761	1.594	10.73	9.279
Composite NOX :	0.655	0.823	1.189	0.917	3.014	0.590	0.809	7.214	1.16	1.435

* #
* Oldham Rural Local 35.0 mph - CY2008
* File 1, Run 2, Scenario 66.
* #
M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.882	0.918	1.533	1.075	1.288	0.267	0.509	0.395	2.30	0.958
Composite CO :	8.17	9.59	13.31	10.54	9.35	0.946	0.803	1.780	12.10	8.850
Composite NOX :	0.648	0.810	1.177	0.904	2.877	0.568	0.778	6.947	1.13	1.398

* #
* Oldham Urban Interstate 71.0 mph - CY2008
* File 1, Run 2, Scenario 67.
* #

M 96 Warning:

71.0 speed reduced to 65 mph maximum

M515 Warning:

The combined freeway and ramp average speed entered cannot be greater than 60.9 miles per hour. The average speed will be reset to this value.

M582 Warning:

The user supplied freeway average speed of 60.9 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2008
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.763	0.820	1.353	0.956	1.067	0.227	0.429	0.293	2.71	0.840
Composite CO :	10.92	12.31	16.61	13.41	13.11	0.988	0.839	1.936	24.21	11.517
Composite NOX :	0.704	0.897	1.276	0.994	3.496	1.062	1.458	13.780	1.61	2.076

* #
* Oldham Urban Freeway 2.5 mph - CY2008
* File 1, Run 2, Scenario 68.
* #

M514 Warning:
The combined freeway and ramp average speed entered cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	7.590	6.415	10.810	7.539	10.624	0.628	1.223	1.303	8.41	7.125
Composite CO :	27.56	27.45	39.29	30.48	55.15	3.079	2.582	9.569	112.87	28.883
Composite NOX :	1.416	1.555	2.203	1.721	2.208	1.064	1.461	13.800	1.04	2.655

* #
* Oldham Urban Principal Arterial 31.0 mph - CY2008
* File 1, Run 2, Scenario 69.
* #

M583 Warn[illegible]
user supplied arterial average speed of 31.0

ill be used for all hours of the day. 100% of
s been assigned to the arterial/collector roadw
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.919	0.949	1.587	1.112	1.376	0.285	0.543	0.439	2.40	0.998
Composite CO :	8.09	9.51	13.22	10.46	10.38	1.004	0.852	1.993	13.45	8.841
Composite NOX :	0.663	0.822	1.191	0.916	2.791	0.572	0.784	6.994	1.10	1.410

* #
* Oldham Urban Minor Arterial 28.0 mph - CY2008
* File 1, Run 2, Scenario 70.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2008
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm

```
            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.951	0.976	1.632	1.143	1.459	0.300	0.574	0.478	2.48	1.032
Composite CO :	8.12	9.53	13.26	10.48	11.47	1.063	0.901	2.209	14.67	8.929
Composite NOX :	0.679	0.837	1.211	0.933	2.725	0.582	0.798	7.115	1.07	1.433

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Collector 33.0 mph - CY2008
* File 1, Run 2, Scenario 71.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2008
                         Month:  July
                      Altitude:  Low
               Minimum Temperature:  67.0 (F)
               Maximum Temperature:  92.0 (F)
                 Absolute Humidity:   75. grains/lb
                  Nominal Fuel RVP:   8.6 psi
                     Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.900	0.932	1.559	1.093	1.329	0.276	0.525	0.416	2.35	0.977
Composite CO :	8.13	9.55	13.27	10.50	9.84	0.973	0.826	1.880	12.73	8.846
Composite NOX :	0.655	0.816	1.184	0.910	2.836	0.570	0.781	6.969	1.11	1.404

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Local 12.9 mph Default - CY2008
* File 1, Run 2, Scenario 72.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2008
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3728	0.3705	0.1273		0.0359	0.0004	0.0019	0.0857	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.369	1.334	2.206	1.557	2.493	0.443	0.857	0.837	3.37	1.467
Composite CO :	7.69	9.70	13.75	10.73	25.46	1.759	1.481	4.749	28.29	9.693
Composite NOX :	0.676	0.812	1.178	0.906	2.383	0.763	1.047	8.676	0.91	1.539

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Interstate 69.0 mph - CY2011
* File 1, Run 2, Scenario 73.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
```

there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.565	0.646	1.131	0.770	0.815	0.120	0.298	0.238	2.73	0.666
Composite CO :	9.05	10.05	13.64	10.97	9.25	0.775	0.620	1.283	25.00	9.483
Composite NOX :	0.537	0.684	1.069	0.783	2.399	0.549	1.006	9.760	1.65	1.535

* #
* Bullitt Rural Principal Arterial 57.0 mph - CY2011
* File 1, Run 2, Scenario 74.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.579	0.659	1.161	0.787	0.827	0.121	0.299	0.239	2.26	0.678
Composite CO :	8.47	9.46	12.90	10.34	7.04	0.704	0.565	1.077	13.06	8.787
Composite NOX :	0.524	0.666	1.045	0.763	2.286	0.414	0.759	6.957	1.44	1.273

* #
* Bullitt Rural Minor Arterial 47.0 mph - CY2011
* File 1, Run 2, Scenario 75.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.609	0.684	1.216	0.820	0.872	0.127	0.315	0.262	2.15	0.709
Composite CO :	7.75	8.73	11.99	9.56	5.95	0.679	0.545	1.005	10.00	8.069
Composite NOX :	0.509	0.644	1.019	0.740	2.135	0.322	0.589	5.411	1.21	1.116

* #
* Bullitt Rural Major Collector 46.0 mph - CY2011
* File 1, Run 2, Scenario 76.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.612	0.687	1.222	0.823	0.878	0.128	0.317	0.266	2.15	0.712
Composite CO :	7.68	8.66	11.89	9.48	5.91	0.680	0.546	1.006	10.07	8.000
Composite NOX :	0.508	0.642	1.017	0.738	2.119	0.316	0.578	5.306	1.20	1.105

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2011
* File 1, Run 2, Scenario 77.
* #
M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.631	0.700	1.250	0.841	0.915	0.134	0.333	0.289	2.19	0.732
Composite CO :	7.32	8.29	11.43	9.10	5.97	0.695	0.558	1.051	10.73	7.684
Composite NOX :	0.501	0.631	1.005	0.727	2.043	0.295	0.541	4.964	1.16	1.065

* #
* Bullitt Rural Local 35.0 mph - CY2011
* File 1, Run 2, Scenario 78.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.658	0.719	1.288	0.865	0.976	0.145	0.361	0.329	2.29	0.760
Composite CO :	6.89	7.85	10.88	8.63	6.48	0.737	0.591	1.174	12.10	7.322
Composite NOX :	0.496	0.622	0.996	0.718	1.951	0.284	0.520	4.778	1.13	1.038

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Interstate 71.0 mph - CY2011
* File 1, Run 2, Scenario 79.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
                            Month:  July
                         Altitude:  Low
              Minimum Temperature:  67.0 (F)
              Maximum Temperature:  92.0 (F)
                Absolute Humidity:   75. grains/lb
                 Nominal Fuel RVP:   8.6 psi
                    Weathered RVP:   8.2 psi
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  No
                 Evap I/M Program:  No
                      ATP Program:  No
                 Reformulated Gas:  No

      Vehicle Type:       LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC   All Veh
              GVWR:                <6000     >6000     (All)
                       ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3367    0.3972    0.1365              0.0360    0.0003    0.0020    0.0860    0.0054    1.0000
  ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite VOC :       0.574     0.653     1.145     0.779     0.825     0.122     0.302     0.243      2.70     0.675
     Composite CO  :        9.13     10.09     13.68     11.01      9.08     0.773     0.618     1.277     24.21     9.519
     Composite NOX :       0.539     0.687     1.074     0.786     2.371     0.533     0.976     9.436      1.61     1.508
  ---------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Freeway 2.5 mph - CY2011
* File 1, Run 2, Scenario 80.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
              e combined freeway and ramp average speed entere
              ıot be less than  2.7 miles per hour.
```

The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	5.340	4.698	8.709	5.723	7.628	0.355	0.882	1.082	8.40	5.267
Composite CO :	23.34	22.84	31.39	25.03	38.20	2.498	1.975	6.311	112.87	23.747
Composite NOX :	1.086	1.181	1.839	1.349	1.497	0.534	0.978	9.451	1.04	1.960

* #
* Bullitt Urban Principal Arterial 31.0 mph - CY2011
* File 1, Run 2, Scenario 81.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb

```
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.685	0.742	1.332	0.893	1.031	0.155	0.386	0.364	2.39	0.789
Composite CO :	6.84	7.80	10.81	8.57	7.19	0.786	0.629	1.315	13.45	7.323
Composite NOX :	0.507	0.630	1.008	0.727	1.892	0.286	0.524	4.811	1.10	1.048

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Minor Arterial 28.0 mph - CY2011
* File 1, Run 2, Scenario 82.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2011
                         Month:  July
                      Altitude:  Low
               Minimum Temperature:  67.0 (F)
               Maximum Temperature:  92.0 (F)
                 Absolute Humidity:   75. grains/lb
                  Nominal Fuel RVP:   8.6 psi
                     Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Compo OC :	0.708	0.762	1.369	0.917	.083	0.165	0.408	0.397	2.47	315

Composite CO :	6.88	7.83	10.86	8.61	7.94	0.834	0.667	1.457	14.67	7.401
Composite NOX :	0.520	0.642	1.024	0.73	1.848	0.291	0.533	4.895	1.07	1.064

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Collector 33.0 mph - CY2011
* File 1, Run 2, Scenario 83.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
                           Month:  July
                        Altitude:  Low
                 Minimum Temperature:  67.0 (F)
                 Maximum Temperature:  92.0 (F)
                   Absolute Humidity:   75. grains/lb
                    Nominal Fuel RVP:   8.6 psi
                       Weathered RVP:   8.2 psi
                 Fuel Sulfur Content:   30. ppm

                 Exhaust I/M Program:  No
                    Evap I/M Program:  No
                         ATP Program:  No
                    Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.671	0.730	1.309	0.878	1.002	0.150	0.373	0.345	2.34	0.774
Composite CO :	6.86	7.83	10.85	8.60	6.81	0.760	0.608	1.240	12.73	7.322
Composite NOX :	0.501	0.626	1.001	0.722	1.923	0.285	0.522	4.794	1.11	1.043

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Local 12.9 mph Default - CY2011
* File 1, Run 2, Scenario 84.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
```

```
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.018	1.037	1.841	1.243	1.742	0.247	0.615	0.695	3.36	1.148
Composite CO :	6.85	8.22	11.45	9.05	17.64	1.408	1.118	3.132	28.29	8.194
Composite NOX :	0.525	0.632	1.001	0.726	1.616	0.382	0.700	6.038	0.91	1.148

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Interstate 69.0 mph - CY2011
* File 1, Run 2, Scenario 85.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
               69.0     speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                  Calendar Year:  2011
                          Month:  July
                       Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm
```

```
          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
            Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.565	0.646	1.131	0.770	0.815	0.120	0.298	0.238	2.73	0.666
Composite CO :	9.05	10.05	13.64	10.97	9.25	0.775	0.620	1.283	25.00	9.483
Composite NOX :	0.537	0.684	1.069	0.783	2.399	0.549	1.006	9.760	1.65	1.535

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Principal Arterial 57.0 mph - CY2011
* File 1, Run 2, Scenario 86.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.579	0.659	1.161	0.787	0.827	0.121	0.299	0.239	2.26	0.678
Composite CO :	8.47	9.46	12.90	10.34	7.04	0.704	0.565	1.077	13.06	8.787
Composite NOX :	0.524	0.666	1.045	0.763	2.286	0.414	0.759	6.957	1.44	1.273

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Minor Arterial 47.0 mph - CY2011
* File 1, Run 2, Scenario 87.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.609	0.684	1.216	0.820	0.872	0.127	0.315	0.262	2.15	0.709
Composite CO :	7.75	8.73	11.99	9.56	5.95	0.679	0.545	1.005	10.00	8.069
Composite NOX :	0.509	0.644	1.019	0.740	2.135	0.322	0.589	5.411	1.21	1.116

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Major Collector 46.0 mph - CY2011
* File 1, Run 2, Scenario 88.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b

                    Calendar Year:  2011
                            Month:  July
                         Altitude:  Low
                nimum Temperature:  67.0 (F)
```

```
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.612	0.687	1.222	0.823	0.878	0.128	0.317	0.266	2.15	0.712
Composite CO :	7.68	8.66	11.89	9.48	5.91	0.680	0.546	1.006	10.07	8.000
Composite NOX :	0.508	0.642	1.017	0.738	2.119	0.316	0.578	5.306	1.20	1.105

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Minor Collector 41.0 mph - CY2011
* File 1, Run 2, Scenario 89.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b

                Calendar Year:  2011
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.631	0.700	1.250	0.841	0.915	0.134	0.333	0.289	2.19	0.732
Composite CO :	7.32	8.29	11.43	9.10	5.97	0.695	0.558	1.051	10.73	7.684
Composite NOX :	0.501	0.631	1.005	0.727	2.043	0.295	0.541	4.964	1.16	1.065

---

* #
* Oldham Rural Local 35.0 mph - CY2011
* File 1, Run 2, Scenario 90.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.658	0.719	1.288	0.865	0.976	0.145	0.361	0.329	2.29	0.760
Composite CO :	6.89	7.85	10.88	8.63	6.48	0.737	0.591	1.174	12.10	7.322
Composite NOX :	0.496	0.622	0.996	0.718	1.951	0.284	0.520	4.778	1.13	1.038

---

* #
* Oldham Urban Interstate 71.0 mph - CY2011
* File 1, Run 2, Scenario 91.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.574	0.653	1.145	0.779	0.825	0.122	0.302	0.243	2.70	0.675
Composite CO :	9.13	10.09	13.68	11.01	9.08	0.773	0.618	1.277	24.21	9.519
Composite NOX :	0.539	0.687	1.074	0.786	2.371	0.533	0.976	9.436	1.61	1.508

* #
* Oldham Urban Freeway 2.5 mph - CY2011
* File 1, Run 2, Scenario 92.
* #
M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July

```
                    Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	5.340	4.698	8.709	5.723	7.628	0.355	0.882	1.082	8.40	5.267
Composite CO :	23.34	22.84	31.39	25.03	38.20	2.498	1.975	6.311	112.87	23.747
Composite NOX :	1.086	1.181	1.839	1.349	1.497	0.534	0.978	9.451	1.04	1.960

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Principal Arterial 31.0 mph - CY2011
* File 1, Run 2, Scenario 93.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

                 Calendar Year:  2011
                         Month:  July
                      Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.685	0.742	1.332	0.893	1.031	0.155	0.386	0.364	2.39	0.789
Composite CO :	6.84	7.80	10.81	8.57	7.19	0.786	0.629	1.315	13.45	7.323
Composite NOX :	0.507	0.630	1.008	0.727	1.892	0.286	0.524	4.811	1.10	1.048

* #
* Oldham Urban Minor Arterial 28.0 mph - CY2011
* File 1, Run 2, Scenario 94.
* #

M583 Warning:
The user supplied arterial average speed of 28.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year:	2011
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.708	0.762	1.369	0.917	1.083	0.165	0.408	0.397	2.47	0.815
Composite CO :	6.88	7.83	10.86	8.61	7.94	0.834	0.667	1.457	14.67	7.401
Composite NOX :	0.520	0.642	1.024	0.739	1.848	0.291	0.533	4.895	1.07	1.064

* #
* Oldham Urban Collector 33.0 mph - CY2011
* File 1, Run 2, Scenario 95.
* #

M583 Warning:
The user supplied arterial average speed of 33.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway

type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.671	0.730	1.309	0.878	1.002	0.150	0.373	0.345	2.34	0.774
Composite CO :	6.86	7.83	10.85	8.60	6.81	0.760	0.608	1.240	12.73	7.322
Composite NOX :	0.501	0.626	1.001	0.722	1.923	0.285	0.522	4.794	1.11	1.043

* #
* Oldham Urban Local 12.9 mph Default - CY2011
* File 1, Run 2, Scenario 96.
* #
M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.
M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2011
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No

Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3367	0.3972	0.1365		0.0360	0.0003	0.0020	0.0860	0.0054	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	1.018	1.037	1.841	1.243	1.742	0.247	0.615	0.695	3.36	1.148
Composite CO :	6.85	8.22	11.45	9.05	17.64	1.408	1.118	3.132	28.29	8.194
Composite NOX :	0.525	0.632	1.001	0.726	1.616	0.382	0.700	6.038	0.91	1.148

* #
* Bullitt Rural Interstate 69.0 mph - CY2014
* File 1, Run 2, Scenario 97.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered cannot be greater than 64.2 miles per hour. The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.431	0.524	0.936	0.629	0.638	0.080	0.243	0.202	2.73	0.541
Composite CO :	7.74	8.69	11.75	9.47	8.41	0.668	0.537	0.762	25.00	8.204
Composite NOX :	0.407	0.528	0.900	0.623	1.518	0.288	0.726	6.216	1.65	1.078

---

* #
* Bullitt Rural Principal Arterial 57.0 mph - CY2014
* File 1, Run 2, Scenario 98.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.441	0.533	0.958	0.642	0.647	0.080	0.244	0.203	2.26	0.549
Composite CO :	7.25	8.18	11.10	8.92	6.40	0.607	0.490	0.640	13.06	7.597
Composite NOX :	0.397	0.514	0.881	0.608	1.447	0.217	0.548	4.433	1.44	0.908

---

* #
* Bullitt Rural Minor Arterial 47.0 mph - CY2014
* File 1, Run 2, Scenario 99.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
[illegible] be used for all hours of the day. 100% of VMT
been assigned to the arterial/collector roadw[illegible]

ype for all hours of the day and all vehicle ty
M 48 Wa g:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

```
            Calendar Year:  2014
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.462	0.552	0.999	0.666	0.681	0.085	0.257	0.223	2.15	0.572
Composite CO :	6.64	7.54	10.28	8.25	5.41	0.585	0.473	0.597	10.00	6.975
Composite NOX :	0.386	0.497	0.859	0.590	1.351	0.169	0.426	3.451	1.21	0.805

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Major Collector 46.0 mph - CY2014
* File 1, Run 2, Scenario 100.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
M583 Warning:
          The user supplied arterial average speed of 46.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
M 48 Warning:
          there are no sales for vehicle class HDGV8b
M 48 Warning:
          there are no sales for vehicle class LDDT12

            Calendar Year:  2014
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
```

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.465	0.554	1.004	0.669	0.686	0.085	0.259	0.226	2.15	0.575
Composite CO :	6.58	7.48	10.20	8.17	5.37	0.586	0.474	0.598	10.07	6.916
Composite NOX :	0.385	0.496	0.857	0.588	1.341	0.166	0.418	3.384	1.20	0.797

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2014
* File 1, Run 2, Scenario 101.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Compo OC :	0.480	0.564	1.025	0.682	.715	0.090	0.271	0.245	2.19	.90

Composite CO :	6.28	7.16	9.80	7.84	5.43	0.599	0.484	0.624	10.73	5.642
Composite NOX :	0.380	0.488	0.847	0.580	1.293	0.155	0.391	3.167	1.16	0.770

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Local 35.0 mph - CY2014
* File 1, Run 2, Scenario 102.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.500	0.579	1.054	0.700	0.762	0.097	0.292	0.279	2.29	0.611
Composite CO :	5.92	6.78	9.31	7.43	5.90	0.635	0.512	0.697	12.10	6.329
Composite NOX :	0.376	0.481	0.839	0.572	1.234	0.149	0.377	3.049	1.13	0.752

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Interstate 71.0 mph - CY2014
* File 1, Run 2, Scenario 103.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
```

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.438	0.530	0.947	0.636	0.646	0.081	0.247	0.207	2.70	0.548
Composite CO :	7.80	8.72	11.77	9.50	8.26	0.666	0.535	0.758	24.21	8.228
Composite NOX :	0.408	0.530	0.905	0.626	1.500	0.279	0.704	6.009	1.61	1.061

* #
* Bullitt Urban Freeway 2.5 mph - CY2014
* File 1, Run 2, Scenario 104.
* #
M514 Warning:
The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:
here are no sales for vehicle class HDGV8b
M 48 Wari

there are no sales for vehicle class LDDT12

```
      Calendar Year:  2014
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.998	3.751	6.824	4.536	5.797	0.238	0.699	0.919	8.40	4.113
Composite CO :	20.28	19.89	26.46	21.57	34.76	2.162	1.686	3.749	112.87	20.537
Composite NOX :	0.829	0.905	1.535	1.066	0.947	0.280	0.706	6.018	1.04	1.416

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Principal Arterial 31.0 mph - CY2014
* File 1, Run 2, Scenario 105.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 31.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

      Calendar Year:  2014
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.521	0.597	1.088	0.722	0.805	0.104	0.312	0.309	2.39	0.635
Composite CO :	5.89	6.75	9.25	7.39	6.54	0.677	0.544	0.781	13.45	6.339
Composite NOX :	0.385	0.487	0.850	0.580	1.197	0.150	0.379	3.069	1.10	0.759

* #
* Bullitt Urban Minor Arterial 28.0 mph - CY2014
* File 1, Run 2, Scenario 106.
* #

M583 Warning:
The user supplied arterial average speed of 28.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.539	0.612	1.116	0.741	0.845	0.110	0.329	0.337	2.47	0.655
Composite CO :	5.93	6.79	9.30	7.43	7.23	0.720	0.577	0.866	14.67	6.411
Composite NOX :	0.394	0.495	0.863	0.589	1.169	0.153	0.386	3.123	1.07	^ 771

```
* # # # #  # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Collector 33.0 mph - CY2014
* File 1, Run 2, Scenario 107.
* # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                    Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
                 Minimum Temperature:  67.0 (F)
                 Maximum Temperature:  92.0 (F)
                   Absolute Humidity:   75. grains/lb
                    Nominal Fuel RVP:   8.6 psi
                       Weathered RVP:   8.2 psi
                 Fuel Sulfur Content:   30. ppm

                 Exhaust I/M Program:  No
                    Evap I/M Program:  No
                         ATP Program:  No
                    Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.510	0.587	1.070	0.711	0.782	0.100	0.302	0.293	2.34	0.622
Composite CO :	5.90	6.77	9.28	7.41	6.20	0.655	0.527	0.737	12.73	6.334
Composite NOX :	0.380	0.483	0.844	0.576	1.217	0.150	0.378	3.058	1.11	0.755

```
* # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Local 12.9 mph Default - CY2014
* File 1, Run 2, Scenario 108.
* # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                     Calendar Year:  2014
```

```
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.787	0.841	1.496	1.008	1.355	0.166	0.490	0.590	3.36	0.927
Composite CO :	6.20	7.26	9.89	7.93	16.05	1.217	0.959	1.860	28.29	7.253
Composite NOX :	0.404	0.491	0.843	0.581	1.022	0.201	0.506	3.844	0.91	0.826

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham               Rural Interstate 69.0 mph - CY2014
* File 1, Run 2, Scenario 109.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M 96 Warning:
              69.0     speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 64.2 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b
 M 48 Warning:
           there are no sales for vehicle class LDDT12

               Calendar Year:  2014
                       Month:  July
                    Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
```

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.431	0.524	0.936	0.629	0.638	0.080	0.243	0.202	2.73	0.541
Composite CO :	7.74	8.69	11.75	9.47	8.41	0.668	0.537	0.762	25.00	8.204
Composite NOX :	0.407	0.528	0.900	0.623	1.518	0.288	0.726	6.216	1.65	1.078

* #
* Oldham Rural Principal Arterial 57.0 mph - CY2014
* File 1, Run 2, Scenario 110.
* #

M583 Warning:
The user supplied arterial average speed of 57.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.441	0.533	0.958	0.642	0.647	0.080	0.244	0.203	2.26	0.549

Composite CO :	7.25	8.18	11.10	8.92	6.40	0.607	0.490	0.640	13.06	7.597
Composite NOX :	0.397	0.514	0.881	0.608	1.447	0.217	0.548	4.433	1.44	0.908

* #
* Oldham Rural Minor Arterial 47.0 mph - CY2014
* File 1, Run 2, Scenario 111.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.462	0.552	0.999	0.666	0.681	0.085	0.257	0.223	2.15	0.572
Composite CO :	6.64	7.54	10.28	8.25	5.41	0.585	0.473	0.597	10.00	6.975
Composite NOX :	0.386	0.497	0.859	0.590	1.351	0.169	0.426	3.451	1.21	0.805

* #
* Oldham Rural Major Collector 46.0 mph - CY2014
* File 1, Run 2, Scenario 112.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
for all hours of the day and all vehicle type

M 48 War

there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

```
            Calendar Year:  2014
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.465	0.554	1.004	0.669	0.686	0.085	0.259	0.226	2.15	0.575
Composite CO :	6.58	7.48	10.20	8.17	5.37	0.586	0.474	0.598	10.07	6.916
Composite NOX :	0.385	0.496	0.857	0.588	1.341	0.166	0.418	3.384	1.20	0.797

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Minor Collector 41.0 mph - CY2014
* File 1, Run 2, Scenario 113.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
               Minimum Temperature:  67.0 (F)
               Maximum Temperature:  92.0 (F)
                 Absolute Humidity:   75. grains/lb
                  Nominal Fuel RVP:   8.6 psi
                     Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm
```

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.480	0.564	1.025	0.682	0.715	0.090	0.271	0.245	2.19	0.590
Composite CO :	6.28	7.16	9.80	7.84	5.43	0.599	0.484	0.624	10.73	6.642
Composite NOX :	0.380	0.488	0.847	0.580	1.293	0.155	0.391	3.167	1.16	0.770

* #
* Oldham Rural Local 35.0 mph - CY2014
* File 1, Run 2, Scenario 114.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.500	0.579	1.054	0.700	0.762	0.097	0.292	0.279	2.29	.511
Composite CO :	5.92	6.78	9.31	7.43	.90	0.635	0.512	0.697	12.10	29
Composite NOX :	0.376	0.481	0.839	0.572	.234	0.149	0.377	3.049	1.13	/52

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Interstate 71.0 mph - CY2014
* File 1, Run 2, Scenario 115.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2014
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.438	0.530	0.947	0.636	0.646	0.081	0.247	0.207	2.70	0.548
Composite CO :	7.80	8.72	11.77	9.50	8.26	0.666	0.535	0.758	24.21	8.228
Composite NOX :	0.408	0.530	0.905	0.626	1.500	0.279	0.704	6.009	1.61	1.061

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Freeway 2.5 mph - CY2014
* File 1, Run 2, Scenario 116.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
```

The combined freeway and ramp average speed entered
cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.998	3.751	6.824	4.536	5.797	0.238	0.699	0.919	8.40	4.113
Composite CO :	20.28	19.89	26.46	21.57	34.76	2.162	1.686	3.749	112.87	20.537
Composite NOX :	0.829	0.905	1.535	1.066	0.947	0.280	0.706	6.018	1.04	1.416

* #
* Oldham Urban Principal Arterial 31.0 mph - CY2014
* File 1, Run 2, Scenario 117.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
here are no sales for vehicle class LDDT12

```
                Calendar Year:  2014
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.521	0.597	1.088	0.722	0.805	0.104	0.312	0.309	2.39	0.635
Composite CO :	5.89	6.75	9.25	7.39	6.54	0.677	0.544	0.781	13.45	6.339
Composite NOX :	0.385	0.487	0.850	0.580	1.197	0.150	0.379	3.069	1.10	0.759

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Urban Minor Arterial 28.0 mph - CY2014
* File 1, Run 2, Scenario 118.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                Calendar Year:  2014
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.539	0.612	1.116	0.741	0.845	0.110	0.329	0.337	2.47	0.655
Composite CO :	5.93	6.79	9.30	7.43	7.23	0.720	0.577	0.866	14.67	6.411
Composite NOX :	0.394	0.495	0.863	0.589	1.169	0.153	0.386	3.123	1.07	0.771

* #
* Oldham Urban Collector 33.0 mph - CY2014
* File 1, Run 2, Scenario 119.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2014
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.510	0.587	1.070	0.711	0.782	0.100	0.302	0.293	2.34	0.622
Composite CO :	5.90	6.77	9.28	7.41	6.20	0.655	0.527	0.737	12.73	6.334
Composite NOX :	0.380	0.483	0.844	0.576	1.217	0.150	0.378	3.058	1.11	0.755

* #
* Oldham Urban Local 12.9 mph Default - CY2014

* File 1, ... 2, Scenario 120.
* #
M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2014
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3099	0.4167	0.1431		0.0360	0.0003	0.0021	0.0866	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.787	0.841	1.496	1.008	1.355	0.166	0.490	0.590	3.36	0.927
Composite CO :	6.20	7.26	9.89	7.93	16.05	1.217	0.959	1.860	28.29	7.253
Composite NOX :	0.404	0.491	0.843	0.581	1.022	0.201	0.506	3.844	0.91	0.826

* #
* Bullitt Rural Interstate 69.0 mph - CY2017
* File 1, Run 2, Scenario 121.
* #
M 96 Warning:
69.0 speed reduced to 65 mph maximum
M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.
M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.
M 48 Warning:

there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.347	0.454	0.784	0.539	0.508	0.059	0.206	0.181	2.73	0.461
Composite CO :	7.00	7.98	10.65	8.66	8.17	0.599	0.484	0.533	25.00	7.520
Composite NOX :	0.320	0.431	0.763	0.516	1.019	0.155	0.554	4.150	1.65	0.799

* #
* Bullitt Rural Principal Arterial 57.0 mph - CY2017
* File 1, Run 2, Scenario 122.
* #
M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
uel Sulfur Content: 30. ppm

```
          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
            Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.355	0.462	0.802	0.549	0.515	0.059	0.206	0.183	2.26	0.468
Composite CO :	6.56	7.50	10.05	8.16	6.22	0.544	0.442	0.447	13.06	6.958
Composite NOX :	0.313	0.419	0.746	0.502	0.971	0.117	0.418	2.944	1.44	0.681

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Minor Arterial 47.0 mph - CY2017
* File 1, Run 2, Scenario 123.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.373	0.478	0.835	0.569	0.542	0.063	0.216	0.200	2.15	0.486
Composite CO :	6.02	6.92	9.31	7.53	5.26	0.525	0.428	0.418	10.00	6.388
Composite NOX :	0.305	0.405	0.727	0.487	0.907	0.091	0.326	2.294	1.21	0.610

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Rural Major Collector 46.0 mph - CY2017
* File 1, Run 2, Scenario 124.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of 46.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

                  Calendar Year:  2017
                          Month:  July
                       Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.375	0.480	0.839	0.571	0.546	0.063	0.218	0.203	2.15	0.489
Composite CO :	5.97	6.86	9.23	7.47	5.22	0.525	0.428	0.418	10.07	6.333
Composite NOX :	0.304	0.403	0.725	0.486	0.900	0.090	0.320	2.250	1.20	0.604

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Rural Minor Collector 41.0 mph - CY2017
* File 1, Run 2, Scenario 125.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of 41.0
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M 48 Warning:
            here are no sales for vehicle class HDGV8b
  M 48 War
```

there are no sales for vehicle class LDDT12

```
      Calendar Year:  2017
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
  Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.388	0.489	0.856	0.583	0.570	0.066	0.228	0.221	2.19	0.502
Composite CO :	5.70	6.57	8.86	7.16	5.28	0.537	0.437	0.437	10.73	6.083
Composite NOX :	0.300	0.397	0.717	0.479	0.868	0.084	0.299	2.106	1.16	0.585

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Rural Local 35.0 mph - CY2017
* File 1, Run 2, Scenario 126.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

      Calendar Year:  2017
              Month:  July
           Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
```

ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.406	0.502	0.880	0.598	0.609	0.072	0.245	0.251	2.29	0.521
Composite CO :	5.37	6.22	8.42	6.78	5.73	0.570	0.462	0.488	12.10	5.799
Composite NOX :	0.298	0.391	0.710	0.472	0.829	0.081	0.288	2.028	1.13	0.573

* #
* Bullitt Urban Interstate 71.0 mph - CY2017
* File 1, Run 2, Scenario 127.
* #

M 96 Warning:
71.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 60.9 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 60.9
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Dis ion:	0.2912	0.4304	0.1478		361	0.0003	0.0022	0.0869	0.0052	000

Composite Emission Factors (g/mi):										
Composite VOC :	0.353	0.459	0.794	0.545	0.514	0.060	0.208	0.186	2.70	0.467
Composite CO :	7.05	8.00	10.67	8.69	8.03	0.598	0.483	0.530	24.21	7.539
Composite NOX :	0.321	0.432	0.767	0.517	1.007	0.151	0.537	4.011	1.61	0.787

* #
* Bullitt Urban Freeway 2.5 mph - CY2017
* File 1, Run 2, Scenario 128.
* #

M514 Warning:
The combined freeway and ramp average speed entered cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2017
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.362	3.314	5.599	3.898	4.654	0.177	0.574	0.826	8.40	3.518
Composite CO :	18.50	18.47	24.23	19.94	33.77	1.948	1.507	2.622	112.87	18.957
Composite NOX :	0.666	0.742	1.305	0.886	0.636	0.151	0.538	4.017	1.04	1.084

* #
* Bullitt Urban Principal Arterial 31.0 mph - CY2017

```
* File 1, Run 2, Scenario 129.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 31.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             there are no sales for vehicle class LDDT12

                    Calendar Year:  2017
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.424	0.517	0.908	0.617	0.644	0.077	0.261	0.278	2.39	0.541
Composite CO :	5.36	6.20	8.38	6.75	6.36	0.608	0.491	0.546	13.45	5.813
Composite NOX :	0.305	0.396	0.718	0.479	0.804	0.081	0.290	2.042	1.10	0.578

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Minor Arterial 28.0 mph - CY2017
* File 1, Run 2, Scenario 130.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 28.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             there are no sales for vehicle class LDDT12

                    Calendar Year:  2017
                            Month:  July
```

```
                    Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.440	0.531	0.932	0.634	0.676	0.081	0.275	0.303	2.47	0.559
Composite CO :	5.40	6.24	8.42	6.79	7.02	0.646	0.520	0.605	14.67	5.884
Composite NOX :	0.313	0.403	0.730	0.487	0.785	0.083	0.295	2.078	1.07	0.588

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Collector 33.0 mph - CY2017
* File 1, Run 2, Scenario 131.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 33.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.415	0.509	0.893	0.607	0.625	0.074	0.253	0.264	2.34	0.530
Composite CO :	5.37	6.21	8.40	6.77	6.02	0.588	0.475	0.515	12.73	5.806
Composite NOX :	0.301	0.393	0.714	0.475	0.817	0.081	0.289	2.035	1.11	0.575

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Local 12.9 mph Default - CY2017
* File 1, Run 2, Scenario 132.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.659	0.739	1.254	0.871	1.094	0.123	0.405	0.531	3.36	0.799
Composite CO :	5.81	6.75	9.05	7.34	15.59	1.095	0.860	1.301	28.29	6.760
Composite NOX :	0.324	0.400	0.712	0.480	0.687	0.108	0.386	2.548	0.91	0.624

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                 Rural Interstate 69.0 mph - CY2017
* File 1, Run 2, Scenario 133.
* # # # # #   # # # # # # # # # # # # # # # # # #
  M 96 Warn
```

```
          69.0      speed reduced to 65 mph maximum
M515 Wa   ıg:
          The combined freeway and ramp average speed entered
          cannot be greater than 64.2 miles per hour.
          The average speed will be reset to this value.
M582 Warning:
          The user supplied freeway average speed of 64.2
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
M 48 Warning:
            there are no sales for vehicle class HDGV8b
M 48 Warning:
            there are no sales for vehicle class LDDT12

                Calendar Year:  2017
                        Month:  July
                     Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.347	0.454	0.784	0.539	0.508	0.059	0.206	0.181	2.73	0.461
Composite CO :	7.00	7.98	10.65	8.66	8.17	0.599	0.484	0.533	25.00	7.520
Composite NOX :	0.320	0.431	0.763	0.516	1.019	0.155	0.554	4.150	1.65	0.799

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Principal Arterial 57.0 mph - CY2017
* File 1, Run 2, Scenario 134.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
           The user supplied arterial average speed of 57.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
 M 48 Warning:
             there are no sales for vehicle class HDGV8b
 M 48 Warning:
```

there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.355	0.462	0.802	0.549	0.515	0.059	0.206	0.183	2.26	0.468
Composite CO :	6.56	7.50	10.05	8.16	6.22	0.544	0.442	0.447	13.06	6.958
Composite NOX :	0.313	0.419	0.746	0.502	0.971	0.117	0.418	2.944	1.44	0.681

* #
* Oldham Rural Minor Arterial 47.0 mph - CY2017
* File 1, Run 2, Scenario 135.
* #

M583 Warning:
The user supplied arterial average speed of 47.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No

ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.373	0.478	0.835	0.569	0.542	0.063	0.216	0.200	2.15	0.486
Composite CO :	6.02	6.92	9.31	7.53	5.26	0.525	0.428	0.418	10.00	6.388
Composite NOX :	0.305	0.405	0.727	0.487	0.907	0.091	0.326	2.294	1.21	0.610

* #
* Oldham Rural Major Collector 46.0 mph - CY2017
* File 1, Run 2, Scenario 136.
* #

M583 Warning:
The user supplied arterial average speed of 46.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2017
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.375	0.480	0.839	0.571	0.546	0.063	0.218	0.203	2.15	0.489
Composite CO :	5.97	6.86	9.23	7.47	5.22	0.525	0.428	0.418	10.07	6.333
Composite NOX :	0.304	0.403	0.725	0.486	0.900	0.090	0.320	2.250	1.20	0.604

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Minor Collector 41.0 mph - CY2017
* File 1, Run 2, Scenario 137.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 41.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             there are no sales for vehicle class LDDT12

                  Calendar Year:  2017
                          Month:  July
                       Altitude:  Low
             Minimum Temperature:  67.0 (F)
             Maximum Temperature:  92.0 (F)
               Absolute Humidity:   75. grains/lb
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
             Fuel Sulfur Content:   30. ppm

             Exhaust I/M Program:  No
                Evap I/M Program:  No
                     ATP Program:  No
                Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.388	0.489	0.856	0.583	0.570	0.066	0.228	0.221	2.19	0.502
Composite CO :	5.70	6.57	8.86	7.16	5.28	0.537	0.437	0.437	10.73	6.083
Composite NOX :	0.300	0.397	0.717	0.479	0.868	0.084	0.299	2.106	1.16	0.585

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham               Rural Local 35.0 mph - CY2017
* File 1, Run 2, Scenario 138.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of 35.0
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             'here are no sales for vehicle class LDDT12
```

```
            Calendar Year:  2017
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
      Weathered RVP:   8.2 psi
Fuel Sulfur Content:   30. ppm

Exhaust I/M Program:  No
   Evap I/M Program:  No
        ATP Program:  No
   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.406	0.502	0.880	0.598	0.609	0.072	0.245	0.251	2.29	0.521
Composite CO :	5.37	6.22	8.42	6.78	5.73	0.570	0.462	0.488	12.10	5.799
Composite NOX :	0.298	0.391	0.710	0.472	0.829	0.081	0.288	2.028	1.13	0.573

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Urban Interstate 71.0 mph - CY2017
* File 1, Run 2, Scenario 139.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
 M 96 Warning:
            71.0      speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
           there are no sales for vehicle class HDGV8b
 M 48 Warning:
           there are no sales for vehicle class LDDT12

            Calendar Year:  2017
                    Month:  July
                 Altitude:  Low
Minimum Temperature:  67.0 (F)
Maximum Temperature:  92.0 (F)
  Absolute Humidity:   75. grains/lb
   Nominal Fuel RVP:   8.6 psi
```

```
                Weathered RVP:    8.2 psi
            Fuel Sulfur Content:    30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.353	0.459	0.794	0.545	0.514	0.060	0.208	0.186	2.70	0.467
Composite CO :	7.05	8.00	10.67	8.69	8.03	0.598	0.483	0.530	24.21	7.539
Composite NOX :	0.321	0.432	0.767	0.517	1.007	0.151	0.537	4.011	1.61	0.787

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Freeway 2.5 mph - CY2017
* File 1, Run 2, Scenario 140.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M514 Warning:
             The combined freeway and ramp average speed entered
            cannot be less than  2.7 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of  2.7
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             there are no sales for vehicle class LDDT12

                  Calendar Year:  2017
                          Month:  July
                       Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Veh ype:	LDGV	LDGT12	LDGT34	LDGT	DGV	LDDV	LDDT	HDDV	MC	Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.362	3.314	5.599	3.898	4.654	0.177	0.574	0.826	8.40	3.518
Composite CO :	18.50	18.47	24.23	19.94	33.77	1.948	1.507	2.622	112.87	18.957
Composite NOX :	0.666	0.742	1.305	0.886	0.636	0.151	0.538	4.017	1.04	1.084

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Urban Principal Arterial 31.0 mph - CY2017
* File 1, Run 2, Scenario 141.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2017
                           Month:  July
                        Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.424	0.517	0.908	0.617	0.644	0.077	0.261	0.278	2.39	0.541
Composite CO :	5.36	6.20	8.38	6.75	6.36	0.608	0.491	0.546	13.45	5.813
Composite NOX :	0.305	0.396	0.718	0.479	0.804	0.081	0.290	2.042	1.10	0.578

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Urban Minor Arterial 28.0 mph - CY2017
* File 1, Run 2, Scenario 142.
* # # # # # # # # # # # # # # # # # # # # # # # #
```

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2017
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.440	0.531	0.932	0.634	0.676	0.081	0.275	0.303	2.47	0.559
Composite CO :	5.40	6.24	8.42	6.79	7.02	0.646	0.520	0.605	14.67	5.884
Composite NOX :	0.313	0.403	0.730	0.487	0.785	0.083	0.295	2.078	1.07	0.588

* #
* Oldham Urban Collector 33.0 mph - CY2017
* File 1, Run 2, Scenario 143.
* #
M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2017
Month:	July
Altitude:	Low
nimum Temperature:	67.0 (F)

```
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.415	0.509	0.893	0.607	0.625	0.074	0.253	0.264	2.34	0.530
Composite CO :	5.37	6.21	8.40	6.77	6.02	0.588	0.475	0.515	12.73	5.806
Composite NOX :	0.301	0.393	0.714	0.475	0.817	0.081	0.289	2.035	1.11	0.575

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Local 12.9 mph Default - CY2017
* File 1, Run 2, Scenario 144.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M585 Warning:
            100% of VMT has been assigned to the local roadway
            type for all hours of the day for all vehicle types
            with an average speed of 12.9 mph.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                Calendar Year:  2017
                        Month:  July
                     Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2912	0.4304	0.1478		0.0361	0.0003	0.0022	0.0869	0.0052	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.659	0.739	1.254	0.871	1.094	0.123	0.405	0.531	3.36	0.799
Composite CO :	5.81	6.75	9.05	7.34	15.59	1.095	0.860	1.301	28.29	6.760
Composite NOX :	0.324	0.400	0.712	0.480	0.687	0.108	0.386	2.548	0.91	0.624

* #
* Bullitt Rural Interstate 69.0 mph - CY2020
* File 1, Run 2, Scenario 145.
* #

M 96 Warning:
69.0 speed reduced to 65 mph maximum

M515 Warning:
The combined freeway and ramp average speed entered
cannot be greater than 64.2 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 64.2
will be used for all hours of the day. 100% of VMT
has been assigned to a fixed combination of freeways
and freeway ramps for all hours of the day and all
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.296	0.396	0.641	0.459	0.408	0.048	0.162	0.170	2.73	0.397
Composite CO :	6.63	7.58	9.85	8.16	8.01	0.571	0.416	0.388	25.00	7.116
Composite NOX :	0.271	0.385	0.674	0.459	0.711	0.099	0.415	2.735	1.65	^ 621

```
* # # # #  # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Principal Arterial 57.0 mph - C   20
* File 1, Run 2, Scenario 146.
* # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 57.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.303	0.403	0.655	0.467	0.413	0.049	0.162	0.171	2.26	0.402
Composite CO :	6.21	7.13	9.29	7.68	6.10	0.518	0.379	0.326	13.06	6.578
Composite NOX :	0.265	0.375	0.658	0.447	0.678	0.075	0.314	1.971	1.44	0.543

```
* # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Rural Minor Arterial 47.0 mph - CY2020
* File 1, Run 2, Scenario 147.
* # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12
```

```
                Calendar Year:  2020
                        Month:  July
                     Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.319	0.417	0.681	0.484	0.436	0.051	0.170	0.188	2.15	0.418
Composite CO :	5.71	6.57	8.59	7.08	5.15	0.499	0.366	0.304	10.00	6.033
Composite NOX :	0.258	0.362	0.641	0.433	0.633	0.058	0.245	1.525	1.21	0.491

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt              Rural Major Collector 46.0 mph - CY2020
* File 1, Run 2, Scenario 148.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b.
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                Calendar Year:  2020
                        Month:  July
                     Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.321	0.418	0.684	0.486	0.439	0.052	0.171	0.190	2.15	0.420
Composite CO :	5.65	6.51	8.52	7.02	5.12	0.500	0.366	0.305	10.07	5.981
Composite NOX :	0.257	0.361	0.639	0.432	0.628	0.057	0.240	1.495	1.20	0.487

* #
* Bullitt Rural Minor Collector 41.0 mph - CY2020
* File 1, Run 2, Scenario 149.
* #

M583 Warning:
The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.333	0.427	0.698	0.496	0.460	0.054	0.179	0.207	2.19	0.432
Composite CO :	5.40	6.23	8.17	6.73	5.17	0.511	0.375	0.318	10.73	5.744
Composite NOX :	0.254	0.355	0.631	0.425	0.606	0.054	0.225	1.397	1.16	0.473

* #
* Bullitt Rural Local 35.0 mph - CY2020

```
* File 1, Run 2, Scenario 150.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 35.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.350	0.438	0.717	0.509	0.493	0.059	0.193	0.235	2.29	0.449
Composite CO :	5.09	5.89	7.75	6.37	5.61	0.543	0.397	0.355	12.10	5.473
Composite NOX :	0.252	0.349	0.625	0.420	0.579	0.052	0.216	1.343	1.13	0.463

```
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt               Urban Interstate 71.0 mph - CY2020
* File 1, Run 2, Scenario 151.
* # # # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                71.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 60.9 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 60.9
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
                icle types.
```

M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.301	0.400	0.649	0.464	0.413	0.049	0.164	0.174	2.70	0.402
Composite CO :	6.67	7.61	9.87	8.19	7.87	0.569	0.415	0.387	24.21	7.133
Composite NOX :	0.271	0.387	0.677	0.461	0.703	0.096	0.403	2.646	1.61	0.614

* #
* Bullitt Urban Freeway 2.5 mph - CY2020
* File 1, Run 2, Scenario 152.
* #

M514 Warning:
The combined freeway and ramp average speed entered cannot be less than 2.7 miles per hour.
The average speed will be reset to this value.

M582 Warning:
The user supplied freeway average speed of 2.7 will be used for all hours of the day. 100% of VMT has been assigned to a fixed combination of freeways and freeway ramps for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)

```
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.020	2.944	4.447	3.329	3.794	0.145	0.454	0.775	8.40	3.055
Composite CO :	17.58	17.73	22.62	18.98	33.10	1.859	1.324	1.911	112.87	18.049
Composite NOX :	0.574	0.668	1.157	0.793	0.444	0.097	0.404	2.651	1.04	0.882

```
* # # # # # # # # # # # # # # # # # # # # # # # #
* Bullitt                Urban Principal Arterial 31.0 mph - CY2020
* File 1, Run 2, Scenario 153.
* # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 31.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                   Calendar Year:  2020
                           Month:  July
                        Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						

VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.367	0.452	0.740	0.526	0.522	0.063	0.205	0.261	2.39	0.467
Composite CO :	5.08	5.87	7.72	6.34	6.23	0.579	0.422	0.398	13.45	5.489
Composite NOX :	0.258	0.354	0.632	0.425	0.561	0.052	0.218	1.353	1.10	0.468

* #
* Bullitt Urban Minor Arterial 28.0 mph - CY2020
* File 1, Run 2, Scenario 154.
* #

M583 Warning:
The user supplied arterial average speed of 28.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.381	0.465	0.760	0.540	0.550	0.067	0.217	0.284	2.47	0.483
Composite CO :	5.12	5.91	7.76	6.38	6.88	0.615	0.448	0.441	14.67	5.558
Composite NOX :	0.265	0.361	0.643	0.433	0.548	0.053	0.221	1.377	1.07	0.476

* #
* Bullitt Urban Collector 33.0 mph - CY2020
* File 1, Run 2, Scenario 155.
* #

M583 Warning:
The user supplied arterial average speed of 33.0

will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.358	0.445	0.728	0.517	0.507	0.061	0.199	0.247	2.34	0.457
Composite CO :	5.09	5.88	7.74	6.36	5.90	0.560	0.409	0.375	12.73	5.480
Composite NOX :	0.255	0.352	0.628	0.422	0.570	0.052	0.217	1.348	1.11	0.465

* #
* Bullitt Urban Local 12.9 mph Default - CY2020
* File 1, Run 2, Scenario 156.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi

```
            Weathered RVP:   8.2 psi
       Fuel Sulfur Content:   30. ppm

      Exhaust I/M Program:  No
         Evap I/M Program:  No
              ATP Program:  No
         Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.584	0.658	1.033	0.754	0.907	0.101	0.320	0.498	3.36	0.702
Composite CO :	5.60	6.43	8.40	6.93	15.28	1.044	0.750	0.948	28.29	6.436
Composite NOX :	0.277	0.357	0.624	0.425	0.479	0.069	0.290	1.746	0.91	0.504

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Interstate 69.0 mph - CY2020
* File 1, Run 2, Scenario 157.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M 96 Warning:
                 69.0      speed reduced to 65 mph maximum
  M515 Warning:
            The combined freeway and ramp average speed entered
            cannot be greater than 64.2 miles per hour.
            The average speed will be reset to this value.
  M582 Warning:
            The user supplied freeway average speed of 64.2
            will be used for all hours of the day. 100% of VMT
            has been assigned to a fixed combination of freeways
            and freeway ramps for all hours of the day and all
             vehicle types.
  M 48 Warning:
             there are no sales for vehicle class HDGV8b
  M 48 Warning:
             there are no sales for vehicle class LDDT12

                  Calendar Year:  2020
                          Month:  July
                       Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                   Nominal Fuel RVP:   8.6 psi
                      Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.296	0.396	0.641	0.459	0.408	0.048	0.162	0.170	2.73	0.397
Composite CO :	6.63	7.58	9.85	8.16	8.01	0.571	0.416	0.388	25.00	7.116
Composite NOX :	0.271	0.385	0.674	0.459	0.711	0.099	0.415	2.735	1.65	0.621

* #
* Oldham Rural Principal Arterial 57.0 mph - CY2020
* File 1, Run 2, Scenario 158.
* #

M583 Warning:
The user supplied arterial average speed of 57.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.303	0.403	0.655	0.467	0.413	0.049	0.162	0.171	2.26	0.402
Composite CO :	6.21	7.13	9.29	7.68	6.10	0.518	0.379	0.326	13.06	6.578
Composite NOX :	0.265	0.375	0.658	0.447	0.678	0.075	0.314	1.971	1.44	0.543

* #
* Oldham Rural Minor Arterial 47.0 mph - CY2020

```
* File 1, Run 2, Scenario 159.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 47.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
                         Altitude:  Low
               Minimum Temperature:  67.0 (F)
               Maximum Temperature:  92.0 (F)
                 Absolute Humidity:   75. grains/lb
                  Nominal Fuel RVP:   8.6 psi
                     Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No

      Vehicle Type:      LDGV    LDGT12     LDGT34      LDGT       HDGV       LDDV       LDDT       HDDV         MC    All Veh
               GVWR:                <6000      >6000     (All)
                     ------     ------     ------     ------     ------     ------     ------     ------     ------     ------
  VMT Distribution:    0.2788     0.4388     0.1507                0.0365     0.0003     0.0022     0.0876     0.0051     1.0000
 ---------------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite VOC  :      0.319      0.417      0.681      0.484      0.436      0.051      0.170      0.188       2.15      0.418
    Composite CO   :       5.71       6.57       8.59       7.08       5.15      0.499      0.366      0.304      10.00      6.033
    Composite NOX  :      0.258      0.362      0.641      0.433      0.633      0.058      0.245      1.525       1.21      0.491
 ---------------------------------------------------------------------------------------------------------------------------

* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Rural Major Collector 46.0 mph - CY2020
* File 1, Run 2, Scenario 160.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 46.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
               there are no sales for vehicle class HDGV8b
  M 48 Warning:
               there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
```

```
                  Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.321	0.418	0.684	0.486	0.439	0.052	0.171	0.190	2.15	0.420
Composite CO :	5.65	6.51	8.52	7.02	5.12	0.500	0.366	0.305	10.07	5.981
Composite NOX :	0.257	0.361	0.639	0.432	0.628	0.057	0.240	1.495	1.20	0.487

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham              Rural Minor Collector 41.0 mph - CY2020
* File 1, Run 2, Scenario 161.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 41.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                  Calendar Year:  2020
                          Month:  July
                       Altitude:  Low
          Minimum Temperature:  67.0 (F)
          Maximum Temperature:  92.0 (F)
            Absolute Humidity:   75. grains/lb
             Nominal Fuel RVP:   8.6 psi
                Weathered RVP:   8.2 psi
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  No
             Evap I/M Program:  No
                  ATP Program:  No
             Reformulated Gas:  No
```

Veh Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	Veh

GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.333	0.427	0.698	0.496	0.460	0.054	0.179	0.207	2.19	0.432
Composite CO :	5.40	6.23	8.17	6.73	5.17	0.511	0.375	0.318	10.73	5.744
Composite NOX :	0.254	0.355	0.631	0.425	0.606	0.054	0.225	1.397	1.16	0.473

* #
* Oldham Rural Local 35.0 mph - CY2020
* File 1, Run 2, Scenario 162.
* #

M583 Warning:
The user supplied arterial average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.350	0.438	0.717	0.509	0.493	0.059	0.193	0.235	2.29	0.449
Composite CO :	5.09	5.89	7.75	6.37	5.61	0.543	0.397	0.355	12.10	5.473
Composite NOX :	0.252	0.349	0.625	0.420	0.579	0.052	0.216	1.343	1.13	0.463

* #
* Oldham Urban Interstate 71.0 mph - CY2020
* File 1, Run 2, Scenario 163.
* #

```
 M 96 Warning:
              71.0      speed reduced to 65 mph maximum
 M515 Warning:
          The combined freeway and ramp average speed entered
          cannot be greater than 60.9 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          The user supplied freeway average speed of 60.9
          will be used for all hours of the day. 100% of VMT
          has been assigned to a fixed combination of freeways
          and freeway ramps for all hours of the day and all
           vehicle types.
 M 48 Warning:
            there are no sales for vehicle class HDGV8b
 M 48 Warning:
            there are no sales for vehicle class LDDT12

                 Calendar Year:  2020
                         Month:  July
                      Altitude:  Low
            Minimum Temperature:  67.0 (F)
            Maximum Temperature:  92.0 (F)
              Absolute Humidity:   75. grains/lb
               Nominal Fuel RVP:   8.6 psi
                  Weathered RVP:   8.2 psi
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  No
               Evap I/M Program:  No
                    ATP Program:  No
               Reformulated Gas:  No
```

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.301	0.400	0.649	0.464	0.413	0.049	0.164	0.174	2.70	0.402
Composite CO :	6.67	7.61	9.87	8.19	7.87	0.569	0.415	0.387	24.21	7.133
Composite NOX :	0.271	0.387	0.677	0.461	0.703	0.096	0.403	2.646	1.61	0.614

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Freeway 2.5 mph - CY2020
* File 1, Run 2, Scenario 164.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M514 Warning:
           The combined freeway and ramp average speed entered
          cannot be less than  2.7 miles per hour.
          The average speed will be reset to this value.
 M582 Warning:
          "  user supplied freeway average speed of  2.7
           be used for all hours of the day. 100% of VMT
```

has been assigned to a fixed combination of free
nd freeway ramps for all hours of the day and a
vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb
Nominal Fuel RVP:	8.6 psi
Weathered RVP:	8.2 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	No
Reformulated Gas:	No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	3.020	2.944	4.447	3.329	3.794	0.145	0.454	0.775	8.40	3.055
Composite CO :	17.58	17.73	22.62	18.98	33.10	1.859	1.324	1.911	112.87	18.049
Composite NOX :	0.574	0.668	1.157	0.793	0.444	0.097	0.404	2.651	1.04	0.882

* #
* Oldham Urban Principal Arterial 31.0 mph - CY2020
* File 1, Run 2, Scenario 165.
* #

M583 Warning:
The user supplied arterial average speed of 31.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year:	2020
Month:	July
Altitude:	Low
Minimum Temperature:	67.0 (F)
Maximum Temperature:	92.0 (F)
Absolute Humidity:	75. grains/lb

```
                Nominal Fuel RVP:   8.6 psi
                   Weathered RVP:   8.2 psi
               Fuel Sulfur Content:   30. ppm

               Exhaust I/M Program:  No
                  Evap I/M Program:  No
                       ATP Program:  No
                  Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.367	0.452	0.740	0.526	0.522	0.063	0.205	0.261	2.39	0.467
Composite CO :	5.08	5.87	7.72	6.34	6.23	0.579	0.422	0.398	13.45	5.489
Composite NOX :	0.258	0.354	0.632	0.425	0.561	0.052	0.218	1.353	1.10	0.468

```
* # # # # # # # # # # # # # # # # # # # # # # # # #
* Oldham                Urban Minor Arterial 28.0 mph - CY2020
* File 1, Run 2, Scenario 166.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
            The user supplied arterial average speed of 28.0
            will be used for all hours of the day.  100% of VMT
            has been assigned to the arterial/collector roadway
            type for all hours of the day and all vehicle types.
  M 48 Warning:
              there are no sales for vehicle class HDGV8b
  M 48 Warning:
              there are no sales for vehicle class LDDT12

                    Calendar Year:  2020
                            Month:  July
                         Altitude:  Low
                Minimum Temperature:  67.0 (F)
                Maximum Temperature:  92.0 (F)
                  Absolute Humidity:   75. grains/lb
                     Nominal Fuel RVP:   8.6 psi
                        Weathered RVP:   8.2 psi
                Fuel Sulfur Content:   30. ppm

                Exhaust I/M Program:  No
                   Evap I/M Program:  No
                        ATP Program:  No
                   Reformulated Gas:  No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distr tion:	0.2788	0.4388	0.1507		0365	0.0003	0.0022	0.0876	0.0051	000

Composite Emission Factors (g/mi):

Composite VOC :	0.381	0.465	0.760	0.540	0.550	0.067	0.217	0.284	2.47	0.483
Composite CO :	5.12	5.91	7.76	6.38	6.88	0.615	0.448	0.441	14.67	5.558
Composite NOX :	0.265	0.361	0.643	0.433	0.548	0.053	0.221	1.377	1.07	0.476

---

* #
* Oldham Urban Collector 33.0 mph - CY2020
* File 1, Run 2, Scenario 167.
* #

M583 Warning:
The user supplied arterial average speed of 33.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000

Composite Emission Factors (g/mi):

Composite VOC :	0.358	0.445	0.728	0.517	0.507	0.061	0.199	0.247	2.34	0.457
Composite CO :	5.09	5.88	7.74	6.36	5.90	0.560	0.409	0.375	12.73	5.480
Composite NOX :	0.255	0.352	0.628	0.422	0.570	0.052	0.217	1.348	1.11	0.465

---

* #
* Oldham Urban Local 12.9 mph Default - CY2020
* File 1, Run 2, Scenario 168.
* #

M585 Warning:
100% of VMT has been assigned to the local roadway
type for all hours of the day for all vehicle types
with an average speed of 12.9 mph.

M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2020
Month: July
Altitude: Low
Minimum Temperature: 67.0 (F)
Maximum Temperature: 92.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 8.6 psi
Weathered RVP: 8.2 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: No
Reformulated Gas: No

Vehicle Type: / GVWR:	LDGV	LDGT12 <6000	LDGT34 >6000	LDGT (All)	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.2788	0.4388	0.1507		0.0365	0.0003	0.0022	0.0876	0.0051	1.0000
Composite Emission Factors (g/mi):										
Composite VOC :	0.584	0.658	1.033	0.754	0.907	0.101	0.320	0.498	3.36	0.702
Composite CO :	5.60	6.43	8.40	6.93	15.28	1.044	0.750	0.948	28.29	6.436
Composite NOX :	0.277	0.357	0.624	0.425	0.479	0.069	0.290	1.746	0.91	0.504

Appendix F

401 KAR 50:012 RACM

401 KAR 50:012. General application.

RELATES TO: KRS 224.10-100, 224.20-120, 40 C.F.R. 60.14, 42 U.S.C. 7401 et seq., 7408, 7410

STATUTORY AUTHORITY: KRS 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. 42 USC 7410 likewise requires the state to implement standards for national primary and secondary ambient air quality. This administrative regulation provides guidelines by which all administrative regulations of 401 KAR Chapters 50 to 65, are to be understood.

Section 1. General Application of Administrative Regulations and Standards. Administrative Regulations of the cabinet shall be construed and applied according to subsections (1) through (6) of this section, which shall guide the cabinet in the issuance, modification, and revocation of permits.

(1) All major sources of VOCs located in a county or portion of a county which is designated ozone nonattainment, for any nonattainment classification except marginal, under 401 KAR 51:010, shall install and use control technology which is reasonable and available.

(a) The determination of reasonably available control technology shall be approved by the cabinet and shall be based upon:

1. A Control Techniques Guidelines Document issued by the U.S. EPA and promulgated in regulatory form by the cabinet; or

2. If no Control Techniques Guidelines Document is appropriate, the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. The cabinet may require technology that has been applied to similar, but not necessarily identical source categories.

(b) For those reasonably available control technology determinations not based on a control techniques guidelines document, the cabinet shall:

1. Hold a public hearing on the determination.

2. Submit the determination to the U.S. EPA for approval.

(c) For these determinations, that portion of a source with facilities uncontrolled by reasonably available control technology which emit VOCs that sum to 100 tpy or greater shall be considered a major source.

(2) In the absence of a standard specified in these administrative regulations, all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical.

(3) Nothing in these administrative regulations is intended to permit a practice which is in violation of a statute, ordinance, or administrative regulation.

(4) These administrative regulations shall be complementary to each other, and to other administrative regulations adopted by the cabinet. If a provision of these administrative regulations or the application thereof to a person or circumstance is held to be invalid, the invalidity shall not affect other provisions or application of another part of these administrative regulations and to this end each provision of these administrative regulations and the various applications thereof are declared to be severable.

(5) Except as provided by 401 KAR 50:055, nothing in these administrative regulations shall allow a source to remove control equipment or discontinue procedures previously required in a nonattainment area to achieve the national ambient air quality standards until a state implementation plan containing different requirements has been approved by the U.S. EPA.

(6) For the purpose of applying the definition of modification, an increase in the amount of an air pollutant shall be determined as in 40 CFR 60.14. (5 Ky.R. 352; eff. 6-6-79; Recodified from 401 KAR 50:005, 7-31-90; Am. 18 Ky.R. 2604; 2929; 3333; eff. 6-24-92; 24 Ky.R. 648; eff. 11-12-97.)

Appendix G

Non-Highway Mobile Model Runs

Other Non-Highway Mobile Source

Emissions Summary

From the Non-Road Model

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2002 (Lou02)
Typical weekday for Summer Season, 2002
Date of Model Run: Mar 27 11:26:20: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.26	1.21	11.61	0.13	0.12	112.93	0.03	0.07
21185	Oldham County	1.16	1.39	16.54	0.14	0.15	132.85	0.01	0.07
Totals:		**2.42**	**2.60**	**28.15**	**0.28**	**0.26**	**245.79**	**0.05**	**0.15**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2002 (Lou02)

Typical weekday for Summer Season, 2002

Date of Model Run: Mar 27 11:26:20: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.01	0.03	0.01	0.05	0.06	0.14	1.67
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.17	1.58
Totals:		**0.03**	**0.08**	**0.02**	**0.07**	**0.12**	**0.31**	**3.24**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2003 (Lou 2003)
Typical weekday for Summer Season, 2003
Date of Model Run: Mar 22 15:31:19: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.33	1.20	12.00	0.13	0.12	116.28	0.03	0.07
21185	Oldham County	1.11	1.38	16.90	0.14	0.15	135.92	0.01	0.07
Totals:		**2.44**	**2.58**	**28.90**	**0.27**	**0.27**	**252.20**	**0.04**	**0.14**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2011 (Lou11)

Typical weekday for Summer Season, 2011

Date of Model Run: Mar 22 15:58:34: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.29	0.91	14.18	0.13	0.15	141.83	0.01	0.10
21185	Oldham County	0.63	1.09	18.72	0.13	0.18	160.39	0.00	0.08
Totals:		**1.92**	**1.99**	**32.89**	**0.26**	**0.33**	**302.22**	**0.01**	**0.18**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2011 (Lou11)
Typical weekday for Summer Season, 2011
Date of Model Run: Mar 22 15:58:34: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.02	0.09	0.07	0.16	1.80
21185	Oldham County	0.02	0.05	0.01	0.02	0.07	0.19	1.07
Totals:		**0.03**	**0.08**	**0.03**	**0.11**	**0.14**	**0.36**	**2.87**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2005 (Lou 2005)
Typical weekday for Summer Season, 2005
Date of Model Run: Mar 22 15:40:07: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.43	1.15	12.75	0.13	0.13	122.54	0.03	0.08
21185	Oldham County	0.95	1.33	17.44	0.13	0.16	141.79	0.01	0.07
Totals:		**2.38**	**2.48**	**30.18**	**0.26**	**0.29**	**264.33**	**0.04**	**0.15**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2003 (Lou 2003)

Typical weekday for Summer Season, 2003

Date of Model Run: Mar 22 15:31:19: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.01	0.03	0.02	0.05	0.06	0.14	1.75
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.17	1.53
Totals:		**0.03**	**0.08**	**0.02**	**0.08**	**0.12**	**0.32**	**3.27**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2005 (Lou 2005)
Typical weekday for Summer Season, 2005
Date of Model Run: Mar 22 15:40:07: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.03	0.02	0.06	0.07	0.15	1.89
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.18	1.37
Totals:		**0.03**	**0.08**	**0.02**	**0.09**	**0.13**	**0.33**	**3.25**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2008 (Lou08)
Typical weekday for Summer Season, 2008
Date of Model Run: Mar 27 15:43:18: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.40	1.04	13.56	0.13	0.14	132.18	0.02	0.10
21185	Oldham County	0.74	1.22	18.08	0.12	0.17	150.88	0.01	0.08
Totals:		**2.14**	**2.25**	**31.64**	**0.25**	**0.31**	**283.06**	**0.02**	**0.18**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2008 (Lou08)

Typical weekday for Summer Season, 2008

Date of Model Run: Mar 27 15:43:18: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.03	0.02	0.08	0.07	0.16	1.90
21185	Oldham County	0.02	0.05	0.01	0.02	0.07	0.19	1.18
Totals:		**0.03**	**0.08**	**0.03**	**0.10**	**0.14**	**0.35**	**3.08**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2014 (Lou 14)
Typical weekday for Summer Season, 2014
Date of Model Run: Mar 27 15:59:54: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.15	0.75	14.56	0.15	0.15	151.16	0.01	0.12
21185	Oldham County	0.59	0.92	19.36	0.16	0.18	170.27	0.00	0.08
Totals:		**1.73**	**1.66**	**33.92**	**0.31**	**0.32**	**321.44**	**0.01**	**0.20**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2014 (Lou 14)
Typical weekday for Summer Season, 2014
Date of Model Run: Mar 27 15:59:54: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.09	0.06	0.16	1.67
21185	Oldham County	0.02	0.05	0.01	0.03	0.07	0.20	1.05
Totals:		**0.04**	**0.09**	**0.03**	**0.12**	**0.14**	**0.36**	**2.72**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2017 (Lou 17)
Typical weekday for Summer Season, 2017
Date of Model Run: Mar 28 08:52:13: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	0.95	0.60	14.89	0.17	0.14	160.13	0.00	0.12
21185	Oldham County	0.57	0.75	20.08	0.19	0.17	180.25	0.00	0.09
Totals:		**1.53**	**1.35**	**34.98**	**0.36**	**0.32**	**340.38**	**0.00**	**0.21**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2017 (Lou 17)

Typical weekday for Summer Season, 2017

Date of Model Run: Mar 28 08:52:13: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.10	0.06	0.15	1.47
21185	Oldham County	0.02	0.05	0.01	0.03	0.07	0.21	1.05
Totals:		**0.04**	**0.09**	**0.03**	**0.12**	**0.13**	**0.36**	**2.52**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2020 (Lou 20)
Typical weekday for Summer Season, 2020
Date of Model Run: Mar 28 08:59:35: 2006 Today's Date: 5/2/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	0.81	0.49	15.28	0.19	0.14	168.75	0.00	0.13
21185	Oldham County	0.57	0.62	20.87	0.22	0.17	190.23	0.00	0.09
Totals:		**1.39**	**1.11**	**36.15**	**0.41**	**0.32**	**358.98**	**0.00**	**0.22**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2020 (Lou 20)
Typical weekday for Summer Season, 2020
Date of Model Run: Mar 28 08:59:35: 2006 Today's Date: 5/2/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.10	0.05	0.15	1.33
21185	Oldham County	0.02	0.06	0.01	0.03	0.08	0.22	1.07
Totals:		**0.04**	**0.10**	**0.03**	**0.13**	**0.13**	**0.36**	**2.39**

Non-Road Model

Input Information

Written by Nonroad interface at 3/27/2006 11:26:15 AM
This is the options file for the NONROAD program.
The data is sperated into "packets" bases on common
information. Each packet is specified by an
identifier and a terminator. Any notes or descriptions
can be placed between the data packets.

9/2005 epa: Add growth & tech years to OPTIONS packet
and Counties & Retrofit files to RUNFILES packet.

PERIOD PACKET

This is the packet that defines the period for
which emissions are to be estimated. The order of the
records matter. The selection of certain parameters
will cause some of the record that follow to be ignored.
The order of the records is as follows:

1 - Char 10 - Period type for this simulation.
Valid responses are: ANNUAL, SEASONAL, and MONTHLY
2 - Char 10 - Type of inventory produced.
Valid responses are: TYPICAL DAY and PERIOD TOTAL
3 - Integer - year of episode (4 digit year)
4 - Char 10 - Month of episode (use complete name of month)
5 - Char 10 - Type of day
Valid responses are: WEEKDAY and WEEKEND

/PERIOD/
Period type : Seasonal
Summation type : Typical day
Year of episode : 2002
Season of year : Summer
Month of year :
Weekday or weekend : Weekday
Year of growth calc:
Year of tech sel :
/END/

OPTIONS PACKET

This is the packet that defines some of the user

options that drive the model. Most parameters are used to make episode specific emission factor adjustments. The order of the records is fixed. The order is as follows.

1 - Char 80 - First title on reports
2 - Char 80 - Second title on reports
3 - Real 10 - Fuel RVP of gasoline for this simulation
4 - Real 10 - Oxygen weight percent of gasoline for simulation
5 - Real 10 - Percent sulfur for gasoline
6 - Real 10 - Percent sulfur for diesel
7 - Real 10 - Percent sulfur for LPG/CNG
8 - Real 10 - Minimum daily temperature (deg. F)
9 - Real 10 - maximum daily temperature (deg. F)
10 - Real 10 - Representative average daily temperature (deg. F)
11 - Char 10 - Flag to determine if region is high altitude
Valid responses are: HIGH and LOW
12 - Char 10 - Flag to determine if RFG adjustments are made
Valid responses are: YES and NO

/OPTIONS/
Title 1 : LOUISVILLE AREA
Title 2 : 2002
Fuel RVP for gas : 8.6
Oxygen Weight % : 0.0
Gas sulfur % : 0.0339
Diesel sulfur % : 0.2284
Marine Dsl sulfur %: 0.2637
CNG/LPG sulfur % : 0.003
Minimum temper. (F): 67
Maximum temper. (F): 92
Average temper. (F): 83
Altitude of region : LOW
/END/

REGION PACKET

This is the packet that defines the region for which emissions are to be estimated.

The first record tells the type of region and allocation to perform.

Valid responses are:

US TOTAL - emissions are for entire USA without state breakout.

50STATE - emissions are for all 50 states and Washington D.C., by state.

STATE - emissions are for a select group of states and are state-level estimates

COUNTY - emissions are for a select group of counties and are county level estimates. If necessary, allocation from state to county will be performed.

SUBCOUNTY - emissions are for the specified sub counties and are subcounty level estimates. If necessary, county to subcounty allocation will be performed.

The remaining records define the regions to be included. The type of data which must be specified depends on the region level.

US TOTAL - Nothing needs to be specified. The FIPS code 00000 is used automatically.

50STATE - Nothing needs to be specified. The FIPS code 00000 is used automatically.

STATE - state FIPS codes

COUNTY - state or county FIPS codes. State FIPS code means include all counties in the state.

SUBCOUNTY - county FIPS code and subregion code.

/REGION/
Region Level : COUNTY
Bullitt County KY : 21029
Oldham County KY : 21185
/END/

or use -
Region Level : STATE
Michigan : 26000

SOURCE CATEGORY PACKET

This packet is used to tell the model which source categories are to be processed. It is optional. If used, only those source categories list will appear in the output data file. If the packet is not found, the model will process all source categories in the population files.

Diesel Only -
:2270000000
:2282020000
:2285002015

Spark Ignition Only -
:2260000000
:2265000000
:2267000000
:2268000000
:2282005010
:2282005015
:2282010005
:2285004015
:2285006015

This is the packet that lists the names of output files and some of the input data files read by the model. If a drive:\path\ is not given, the location of the NONROAD.EXE file itself is assumed. You will probably want to change the names of the Output and Message files to match that of the OPTion file, e.g., MICH-97.OPT, MICH-97.OUT, MICH-97.MSG, and if used MICH-97.AMS.

/RUNFILES/
ALLOC XREF : data\allocate\allocate.xrf
ACTIVITY : data\activity\activity.dat
EXH TECHNOLOGY : data\tech\tech-exh.dat
EVP TECHNOLOGY : data\tech\tech-evp.dat
SEASONALITY : data\season\season.dat
REGIONS : data\season\season.dat
MESSAGE : c:\nonroad\outputs\lou02.msg
OUTPUT DATA : c:\nonroad\outputs\lou02.out
EPS2 AMS :

US COUNTIES FIPS : data\allocate\fips.dat
RETROFIT :
/END/

This is the packet that defines the equipment population files read by the model.

/POP FILES/
Population File : c:\nonroad\data\pop\ky.pop
/END/

POPULATION FILE : c:\nonroad\data\POP\MI.POP

This is the packet that defines the growth files files read by the model.

/GROWTH FILES/
National defaults : data\growth\nation.grw
/END/

/ALLOC FILES/
Air trans. empl. :c:\nonroad\data\allocate\ky_airtr.alo
Undergrnd coal prod:c:\nonroad\data\allocate\ky_coal.alo
Construction cost :c:\nonroad\data\allocate\ky_const.alo
Harvested acres :c:\nonroad\data\allocate\ky_farms.alo
Golf course estab. :c:\nonroad\data\allocate\ky_golf.alo
Wholesale estab. :c:\nonroad\data\allocate\ky_holsl.alo
Family housing :c:\nonroad\data\allocate\ky_house.alo
Logging employees :c:\nonroad\data\allocate\ky_loggn.alo
Landscaping empl. :c:\nonroad\data\allocate\ky_lscap.alo
Manufacturing empl.:c:\nonroad\data\allocate\ky_mnfg.alo
Oil & gas employees:c:\nonroad\data\allocate\ky_oil.alo
Census population :c:\nonroad\data\allocate\ky_pop.alo
Allocation File :c:\nonroad\data\allocate\ky_rail.alo
RV Park establish. :c:\nonroad\data\allocate\ky_rvprk.alo
Snowblowers comm. :c:\nonroad\data\allocate\ky_sbc.alo
Snowblowers res. :c:\nonroad\data\allocate\ky_sbr.alo
Snowmobiles :c:\nonroad\data\allocate\ky_snowm.alo
Rec marine inboard :c:\nonroad\data\allocate\ky_wib.alo
Rec marine outboard:c:\nonroad\data\allocate\ky_wob.alo
/END/

This is the packet that defines the emssions factors
files read by the model.

/EMFAC FILES/
THC exhaust : data\emsfac\exhthc.emf
CO exhaust : data\emsfac\exhco.emf
NOX exhaust : data\emsfac\exhnox.emf
PM exhaust : data\emsfac\exhpm.emf
BSFC : data\emsfac\bsfc.emf
Crankcase : data\emsfac\crank.emf
Spillage : data\emsfac\spillage.emf
Diurnal : data\emsfac\evdiu.emf
TANK PERM : data\emsfac\evtank.emf
NON-RM HOSE PERM : data\emsfac\evhose.emf
RM FILL NECK PERM : data\emsfac\evneck.emf
RM SUPPLY/RETURN : data\emsfac\evsupret.emf
RM VENT PERM : data\emsfac\evvent.emf
HOT SOAKS : data\emsfac\evhotsk.emf
RUNINGLOSS : data\emsfac\evrunls.emf
/END/

This is the packet that defines the deterioration factors
files read by the model.

/DETERIORATE FILES/
THC exhaust : data\detfac\exhthc.det
CO exhaust : data\detfac\exhco.det
NOX exhaust : data\detfac\exhnox.det
PM exhaust : data\detfac\exhpm.det
Diurnal : data\detfac\evdiu.det
/END/

Optional Packets - Add initial slash "/" to activate

/STAGE II/
Control Factor : 0.0
/END/
Enter percent control: 95 = 95% control = 0.05 x uncontrolled
Default should be zero control.

/MODELYEAR OUT/
EXHAUST BMY OUT :
EVAP BMY OUT :

/END/

SI REPORT/
SI report file-CSV :OUTPUTS\NRPOLLUT.CSV
/END/

/DAILY FILES/
DAILY TEMPS/RVP :
/END/

PM Base Sulfur
cols 1-10: dsl tech type;
11-20: base sulfur wt%; or '1.0' means no-adjust (cert= in-use)
/PM BASE SULFUR/
T2 0.2000 0.02247
T3 0.2000 0.02247
T3B 0.0500 0.02247
T4A 0.0500 0.02247
T4B 0.0015 0.02247
T4 0.0015 0.30
T4N 0.0015 0.30
/END/

2002 Locomotive
Questionnaire

2002 KENTUCKY RAILROAD INFORMATION

QUESTIONNAIRE

2002 Railroad General Information:

Railroad Name_____

Contact Person_____Phone #_____

Contact Person E-mail_____

Contact Person Fax Number_____

Any clarifying remarks regarding the information provided_____

_____

_____

2002 System Level Railroad Information:

System Total Gross Ton Miles *(GTM)_____

System Total Fuel Consumption (gallons)_____

System Total Track Mileage (miles)_____

2002 State Level Railroad Information:

State Total Railroad Gross Ton Miles *(GTM) in Kentucky_____

State Total Railroad Fuel Consumption (gallons) in Kentucky_____

State Total Railroad Track Mileage (miles) in Kentucky_____

(Please see County Level information needed starting on Page 2.)

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either including or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION

QUESTIONNAIRE

2002 County Level Railroad Information:

Please provide 2002 County Level information for Total Gross Ton Miles *(GTM), Total Track Mileage, Fuel Used b Line Haul Locomotives, the Number of Yard Locomotives Operated, and the Fuel Used by Yard Locomotives in the following table:

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE - COUNTY LEVEL -					
KENTUCKY COUNTY NAME	**2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY**	**2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY**	**2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)**	**NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002**	**2002 TOTAL FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)**
Adair					
Allen					
Anderson					
Ballard					
Barren					
Bath					
Bell					
Boone					
Bourbon					
Boyd					
Boyle					
Bracken					
Breathitt					

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either i[illegible]ding or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TOTAL FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Breckinridge					
Bullitt					
Butler					
Caldwell					
Calloway					
Campbell					
Carlisle					
Carroll					
Carter					
Casey					
Christian					
Clark					
Clay					
Clinton					
Crittenden					
Cumberland					
Daviess					
Edmonson					
Elliott					
Estill					

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either including or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TOTAL FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Fayette					
Fleming					
Floyd					
Franklin					
Fulton					
Gallatin					
Garrard					
Grant					
Graves					
Grayson					
Green					
Greenup					
Hancock					
Hardin					
Harlan					
Harrison					
Hart					
Henderson					
Henry					
Hickman					

When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either ding or not including the locomotive weight.

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TOT. FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Hopkins					
Jackson					
Jefferson					
Jessamine					
Johnson					
Kenton					
Knott					
Knox					
Larue					
Laurel					
Lawrence					
Lee					
Leslie					
Letcher					
Lewis					
Lincoln					
Livingston					
Logan					
Lyon					
Madison					

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either including or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TOTAL FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Magoffin					
Marion					
Marshall					
Martin					
Mason					
McCracken					
McCreary					
McLean					
Meade					
Menifee					
Mercer					
Metcalfe					
Monroe					
Montgomery					
Morgan					
Muhlenberg					
Nelson					
Nicholas					
Ohio					
Oldham					

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either including or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TO' FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Owen					
Owsley					
Pendleton					
Perry					
Pike					
Powell					
Pulaski					
Robertson					
Rockcastle					
Rowan					
Russell					
Scott					
Shelby					
Simpson					
Spencer					
Taylor					
Todd					
Trigg					
Trimble					
Union					

**When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either i ding or not including the locomotive weight.*

2002 KENTUCKY RAILROAD INFORMATION QUESTIONNAIRE

- COUNTY LEVEL -

KENTUCKY COUNTY NAME	2002 TOTAL GROSS TON MILES *(GTM) FOR EACH COUNTY	2002 TOTAL TRACK MILEAGE (MILES) FOR EACH COUNTY	2002 TOTAL FUEL USAGE BY LINE HAUL LOCOMOTIVES FOR EACH COUNTY (GALLONS)	NUMBER OF YARD LOCOMOTIVES OPERATED IN EACH COUNTY IN 2002	2002 TOTAL FUEL USAGE BY YARD LOCOMOTIVES OPERATED IN EACH COUNTY (GALLONS)
Warren					
Washington					
Wayne					
Webster					
Whitley					
Wolfe					
Woodford					

*When providing Gross Ton Miles (GTM) for the system, state, and county levels be consistent throughout in either including or not including the locomotive weight.

Appendix H

Emissions Projections Inventory Methodology and Documentation

Emissions Projections Summary

LOUISVILLE REDESIGNATION REQUEST EMISSIONS AND PROJECTION SUMMARY: 2002, 2003, 2005, 2008, 2011, 2014, 2017, AND 2020

Bullitt and Oldham Counties

Note: All emissions reflect any applicable Federal or State controls.

POINT SOURCE EMISSIONS (In tons per day)

	2002 Baseyear			2003 Attainment			2005 Projected			2008 Projected			2011 Projected			2014 Projected			2017 Projected			2020 Projected		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	7.78	0.17	0.56	8.10	0.20	0.60	8.21	0.20	0.61	8.39	0.21	0.64	8.58	0.21	0.65	8.77	0.23	0.68	8.95	0.24	0.71	9.16	0.24	0.72
Oldham	0.55	0.01	0.01	0.72	0.06	0.09	0.73	0.06	0.09	0.75	0.06	0.09	0.76	0.06	0.10	0.78	0.07	0.10	0.79	0.07	0.10	0.81	0.07	0.10
VOC	8.33			8.82			8.94			9.14			9.34			9.55			9.74			9.97		
CO		0.18			0.26			0.26			0.27			0.27			0.30			0.31			0.31	
NOx			0.57			0.69			0.70			0.73			0.75			0.78			0.81			0.82

AREA SOURCE EMISSIONS (in tons per day)

	2002 Baseyear			2003 Attainment			2005 Projected			2008 Projected			2011 Projected			2014 Projected			2017 Projected			2020 Projected		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	3.31	1.31	0.11	3.34	1.36	0.11	3.43	1.41	0.11	3.60	1.48	0.12	3.75	1.53	0.12	3.92	1.59	0.13	4.09	1.66	0.13	4.26	1.74	0.14
Oldham	2.40	0.89	0.07	2.46	0.90	0.07	2.55	0.94	0.07	2.70	0.99	0.07	2.82	1.04	0.08	3.01	1.10	0.09	3.16	1.16	0.09	3.32	1.22	0.09
VOC	5.71			5.80			5.98			6.30			6.57			6.93			7.25			7.58		
CO		2.20			2.26			2.35			2.47			2.57			2.69			2.82			2.96	
NOx			0.18			0.18			0.18			0.19			0.20			0.22			0.22			0.23

HIGHWAY MOBILE SOURCE EMISSIONS (in tons per day)

	2002 Baseyear			2003 Attainment			2005 Projected			2008 Projected			2011 Projected			2014 Projected			2017 Projected			2020 Projected		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	3.69	45.82	7.48	3.74	45.64	7.52	3.43	40.37	7.23	2.87	33.54	5.99	2.52	30.66	4.83	2.30	29.80	3.84	2.18	30.18	3.17	2.05	31.18	2.73
Oldham	2.22	26.68	4.36	2.29	26.93	4.43	2.16	24.58	4.36	1.79	20.23	3.58	1.56	18.47	2.88	1.45	18.23	2.34	1.40	18.70	1.96	1.34	19.55	1.72
VOC	5.91			6.03			5.59			4.66			4.08			3.75			3.58			3.39		
CO		72.50			72.57			64.95			53.77			49.13			48.03			48.88			50.73	
NOx			11.84			11.95			11.59			9.57			7.71			6.18			5.13			4.45

NON-HIGHWAY SOURCE EMISSIONS (in tons per day)

	2002 Baseyear			2003 Attainment			2005 Projected			2008 Projected			2011 Projected			2014 Projected			2017 Projected			2020 Projected		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	1.69	11.67	1.81	1.77	12.06	1.81	1.91	12.81	1.78	1.91	13.63	1.70	1.82	14.25	1.60	1.69	14.63	1.47	1.49	14.96	1.35	1.36	15.36	1.27
Oldham	1.59	16.56	1.63	1.54	16.92	1.63	1.38	17.46	1.59	1.18	18.10	1.49	1.08	18.74	1.37	1.06	19.38	1.22	1.06	20.11	1.07	1.08	20.90	0.95
VOC	3.28			3.31			3.29			3.09			2.90			2.75			2.55			2.44		
CO		28.23			28.98			30.27			31.73			32.99			34.01			35.07			36.26	
NOx			3.44			3.44			3.37			3.19			2.97			2.69			2.42			2.22

TOTAL EMISSIONS (in tons per day)

	2002 Baseyear			2003 Attainment			2005 Projected			2008 Projected			2011 Projected			2014 Projected			2017 Projected			2020 Projected		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	16.47	58.97	9.96	16.95	59.26	10.04	16.98	54.79	9.73	16.77	48.86	8.45	16.67	46.65	7.20	16.68	46.25	6.12	16.71	47.04	5.36	16.83	48.52	4.86
Oldham	6.76	44.14	6.07	7.01	44.81	6.22	6.82	43.04	6.11	6.42	39.38	5.23	6.22	38.31	4.43	6.30	38.78	3.75	6.41	40.04	3.22	6.55	41.74	2.86
VOC	23.23			23.96			23.80			23.19			22.89			22.98			23.12			23.38		
CO		103.11			104.07			97.83			88.24			84.96			85.03			87.08			90.26	
NOx			16.03			16.26			15.84			13.68			11.63			9.87			8.58			7.72

Note: Biogenic emission totals not included in this summary.

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

VOC

Bullitt County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	**7.78**	**8.10**	**8.21**	**8.39**	**8.58**	**8.77**	**8.95**	**9.16**
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13
Tank Trucks in Transit	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vehicle Refueling	-------	-------	-------	-------	-------	-------	-------	-------
Tank Truck Unloading	0.63	0.63	0.65	0.68	0.71	0.74	0.77	0.80
Aircraft Refueling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Vessel Loading & Unloading	-------	-------	-------	-------	-------	-------	-------	-------
TOTAL GASOLINE DISTRIBUTION	**0.74**	**0.74**	**0.76**	**0.80**	**0.83**	**0.87**	**0.90**	**0.94**
Stationary Source Solvent Evaporation								
Dry Cleaning	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18
Surface Cleaning	0.35	0.35	0.36	0.38	0.39	0.41	0.43	0.45
Surface Coating	-------	-------	-------	-------	-------	-------	-------	-------
Architectural Surface Coating	0.52	0.53	0.55	0.57	0.59	0.62	0.65	0.68
Automobile Refinishing	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.37
Traffic Markings	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.06
Other Small Industrial Surface Coating	-------	-------	-------	-------	-------	-------	-------	-------
Graphic Arts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cutback Asphalt Paving	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
Emulsified Asphalt	-------	-------	-------	-------	-------	-------	-------	-------
Pesticide Application	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09
Commercial/Consumer Solvent Use	0.69	0.70	0.72	0.76	0.79	0.82	0.86	0.89
TOTAL STATIONARY SOLVENT EVAPORATION	**2.15**	**2.18**	**2.24**	**2.35**	**2.46**	**2.55**	**2.67**	**2.78**
Waste Management Practices								
Publicly Owned Treatment Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Wastewater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hazardous Treatment, Disposal (TSDFs)	-------	-------	-------	-------	-------	-------	-------	-------
Municipal Solid Waste Landfills	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Solid Waste Incineration								
On-Site Incineration	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Open Burning	0.31	0.31	0.32	0.34	0.35	0.36	0.38	0.40
TOTAL WASTE MANAGEMENT PRACTICES	**0.35**	**0.35**	**0.36**	**0.38**	**0.39**	**0.41**	**0.43**	**0.45**
Small Stationary Source Fossil Fuel Use	-------	-------	-------	-------	-------	-------	-------	-------
Bioprocess Emissions Sources								
Bakeries	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Breweries	-------	-------	-------	-------	-------	-------	-------	-------
Wineries	-------	-------	-------	-------	-------	-------	-------	-------
Distilleries	-------	-------	-------	-------	-------	-------	-------	-------
Silage Storage	-------	-------	-------	-------	-------	-------	-------	-------
TOTAL BIOPROCESS EMISSIONS	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.04**	**0.04**	**0.04**
Other Area Sources								
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL OTHER AREA SOURCE EMISSIONS	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.05**	**0.05**	**0.05**
TOTAL AREA SOURCE EMISSIONS	**3.31**	**3.34**	**3.43**	**3.60**	**3.75**	**3.92**	**4.09**	**4.26**
HIGHWAY MOBILE SOURCE EMISSIONS	**3.69**	**3.74**	**3.43**	**2.87**	**2.52**	**2.30**	**2.18**	**2.05**
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Other Non-Highway	1.67	1.75	1.89	1.89	1.80	1.67	1.47	1.33
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	**1.69**	**1.77**	**1.91**	**1.91**	**1.82**	**1.69**	**1.49**	**1.36**
GRAND TOTAL: ALL EMISSION CATEGORIES	**16.47**	**16.95**	**16.98**	**16.77**	**16.67**	**16.68**	**16.71**	**16.83**

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

CO

Bullitt County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	0.17	0.20	0.20	0.21	0.21	0.23	0.24	0.24
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses								
Tank Trucks in Transit								
Vehicle Refueling								
Tank Truck Unloading								
Aircraft Refueling								
Petroleum Vessel Loading & Unloading								
TOTAL GASOLINE DISTRIBUTION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stationary Source Solvent Evaporation								
Dry Cleaning								
Surface Cleaning								
Surface Coating								
Architectural Surface Coating								
Automobile Refinishing								
Traffic Markings								
Other Small Industrial Surface Coating								
Graphic Arts								
Cutback Asphalt Paving								
Emulsified Asphalt								
Pesticide Application								
Commercial/Consumer Solvent Use								
TOTAL STATIONARY SOLVENT EVAPORATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste Management Practices								
Publicly Owned Treatment Works								
Industrial Wastewater								
Hazardous Treatment, Disposal (TSDFs)								
Municipal Solid Waste Landfills								
Solid Waste Incineration								
On-Site Incineration	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29
Open Burning	0.87	0.89	0.92	0.97	1.00	1.04	1.09	1.14
TOTAL WASTE MANAGEMENT PRACTICES	1.09	1.12	1.16	1.22	1.26	1.31	1.37	1.43
Small Stationary Source Fossil Fuel Use								
Bioprocess Emissions Sources								
Bakeries								
Breweries								
Wineries								
Distilleries								
Silage Storage								
TOTAL BIOPROCESS EMISSIONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Area Sources								
Forest Fires	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks								
TOTAL OTHER AREA SOURCE EMISSIONS	0.22	0.24	0.25	0.26	0.27	0.28	0.29	0.31
TOTAL AREA SOURCE EMISSIONS	1.31	1.36	1.41	1.48	1.53	1.59	1.66	1.74
HIGHWAY MOBILE SOURCE EMISSIONS	45.82	45.64	40.37	33.54	30.66	29.80	30.18	31.18
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08
Other Non-Highway	11.61	12.00	12.75	13.56	14.18	14.56	14.89	15.28
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	11.67	12.06	12.81	13.63	14.25	14.63	14.96	15.36
GRAND TOTAL: ALL EMISSION CATEGORIES	58.97	59.26	54.79	48.86	46.65	46.25	47.04	48.52

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

NOx

Bullitt County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	**0.56**	**0.60**	**0.61**	**0.64**	**0.65**	**0.68**	**0.71**	**0.72**
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses								
Tank Trucks in Transit								
Vehicle Refueling								
Tank Truck Unloading								
Aircraft Refueling								
Petroleum Vessel Loading & Unloading								
TOTAL GASOLINE DISTRIBUTION	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Stationary Source Solvent Evaporation								
Dry Cleaning								
Surface Cleaning								
Surface Coating								
Architectural Surface Coating								
Automobile Refinishing								
Traffic Markings								
Other Small Industrial Surface Coating								
Graphic Arts								
Cutback Asphalt Paving								
Emulsified Asphalt								
Pesticide Application								
Commercial/Consumer Solvent Use								
TOTAL STATIONARY SOLVENT EVAPORATION	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Waste Management Practices								
Publicly Owned Treatment Works								
Industrial Wastewater								
Hazardous Treatment, Disposal (TSDFs)								
Municipal Solid Waste Landfills								
Solid Waste Incineration								
On-Site Incineration	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05
Open Burning	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08
TOTAL WASTE MANAGEMENT PRACTICES	**0.10**	**0.10**	**0.10**	**0.11**	**0.11**	**0.12**	**0.12**	**0.13**
Small Stationary Source Fossil Fuel Use								
Bioprocess Emissions Sources								
Bakeries								
Breweries								
Wineries								
Distilleries								
Silage Storage								
TOTAL BIOPROCESS EMISSIONS	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Other Area Sources								
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks								
TOTAL OTHER AREA SOURCE EMISSIONS	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
TOTAL AREA SOURCE EMISSIONS	**0.11**	**0.11**	**0.11**	**0.12**	**0.12**	**0.13**	**0.13**	**0.14**
HIGHWAY MOBILE SOURCE EMISSIONS	**7.48**	**7.52**	**7.23**	**5.99**	**4.83**	**3.84**	**3.17**	**2.73**
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.60	0.61	0.63	0.66	0.69	0.72	0.75	0.78
Other Non-Highway	1.21	1.20	1.15	1.04	0.91	0.75	0.60	0.49
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	**1.81**	**1.81**	**1.78**	**1.70**	**1.60**	**1.47**	**1.35**	**1.27**
GRAND TOTAL: ALL EMISSION CATEGORIES	**9.96**	**10.04**	**9.73**	**8.45**	**7.20**	**6.12**	**5.36**	**4.86**

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

VOC

Oldham County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	**0.55**	**0.72**	**0.73**	**0.75**	**0.76**	**0.78**	**0.79**	**0.81**
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07
Tank Trucks in Transit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vehicle Refueling	-------	-------	-------	-------	-------	-------	-------	-------
Tank Truck Unloading	0.29	0.29	0.30	0.32	0.33	0.35	0.37	0.39
Aircraft Refueling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Vessel Loading & Unloading	-------	-------	-------	-------	-------	-------	-------	-------
TOTAL GASOLINE DISTRIBUTION	**0.34**	**0.34**	**0.35**	**0.38**	**0.39**	**0.41**	**0.43**	**0.46**
Stationary Source Solvent Evaporation								
Dry Cleaning	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.15
Surface Cleaning	0.26	0.27	0.28	0.30	0.31	0.33	0.35	0.37
Surface Coating	-------	-------	-------	-------	-------	-------	-------	-------
Architectural Surface Coating	0.41	0.42	0.44	0.46	0.48	0.51	0.54	0.57
Automobile Refinishing	0.22	0.22	0.23	0.24	0.25	0.27	0.28	0.30
Traffic Markings	0.05	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Other Small Industrial Surface Coating	-------	-------	-------	-------	-------	-------	-------	-------
Graphic Arts	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.18
Cutback Asphalt Paving	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Emulsified Asphalt	-------	-------	-------	-------	-------	-------	-------	-------
Pesticide Application	0.08	0.07	0.07	0.08	0.08	0.09	0.09	0.09
Commercial/Consumer Solvent Use	0.53	0.55	0.57	0.61	0.63	0.67	0.71	0.74
TOTAL STATIONARY SOLVENT EVAPORATION	**1.81**	**1.85**	**1.92**	**2.03**	**2.13**	**2.26**	**2.38**	**2.50**
Waste Management Practices								
Publicly Owned Treatment Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Wastewater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hazardous Treatment, Disposal (TSDFs)	-------	-------	-------	-------	-------	-------	-------	-------
Municipal Solid Waste Landfills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solid Waste Incineration								
On-Site Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Burning	0.20	0.21	0.22	0.23	0.24	0.26	0.27	0.28
TOTAL WASTE MANAGEMENT PRACTICES	**0.20**	**0.21**	**0.22**	**0.23**	**0.24**	**0.26**	**0.27**	**0.28**
Small Stationary Source Fossil Fuel Use	-------	-------	-------	-------	-------	-------	-------	-------
Bioprocess Emissions Sources								
Bakeries	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Breweries	-------	-------	-------	-------	-------	-------	-------	-------
Wineries	-------	-------	-------	-------	-------	-------	-------	-------
Distilleries	-------	-------	-------	-------	-------	-------	-------	-------
Silage Storage	-------	-------	-------	-------	-------	-------	-------	-------
TOTAL BIOPROCESS EMISSIONS	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**	**0.04**	**0.04**	**0.04**
Other Area Sources								
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL OTHER AREA SOURCE EMISSIONS	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.04**	**0.04**	**0.04**
TOTAL AREA SOURCE EMISSIONS	**2.40**	**2.46**	**2.55**	**2.70**	**2.82**	**3.01**	**3.16**	**3.32**
HIGHWAY MOBILE SOURCE EMISSIONS	**2.22**	**2.29**	**2.16**	**1.79**	**1.56**	**1.45**	**1.40**	**1.34**
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Other Non-Highway	1.58	1.53	1.37	1.17	1.07	1.05	1.05	1.07
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	**1.59**	**1.54**	**1.38**	**1.18**	**1.08**	**1.06**	**1.06**	**1.08**
GRAND TOTAL: ALL EMISSION CATEGORIES	**6.76**	**7.01**	**6.82**	**6.42**	**6.22**	**6.30**	**6.41**	**6.55**

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

CO

Oldham County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	0.01	0.06	0.06	0.06	0.06	0.07	0.07	0.07
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses								
Tank Trucks in Transit								
Vehicle Refueling								
Tank Truck Unloading								
Aircraft Refueling								
Petroleum Vessel Loading & Unloading								
TOTAL GASOLINE DISTRIBUTION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stationary Source Solvent Evaporation								
Dry Cleaning								
Surface Cleaning								
Surface Coating								
Architectural Surface Coating								
Automobile Refinishing								
Traffic Markings								
Other Small Industrial Surface Coating								
Graphic Arts								
Cutback Asphalt Paving								
Emulsified Asphalt								
Pesticide Application								
Commercial/Consumer Solvent Use								
TOTAL STATIONARY SOLVENT EVAPORATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste Management Practices								
Publicly Owned Treatment Works								
Industrial Wastewater								
Hazardous Treatment, Disposal (TSDFs)								
Municipal Solid Waste Landfills								
Solid Waste Incineration								
On-Site Incineration	0.14	0.14	0.15	0.15	0.16	0.17	0.18	0.19
Open Burning	0.58	0.59	0.61	0.65	0.68	0.72	0.76	0.80
TOTAL WASTE MANAGEMENT PRACTICES	0.72	0.73	0.76	0.80	0.84	0.89	0.94	0.99
Small Stationary Source Fossil Fuel Use								
Bioprocess Emissions Sources								
Bakeries								
Breweries								
Wineries								
Distilleries								
Silage Storage								
TOTAL BIOPROCESS EMISSIONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Area Sources								
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.23
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks								
TOTAL OTHER AREA SOURCE EMISSIONS	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.23
TOTAL AREA SOURCE EMISSIONS	0.89	0.90	0.94	0.99	1.04	1.10	1.16	1.22
HIGHWAY MOBILE SOURCE EMISSIONS	26.68	26.93	24.58	20.23	18.47	18.23	18.70	19.55
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
Other Non-Highway	16.54	16.90	17.44	18.08	18.72	19.36	20.08	20.87
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	16.56	16.92	17.46	18.10	18.74	19.38	20.11	20.90
GRAND TOTAL: ALL EMISSION CATEGORIES	44.14	44.81	43.04	39.38	38.31	38.78	40.04	41.74

EMISSIONS SUMMARY FOR LOUISVILLE MSA (*tons per day*)

NOx

Oldham County

Source Category	2002 Baseyear	2003 Attainment	2005 Projected	2008 Projected	2011 Projected	2014 Projected	2017 Projected	2020 Projected
POINT SOURCE EMISSIONS	0.01	0.09	0.09	0.09	0.10	0.10	0.10	0.10
AREA SOURCE EMISSIONS								
Gasoline Distribution								
Storage Tank Breathing Losses								
Tank Trucks in Transit								
Vehicle Refueling								
Tank Truck Unloading								
Aircraft Refueling								
Petroleum Vessel Loading & Unloading								
TOTAL GASOLINE DISTRIBUTION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stationary Source Solvent Evaporation								
Dry Cleaning								
Surface Cleaning								
Surface Coating								
Architectural Surface Coating								
Automobile Refinishing								
Traffic Markings								
Other Small Industrial Surface Coating								
Graphic Arts								
Cutback Asphalt Paving								
Emulsified Asphalt								
Pesticide Application								
Commercial/Consumer Solvent Use								
TOTAL STATIONARY SOLVENT EVAPORATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste Management Practices								
Publicly Owned Treatment Works								
Industrial Wastewater								
Hazardous Treatment, Disposal (TSDFs)								
Municipal Solid Waste Landfills								
Solid Waste Incineration								
On-Site Incineration	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Open Burning	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
TOTAL WASTE MANAGEMENT PRACTICES	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.09
Small Stationary Source Fossil Fuel Use								
Bioprocess Emissions Sources								
Bakeries								
Breweries								
Wineries								
Distilleries								
Silage Storage								
TOTAL BIOPROCESS EMISSIONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Area Sources								
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slash & Prescribed Burning	-------	-------	-------	-------	-------	-------	-------	-------
Agricultural Burning	-------	-------	-------	-------	-------	-------	-------	-------
Structure Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orchard Heaters	-------	-------	-------	-------	-------	-------	-------	-------
Leaking Underground Storage Tanks								
TOTAL OTHER AREA SOURCE EMISSIONS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL AREA SOURCE EMISSIONS	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.09
HIGHWAY MOBILE SOURCE EMISSIONS	4.36	4.43	4.36	3.58	2.88	2.34	1.96	1.72
NON-HIGHWAY MOBILE SOURCE EMISSIONS								
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Locomotives	0.24	0.25	0.26	0.27	0.28	0.30	0.32	0.33
Other Non-Highway	1.39	1.38	1.33	1.22	1.09	0.92	0.75	0.62
TOTAL NON-HIGHWAY MOBILE SOURCE EMISSIONS	1.63	1.63	1.59	1.49	1.37	1.22	1.07	0.95
GRAND TOTAL: ALL EMISSION CATEGORIES	6.07	6.22	6.11	5.23	4.43	3.75	3.22	2.86

Industry Names and Standard Industrial Classification Codes

Industry Names and SIC Codes

The following is the unabridged listing of industry names used by BEA for the Regional Projections to 2045, along with the corresponding 1987 SIC codes which are included in each industrial category.

INDUSTRY	1987 SIC
Farm	01, 02
Agricultural services, forestry, fishing, and other	07 - 09
Mining	
Metal mining	10
Coal mining	12
Oil and gas extraction	13
Nonmetallic minerals, except fuels	14
Construction	15 - 17
Manufacturing	
Durable goods	
Lumber and wood products	24
Furniture and fixtures	25
Stone, clay, and glass products	32
Primary metal industries	33
Fabricated metal products	34
Industrial machinery and equipment	35
Electronic and other electric equipment	36
Motor vehicles and equipment	371
Other transportation equipment	37 (except 371)
Instruments and related products	38
Miscellaneous manufacturing industries	39
Nondurable goods	
Food and kindred products	20
Tobacco Products	21
Textile mill products	22
Apparel and other textile products	23
Paper and allied products	26
Printing and publishing	27
Chemicals and allied products	28
Petroleum and coal products	29
Rubber and miscellaneous plastics products	30
Leather and leather products	31
Transportation and public utilities	
Railroad transportation	40
Local and interurban passenger transit	41
Trucking and warehousing	42
Water transportation	44
Transportation by air	45
Pipelines, except natural gas	46
Transportation services	47

Communications	48
Electric, gas, and sanitary services	49
Wholesale and retail trade	
Wholesale trade	50, 51
Retail trade	52 - 59
Finance, insurance, and real estate	
Banks, credit agencies, and investment services	60 - 62, 67
Insurance	63, 64
Real estate	65
Services	
Hotels and other lodging places	70
Personal services	72
Business and miscellaneous repair services	73, 76
Auto repair, services, and parking	75
Amusement and recreation services and motion pictures	78, 79
Health services	80
Legal services	81
Educational services	82
Social services and membership organizations	83, 86
Private households	88
Other services	84, 87, 89
Government and government enterprises	
Federal, civilian	—
Federal, military	—
State and local	—

Kentucky: Employment (thousands)

Sort Key = None		1969	1970	1971	1972
01.	All-Industry Total	1,328.1	1,332.7	1,354.8	1,386.2
02.	Farm	144.6	144.1	143.3	143.1
03.	Nonfarm	1,183.5	1,188.7	1,211.5	1,243.0
04.	Agricultural services	4.2	4.4	4.6	4.9
05.	Mining	29.1	31.2	32.6	33.9
06.	Metal mining	0.1	0.1	0.1	0.1
07.	Coal mining	21.3	23.7	25.5	26.7
08.	Oil & gas	4.7	4.5	4.0	4.2
09.	Nonmetalic minerals	3.1	3.0	3.0	2.9
10.	Construction	75.5	69.6	71.3	75.3
11.	Manufacturing	253.3	256.3	254.6	269.9
12.	Durable goods	136.3	139.0	138.0	149.7
13.	Lumber & wood	10.6	10.3	10.1	11.0
14.	Furniture	7.2	6.9	7.1	7.6
15.	Stone, clay, glass	7.4	7.3	7.3	7.8
16.	Primary metals	13.5	14.3	14.3	9
17.	Fabricated metals	19.9	18.8	17.4	--
18.	Indust. machinery	25.1	27.1	27.4	29.0
19.	Electronic equip.	36.0	37.1	36.9	41.3
20.	Motor vehicles	8.1	8.5	8.5	8.8
21.	Other trans. equip.	1.7	1.8	1.9	2.0
22.	Instruments	2.7	2.8	3.0	3.5
23.	Misc. manufacturing	4.1	4.1	4.1	4.5
24.	Nondurable goods	117.0	117.3	116.6	120.3
25.	Food & kindred	25.4	25.0	24.3	23.8
26.	Tobacco products	13.4	13.7	12.7	13.3
27.	Textile mill prod.	3.2	6.0	6.1	6.3
28.	Apparel & textile	30.6	27.2	27.2	28.7
29.	Paper products	4.3	4.7	4.9	5.3
30.	Printing & publish.	13.1	13.6	13.3	13.1
31.	Chemicals	14.4	14.2	13.6	13.9
32.	Petroleum products	1.1	1.2	2.2	1.9
33.	Rubber & plastics	6.2	6.8	7.6	8.5
34.	Leather products	5.3	4.8	4.8	5.3
35.	Transport. & utilities	66.5	68.0	67.1	

Kentucky: Employment (thousands)

Sort Key = None		1969	1970	1971	1972
36.	Railroad transport.	15.6	16.2	15.9	15.
37.	Local & interurban	4.4	4.2	4.0	3.
38.	Trucking	19.5	19.8	18.7	21.
39.	Water transportation	1.5	1.4	1.5	1.
40.	Transportation by air	1.4	1.4	1.4	1.
41.	Pipelines	0.2	0.2	0.2	0.
42.	Transport. services	1.6	1.7	1.7	1.
43.	Communications	11.4	11.9	12.1	12.
44.	Utilities	10.9	11.2	11.6	12.
45.	Wholesale and retail	231.1	236.1	244.8	247.4
46.	Wholesale trade	43.3	45.6	45.5	48.1
47.	Retail trade	187.8	190.4	199.3	199.3
48.	F.I.R.E.	62.7	67.8	73.7	75.0
49.	Banks & investment	22.4	27.2	32.7	30.9
50.	Insurance	16.7	16.9	16.4	16.6
51.	Real estate	23.6	23.7	24.7	5
52.	Services	216.7	216.4	223.8	235.4
53.	Hotels & lodging	11.2	11.1	11.4	11.3
54.	Personal services	24.1	24.5	24.9	25.1
55.	Business services	20.5	21.1	20.5	23.6
56.	Auto repair & parking	8.1	8.3	8.9	9.0
57.	Amusement	11.1	11.2	11.2	11.2
58.	Health services	40.4	41.2	44.1	47.0
59.	Legal services	5.5	5.7	5.7	6.1
60.	Educational services	15.6	14.8	15.1	15.3
61.	Social services	29.5	28.6	29.3	30.3
62.	Private households	38.1	37.1	36.3	35.6
63.	Other services	12.7	12.7	16.4	18.9
64.	Government	244.3	238.9	238.9	233.2
65.	Federal, civilian	41.9	40.8	39.0	39.2
66.	Federal, military	73.3	63.1	60.5	52.4
67.	State and local	129.1	135.0	139.3	141.7

Kentucky: Employment (thousands)

Sort Key = None		1973	1974	1975	1976
01.	All-Industry Total	1,455.8	1,492.3	1,460.5	1,518.
02.	Farm	145.3	149.1	135.8	143.
03.	Nonfarm	1,310.5	1,343.2	1,324.8	1,374.
04.	Agricultural services	5.6	5.7	6.0	6.
05.	Mining	34.2	41.8	49.6	50.
06.	Metal mining	0.1	0.1	(L)	0.
07.	Coal mining	27.1	34.8	42.5	43.
08.	Oil & gas	3.9	4.0	4.1	3.
09.	Nonmetalic minerals	3.0	2.9	2.9	2.
10.	Construction	77.8	75.2	71.3	77.7
11.	Manufacturing	291.4	296.1	262.8	278.2
12.	Durable goods	166.8	171.0	146.5	156.
13.	Lumber & wood	12.7	12.5	11.4	12.3
14.	Furniture	7.9	7.1	5.4	6.2
15.	Stone, clay, glass	8.5	8.5	8.5	8.8
16.	Primary metals	17.1	17.8	15.8	8
17.	Fabricated metals	21.3	21.5	18.7	
18.	Indust. machinery	32.9	35.2	34.4	35.
19.	Electronic equip.	44.8	44.3	33.4	36.5
20.	Motor vehicles	10.7	12.1	10.3	11.1
21.	Other trans. equip.	2.0	2.2	1.7	1.6
22.	Instruments	3.9	4.8	2.6	3.3
23.	Misc. manufacturing	5.1	4.9	4.3	4.6
24.	Nondurable goods	124.6	125.1	116.3	121.8
25.	Food & kindred	23.5	23.0	22.2	22.7
26.	Tobacco products	14.0	14.3	12.7	12.6
27.	Textile mill prod.	6.7	7.2	6.7	7.2
28.	Apparel & textile	30.0	29.2	26.4	28.1
29.	Paper products	5.7	5.9	6.6	7.1
30.	Printing & publish.	13.6	13.7	12.5	12.9
31.	Chemicals	14.4	14.6	14.4	15.5
32.	Petroleum products	1.9	2.7	2.9	3.2
33.	Rubber & plastics	9.0	8.9	6.8	7.3
34.	Leather products	5.8	5.6	5.1	5.2
35.	Transport. & utilities	72.4	73.5	71.5	

Kentucky: Employment (thousands)

Sort Key = None		1973	1974	1975	1976
36.	Railroad transport.	15.8	16.1	15.4	15.1
37.	Local & interurban	3.7	3.7	3.3	3.0
38.	Trucking	22.2	22.6	22.6	22.8
39.	Water transportation	1.5	1.6	1.9	1.9
40.	Transportation by air	1.5	1.5	1.6	1.6
41.	Pipelines	0.2	0.2	0.2	0.2
42.	Transport. services	1.9	1.8	0.9	1.0
43.	Communications	13.3	13.7	13.9	13.9
44.	Utilities	12.5	12.2	11.8	12.2
45.	Wholesale and retail	259.5	264.1	270.1	283.8
46.	Wholesale trade	49.7	50.5	61.5	61.9
47.	Retail trade	209.8	213.6	208.6	221.9
48.	F.I.R.E.	79.0	80.8	79.9	82.3
49.	Banks & investment	32.5	33.2	31.9	32.0
50.	Insurance	16.7	17.3	17.7	18.2
51.	Real estate	29.9	30.4	30.3	[illegible]
52.	Services	247.4	252.0	255.3	26[illegible].6
53.	Hotels & lodging	12.7	12.9	13.0	13.2
54.	Personal services	24.8	24.6	24.5	25.3
55.	Business services	28.7	31.0	30.3	31.0
56.	Auto repair & parking	9.4	9.8	9.8	10.2
57.	Amusement	12.0	12.8	13.4	13.4
58.	Health services	53.4	56.2	61.9	66.9
59.	Legal services	6.7	6.9	7.0	7.3
60.	Educational services	16.2	17.1	13.2	13.2
61.	Social services	30.1	30.2	36.2	35.5
62.	Private households	33.8	30.8	30.0	30.0
63.	Other services	19.6	19.9	16.0	16.5
64.	Government	243.1	254.0	258.2	262.0
65.	Federal, civilian	38.4	39.5	39.9	39.6
66.	Federal, military	57.4	59.7	56.6	58.1
67.	State and local	147.3	154.7	161.7	164.3

Kentucky: Employment (thousands)

Sort Key = None		1977	1978	1979	1980
01.	All-Industry Total	1,575.7	1,643.8	1,663.0	1,638.7
02.	Farm	142.1	145.2	132.6	137.1
03.	Nonfarm	1,433.6	1,498.6	1,530.4	1,501.6
04.	Agricultural services	7.3	8.3	9.0	9.5
05.	Mining	55.1	56.2	58.8	58.1
06.	Metal mining	0.1	(L)	0.1	0.1
07.	Coal mining	47.7	48.5	50.2	48.6
08.	Oil & gas	4.5	4.9	5.6	6.8
09.	Nonmetalic minerals	2.9	2.8	2.9	2.6
10.	Construction	83.6	95.9	97.0	83.8
11.	Manufacturing	291.0	297.4	302.7	283.4
12.	Durable goods	166.3	172.4	176.4	160.2
13.	Lumber & wood	12.1	12.5	13.4	12.9
14.	Furniture	6.7	6.6	6.2	5.3
15.	Stone, clay, glass	9.7	9.8	10.5	9.6
16.	Primary metals	17.4	18.0	19.3	
17.	Fabricated metals	21.9	22.5	21.4	18
18.	Indust. machinery	36.2	38.4	40.1	39.3
19.	Electronic equip.	39.1	40.1	40.5	36.0
20.	Motor vehicles	13.2	14.5	14.1	9.8
21.	Other trans. equip.	1.8	1.7	2.0	1.9
22.	Instruments	3.4	3.6	4.1	3.6
23.	Misc. manufacturing	4.7	4.8	4.9	4.7
24.	Nondurable goods	124.7	125.1	126.3	123.1
25.	Food & kindred	23.1	22.2	21.9	22.0
26.	Tobacco products	12.5	12.1	12.0	10.2
27.	Textile mill prod.	7.5	7.3	7.0	6.6
28.	Apparel & textile	28.7	27.9	27.9	28.0
29.	Paper products	7.3	7.4	7.5	7.4
30.	Printing & publish.	13.5	14.1	15.2	15.7
31.	Chemicals	16.1	16.4	16.2	15.8
32.	Petroleum products	3.7	3.6	3.7	3.7
33.	Rubber & plastics	7.8	9.6	10.4	9.7
34.	Leather products	4.6	4.5	4.4	4.2
35.	Transport. & utilities	76.3	80.5	82.1	81

Kentucky: Employment (thousands)

Sort Key = None		1977	1978	1979	1980
36.	Railroad transport.	15.4	15.5	16.0	15..
37.	Local & interurban	2.9	2.8	2.6	2..
38.	Trucking	25.5	27.9	27.6	27..
39.	Water transportation	2.2	2.3	2.3	2..
40.	Transportation by air	1.7	1.8	1.9	1..
41.	Pipelines	0.2	0.2	0.2	0..
42.	Transport. services	1.1	1.2	1.4	1..
43.	Communications	14.8	15.6	16.5	16..
44.	Utilities	12.6	13.1	13.5	14.1
45.	Wholesale and retail	295.2	314.4	320.8	313.9
46.	Wholesale trade	62.3	67.0	68.2	66.4
47.	Retail trade	232.9	247.4	252.6	247.5
48.	F.I.R.E.	89.7	93.7	93.9	97.9
49.	Banks & investment	34.4	38.4	39.8	43.9
50.	Insurance	19.2	20.0	20.4	20.6
51.	Real estate	36.1	35.3	33.7	..
52.	Services	273.8	286.3	293.9	2..S
53.	Hotels & lodging	13.4	14.7	14.5	14.1
54.	Personal services	26.4	27.6	27.8	27.4
55.	Business services	34.0	36.1	38.6	38.7
56.	Auto repair & parking	11.6	12.5	12.9	13.0
57.	Amusement	14.4	14.8	15.0	15.7
58.	Health services	69.5	73.9	78.4	84.5
59.	Legal services	7.7	8.0	8.8	9.5
60.	Educational services	13.0	13.2	13.8	14.2
61.	Social services	34.8	36.1	36.9	35.1
62.	Private households	30.7	29.9	27.5	24.9
63.	Other services	18.2	19.3	19.8	20.5
64.	Government	261.7	265.7	272.3	276.3
65.	Federal, civilian	38.8	38.2	38.4	40.2
66.	Federal, military	57.0	54.1	53.8	54.8
67.	State and local	165.9	173.4	180.1	181.3

Kentucky: Employment (thousands)

Sort Key = None		1981	1982	1983	1984
01.	All-Industry Total	1,628.6	1,601.0	1,608.2	1,659.
02.	Farm	139.7	140.1	148.9	142.
03.	Nonfarm	1,488.9	1,460.9	1,459.3	1,517.
04.	Agricultural services	10.2	11.0	12.4	13.
05.	Mining	60.6	59.6	48.9	52.
06.	Metal mining	0.1	0.1	0.1	0.
07.	Coal mining	49.8	48.5	38.0	41.
08.	Oil & gas	8.3	8.6	8.5	8.
09.	Nonmetalic minerals	2.5	2.5	2.3	2.3
10.	Construction	78.9	77.0	73.8	79.2
11.	Manufacturing	278.7	252.3	248.6	264.0
12.	Durable goods	156.8	135.3	133.8	147.5
13.	Lumber & wood	11.8	10.2	10.6	11.9
14.	Furniture	4.8	4.3	4.8	5.3
15.	Stone, clay, glass	8.6	8.0	8.0	8.0
16.	Primary metals	18.4	16.3	16.3	2
17.	Fabricated metals	18.1	15.5	14.7	
18.	Indust. machinery	38.8	33.2	30.5	34.3
19.	Electronic equip.	35.2	29.0	29.0	31.4
20.	Motor vehicles	10.9	10.0	10.8	13.5
21.	Other trans. equip.	1.8	1.2	1.2	1.6
22.	Instruments	3.9	3.4	3.6	3.9
23.	Misc. manufacturing	4.5	4.2	4.5	4.3
24.	Nondurable goods	121.9	117.0	114.8	116.5
25.	Food & kindred	21.3	21.1	20.3	19.6
26.	Tobacco products	10.3	9.6	8.4	8.4
27.	Textile mill prod.	6.3	6.3	6.1	6.0
28.	Apparel & textile	26.9	25.9	26.4	26.5
29.	Paper products	7.3	7.0	7.0	7.6
30.	Printing & publish.	15.8	15.3	15.6	16.6
31.	Chemicals	15.4	14.2	13.3	13.5
32.	Petroleum products	4.0	3.9	3.9	3.9
33.	Rubber & plastics	10.6	9.9	10.7	12.0
34.	Leather products	4.0	3.6	3.0	2.5
35.	Transport. & utilities	80.3	77.9	76.0	

Kentucky: Employment (thousands)

Sort Key = None		1981	1982	1983	1984
36.	Railroad transport.	14.4	12.1	10.4	10.4
37.	Local & interurban	2.2	2.3	2.2	2.3
38.	Trucking	26.9	26.5	27.2	31.3
39.	Water transportation	2.2	2.3	2.4	2.7
40.	Transportation by air	1.9	2.1	2.4	2.8
41.	Pipelines	0.2	0.2	0.2	0.2
42.	Transport. services	1.3	1.4	1.5	1.7
43.	Communications	16.7	16.4	15.1	14.0
44.	Utilities	14.5	14.7	14.6	14.5
45.	Wholesale and retail	313.5	314.1	318.1	333.4
46.	Wholesale trade	66.9	65.6	64.3	67.4
47.	Retail trade	246.6	248.5	253.7	266.1
48.	F.I.R.E.	95.6	93.6	92.0	92.5
49.	Banks & investment	42.9	40.8	38.9	38.6
50.	Insurance	20.8	20.7	20.8	21.3
51.	Real estate	32.0	32.2	32.4	32.6
52.	Services	301.6	308.0	320.6	336.4
53.	Hotels & lodging	14.0	14.5	15.0	15.0
54.	Personal services	27.3	27.6	29.0	30.4
55.	Business services	40.3	43.6	47.9	54.0
56.	Auto repair & parking	12.8	13.1	14.0	15.8
57.	Amusement	15.1	14.8	15.2	15.7
58.	Health services	89.8	92.0	95.2	95.9
59.	Legal services	10.0	10.6	10.7	11.1
60.	Educational services	14.2	14.1	14.6	15.4
61.	Social services	33.8	32.8	32.6	32.4
62.	Private households	24.7	24.9	24.4	23.8
63.	Other services	19.6	20.1	22.1	23.0
64.	Government	269.6	267.4	268.9	270.6
65.	Federal, civilian	38.6	39.8	40.6	40.4
66.	Federal, military	54.7	57.6	58.8	57.6
67.	State and local	176.3	170.1	169.5	172.6

Kentucky: Employment (thousands)

Sort Key = None		1985	1986	1987	1988
01.	All-Industry Total	1,694.8	1,722.1	1,769.3	1,817.0
02.	Farm	132.9	134.5	127.7	123.7
03.	Nonfarm	1,561.9	1,587.6	1,641.7	1,693.3
04.	Agricultural services	14.9	15.7	17.3	17.7
05.	Mining	50.5	45.9	44.2	40.5
06.	Metal mining	0.1	0.1	(L)	(L)
07.	Coal mining	39.9	37.0	35.7	32.4
08.	Oil & gas	8.3	6.5	6.1	5.6
09.	Nonmetalic minerals	2.3	2.3	2.4	2.5
10.	Construction	82.7	87.2	92.5	95.1
11.	Manufacturing	262.9	260.1	268.0	280.7
12.	Durable goods	144.9	140.8	144.6	152.7
13.	Lumber & wood	11.7	11.9	12.6	13.6
14.	Furniture	5.5	5.4	5.2	5.2
15.	Stone, clay, glass	8.4	8.8	9.3	9.6
16.	Primary metals	17.5	16.0	16.5	1
17.	Fabricated metals	15.2	15.0	16.3	1
18.	Indust. machinery	34.3	31.9	31.5	32.4
19.	Electronic equip.	28.6	28.3	28.9	30.1
20.	Motor vehicles	14.0	13.0	13.2	15.2
21.	Other trans. equip.	1.8	2.3	2.6	2.8
22.	Instruments	3.6	3.4	3.7	4.3
23.	Misc. manufacturing	4.4	4.8	4.8	5.5
24.	Nondurable goods	118.0	119.3	123.4	128.0
25.	Food & kindred	19.4	19.6	19.3	19.2
26.	Tobacco products	7.9	7.0	6.2	5.9
27.	Textile mill prod.	5.8	5.9	6.2	6.3
28.	Apparel & textile	27.1	27.5	29.3	30.9
29.	Paper products	7.8	7.8	8.3	8.5
30.	Printing & publish.	17.7	18.9	19.7	20.6
31.	Chemicals	13.3	13.0	12.9	13.5
32.	Petroleum products	3.8	3.8	4.1	4.0
33.	Rubber & plastics	13.1	14.0	15.2	16.8
34.	Leather products	2.2	1.9	2.2	2.4
35.	Transport. & utilities	81.6	82.5	86.1	8f

Kentucky: Employment (thousands)

Sort Key = None		1985	1986	1987	1988
36.	Railroad transport.	9.8	8.9	8.1	7.
37.	Local & interurban	2.3	2.2	2.3	2.
38.	Trucking	33.0	34.1	33.1	34.
39.	Water transportation	2.8	2.8	2.9	3.
40.	Transportation by air	3.4	3.9	8.6	9.
41.	Pipelines	0.2	0.2	0.1	0.
42.	Transport. services	1.8	2.1	2.1	2.
43.	Communications	13.5	13.2	13.2	13.
44.	Utilities	14.9	15.1	15.7	15.
45.	Wholesale and retail	347.3	351.9	368.7	383.
46.	Wholesale trade	69.2	67.5	70.3	71.3
47.	Retail trade	278.1	284.4	298.3	311.9
48.	F.I.R.E.	93.3	94.9	94.0	94.5
49.	Banks & investment	38.6	38.6	38.8	37.7
50.	Insurance	21.1	22.1	22.9	23.2
51.	Real estate	33.6	34.2	32.3	
52.	Services	350.0	365.0	383.2	400.3
53.	Hotels & lodging	15.5	16.1	16.3	16.9
54.	Personal services	34.8	36.5	36.5	34.7
55.	Business services	59.8	65.6	71.4	72.2
56.	Auto repair & parking	16.7	17.4	18.4	18.5
57.	Amusement	15.9	15.9	16.8	21.7
58.	Health services	99.7	103.6	109.9	114.6
59.	Legal services	11.6	12.1	12.5	12.5
60.	Educational services	15.8	16.6	17.5	18.5
61.	Social services	32.8	33.3	35.8	38.3
62.	Private households	23.3	22.8	22.0	20.8
63.	Other services	23.8	25.1	26.0	31.5
64.	Government	278.8	284.6	287.8	292.7
65.	Federal, civilian	41.4	41.8	42.2	42.4
66.	Federal, military	60.2	59.4	59.2	58.3
67.	State and local	177.3	183.4	186.3	192.0

Kentucky: Employment (thousands)

Sort Key = None		1989	1990	1991	1992
01.	All-Industry Total	1,863.3	1,912.9	1,915.5	1,961.(
02.	Farm	127.1	125.2	119.4	122.1
03.	Nonfarm	1,736.2	1,787.7	1,796.1	1,838.9
04.	Agricultural services	17.0	18.5	19.3	18.7
05.	Mining	38.5	39.4	35.8	33.2
06.	Metal mining	(L)	(L)	(L)	(L)
07.	Coal mining	31.0	31.8	28.5	26.4
08.	Oil & gas	5.1	4.9	4.9	4.4
09.	Nonmetalic minerals	2.4	2.6	2.4	2.4
10.	Construction	98.8	100.6	98.7	105.9
11.	Manufacturing	290.8	294.6	288.8	293.1
12.	Durable goods	158.8	161.1	155.2	157.3
13.	Lumber & wood	14.4	15.5	15.2	15.3
14.	Furniture	4.8	4.6	4.3	4.6
15.	Stone, clay, glass	10.3	10.6	10.6	11.0
16.	Primary metals	17.4	17.3	16.8	16.9
17.	Fabricated metals	18.5	19.4	19.0	
18.	Indust. machinery	33.0	32.0	29.7	2
19.	Electronic equip.	30.5	30.0	27.4	27.6
20.	Motor vehicles	17.2	19.2	19.5	20.0
21.	Other trans. equip.	3.0	3.0	2.9	3.1
22.	Instruments	4.1	4.0	4.0	4.1
23.	Misc. manufacturing	5.7	5.5	5.8	5.6
24.	Nondurable goods	132.0	133.6	133.6	135.8
25.	Food & kindred	19.0	19.5	20.9	21.4
26.	Tobacco products	5.7	5.6	5.3	5.4
27.	Textile mill prod.	9.7	10.3	9.6	9.9
28.	Apparel & textile	30.6	29.2	29.3	30.3
29.	Paper products	9.1	9.6	9.6	10.1
30.	Printing & publish.	20.7	21.1	21.3	20.7
31.	Chemicals	13.8	14.5	14.9	14.9
32.	Petroleum products	4.1	3.7	3.7	3.8
33.	Rubber & plastics	17.2	17.8	16.8	17.4
34.	Leather products	2.2	2.3	2.1	1.9
35.	Transport. & utilities	91.3	95.6	97.0	

Kentucky: Employment (thousands)

Sort Key = None		1989	1990	1991	1992
36.	Railroad transport.	6.6	6.4	6.3	5.
37.	Local & interurban	2.6	2.8	3.0	3.
38.	Trucking	36.3	38.9	40.0	39.
39.	Water transportation	3.2	3.7	3.8	3.
40.	Transportation by air	10.6	11.7	11.9	12.
41.	Pipelines	0.1	0.1	0.1	0.
42.	Transport. services	2.5	2.9	3.1	3.
43.	Communications	13.4	13.4	13.2	12.
44.	Utilities	16.1	15.7	15.5	15.4
45.	Wholesale and retail	396.6	404.3	405.1	415.0
46.	Wholesale trade	75.6	76.6	77.5	79.5
47.	Retail trade	321.0	327.7	327.6	335.5
48.	F.I.R.E.	95.0	97.1	98.4	96.7
49.	Banks & investment	38.2	38.5	37.8	37.6
50.	Insurance	23.3	23.8	24.9	24.5
51.	Real estate	33.4	34.8	35.7	7
52.	Services	410.0	436.1	447.0	462.9
53.	Hotels & lodging	17.0	17.5	17.1	17.2
54.	Personal services	31.7	34.8	35.2	36.2
55.	Business services	73.6	83.5	83.6	88.5
56.	Auto repair & parking	18.7	19.6	19.9	20.0
57.	Amusement	24.1	24.0	24.2	24.9
58.	Health services	120.1	128.3	136.5	143.3
59.	Legal services	12.9	13.4	13.7	14.4
60.	Educational services	19.1	20.0	22.0	22.1
61.	Social services	40.7	43.1	44.3	45.8
62.	Private households	19.7	18.0	17.7	17.9
63.	Other services	32.4	33.8	32.7	32.5
64.	Government	298.1	301.3	306.0	316.8
65.	Federal, civilian	43.5	45.6	44.5	44.9
66.	Federal, military	57.1	51.3	47.6	54.0
67.	State and local	197.5	204.4	213.9	218.0

Kentucky: Employment (thousands)

Sort Key = None	1993	1998	2000	2005
01. All-Industry Total	2,002.7	2,145.9	2,190.9	2,295.0
02. Farm	118.7	117.5	117.0	114.9
03. Nonfarm	1,884.0	2,028.5	2,074.0	2,180.1
04. Agricultural services	19.1	22.5	23.8	27.0
05. Mining	31.3	27.1	25.4	23.4
06. Metal mining	(L)	N/A	(L)	(L)
07. Coal mining	24.6	N/A	18.9	17.0
08. Oil & gas	4.3	N/A	3.9	3.7
09. Nonmetalic minerals	2.4	N/A	2.6	2.7
10. Construction	109.7	118.9	120.2	125.2
11. Manufacturing	302.7	311.5	313.5	317.3
12. Durable goods	162.9	166.6	166.8	167.9
13. Lumber & wood	16.5	N/A	18.6	19.6
14. Furniture	5.1	N/A	5.2	5.2
15. Stone, clay, glass	11.3	N/A	11.9	12.0
16. Primary metals	16.3	N/A	15.9	6
17. Fabricated metals	20.8	N/A	22.4	
18. Indust. machinery	31.0	N/A	30.1	29.5
19. Electronic equip.	27.3	N/A	25.5	24.4
20. Motor vehicles	21.8	N/A	23.6	24.4
21. Other trans. equip.	3.2	N/A	3.9	4.2
22. Instruments	3.9	N/A	4.0	4.2
23. Misc. manufacturing	5.6	N/A	5.6	5.6
24. Nondurable goods	139.8	144.9	146.8	149.4
25. Food & kindred	22.3	N/A	22.8	22.7
26. Tobacco products	5.3	N/A	4.6	4.2
27. Textile mill prod.	10.3	N/A	10.4	10.2
28. Apparel & textile	31.1	N/A	32.5	32.7
29. Paper products	10.7	N/A	12.5	13.5
30. Printing & publish.	21.2	N/A	22.8	23.7
31. Chemicals	14.8	N/A	15.1	15.1
32. Petroleum products	3.6	N/A	3.5	3.5
33. Rubber & plastics	18.5	N/A	20.9	22.4
34. Leather products	2.0	N/A	1.7	1.5
35. Transport. & utilities	99.5	107.1	109.2	1

Kentucky: Employment (thousands)

Sort Key = None		1993	1998	2000	2005
36.	Railroad transport.	5.2	N/A	5.0	4.
37.	Local & interurban	3.6	N/A	4.1	4.
38.	Trucking	41.9	N/A	47.0	49.
39.	Water transportation	3.8	N/A	3.9	3.
40.	Transportation by air	13.3	N/A	16.0	17.
41.	Pipelines	0.1	N/A	0.1	0.
42.	Transport. services	3.4	N/A	4.4	5.0
43.	Communications	12.8	N/A	12.6	12.4
44.	Utilities	15.4	N/A	16.1	16.5
45.	Wholesale and retail	426.7	462.1	469.3	491.2
46.	Wholesale trade	78.5	N/A	85.5	88.9
47.	Retail trade	348.2	N/A	383.8	402.2
48.	F.I.R.E.	98.1	102.8	106.6	111.0
49.	Banks & investment	37.8	N/A	40.3	41.4
50.	Insurance	25.5	N/A	28.6	30.2
51.	Real estate	34.8	N/A	37.7	3
52.	Services	480.6	545.5	570.8	6
53.	Hotels & lodging	17.2	N/A	19.2	20.5
54.	Personal services	36.4	N/A	38.6	39.6
55.	Business services	95.1	N/A	122.4	138.6
56.	Auto repair & parking	20.8	N/A	23.7	25.5
57.	Amusement	26.9	N/A	31.9	34.2
58.	Health services	147.9	N/A	180.9	201.8
59.	Legal services	15.0	N/A	17.1	18.3
60.	Educational services	22.8	N/A	26.1	28.1
61.	Social services	47.7	N/A	56.9	62.0
62.	Private households	17.9	N/A	15.9	14.6
63.	Other services	32.8	N/A	38.1	41.9
64.	Government	316.3	331.0	335.2	345.4
65.	Federal, civilian	42.4	41.2	40.5	39.3
66.	Federal, military	50.2	50.5	50.3	50.3
67.	State and local	223.8	239.3	244.4	255.8

Kentucky: Employment (thousands)

Sort Key = None		2010	2015	2025	2045
01.	All-Industry Total	2,380.8	2,439.3	2,490.0	2,731.4
02.	Farm	112.0	108.1	99.3	93.9
03.	Nonfarm	2,268.7	2,331.2	2,390.7	2,637.5
04.	Agricultural services	29.8	31.9	34.5	40.2
05.	Mining	21.8	20.6	18.3	15.8
06.	Metal mining	(L)	(L)	(L)	(L)
07.	Coal mining	15.5	14.5	12.5	10.1
08.	Oil & gas	3.5	3.3	3.1	2.7
09.	Nonmetalic minerals	2.7	2.8	2.8	3.0
10.	Construction	129.4	131.9	133.5	146.0
11.	Manufacturing	319.8	320.3	316.2	335.0
12.	Durable goods	168.3	167.9	164.9	174.2
13.	Lumber & wood	20.3	20.6	20.5	21.4
14.	Furniture	5.2	5.2	5.0	5.1
15.	Stone, clay, glass	12.1	12.2	12.3	13.7
16.	Primary metals	15.3	15.0	14.4	[illegible]
17.	Fabricated metals	23.8	24.1	24.3	[illegible]
18.	Indust. machinery	28.9	28.3	27.0	27.[illegible]
19.	Electronic equip.	23.4	22.5	21.0	21.0
20.	Motor vehicles	25.0	25.4	25.7	28.1
21.	Other trans. equip.	4.4	4.6	4.7	5.2
22.	Instruments	4.3	4.4	4.4	4.9
23.	Misc. manufacturing	5.6	5.6	5.4	5.8
24.	Nondurable goods	151.5	152.4	151.2	160.8
25.	Food & kindred	22.5	22.4	21.9	23.1
26.	Tobacco products	3.8	3.5	3.0	2.7
27.	Textile mill prod.	10.0	9.8	9.4	9.7
28.	Apparel & textile	32.8	32.5	30.9	30.6
29.	Paper products	14.3	14.9	15.7	17.8
30.	Printing & publish.	24.4	24.9	25.3	27.6
31.	Chemicals	15.2	15.2	14.9	15.8
32.	Petroleum products	3.4	3.4	3.3	3.5
33.	Rubber & plastics	23.7	24.7	25.8	29.1
34.	Leather products	1.4	1.2	1.0	0.9
35.	Transport. & utilities	119.2	122.4	125.4	13[illegible]

Kentucky: Employment (thousands)

Sort Key = None		2010	2015	2025	2045
36.	Railroad transport.	4.6	4.4	4.0	3.7
37.	Local & interurban	4.6	4.7	4.9	5.5
38.	Trucking	52.3	53.9	55.7	62.5
39.	Water transportation	4.0	4.1	4.1	4.6
40.	Transportation by air	19.0	20.2	21.6	24.9
41.	Pipelines	0.1	0.1	0.1	0.1
42.	Transport. services	5.5	5.9	6.4	7.6
43.	Communications	12.2	11.9	11.4	11.7
44.	Utilities	16.8	17.1	17.1	18.5
45.	Wholesale and retail	510.6	522.9	533.5	589.7
46.	Wholesale trade	91.4	92.8	93.3	101.6
47.	Retail trade	419.1	430.1	440.2	488.1
48.	F.I.R.E.	114.5	116.9	118.7	129.2
49.	Banks & investment	42.4	42.9	43.2	46.6
50.	Insurance	31.5	32.4	33.4	36.9
51.	Real estate	40.6	41.5	42.1	[illegible]
52.	Services	670.2	705.4	747.8	8[illegible]
53.	Hotels & lodging	21.4	22.1	22.8	24.9
54.	Personal services	40.4	40.9	41.1	44.3
55.	Business services	152.2	163.0	176.6	205.2
56.	Auto repair & parking	26.9	28.0	29.2	32.6
57.	Amusement	36.1	37.5	38.9	43.1
58.	Health services	219.8	234.4	253.8	296.9
59.	Legal services	19.1	19.7	20.3	22.5
60.	Educational services	29.7	30.9	32.3	36.6
61.	Social services	66.0	68.9	71.7	79.4
62.	Private households	13.5	12.7	11.3	10.7
63.	Other services	45.0	47.3	49.9	56.3
64.	Government	353.5	359.0	362.8	390.1
65.	Federal, civilian	38.4	37.5	35.9	37.0
66.	Federal, military	50.3	50.3	50.3	50.3
67.	State and local	264.8	271.3	276.7	302.8

Point Source

Emissions Inventory

Growth Factors

Source: BEA Regional Projections to 2045: States
U.S. Department of Commerce
Bureau of Economic Analysis
Regional Economic Analysis Division
August 1995

Computed through interpolation between Present and Future years. 2003 PROJ BEA is used as the Present Year and 2010 BEA (for 2005 and 2008) and 2020 BEA (for 2011, 2014, 2017, and 2020) is used as the Future Year.

MSA	COUNTY	PLANT_ID	FACILITY NAME	SIC Code	2003 BEA	'03 - '05 GROWTH	'03 - '08 GROWTH	2010 BEA	'03 - '11 GROWTH	'03 - '14 GROWTH	'03 - '17 GROWTH	'03 - '20 GROWTH	2020 BEA
Louisville	Bullitt	2	KENTUCKY SOLITE CORP	3295	609.5	1.03	1.08	675.1	1.12	1.17	1.22	1.27	772.3
Louisville	Bullitt	4	FOUR ROSES DISTILLERY INC	2085	1,859.3	1.01	1.04	1,955.4	1.06	1.08	1.11	1.13	2,102.0
Louisville	Bullitt	5	JIM BEAM BRANDS CO	2085	1,859.3	1.01	1.04	1,955.4	1.06	1.08	1.11	1.13	2,102.0
Louisville	Bullitt	19	PUBLISHERS PRINTING CO	2752	905.7	1.01	1.02	935.8	1.04	1.05	1.07	1.08	978.1
Louisville	Bullitt	32	PUBLISHERS PRINTING CO	2721	905.7	1.01	1.02	935.8	1.04	1.05	1.07	1.08	978.1
Louisville	Oldham	12	NEXANS MAGNET WIRE INC	3357	984.2	1.01	1.04	1,032.6	1.06	1.08	1.10	1.13	1,107.3
Louisville	Oldham	12	KENTUCKY STATE REFORMATORY	9223	5,576.2	1.03	1.06	6,076.5	1.09	1.13	1.16	1.20	6,705.0

Point Source

Growth Factor

Summary

POINT SOURCE EMISSIONS AND EMISSION PROJECTION SUMMARY -- 2003 ATTAINMENT, 2005, 2008, 2011, 2014, 2017, & 2020

Using Most-Recent Bureau of Economic Analysis (BEA) Employment Data for Computing Growth Factors -- August 1995

LOUISVILLE MSA

				2003 Attainment (in tpd)			2005 Projected (in tpd)			2008 Projected (in tpd)			2011 Projected (in tpd)			2014 Projected (in tpd)			2017 Projected (in tpd)			2020 Projected (in tpd)		
COUNTY	FACILITY NAME	Plant I.D. #	SIC Code	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd	VOC tpd	CO tpd	NOx tpd
Bullitt	KENTUCKY SOLITE CORP	21-029-00002	3295	0.14	0.12	0.35	0.14	0.12	0.36	0.15	0.13	0.38	0.16	0.13	0.39	0.16	0.14	0.41	0.17	0.15	0.43	0.18	0.15	0.44
Bullitt	FOUR ROSES DISTILLERY INC	21-029-00004	2085	3.56	0.00	0.00	3.61	0.00	0.00	3.69	0.00	0.00	3.77	0.00	0.00	3.86	0.00	0.00	3.94	0.00	0.00	4.03	0.00	0.00
Bullitt	JIM BEAM BRANDS CO	21-029-00005	2085	3.83	0.08	0.25	3.89	0.08	0.25	3.97	0.08	0.26	4.06	0.08	0.26	4.15	0.09	0.27	4.24	0.09	0.28	4.33	0.09	0.28
Bullitt	PUBLISHERS PRINTING CO	21-029-00019	2752	0.19	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.21	0.00	0.00
Bullitt	PUBLISHERS PRINTING CO	21-029-00032	2721	0.38	0.00	0.00	0.38	0.00	0.00	0.39	0.00	0.00	0.39	0.00	0.00	0.40	0.00	0.00	0.40	0.00	0.00	0.41	0.00	0.00
	BULLITT COUNTY TOTAL			8.10	0.20	0.60	8.21	0.20	0.61	8.39	0.21	0.64	8.58	0.21	0.65	8.77	0.23	0.68	8.95	0.24	0.71	9.16	0.24	0.72
Oldham	NEXANS MAGNET WIRE INC	21-185-00004	3323	0.72	0.01	0.02	0.73	0.01	0.02	0.75	0.01	0.02	0.76	0.01	0.02	0.78	0.01	0.02	0.79	0.01	0.02	0.81	0.01	0.02
Oldham	KENTUCKY STATE REFORMATORY	21-185-00012	9223	0.00	0.05	0.07	0.00	0.05	0.07	0.00	0.05	0.07	0.00	0.05	0.08	0.00	0.06	0.08	0.00	0.06	0.08	0.00	0.06	0.08
	OLDHAM COUNTY TOTAL			0.72	0.06	0.09	0.73	0.06	0.09	0.75	0.06	0.09	0.76	0.06	0.10	0.78	0.07	0.10	0.79	0.07	0.10	0.81	0.07	0.10
	LOUISVILLE MSA TOTAL			8.82	0.26	0.69	8.94	0.26	0.70	9.14	0.27	0.73	9.34	0.27	0.75	9.55	0.30	0.78	9.74	0.31	0.81	9.97	0.31	0.82

Population Data from

U of L State Data Center

How Many Kentuckians: Population Forecasts 2001 - 2030

	Census	Census	Projections					
County	1990	2000	2005	2010	2015	2020	2025	2030
Kentucky	3,686,891	4,041,769	4,246,743	4,442,374	4,640,916	4,843,219	5,043,016	5,235,685
Adair	15,360	17,244	18,191	19,138	20,144	21,162	22,127	23,038
Allen	14,628	17,800	19,925	22,169	24,616	27,240	30,021	32,939
Anderson	14,571	19,111	21,977	25,036	28,495	32,347	36,492	40,853
Ballard	7,902	8,286	8,597	8,868	9,142	9,413	9,656	9,857
Barren	34,001	38,033	40,366	42,640	44,978	47,300	49,502	51,524
Bath	9,692	11,085	11,882	12,681	13,496	14,321	15,128	15,891
Bell	31,506	30,060	29,396	28,588	27,588	26,453	25,207	23,856
Boone	57,589	85,991	104,982	126,036	150,709	179,528	212,412	249,143
Bourbon	19,236	19,360	19,392	19,350	19,260	19,110	18,854	18,491
Boyd	51,150	49,752	49,095	48,148	46,975	45,631	44,094	42,372
Boyle	25,641	27,697	28,503	29,273	30,085	30,888	31,573	32,065
Bracken	7,766	8,279	8,698	9,107	9,517	9,902	10,253	10,564
Breathitt	15,703	16,100	16,414	16,627	16,734	16,702	16,550	16,282
Breckinridge	16,312	18,648	20,130	21,554	22,998	24,447	25,846	27,178
Bullitt	47,567	61,236	69,571	77,928	86,778	96,050	105,481	114,909
Butler	11,245	13,010	14,232	15,454	16,741	18,105	19,497	20,895
Caldwell	13,232	13,060	13,047	12,988	12,877	12,723	12,517	12,246
Calloway	30,735	34,177	35,692	37,317	38,631	39,790	40,846	41,932
Campbell	83,866	88,616	90,700	92,385	93,818	94,931	95,542	95,547
Carlisle	5,238	5,351	5,448	5,530	5,605	5,687	5,759	5,807
Carroll	9,292	10,155	10,815	11,442	12,048	12,626	13,166	13,645
Carter	24,340	26,889	28,214	29,406	30,544	31,564	32,425	33,122
Casey	14,211	15,447	16,181	16,853	17,464	18,033	18,550	18,988
Christian	68,941	72,265	73,955	74,791	75,147	75,404	75,345	74,633
Clark	29,496	33,144	35,135	36,932	38,631	40,226	41,637	42,813
Clay	21,746	24,556	26,152	27,615	28,938	30,020	30,904	31,553
Clinton	9,135	9,634	9,890	10,079	10,223	10,318	10,345	10,299
Crittenden	9,196	9,384	9,533	9,645	9,733	9,783	9,774	9,695
Cumberland	6,784	7,147	7,385	7,580	7,747	7,892	8,008	8,085
Daviess	87,189	91,545	92,994	94,022	94,772	95,221	95,237	94,749
Edmonson	10,357	11,644	12,428	13,152	13,854	14,536	15,180	15,775
Elliott	6,455	6,748	6,940	7,122	7,279	7,394	7,460	7,494
Estill	14,614	15,307	15,730	16,048	16,283	16,424	16,460	16,373
Fayette	225,366	260,512	279,005	295,664	311,436	326,446	340,043	351,829
Fleming	12,292	13,792	14,818	15,851	16,929	18,034	19,127	20,198
Floyd	43,586	42,441	41,893	41,052	39,881	38,419	36,688	34,674
Franklin	44,143	47,687	49,196	50,440	51,469	52,255	52,710	52,789
Fulton	8,271	7,752	7,580	7,419	7,257	7,089	6,907	6,706
Gallatin	5,393	7,870	9,618	11,638	14,063	16,911	20,200	23,981
Garrard	11,579	14,792	16,943	19,251	21,840	24,683	27,722	30,920
Grant	15,737	22,384	27,063	32,341	38,599	45,939	54,408	64,125
Graves	33,550	37,028	39,038	41,071	43,261	45,573	47,907	50,203
Grayson	21,050	24,053	25,908	27,698	29,490	31,248	32,950	34,572
Green	10,371	11,518	12,144	12,765	13,412	14,066	14,713	15,339
Greenup	36,742	36,891	37,086	36,989	36,668	36,190	35,566	34,798
Hancock	7,864	8,392	8,720	8,984	9,240	9,471	9,645	9,761
Hardin	89,240	94,174	97,374	100,278	102,989	105,299	107,223	108,851

How Many Kentuckians: Population Forecasts 2001 - 2030

	Census	Census	Projections					
County	1990	2000	2005	2010	2015	2020	2025	2030
Harlan	36,574	33,202	31,591	29,893	28,088	26,228	24,319	22,347
Harrison	16,248	17,983	19,195	20,380	21,590	22,772	23,861	24,815
Hart	14,890	17,445	19,151	20,854	22,638	24,504	26,452	28,449
Henderson	43,044	44,829	45,701	46,303	46,729	46,933	46,831	46,414
Henry	12,823	15,060	16,491	17,912	19,386	20,884	22,359	23,784
Hickman	5,566	5,262	5,116	4,987	4,853	4,712	4,549	4,360
Hopkins	46,126	46,519	46,665	46,644	46,460	46,077	45,442	44,552
Jackson	11,955	13,495	14,504	15,490	16,492	17,460	18,368	19,209
Jefferson	665,123	693,604	706,907	717,376	725,967	732,776	737,210	738,510
Jessamine	30,508	39,041	43,521	48,116	53,174	58,647	64,346	70,114
Johnson	23,248	23,445	23,592	23,550	23,349	23,002	22,477	21,765
Kenton	142,031	151,464	156,074	159,730	162,859	165,463	167,219	167,873
Knott	17,906	17,649	17,449	17,145	16,726	16,173	15,497	14,717
Knox	29,676	31,795	32,856	33,751	34,527	35,124	35,521	35,721
Larue	11,679	13,373	14,397	15,406	16,481	17,632	18,797	19,940
Laurel	43,438	52,715	58,091	63,370	68,810	74,334	79,783	85,088
Lawrence	13,998	15,569	16,678	17,696	18,643	19,503	20,287	20,971
Lee	7,422	7,916	8,214	8,483	8,692	8,830	8,896	8,883
Leslie	13,642	12,401	11,713	10,999	10,241	9,454	8,646	7,828
Letcher	27,000	25,277	24,546	23,660	22,620	21,452	20,169	18,772
Lewis	13,029	14,092	14,860	15,577	16,253	16,877	17,446	17,950
Lincoln	20,045	23,361	25,450	27,520	29,709	32,012	34,336	36,637
Livingston	9,062	9,804	10,298	10,763	11,221	11,651	12,032	12,350
Logan	24,416	26,573	27,993	29,362	30,754	32,140	33,450	34,643
Lyon	6,624	8,080	8,812	9,609	10,522	11,499	12,509	13,585
McCracken	62,879	65,514	66,566	67,329	67,926	68,329	68,391	68,004
McCreary	15,603	17,080	18,135	19,082	19,954	20,745	21,439	22,029
McLean	9,628	9,938	10,224	10,457	10,683	10,889	11,042	11,141
Madison	57,508	70,872	77,378	83,629	89,741	96,102	102,500	108,732
Magoffin	13,077	13,332	13,515	13,590	13,559	13,454	13,253	12,954
Marion	16,499	18,212	19,138	20,049	20,975	21,886	22,751	23,533
Marshall	27,205	30,125	31,598	32,970	34,325	35,607	36,736	37,677
Martin	12,526	12,578	12,652	12,597	12,418	12,165	11,856	11,459
Mason	16,666	16,800	16,929	16,966	16,930	16,834	16,658	16,362
Meade	24,170	26,349	27,647	28,963	30,417	32,045	33,852	35,873
Menifee	5,092	6,556	7,471	8,407	9,403	10,445	11,526	12,645
Mercer	19,148	20,817	21,735	22,549	23,339	24,110	24,795	25,353
Metcalfe	8,963	10,037	10,719	11,377	12,050	12,727	13,392	14,044
Monroe	11,401	11,756	12,028	12,246	12,415	12,538	12,614	12,644
Montgomery	19,561	22,554	24,349	26,089	27,841	29,617	31,394	33,106
Morgan	11,648	13,948	15,258	16,621	18,026	19,368	20,635	21,824
Muhlenberg	31,318	31,839	32,072	32,136	32,033	31,768	31,323	30,678
Nelson	29,710	37,477	42,078	46,792	51,905	57,328	62,881	68,458
Nicholas	6,725	6,813	6,869	6,895	6,884	6,849	6,790	6,695
Ohio	21,105	22,916	24,119	25,271	26,374	27,413	28,354	29,167
Oldham	33,263	46,178	54,441	62,789	71,753	81,508	91,920	102,650
Owen	9,035	10,547	11,575	12,618	13,728	14,911	16,129	17,361
Owsley	5,036	4,858	4,797	4,712	4,610	4,492	4,352	4,186
Pendleton	12,036	14,390	16,004	17,690	19,496	21,385	23,314	25,261

How Many Kentuckians: Population Forecasts 2001 - 2030

	Census	Census	Projections					
County	1990	2000	2005	2010	2015	2020	2025	2030
Perry	30,283	29,390	28,870	28,105	27,111	25,930	24,590	23,077
Pike	72,583	68,736	66,710	64,207	61,342	58,214	54,818	51,158
Powell	11,686	13,237	14,189	15,063	15,866	16,590	17,247	17,820
Pulaski	49,489	56,217	59,875	63,228	66,448	69,558	72,471	75,092
Robertson	2,124	2,266	2,340	2,411	2,476	2,528	2,570	2,597
Rockcastle	14,803	16,582	17,680	18,723	19,716	20,662	21,530	22,299
Rowan	20,353	22,094	22,490	22,856	23,021	23,131	23,136	23,005
Russell	14,716	16,315	17,122	17,830	18,494	19,088	19,584	19,986
Scott	23,867	33,061	38,696	44,851	51,981	60,146	69,167	78,858
Shelby	24,824	33,337	38,811	44,723	51,426	58,906	67,006	75,621
Simpson	15,145	16,405	17,098	17,737	18,411	19,105	19,732	20,260
Spencer	6,801	11,766	15,640	20,416	26,520	34,226	43,718	55,221
Taylor	21,146	22,927	23,622	24,227	24,758	25,168	25,444	25,611
Todd	10,940	11,971	12,671	13,365	14,109	14,871	15,620	16,347
Trigg	10,361	12,597	14,136	15,740	17,472	19,345	21,352	23,468
Trimble	6,090	8,125	9,545	11,134	12,976	15,079	17,408	19,984
Union	16,557	15,637	15,361	15,070	14,776	14,478	14,157	13,813
Warren	77,720	92,522	100,331	108,054	116,102	124,518	133,234	142,201
Washington	10,441	10,916	11,130	11,301	11,457	11,582	11,654	11,658
Wayne	17,468	19,923	21,411	22,863	24,348	25,838	27,284	28,684
Webster	13,955	14,120	14,362	14,573	14,755	14,856	14,876	14,824
Whitley	33,326	35,865	37,208	38,411	39,522	40,466	41,201	41,720
Wolfe	6,503	7,065	7,413	7,715	7,975	8,197	8,376	8,501
Woodford	19,955	23,208	24,896	26,427	27,897	29,288	30,485	31,408

Population Projection

Growth Factors

Population Projection

Growth Factors

This applies to county portions of nonattainment or maintenance areas.

County	MSA	Apportionment Factor	2002 Population	2003 Population		'02 - '03 GROWTH	U of L Est. 2003 Data	Growth Rates '03 - '05 GROWTH	Growth Rates '03 - '08 GROWTH	PROJ 2005 Projections	PROJ 2008 Projections	U of L Est. 2010 Data	Growth Rates '03 - '11 GROWTH	Growth Rates '03 - '14 GROWTH	Growth Rates '03 - '17 GROWTH	Growth Rates '03 - '20 GROWTH
Bullitt	Louisville	100.0%	63,800	65,068	65,068	1.02	65,068	1.03	1.08	67,211	70,558	72,816	1.12	1.17	1.22	1.28
Oldham	Louisville	100.0%	49,310	50,642	50,642	1.03	50,642	1.04	1.10	52,696	55,934	58,123	1.15	1.22	1.28	1.35
			113,110	115,710												
		Lou	**113,110**	**115,710**												

If the *Census of Retail* does not supply the "(Retail GAS Sales," multiply: "County Retail TOTAL Sales" x "Ky. % Sales from GAS" x Apportionment Factor.

(Kentucky 2002 Retail Trade - Geographic Area Series, published May 2005)

Projections			Data	(2000)	(2000)		Step # 1 of 4			Step # 2 of 4		Step # 3 of 4
							(2002)	(2002)		(2002)	(2002)	
PROJ 2011	PROJ 2014	PROJ 2017	U of L Est. 2020	% Urban Population	% Rural Population		Ky. Retail TOTAL Sales ($1000)	Ky. Retail GAS Sales ($1000)	Ky. % Sales from GAS	County Retail TOTAL Sales ($1000)		County % of Ky.'s Retail GAS Sales
72,991	76,205	79,561	82,920	64.57%	35.43%	23,054	$ 40,062,661	$ 4,593,404	11.47%	$ 135,228,261	$ 15,505	2.94%
58,384	61,583	64,957	68,335	65.23%	34.77%	17,608	$ 40,062,661	$ 4,593,404	11.47%	$ 69,609,208	$ 7,982	1.51%

Other Non-Highway

Mobile Source

Emissions Summary

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2003 (Lou03)
Typical weekday for Summer Season, 2003
Date of Model Run: Mar 27 13:07:59: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.33	1.20	12.00	0.13	0.12	116.28	0.03	0.08
21185	Oldham County	1.11	1.38	16.90	0.14	0.15	135.92	0.01	0.07
Totals:		**2.44**	**2.58**	**28.90**	**0.27**	**0.27**	**252.20**	**0.04**	**0.15**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2003 (Lou03)
Typical weekday for Summer Season, 2003
Date of Model Run: Mar 27 13:07:59: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.01	0.03	0.02	0.05	0.06	0.14	1.75
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.17	1.53
Totals:		**0.03**	**0.08**	**0.02**	**0.08**	**0.12**	**0.32**	**3.29**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2005 (Lou205)
Typical weekday for Summer Season, 2005
Date of Model Run: Mar 27 15:03:30: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.43	1.15	12.75	0.13	0.13	122.54	0.03	0.09
21185	Oldham County	0.95	1.33	17.44	0.13	0.16	141.79	0.01	0.08
Totals:		**2.38**	**2.48**	**30.18**	**0.26**	**0.29**	**264.33**	**0.04**	**0.16**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2005 (Lou205)
Typical weekday for Summer Season, 2005
Date of Model Run: Mar 27 15:03:30: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.03	0.02	0.06	0.07	0.15	1.89
21185	Oldham County	0.02	0.05	0.01	0.02	0.06	0.18	1.37
Totals:		**0.03**	**0.08**	**0.02**	**0.09**	**0.13**	**0.33**	**3.27**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2008 (Lou08)

Typical weekday for Summer Season, 2008

Date of Model Run: Mar 27 15:43:18: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.40	1.04	13.56	0.13	0.14	132.18	0.02	0.10
21185	Oldham County	0.74	1.22	18.08	0.12	0.17	150.88	0.01	0.08
Totals:		**2.14**	**2.25**	**31.64**	**0.25**	**0.31**	**283.06**	**0.02**	**0.18**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2008 (Lou08)
Typical weekday for Summer Season, 2008
Date of Model Run: Mar 27 15:43:18: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.03	0.02	0.08	0.07	0.16	1.90
21185	Oldham County	0.02	0.05	0.01	0.02	0.07	0.19	1.18
Totals:		**0.03**	**0.08**	**0.03**	**0.10**	**0.14**	**0.35**	**3.08**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2011 (Loul1)
Typical weekday for Summer Season, 2011
Date of Model Run: Mar 22 15:58:34: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.29	0.91	14.18	0.13	0.15	141.83	0.01	0.10
21185	Oldham County	0.63	1.09	18.72	0.13	0.18	160.39	0.00	0.08
Totals:		**1.92**	**1.99**	**32.89**	**0.26**	**0.33**	**302.22**	**0.01**	**0.18**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

Louisville Area
2011 (Lou11)

Typical weekday for Summer Season, 2011

Date of Model Run: Mar 22 15:58:34: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.02	0.09	0.07	0.16	1.80
21185	Oldham County	0.02	0.05	0.01	0.02	0.07	0.19	1.07
Totals:		**0.03**	**0.08**	**0.03**	**0.11**	**0.14**	**0.36**	**2.87**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2014 (Lou 14)
Typical weekday for Summer Season, 2014
Date of Model Run: Mar 27 15:59:54: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	1.15	0.75	14.56	0.15	0.15	151.16	0.01	0.12
21185	Oldham County	0.59	0.92	19.36	0.16	0.18	170.27	0.00	0.08
Totals:		**1.73**	**1.66**	**33.92**	**0.31**	**0.32**	**321.44**	**0.01**	**0.20**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2014 (Lou 14)

Typical weekday for Summer Season, 2014

Date of Model Run: Mar 27 15:59:54: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.09	0.06	0.16	1.67
21185	Oldham County	0.02	0.05	0.01	0.03	0.07	0.20	1.05
Totals:		**0.04**	**0.09**	**0.03**	**0.12**	**0.14**	**0.36**	**2.72**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2017 (Lou 17)
Typical weekday for Summer Season, 2017
Date of Model Run: Mar 28 08:52:13: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	0.95	0.60	14.89	0.17	0.14	160.13	0.00	0.12
21185	Oldham County	0.57	0.75	20.08	0.19	0.17	180.25	0.00	0.09
Totals:		**1.53**	**1.35**	**34.98**	**0.36**	**0.32**	**340.38**	**0.00**	**0.21**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2017 (Lou 17)
Typical weekday for Summer Season, 2017
Date of Model Run: Mar 28 08:52:13: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.10	0.06	0.15	1.47
21185	Oldham County	0.02	0.05	0.01	0.03	0.07	0.21	1.05
Totals:		**0.04**	**0.09**	**0.03**	**0.12**	**0.13**	**0.36**	**2.52**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2020 (Lou 20)
Typical weekday for Summer Season, 2020
Date of Model Run: Mar 28 08:59:35: 2006 Today's Date: 4/26/2006

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
21029	Bullitt County	0.81	0.49	15.28	0.19	0.14	168.75	0.00	0.13
21185	Oldham County	0.57	0.62	20.87	0.22	0.17	190.23	0.00	0.09
Totals:		**1.39**	**1.11**	**36.15**	**0.41**	**0.32**	**358.98**	**0.00**	**0.22**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

LOUISVILLE AREA
2020 (Lou 20)
Typical weekday for Summer Season, 2020
Date of Model Run: Mar 28 08:59:35: 2006 Today's Date: 4/26/2006

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
21029	Bullitt County	0.02	0.04	0.03	0.10	0.05	0.15	1.33
21185	Oldham County	0.02	0.06	0.01	0.03	0.08	0.22	1.07
Totals:		**0.04**	**0.10**	**0.03**	**0.13**	**0.13**	**0.36**	**2.39**

Appendix I

Notice of Public Hearing and Legal Documention

KENTUCKY DIVISION FOR AIR QUALITY
NOTICE OF PUBLIC HEARING
TO REVISE KENTUCKY'S STATE IMPLEMENTATION PLAN

The Kentucky Environmental and Public Protection Cabinet and the Louisville Metro Air Pollution Control District will conduct a public hearing on July 19, 2006, at 10:00 a.m. in the Board Room of the Louisville Metro Air Pollution Control District, 850 Barret Avenue, Louisville, Kentucky. This hearing is being held to receive comments on a proposed State Implementation Plan (SIP) revision to redesignate the Kentucky portion of the Louisville Kentucky-Indiana ozone nonattainment area to attainment for the eight-hour ozone National Ambient Air Quality Standard. This revision, when approved by U.S. EPA, will redesignate Bullitt, Oldham, and Jefferson Counties to attainment, and document that the ambient monitoring data for 8-hour ozone indicates attainment of the standard.

This hearing is open to the public and all interested persons will be given the opportunity to present testimony. To assure that all comments are accurately recorded, the Division requests that oral comments presented at the hearing also be provided in written form, if possible. To be considered part of the hearing record, comments must be received by the close of business. Comments should be sent to the contact person.

The full text of the proposed SIP revision is available for public inspection and copying during regular business hours (8:00 a.m. to 4:30 p.m.) at the locations listed below. Any individual requiring copies may submit a request to the Division for Air Quality in writing, by telephone, or by FAX. Requests for copies should be directed to the contact person. In addition, an electronic version of the proposed SIP revision document and relevant attachments can be downloaded from the Division for Air Quality's web site at:
http://www.air.ky.gov/homepage_repository/Public+Hearings.htm.

The hearing facility is accessible to people with disabilities. An interpreter or other auxiliary aid or service will be provided upon request. Please direct these requests to the contact person.

CONTACT PERSON: John E. Gowins (Evaluation Section), Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601. The phone number is (502) 573-3382. The FAX number is (502) 573-3787. E-mail addresses are john.gowins@ky.gov.

The Environmental and Public Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, age, religion, or disability and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs, and activities.

Lou-Metro Air Pollution Control District
850 Barret Avenue, Suite 205
Louisville, KY 40204-1745

Ashland Regional Office
1550 Wolohan Drive, Suite 1
Ashland, KY 41102-8942

Bowling Green Regional Office
1508 Westen Avenue
Bowling Green, KY 42104

Florence Regional Office
8020 Veterans Mem Dr, Suite 110
Florence, KY 41042

Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601-1758

Hazard Regional Office
233 Birch Street, Suite 2
Hazard, KY 41701-2179

London Regional Office
875 S Main Street
London, KY 40741

Owensboro Regional Office
3032 Alvey Park Dr W, Suite 700
Owensboro, KY 42303-2191

Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003

Bullitt County Clerk
Nina Mooney Courthouse Annex
149 North Walnut Street
Shepherdsville, Kentucky 40165

Oldham County Clerk
Oldham County Fiscal Building
100 West Jefferson Street
LaGrange, Kentucky 40031

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 19, 2006

John Lyons, Director
Division for Air Quality
803 Schenkel Lane
Franfort, Kentucky 40601

Dear Mr. Lyons:

The Region 4 Office of the Environmental Protection Agency (EPA) received the prehearing submittal dated June 7, 2006 to redesignate the Kentucky portion of the Louisville KY-in nonattainment area (Bullitt, Oldham and Jefferson Counties, Kentucky) as attainment for the 8-hour ozone National Ambient Air Quality Standard (NAAQS). The following comments are provided to strengthen the final submittal and the recommended changes are not necessary for approval of the redesignation.

1. Please clarify what temperatures were used for the MOBILE 6.2 (i.e., Jefferson, Bullitt, Oldham Counties) on page 27 and 28 of the submittal. It is our understanding that Jefferson County has different temperatures than Bullitt and Oldham counties. Per 40 CFR 93.122(a)(6), these temperatures must be used by the transportation partners for conformity determination so this clarification is necessary.

2. EPA suggests a summary of the total reductions that occurred and resulted in the attainment of the 8-hr ozone NAAQS should be included in the main body of the SIP in the Permanent and Enforceable Reductions section to strengthen the submittal. Details could still be referenced in the appendices.

3. The final submittal should indicate that the Commonwealth will work with the Indiana Environmental Agency in maintaining the 8-hr NAAQS and in correcting any future violations, because this is an interstate nonattainment area.

If you have any questions, please contact me or have your staff contact Heidi LeSane of the EPA Region 4 staff at 404-562-9074.

Sincerely,

Kay T. Prince
Chief
Air Planning Branch

Appendix J

Statement of Consideration

STATEMENT OF CONSIDERATION
RELATING TO SIP REVISION FOR THE LOUISVILLE AREA REDESIGNATION TO ATTAINMENT
FOR 8-HOUR OZONE
Amended After Comments

Environmental and Public Protection Cabinet

Department for Environmental Protection
Division for Air Quality

(1) A public hearing on the State Implementation Plan (SIP) revision for redesignation of the Kentucky portion of the Louisville KY-IN MSA 8-Hour Ozone Nonattainment Area to attainment for the 8-hour ozone standard was held on July 19, 2006, at 10:00 a.m. The hearing was held at the offices of the Louisville Metro Air Pollution Control District, 850 Barret Avenue, Louisville, Kentucky. Written and oral comments were received during the public comment period.

(2) The following individuals attended and/or provided written and/or oral comments:

Name and Title	**Organization**
Robert Ukeiley	Law Office, Berea, KY
Tom FitzGerald	Kentucky Resources Council, Inc., Frankfort, KY
Jenny Macdonald	Kentucky Resources Council, Inc., Frankfort, KY
Sarah Lynn Cunningham	Louisville, KY
Wallace McMullen	Greater Louisville Sierra Club, Louisville, KY
Kay T. Prince	USEPA, Region IV Atlanta, GA

(3) The following individuals from the Kentucky Environmental and Public Protection Cabinet attended the public hearing and drafted responses to comments received during the public review period:

Lona Brewer, Environmental Branch Manager	Division for Air Quality
John Gowins, Environmental Control Supervisor*	Division for Air Quality
Susan Weaver, Environmental Technologist III	Division for Air Quality
John S. Lyons, Director	Division for Air Quality

* Agency moderator

Response to Comments on the proposed revision to the State Implementation Plan (SIP) to redesignate the Kentucky portion of the Louisville-Boyd County as attainment for the National Ambient Air Quality Standard (NAAQS) for ozone.

1. **Comment:** It is clear that the reason that Oldham County has a design value below 0.085 for 2002-2005 is simply because of the usually wet and cool summer in 2004.
Robert Ukeiley, law office, Berea, KY

Response: The Cabinet does not agree. While weather normally fluctuates each year, becoming cooler or warmer, or more wet or more dry, than the previous year, the overall averaging of ambient data across three years is to lessen the impact of any one-year aberration in the data. Overall reductions in the ozone precursor emissions, which are permanent and enforceable have been documented. The weather will continue to fluctuate however, this agency is committed to the mitigating the impact of ozone-forming precursors and maintaining the attainment of the National Ambient Air Quality Standard (NAAQS).

2. **Comment:** Last year, 2005, saw a 4^{th} highest ozone value of 0.089 in Oldham County and there is no reason to think that this will not continue in 2006 and beyond
Robert Ukeiley, law office, Berea, KY

Response: The Cabinet does not agree. The 8-Hour Ozone NAAQS uses the fourth high maximum reading for each year averaged over a 3-year period. Making an assumption that the standard will be violated based on the assumption that previous monitoring levels are constant is contrary to the standard itself.

3. **Comment:** Global warming means that ozone levels will increase over time.
Robert Ukeiley, law office, Berea, KY

Response: The Cabinet acknowledges this comment. However global warming and the related international and federal policies are outside the scope of this proposed SIP revision.

4. **Comment:** EPA is currently on a court ordered schedule to revise the ozone NAAQS. It is not an appropriate use of DAQ's limited resources to spend time re-designating an area that will likely be designated non-attainment for the new standard before or shortly after re-designation to attainment is finalized.
Robert Ukeiley, law office, Berea, KY

Response: The Cabinet does not agree. USEPA is required to review all NAAQS every five years. Sometimes this process gets diverted into the court system and delays will occur. However, this review process is on-going and separate from the states' attempts to manage air quality issues under the current requirements issued by USEPA.

5. **Comment:** If EPA follows CARB's lead with its revised ozone NAAQS all three counties will still have a design value above the new NAAQS.
Robert Ukeiley, law office, Berea, KY

Response: The Cabinet acknowledges this comment; however it involves speculation as to what EPA may do in the future. As stated in response 2 above, We currently have three years of ambient data meeting the NAAQS, and have documented permanent and enforceable reductions to ozone precursors, thus the obligation is now to present this information to the U.S. EPA and ask for the designation status of the area to reflect the current data trends.

6. **Comment:** Based on the ambient monitoring data for the 7 monitoring stations over the 2002-2005 period, the calculated values for each monitor are below the National Ambient Air Quality Standard of .085 ppm, demonstrating attainment of the 8-hour regulatory standard.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet concurs with this comment.

7. **Comment:** KRC acknowledges that the attainment of the standard is in part due to local and regional reductions in emission of ozone precursors, although the District is correct in stating that the overall favorable pattern of weather conditions also contributed to lower levels of ozone formation during the 2002-2005 period.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet concurs with this comment.

8. **Comment:** Attainment of the current regulatory standard is a step towards protection of public health, but is not an appropriate endpoint, since there is a substantial body of evidence indicating that adverse health effects occur from exposure to ozone at concentrations and for the durations at and below those allowed by the current standard.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet concurs in part. The 8-hour ozone standard is more than a step towards public protection; it is the legal standard in place that states are required to meet. It is more protective of public health and more stringent than the previous 1-hour ozone standard. If at some future point in time U.S. EPA promulgates a new more stringent standard to address public health issues, the Cabinet will respond appropriately.

9. **Comment:** The regulatory approach in the current NAAQS allows the District and Commonwealth to use the 4th highest value in demonstrating attainment of the standard, so that exceedances of the standard that may have occurred (and which in fact did occur during the 2002-2005 period at several of the monitors) are ignored.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet agrees with the comment regarding the regulatory approach,

however the Cabinet disagrees that the exceedances are ignored. An exceedance of the standard is not a violation of the standard. The monitored values are considered in accordance with EPA requirements. The overall averaging of ambient data across three years and the use of the 4th highest monitor reading is to lessen the impact of any aberration of weather or local circumstances on the data.

10. **Comment:** The Health Effects Committee of the Louisville Metro Air Quality Task Force acknowledged that additional reductions below the current regulatory standard are both necessary and advisable to provide the required margin of safety that allows for and compensates for scientific uncertainty, as well as the lack of precise predictions regarding the health impacts of air pollutants on a multiplicity of potentially susceptible subpopulations.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment; however the Division for Air Quality's mission statement is to achieve and maintain the NAAQS, which are designed to protect the health and welfare of the nation. We currently have three years of ambient data meeting the NAAQS, and have documented permanent and enforceable reductions to ozone precursors, thus the obligation is now to present this information to the U.S. EPA and ask for the designation status of the area to reflect the current data trends.

11. **Comment:** The Task Force recommended that the District Board establish an ongoing and continuous process of review of sources of ozone precursor emissions from all sectors of the economy, and develop and implement policies, practices and standards in order to continue progress towards reduction in ambient concentrations of ozone and precursor pollutants in order to protect public health with an adequate margin of safety.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment.

12. **Comment:** KRC encourages the Louisville Metro Air Pollution Control District to move forward with the effort to achieve additional reductions below the current regulatory standard, and applauds the recognition by the District Board that attainment of the 8-hour standard is a step towards clean air in Louisville, but is not an appropriate endpoint in protection of public health from ozone exposure.
Tom FitzGerald, Jenny Macdonald, Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment.

13. **Comment:** As an asthmatic, I must significantly restrict my work and recreational activities during Air Quality Alert days. Evidently, I need my governments to do more than rely upon the weather and federal minimums to protect my health.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet does not agree. As stated above this agency was able to document air quality that meets the NAAQS for ozone; and overall reductions in the

ozone precursors that are permanent and enforceable. The weather will continue to fluctuate into the future, but this agency is committed to the mitigating the impact of ozone-forming precursors and maintaining the National Ambient Air Quality Standard (NAAQS). The mere fact that the commenter is aware of Air Quality Alert days speaks to the tremendous amount of outreach being performed on local, state and national levels to alert those sectors of the population who are most sensitive to this pollutant.

14. **Comment:** Only one of the graphs in this document properly starts its y-axis at zero. If one didn't look closely, one could easily, but inaccurately, conclude that air pollution will come close to ending.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet does not agree. The formats of the graphs presented in this document were done in order to provide visual examples of the data described in the narrative and tables. Axis endpoints were utilized that were meaningful and did not waste space.

15. **Comment:** Graph 1 unnecessarily visually eliminates nearly 88% of the pollution it's supposed to depict.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet does not agree. Graph 1 compares average rainfall and average temperature over the years 2000 to 2005. It does not depict pollution.

16. **Comment:** It is misleading to discuss tailpipe emissions in 2002-2005 in Jefferson County without mentioning the shut down of its pioneering inspection and maintenance (VET) program.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet does not agree. The VET program was legislatively mandated to end November 1, 2003. The years used to show attainment of the standard were 2003, 2004, and 2005. There were at least two years without the program used in determining attainment. Further, the VET was not included in any of the mobile model runs that projected emissions into the future.

17. **Comment:** Our local VMT continues to grow exponentially, and should be acknowledged in the summary report.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment. The VMT are included in Appendix E.

18. **Comment:** The report fails to acknowledge that the EPA long ago ceased enforcement of the Corporate Average Fuel Efficiency (CAFÉ) standards or that most new vehicle

purchased fall into the light truck category which is still not required to meet the more efficient CAFE or lower emissions standards imposed on passenger cars.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment, however it appears to be beyond the scope of this proposed SIP revision.

19. Comment: How can extended warranties on emission control devices count toward the SIP when—without a VET program—very few motorists would ever discover that their automobile's emission control devices had failed, much less invoke their extended warranties?
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment. The purpose for the requirement to extend the warranties on emission control devices was to encourage owners to have the equipment repaired/replaced in the event of failure. The extension of the warranty increases the likelihood that the owner will take the vehicle in for the repair if it is covered under a warranty. The MOBILE 6.2 model takes this into consideration when generating emission factors.

20. Comment: The discussion on page 8 refers to federal legislation commonly called the "2007 Highway Rule." Its fuel standards only began this summer. The engine rules don't begin until the 2007 model year. Because diesel engines are typically driven 15-20 years before being finally retired, the full impact of this rule could easily until [sic] 2027—much longer than implied.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment. The draft SIP revision references "Heavy Duty Engine, Vehicle and Fuel Standards." This was a two-phase program implemented by EPA. The first phase required a 50% reduction in emissions of NOx from 2004 highway diesel engines and set new emissions standards for heavy-duty gasoline-fueled engines and vehicles for 2005. The second phase established the lower sulfur content requirements that for gasoline began in June 2006, followed by heavy-duty diesel engine requirements due in 2007. Additional language has been added to the narrative to clarify these phases of the rule.

21. Comment: UPS recently announced that it will soon begin a billion-dollar-plus expansion of its Louisville sorting hub. When finished, significantly more large planes will be landing and taking off daily. Does this report include those additional emissions?
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet acknowledges this comment. There are no emissions attributed to the UPS expansion at the airport in the inventories, however airport emissions were generated and projected using the EPA approved Emissions and Dispersion Modeling System (EDMS) model.

22. **Comment:** Models are predicated on design assumptions. It is my understanding that the models used to calculate auto emissions assume that all drivers are minding the speed limit. In reality, the norm is to exceed the limit by 5-15 mph. Particularly at highway speeds, excessive speed decreases fuel efficiency and increases emission rates. If the models cannot reflect reality, the report should at least acknowledge that flaw in the model.
Sarah Lynn Cunningham, P.E. Kentucky Resources Council, Inc.

Response: The Cabinet does not agree. As explained in Appendix D, the Kentucky Transportation Cabinet provides road classifications, Daily Vehicle Miles Traveled (DVMT) per road classification per county, and estimated average speeds for each road classification for Bullitt and Oldham Counties utilizing the Highway Performance Monitoring System (HPMS). For Jefferson County, KIPDA maintains a travel demand model (TDM) to estimate transportation system capacities, speeds, and DVMT in the five counties surrounding Louisville. This is the data that is used in running the Mobile model for onroad vehicle emissions.

23. **Comment:** It is ironic that the biggest part of the reductions in VOCs and NOx shown in the SIP tables come from motor vehicles, even though automobile emissions testing has been discontinued, and Louisville and the Commonwealth of Kentucky are doing little to reduce on-road motor vehicle air emissions.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet does not agree. As stated in the SIP revision, in 2004 the Tier 2 Vehicle Emissions and Fuel Standards federal requirement began to be phased in, which required a single set of federal tailpipe emission standards the apply to all passenger cars, light trucks, and larger passenger vehicles. In addition, the sulfur content of gasoline was required to be significantly reduced by 2006. These reductions have been quantified in the highway mobile model runs. Additionally, in determining that the proper inputs were used in the model, it was discovered that the Indiana request to redesignate Floyd and Clark Counties included a new 2003 regional mobile transportation conformity budget and that there was an error in the total emissions table of 0.72 tons per day. Since transportation planning is done on a regional basis, the same budget must be used for the entire region, which includes those portions in Kentucky as well as Indiana. Therefore, Kentucky's stated transportation conformity budget has been lowered and now reflects a 2003 conformity budget of 40.97 tons per day VOC and 95.51 tons per day NOx and the emissions numbers have be corrected.

24. **Comment:** The SIP document shows large reductions in this category of mobile source air emissions, with the reductions projected to come entirely from old cars disappearing from the roads and Federal regulations taking effect.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet acknowledges this comment. Fleet turnover is a recognized phenomenon that reduces emissions due to the replacement of older, less efficient

vehicles with newer, more efficient vehicles. Previous responses above have discussed the federal programs that reduce emissions from vehicles.

25. **Comment:** The tables in the SIP project optimistic looking permanent emission reductions, however it is easy for citizens to wonder if these nice numbers are going to translate into real improvements in air quality.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet acknowledges this comment. The projected emissions were calculated using approved methodology, and demonstrates maintenance of the emissions level that allowed for attainment of the standard through the year 2020.

26. **Comment:** We will be happy if the projected low emissions come true. We will celebrate clean air no matter how it comes about.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet concurs with this statement.

27. **Comment:** We note that the maintenance plan section of the SIP has some desirable provisions such as the requirement for Best Available Control Technology (BACT), Prevention of Significant Deterioration (PSD), and the maintenance of inspections in Jefferson County.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet concurs with this statement.

28. **Comment:** The provision that none of the contingency measures should be implemented for 18 months after establishing the need for more measures in unacceptable. The SIP should require these corrective measures to be implemented as fast as reasonably possible when needed.
Wallace McMullen, Greater Louisville Sierra Club

Response: The Cabinet agrees in part. The language in the redesignation request states that the appropriate contingency measures will be implemented no later than 18 months after a monitored violation. The review, analysis, and determination of appropriate control measures can be implemented sooner at a local level than at a state level. Additionally that time frame also takes into account time for public review and response by the public as well as review of state regulations by committees of the General Assembly. The implementation will occur as quickly as reasonably possible, but will be completed no longer than 18 months after a monitored violation.

29. **Comment:** I remain opposed to any form of implementation of a vehicle emission testing/inspection program. I believe that our air quality has actually been better since we eliminated the old VET program. Automobiles are of a new breed now and testing only dumps more junk in the air as 98% of cars will pass an exam.
Don Warwick

Response: The Cabinet acknowledges this comment, however it appears to be beyond the scope of this SIP revision.

30. **Comment:** Please clarify temperatures on page 27 and 28 of the submittal what temperatures were used for the MOBILE6.2 model runs. It is our understanding that Jefferson County has different temperatures than Bullitt and Oldham counties. These temperatures must be used by the transportation partners for conformity determination so this clarification is necessary.
Kay T. Prince, USEPA

Response: The Cabinet acknowledges this comment. The temperature data used in developing the mobile emissions budgets was included in Appendix D. However, in order to ensure a review of the applicable appendices documentation is unnecessary, the temperatures used have now been included in the narrative.

31. **Comment:** EPA suggests a summary of the total reductions that occurred and resulted in the attainment of the 8-hr ozone NAAQS should be included in the main body of the SIP in the Permanent and Enforceable Reductions section. Details could still be referenced in the appendices.
Kay T. Prince, USEPA

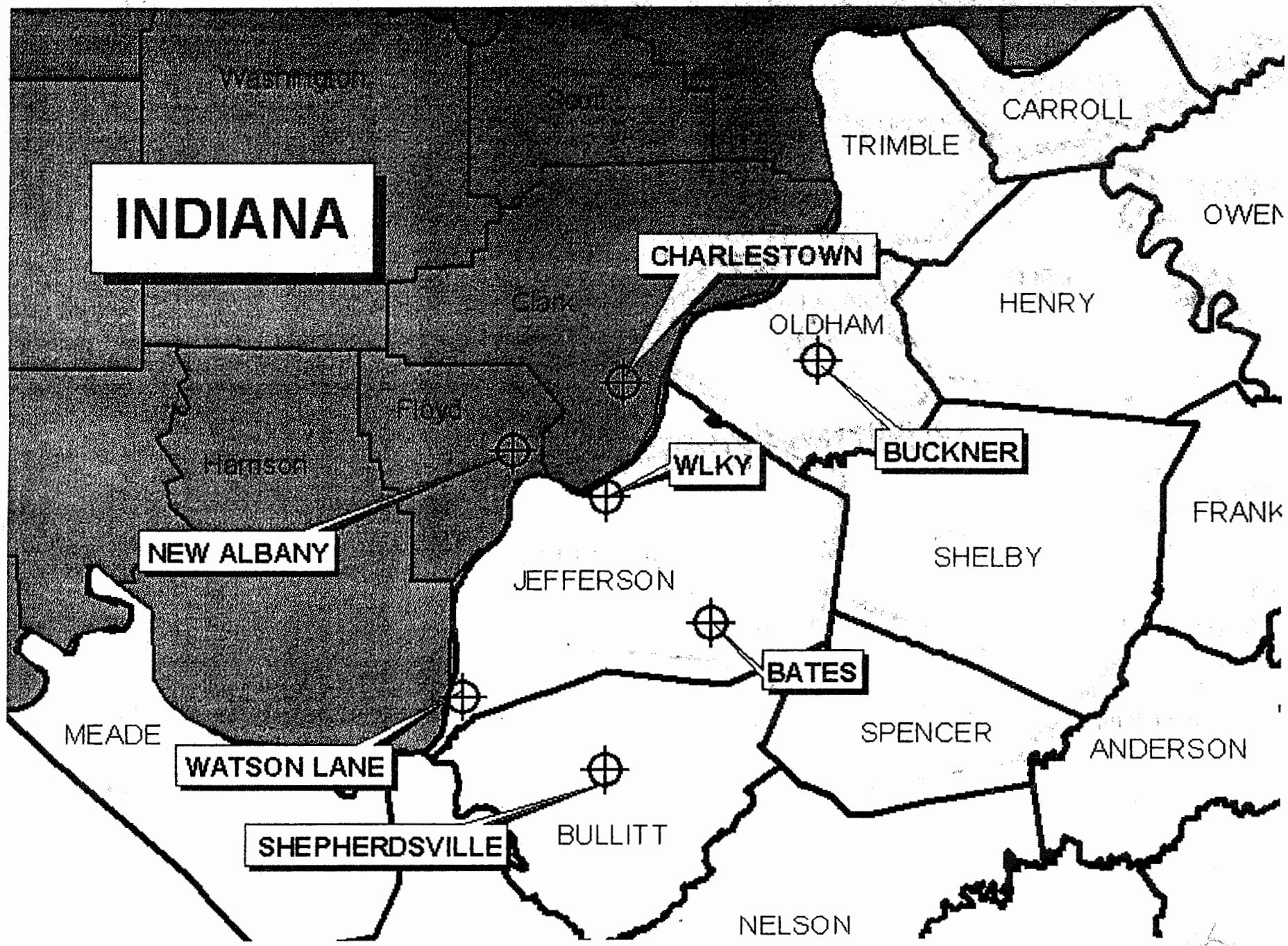
Response: The Cabinet acknowledges this comment, however the Cabinet feels that the level of detail regarding permanent and enforceable reductions contained in the appendices is sufficient.

32. **Comment:** The final submittal should also indicate that the Commonwealth will work with the Indiana Environmental Agency in maintaining the 8-hr NAAQS and in correcting any future violations because this is an interstate nonattainment area.
Kay T. Prince, USEPA

Response: The Cabinet acknowledges this comment, however it appears unnecessary. As duly pointed out, this is a multistate area and has been for numerous years. Kentucky will continue to work with adjacent states to research the best means of addressing air quality issues. Within this document the Cabinet will commit to addressing appropriate issues over which it has primacy in this interstate area.

Appendix K

Monitor Locations


INDIANA
Washington
Scott
Clark
Floyd
Harrison
CHARLESTOWN
NEW ALBANY
WLKY
BUCKNER
CARROLL
TRIMBLE
OWEN
HENRY
OLDHAM
FRANK
SHELBY
JEFFERSON
BATES
SPENCER
ANDERSON
MEADE
WATSON LANE
SHEPHERDSVILLE
BULLITT
NELSON