STATEMENT OF CONSIDERATION

RELATING TO SIP REVISION FOR THE ASHLAND AREA COUNTIES OF BOYD AND A PORTION OF LAWRENCE COUNTY, KENTUCKY, REDESIGNATION TO ATTAINMENT FOR THE ANNUAL $PM_{2.5}$ STANDARD
Amended After Comments

Energy and Environment Cabinet

Department for Environmental Protection

Division for Air Quality

A public hearing on the State Implementation Plan (SIP) revision for redesignation of Boyd County and a portion of Lawrence County to attainment for the annual $PM_{2.5}$ standard was scheduled for 6 p.m., December 22, 2011. The public hearing was cancelled after this agency received no requests by December 15th to conduct the hearing. Written comments were received during the public comment period.

The following individuals from the Kentucky Environmental and Public Protection Cabinet drafted responses to comments received during the public review period.

John Gowins, Environmental Control Supervisor Division for Air Quality

Susan Weaver, Internal Policy Analyst III Division for Air Quality

Response to Comments for the proposed revision to the State Implementation Plan (SIP) to redesignate Boyd County and a portion of Lawrence County as attainment for the National Ambient Air Quality Standard (NAAQS) for annual $PM_{2.5}$.

1. **Comment:** The Visibility Improvement State and Tribal Association of the Southeast (VISTAS) 2005 referenced under the Demonstration section appears to be a typo. It is our understanding that VISTAS did not develop a 2005 emissions inventory. Please confirm.
   (R. Scott Davis, U.S. EPA)

   Response: The Cabinet acknowledges this comment. The reference to the 2005 VISTAS inventory has been deleted from Chapter 4, Base Year Emissions Inventory, and all inventory details have been clarified in the background and demonstration.

2. **Comment:** The first paragraph (page 32) of the State Implementation Plan (SIP) narrative appears to imply a connection between VISTAS' projection growth and control files discussed in Appendix D in a VISTAS report that was used to develop the 2009 and 2018 inventories, and the 2015 and 2022 projection inventories used in this redesignation SIP. However, this is not the case, since interpolation was used to develop the 2015 inventory from the VISTAS data and extrapolation was used to develop the 2022 inventory.
(R. Scott Davis, U.S. EPA)

   Response: The Cabinet acknowledges this comment. The Cabinet added description of the interpolation calculation used for 2015 and 2022 to the inventory narration of Chapter 4, Emission Inventory Demonstration. The nonroad and area emissions inventory spreadsheets have been added to Appendix B.

3. **Comment:** It is not clear how extrapolation was used to develop the 2022 inventory. Can you provide detail on how extrapolation was used to develop 2022 inventory?
(R. Scott Davis, U.S. EPA)

   Response: The Cabinet acknowledges this comment. The descriptions of calculations developing the inventory numbers has been added to the narrative of Chapter 4, Emission projections, and are included in the spreadsheets of Appendix B regarding pollutant by type and county. Interpolation and extrapolation was used for nonroad and area sources, and spreadsheets have been added to Appendix B of this submittal.

4. **Comment:** It is not clear how interpolation was used to develop the 2015 inventory for stationary and mobile sources. It is not clear if the on-road and mobile source inventories for 2009 and 2018 were developed using the MOVES model. Please explain.
(R. Scott Davis, U.S. EPA)

   Response: The Cabinet acknowledges this comment. The Cabinet added a clarifying statement that MOVES was used for all mobile numbers. It is further discussed on page A-2 of Appendix C in the KYOVA document that all mobile inventory years were developed using MOVES. Kentucky used our own KyEIS numbers for stationary sources and extrapolated to 2015 and 2022. Chapter 4, Emission Projections, Background and Demonstration, for the KYOVA and KYTC Travel Demand Model, were updated to reflect these clarifications.

5. **Comment:** All 2008 attainment emissions inventory source categories for the PM2.5 precursor pollutants are not presented in specific detail in Appendix B and the VISTAS report. Emissions inventory specifics for the area, non-road and on-road sources specific to the Kentucky nonattainment counties must be presented.
(R. Scott Davis, U.S. EPA)

   Response: The Cabinet acknowledges this comment. The Cabinet has included specific details for all nonroad and area inventories in Appendix B. There are also summary tables for nonroad and area regarding by pollutant type and county.

6. **Comment:** The SIP does not discuss the quality control procedure with respect to the inventory development. Please explain what quality control measures were used with respect to the inventory.
(R. Scott Davis, U.S. EPA)

Response: The Cabinet acknowledges this comment. The Cabinet added a clarifying statement which explains that this agency has developed and submitted a point source emissions inventory quality assurance project plan (QAPP) which was approved in a letter from EPA dated August 18, 2010 from the Chief of Air Quality Modeling and Transportation Section, R. Scott Davis. This reference was added to Chapter 4, Base Year Emission Inventory Background and to Appendix B.

7. **Comment:** Chapter 2 indicates there is a modeling component required to address Clean Air Act (CAA) section 107(d)(3)(E)(i) and that this is discussed in Chapter 3. However, such discussion does not appear to be included in Chapter 3 and would be helpful. The ambient monitoring data may be sufficient without modeling.
(R. Scott Davis, U.S. EPA)

Response: The Cabinet acknowledges this comment. The Cabinet modified the reference in Chapter 2 (i) to reflect that no modeling was required and not considered in the redesignation request.

8. **Comment:** Each requirement listed throughout the narrative is delineated as being one out of a number of requirements for a particular aspect of the submittal (e.g., 1 of 4, 2 of 4, 3 of 4, 4 of 4). Please clarify what the source of the requirements numbering is.
(R. Scott Davis, U.S. EPA)

Response: The Cabinet acknowledges this comment. The overall requirements are taken from the U.S. EPA *Procedures for Processing Requests to Redesignate Areas to Attainment*, John Calcagni, September 4, 1992, as stated in Chapter 2.

9. **Comment:** Below the titles of Chapter 3, 4, 5 and 6 are references to sections for the CAA. These references appear to be intended to indicate which section of the CAA the discussion in the chapter addresses. Please review to ensure the references shown are the ones intended. For example:

   a) Chapter 4 lists 107(d)(3)(E)(iii), which is the requirement to show permanent and enforceable improvement in air quality. It seems 107(d)(3)(E)(iv) should also be indicated here since Chapter 4 also addresses elements of that section, such as the attainment inventory, maintenance demonstration, and verification of continued attainment (i.e, part of the maintenance plan).
   b) Listed below the title of Chapter 5 are references to the CAA sections 107(d)(3)(E)(ii), (iv) and (v). However it appears this chapter only addresses requirements from CAA section 107(d)(3)(E)(v).

c) Listed below the title of Chapter 6 is a reference to CAA section 107(d)(3)(E)(v). However, the contingency plan is a requirement of section 107(d)(3)(E)(iv) (i.e., it is part of the maintenance plan).

(R. Scott Davis, U.S. EPA)

Response: The Cabinet acknowledges this comment. The narrative has been corrected for each chapter.