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February 20, 2025

Ms. Jeaneanne Gettle  
Acting Regional Administrator  
U.S. EPA, Region 4  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

RE: Submittal of the Kentucky State Implementation Plan Revision, Satisfying the 2010 1-Hour Sulfur Dioxide National Ambient Air Quality Standards (NAAQS) Second 10-year Maintenance Plan Requirements for the Campbell-Clermont, KY-OH Maintenance Area

Dear Ms. Gettle:

The Kentucky Energy and Environment Cabinet (Cabinet) submits this letter concurrent with a revision to the Kentucky State Implementation Plan (SIP) regarding the 2010 sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS) second 10-year maintenance plan for the Kentucky portion of the Campbell-Clermont, KY-OH maintenance area (hereinafter "the Area"). Specifically, the Cabinet has provided a submittal that contains a second maintenance plan for the Area demonstrating continued attainment for an additional ten years after the initial 10-year maintenance period as outlined in Clean Air Act (CAA) Section 175A(b).

On October 4, 2013, EPA designated portions of Campbell County, Kentucky and Clermont County, Ohio as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS. On February 22, 2016, the Cabinet submitted a redesignation request and initial 10-year maintenance plan to EPA. On March 10, 2017, EPA approved the Cabinet's redesignation request and initial 10-year maintenance plan for the Area. The Cabinet requests EPA approve this subsequent SIP revision for the Area due to significant improvements in air quality that indicate continued maintenance of the 2010 SO<sub>2</sub> NAAQS will occur for the duration of the second maintenance period (i.e. 2037).

In accordance with 40 CFR 51.102, the proposed SIP revision was available for public review and comment from December 4, 2024, until January 10, 2025. There were no

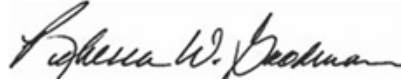
Ms. Jeaneanne Gettle

Page 2

February 20, 2025

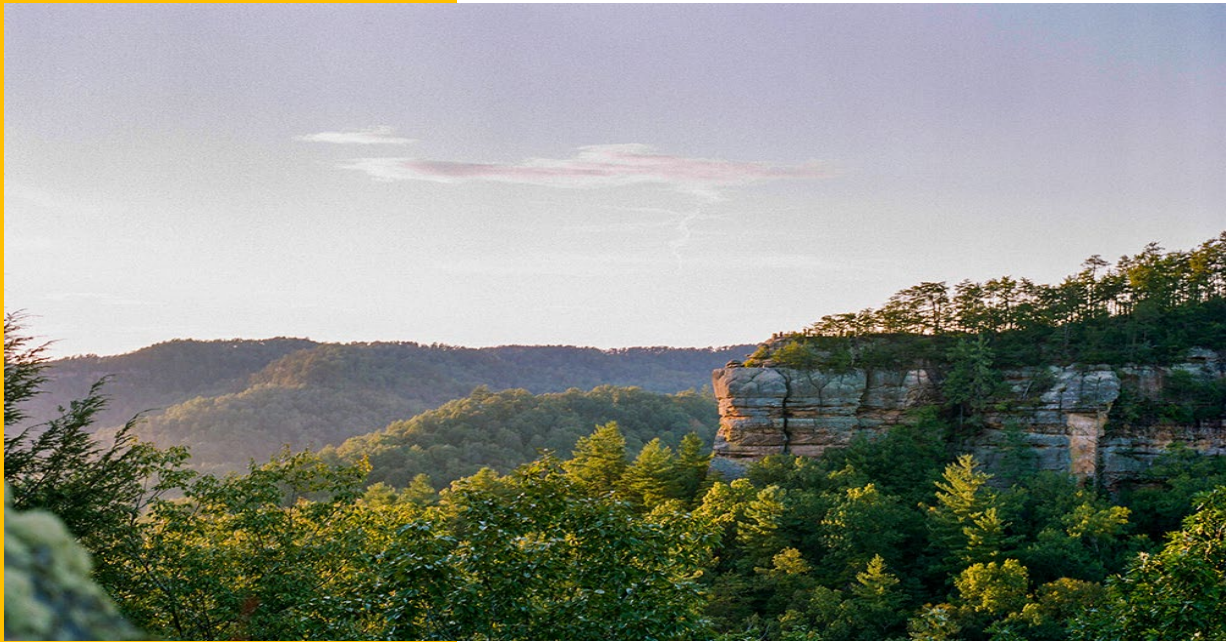
requests for a public hearing, so the scheduled public hearing was canceled. If you have any questions regarding this matter, please contact Mr. Michael Kennedy, Division for Air Quality Director, at (502) 782-6997, or [michael.kennedy@ky.gov](mailto:michael.kennedy@ky.gov).

Sincerely,

A handwritten signature in black ink, reading "Rebecca W. Goodman". The signature is fluid and cursive, with the first name "Rebecca" being the most prominent part.

Rebecca W. Goodman  
Cabinet Secretary

cc: Denisse Diaz, U.S. EPA Region 4  
Lynorae Benjamin, U.S. EPA Region 4



## **Second 10-Year Maintenance Plan for the Kentucky-portion of the Campbell-Clermont, KY-OH Area**

**Clean Air Act Section 175(A)  
Second 10-Year Maintenance Plan for the 2010  
1-Hour Sulfur Dioxide National Ambient Air  
Quality Standard**

Prepared for: U.S. Environmental Protection Agency

Prepared by: Kentucky Energy and Environment Cabinet,  
Division for Air Quality

February 2025, Final Submittal

## Publication Information:

This document is available on the Division for Air Quality's website at:

[State Implementation Plan Revisions - Kentucky Energy and Environment Cabinet](https://eec.ky.gov/Environmental-Protection/Air/Pages/State%20Implementation%20Plan%20Revisions.aspx)<sup>1</sup>

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<sup>1</sup> <https://eec.ky.gov/Environmental-Protection/Air/Pages/State%20Implementation%20Plan%20Revisions.aspx>

## Table of Contents

I. Background & Introduction.....	1
a. History.....	1
b. Requirements.....	4
II. Maintenance Plan Requirements.....	5
a. Attainment Inventory.....	5
b. Maintenance Demonstration.....	10
c. Monitoring Network.....	12
d. Verification of Continued Attainment.....	12
e. Contingency Plan.....	13
f. Public Participation.....	15
III. Conclusion.....	15

## List of Tables

Table 1 – Kentucky Portion SO <sub>2</sub> Emission Inventory Totals for Base Year 2011, Attainment 2014, Projected 2017 & 2022, 2020 Interim and 2027 Maintenance (tpy) .....	6
Table 2 – Ohio Portion SO <sub>2</sub> Emission Inventory Totals for Base Year 2011, Attainment 2014, Projected 2017 & 2022, Interim 2020 and 2027 Maintenance (tpy) .....	6
Table 3 – Kentucky Portion SO <sub>2</sub> Emission Inventory Totals for 2016 Base Year and 2037 Second Maintenance Year (tpy).....	7
Table 4 – Ohio Portion SO <sub>2</sub> Emission Inventory Totals for 2016 Base Year and 2037 Second Maintenance Year (tpy) .....	8
Table 5 – Campbell-Clermont, KY-OH Maintenance Area SO <sub>2</sub> Emission Inventory Totals for 2016 Base and 2037 Second Maintenance Year (tpy).....	8
Table 6 – 2021-2023 1-hour SO <sub>2</sub> 99 <sup>th</sup> Percentile Values for the Campbell-Clermont, KY-OH Maintenance Area (ppb) .....	10
Table 7 – Campbell-Clermont, KY-OH Maintenance Area Comparison of 2014 Attainment Year (Initial Maintenance Plan), 2016 Base Year, and 2037 Second Maintenance Year Projected Emissions (tpy) .....	12

## **List of Figures**

Figure 1 – Map of the Campbell-Clermont, KY-OH Partial Maintenance Area and Monitor Location .....	2
Figure 2 – 1-hour SO <sub>2</sub> Design Values for the Campbell-Clermont, KY-OH Maintenance Area (ppb).....	11

## **Appendices**

Appendix A – Monitoring Data	
Appendix B – W.C. Beckjord Shutdown Notifications	
Appendix C – William H. Zimmer Shutdown Notification	
Appendix D – Emissions Inventory 2016v2 Emissions Modeling Platform Files	
Appendix E – Public Notice and Statement of Consideration	

## **I. Background & Introduction**

### *a. History*

On June 22, 2010, the United States Environmental Protection Agency (EPA) promulgated the revised primary 1-hour sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). The new 1-hour SO<sub>2</sub> standard was published on June 22, 2010, and became effective on August 23, 2010.<sup>2</sup> The standard is based on the three-year average of the annual 99<sup>th</sup> percentile of 1-hour daily maximum concentrations.

During the initial area designation process for the 2010 SO<sub>2</sub> NAAQS, the Division, Ohio EPA, and EPA concluded the Duke Energy Walter C. Beckjord facility (Beckjord facility), located in Clermont County, Ohio, was the primary source of SO<sub>2</sub> emissions that caused SO<sub>2</sub> exceedances at the Campbell County, Kentucky monitor (21-037-3002). It was also determined that emissions from the William H. Zimmer facility (Zimmer facility), located south and slightly east of the Campbell County monitor, did not impact the monitor. As a result, the nonattainment area was not expanded to encompass this facility.

On August 5, 2013, EPA published the initial SO<sub>2</sub> nonattainment area designations for the 1-hour SO<sub>2</sub> standard for specific areas of the country, which became effective on October 4, 2013. Portions of Campbell County, Kentucky and Clermont County, Ohio were designated as nonattainment for the SO<sub>2</sub> NAAQS, which became the Campbell-Clermont, KY-OH nonattainment area (hereinafter, “the Area”).<sup>3</sup> The Area is located in southwestern Ohio and the following area in Campbell County, Kentucky that lies south and west of the Ohio River: beginning at geographic coordinates 38.9735 North Latitude, 84.3017 West Longitude (NAD 1983) on the edge of the Ohio River running southwesterly to KY Highway 1566; thence continuing running southwesterly along KY Highway 1566 to KY Highway 9 (AA Highway); thence running north westerly along KY Highway 9 (AA Highway) from Hwy 1566 to Interstate 275; thence running northeasterly along Interstate 275 to Highway 2345 (John’s Hill Road), Hwy 2345 to US-27, US-27 to I-275, I-275 to the Ohio River; thence running southeasterly along the Ohio River from Interstate 275 to geographic coordinates 38.9735 North Latitude, 84.3017 West Longitude (NAD 1983). The boundaries of the Area are shown in Figure 1, below.

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<sup>2</sup> 75 FR 35520

<sup>3</sup> 78 FR 47191



**Figure 1 – Map of the Campbell-Clermont, KY-OH  
Partial Maintenance Area and Monitor Location**



On October 1, 2014, the Beckjord facility ceased operations and six coal-fired emissions units were permanently shut down, causing a significant reduction of SO<sub>2</sub> emissions in the Area. Documentation of the Beckjord facility's closure can be found in Appendix B.



On March 31, 2015, the Kentucky Energy and Environment Cabinet, Division for Air Quality (Division) submitted a request to EPA for a clean data determination (CDD) based on 2012-2014 certified SO<sub>2</sub> monitoring data.<sup>4</sup> Under the Clean Data Policy, EPA may issue a CDD if a state submits monitored data showing the NAAQS has been achieved.<sup>5</sup> The EPA interprets that certain requirements of the Clean Air Act (CAA) are no longer applicable if ambient air quality continues to meet the standard. However, a CDD is not equivalent to a redesignation and a state must still meet statutory requirements.

On August 11, 2015, Ohio EPA submitted a redesignation request and initial 10-year maintenance plan to EPA for the Ohio portion of the Area. EPA approved this request and the maintenance plan on November 21, 2016.<sup>6</sup>

On February 22, 2016, the Division submitted a redesignation request and initial 10-year maintenance plan to EPA, demonstrating that ambient air monitoring data collected between 2012 and 2014 showed the Campbell County portion of the Area attaining the 2010 1-hour SO<sub>2</sub> NAAQS. Notably, the Division's initial redesignation request and maintenance plan for the Area included an analysis of the Zimmer facility. The Division also conducted a back trajectory analysis and concluded that it was in fact the Beckjord facility that caused the violations and not the Zimmer facility. The Division, in concurrence with Ohio EPA, agreed no additional analysis was necessary to determine if emissions from the Zimmer facility had the potential to impact the Area when preparing the initial redesignation request and maintenance plan.

On March 10, 2017, EPA approved both the Division's request for a CDD and the Division's redesignation request and initial 10-year maintenance plan for the Kentucky portion of the Area.<sup>7</sup>

On May 31<sup>st</sup>, 2022 the Zimmer facility permanently ceased operations. Ohio EPA was notified of the closure on April 17, 2023. Ohio EPA provided the Division with documentation of the Zimmer facility's closure, which is located in Appendix C. With the shutdown of the Zimmer facility, there are no longer any significant sources of SO<sub>2</sub> emissions outside of, yet in proximity to, the Area. Further, at the time of this submittal, there are no sources within the Kentucky portion of the Area emitting over one ton of SO<sub>2</sub> annually.

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<sup>4</sup> For the Division's CDD submittal, please see <https://eec.ky.gov/Environmental-Protection/Air/Documents/2015-03-31%20Clean%20Data%20Determination%20for%20Campbell-Clermont%20Area.pdf>.

<sup>5</sup> For more information on EPA's Clean Data Policy, please see <https://www.epa.gov/ground-level-ozone-pollution/redesignation-and-clean-data-policy-cdp>.

<sup>6</sup> 81 FR 83158

<sup>7</sup> 82 FR 13227

*b. Requirements*

Maintenance Plan Requirements contained in CAA Section 175A include:

- (a) Plan revision
- (b) Subsequent plan revisions
- (c) Nonattainment requirements applicable pending plan approval
- (d) Contingency provisions

Pursuant to CAA Section 175(A)(b), eight years after an area is redesignated to attainment and following the initial 10-year maintenance period covered by the initial maintenance plan, the state shall submit a second maintenance plan demonstrating continued attainment for an additional 10 years. The Division is responsible for the preparation and submittal of this subsequent plan. This SIP revision demonstrates how the Area will continue to meet and maintain the 2010 SO<sub>2</sub> NAAQS through March 10, 2037, which marks the expiration of the overall 20-year maintenance period.

The EPA has not yet issued specific guidance for development of maintenance plans for the 2010 SO<sub>2</sub> NAAQS. Thus, the Division used available guidance to develop this maintenance plan.

On September 4, 1992, a memo from EPA Director of the Air Quality Management Division, John Calcagni,<sup>8</sup> further elaborated on the conditions outlined in CAA Section 175A, specifying five requirements:

- a. Attainment Inventory
- b. Maintenance Demonstration
- c. Monitoring Network
- d. Verification of Continued Attainment
- e. Contingency Plan<sup>9</sup>

These five requirements were central to the development of the second 10-year maintenance plan. The initial maintenance period for the Area lasts for ten years after the effective date of approval of the maintenance plan – i.e., through 2027. The second 10-year maintenance plan demonstrates continued maintenance through 2037.

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<sup>8</sup> John Calcagni, Director, Air Quality Management Division, “[\*Procedures for Processing Requests to Redesignate Areas to Attainment\*](#),” (Sep. 4, 1992), (*hereinafter* “Calcagni Memo”).

<sup>9</sup> *Id.* at 7-13.

## II. Maintenance Plan Requirements

Each requirement of a maintenance plan is addressed below, in the order laid out in the *Calcagni Memo*.

### a. Attainment Inventory

The initial redesignation request and maintenance plan for the Area used a base year of 2011 and an attainment year of 2014, based on monitoring data from 2012-2014, which showed the Area attaining the standard.

According to the initial redesignation request and maintenance plan, all base year emissions data were taken from the National Emissions Inventory (NEI) with the exception of:

- Ohio's electric generating unit (EGU) emissions, which were obtained from EPA's Clean Air Markets Program Data (CAMPD).<sup>10</sup>
- Point source emissions for Kentucky, which were obtained from Kentucky's Emission Inventory (KyEIS) database.
- Mobile emissions, which were generated by Ohio-Kentucky-Indiana Regional Council of Governments (OKI).

Projections were developed for each sector as follows:

- Area source emissions were compiled from the 2011 NEI and projections were developed by the Division.<sup>11</sup>
- Mobile source emissions were calculated from MOVES2014b-produced emission factors. Mobile source emission projections were performed by OKI and are based on the EPA MOVES model.
- Non-EGU point source information was compiled from the 2011 data in the KyEIS database, while Ohio's EGU point source information was compiled from the 2011 data in the CAMD database.
- Non-road emissions were compiled from the 2011 NEI and projections were developed by the Division.
- Biogenic emissions are negligible and are not included in these summaries.

The Kentucky portion of the 2011 base year and 2014 attainment inventories are shown below in Table 1. The Ohio portion of the 2011 base year and 2014 attainment inventories are shown below in Table 2.<sup>12</sup> Emissions for the Kentucky portion of the Area in 2011 and 2014 were

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<sup>10</sup> Environmental Protection Agency Clean Air Markets Program Data, available at: <https://campd.epa.gov/data/custom-data-download>

<sup>11</sup> Area sources, also referred to as nonpoint sources, include emissions which individually are too small in magnitude to report as point sources; these include but are not limited to emissions from residential heating, commercial combustion, asphalt paving, and commercial and consumer solvent use.

<sup>12</sup> Both the OH and KY emissions were scaled down using population data to reflect the partial portion of counties within the Area. Please see Appendix C of the initial redesignation request for more information.

substantially lower than the Ohio portion. For more information on the development of these inventories, please see the original submissions.<sup>13</sup>

**Table 1 – Kentucky Portion SO<sub>2</sub> Emission Inventory Totals for Base Year 2011, Attainment 2014, Projected 2017 & 2022, 2020 Interim and 2027 Maintenance (tpy)**

Sector	2011 Base	2014 Attainment	2017 Projected	2020 Interim	2022 Projected	2027 Maintenance
EGU Point	0	0	0	0	0	0
Non-EGU Point	0.78	0.78	0.79	0.79	0.78	0.78
Non-road	0.20	0.20	0.20	0.20	0.20	0.20
Area	6.03	6.04	6.06	6.08	6.03	6.02
On-road	1.55	1.51	1.44	1.40	1.37	1.26
<b>TOTAL</b>	<b>8.56</b>	<b>8.53</b>	<b>8.49</b>	<b>8.47</b>	<b>8.38</b>	<b>8.26</b>

**Table 2 – Ohio Portion SO<sub>2</sub> Emission Inventory Totals for Base Year 2011, Attainment 2014, Projected 2017 & 2022, Interim 2020 and 2027 Maintenance (tpy)**

Sector	2011 Base	2014 Attainment	2017 Projected	2020 Interim	2022 Projected	2027 Maintenance
EGU Point	90,834.50	32,602.44	0	0	0	0
Non-EGU Point	0	0	0	0	0	0
Non-road	0.17	0.18	0.18	0.18	0.18	0.19
Area	7.51	7.63	7.75	7.88	7.86	8.00
On-road	0.34	0.33	0.32	0.31	0.30	0.28
<b>TOTAL</b>	<b>90,842.52</b>	<b>32,610.58</b>	<b>8.25</b>	<b>8.37</b>	<b>8.34</b>	<b>8.47</b>

For the second maintenance plan, the Division, in consultation with EPA Region 4 and Ohio EPA, selected 2016 as the base year and 2037 as the second maintenance year. In consultation with Ohio EPA, the 2016v2 Emissions Modeling Platform (EMP) inventory was identified as the preferred modeling platform for this SIP submittal. The 2016v2 EMP is a combination of the 2014 NEI, Version 2, and the 2017 NEI and includes projected emissions for modeling years 2016, 2023, 2026 and 2032. Inputs used in the model can be viewed in Appendix D.

Base year and projected second maintenance year emissions were developed as follows:

- The Division relied upon projected 2032 emissions from the 2016v2 EMP as a surrogate for 2037 second maintenance year emissions. This is based on the relatively stagnant population growth in the Area and existing state and federal rules in place which preclude

<sup>13</sup> For the Division's initial submittal please see <https://eec.ky.gov/Environmental-Protection/Air/Documents/FINAL%20Complete%20SO2%20Campbell%20Package%202-23-16.pdf>; for Ohio's initial submittal please see <https://dam.assets.ohio.gov/image/upload/epa.ohio.gov/Portals/27/sip/SO2/Final%20Redesignation%20Request%20August2015.pdf>; EPA's approval of these submittals can be found at 82 FR 13227 and 81 FR 83158, respectively.

the installation of a new source or group of sources with SO<sub>2</sub> emissions capable of causing or contributing to an exceedance of the NAAQS. Details on projected population growth are presented later in this section.

- Area source, on-road (or mobile source) and non-road emissions were compiled from the 2016v2 EMP for both 2016 and 2037 (2032 as surrogate) for the Ohio and Kentucky portions of the Area.<sup>14</sup> For partial Clermont County (Pierce Township) Ohio, emissions for both years were scaled using population data from the 2020 Census for both Clermont County and Pierce Township. Despite the Kentucky portion of the Area only partially covering Campbell County, the emissions represented in the inventory were not scaled down to reflect a partial-county approach. The Division chose to rely upon a more conservative county-wide approach to further demonstrate maintenance of the standard.
- Non-EGU and EGU point source information was compiled from both Ohio and Kentucky emissions inventory databases for 2016. For 2037 (2032 as a surrogate), projections of emissions were based on the 2016v2 EMP.
- Biogenic emissions are not included in inventory because they are negligible, consistent with the Division's first maintenance plan for the Area

Tables 3 through 5 present the emissions inventory for the second maintenance plan.

**Table 3 – Kentucky Portion SO<sub>2</sub> Emission Inventory Totals for 2016 Base Year and 2037 Second Maintenance Year (tpy)**

Sector	2016 Base Year	2037 Second Maintenance Year
EGU Point	0.00	0.00
Non-EGU Point	2.06	2.07
Non-road	0.85	0.43
Area	15.46	15.46
On-road	4.53	2.67
<b>TOTAL</b>	<b>22.90</b>	<b>20.63</b>

<sup>14</sup> Non-road source categories include: industrial equipment, recreational equipment, construction equipment, lawn and garden equipment, agriculture equipment, commercial equipment, logging equipment, underground mining equipment, recreational marine vehicles, and railroads. Residential wood combustion was accounted for in the Area point source column. For additional information please see Appendix C.

**Table 4 – Ohio Portion SO<sub>2</sub> Emission Inventory Totals for 2016 Base Year and 2037 Second Maintenance Year (tpy)**

<b>Sector</b>	<b>2016 Base Year</b>	<b>2037 Second Maintenance Year</b>
EGU Point	0.00	0.00
Non-EGU Point	0.10	0.14
Non-road	2.83	1.38
Area	6.31	6.26
On-road	0.94	0.36
<b>TOTAL</b>	<b>10.18</b>	<b>8.14</b>

**Table 5 – Campbell-Clermont, KY-OH Maintenance Area SO<sub>2</sub> Emission Inventory Totals for 2016 Base and 2037 Second Maintenance Year (tpy)**

<b>Sector</b>	<b>2016 Base Year</b>	<b>2037 Second Maintenance Year</b>
EGU Point	0.00	0.00
Non-EGU Point	2.16	2.21
Non-road	3.68	1.81
Area	21.77	21.72
On-road	5.47	3.03
<b>TOTAL</b>	<b>33.08</b>	<b>28.77</b>

As part of the first maintenance plan for the Area, motor vehicle emission budgets were not established as it was determined mobile sources were insignificant contributors to the Area's initial violation of the 2010 SO<sub>2</sub> NAAQS. In consultation with EPA, the Division and Ohio EPA agreed that mobile emissions budgets are not necessary for the second maintenance plan.

Additionally, in the first maintenance plan for the Area, EPA requested the Division and Ohio EPA perform an analysis of background concentrations for the Area to determine predicted concentrations in the future and ensure that maintenance would be achieved. The Division and Ohio EPA determined a conservative average background concentration for the Area to be 4.76 ppb, and a conservative 99<sup>th</sup> percentile background for the Area to be 11 ppb. The analysis to support this determination was submitted as Appendix F and Appendix K of the Division's initial

redesignation request and maintenance plan for the Area.<sup>15</sup> Recent monitoring data shows the 2021-2023 design value at the Campbell County monitor (21-037-3002) is 8 ppb, which is below the conservative 99<sup>th</sup> percentile background concentration for the Area. The Area's monitored design value being low, and comparable to the Area's background concentrations, supports the conclusion that the Area will continue to maintain the 2010 SO<sub>2</sub> standard.

Lastly, the Division and Ohio EPA conducted a review of census data for their respective portions of the Area.

For Clermont County, the specific Census Tract within the Ohio portion of the Area is Pierce Township. Data from the U.S. Census Bureau indicates that the population of Pierce Township increased by 17.4% from 2000 to 2010 (12,226 to 14,439 respectively).<sup>16</sup> From 2010 to 2020, the population increased by 5.2% (14,439 to 15,096 respectively). The slowing of population growth in Pierce township is consistent with the overall stagnation of population growth in Ohio. Based on this data, Ohio EPA concluded that population growth is unlikely to result in significant increases in ambient SO<sub>2</sub> concentrations in the maintenance area. Ohio EPA's initial maintenance plan for the Area, completed in 2015, indicated a projected 2020 population of 15,146 in Pierce Township. Actual 2020 census data indicated the population in Pierce Township was 15,096. Based on the rural nature of Pierce Township and the similarities between previously projected and actual populations, Ohio EPA determined that the projected population of 15,544 for Pierce Township in 2027, from the initial maintenance plan, is a reasonable prediction of the actual future population in the Ohio portion of the Area; 2027 projected population data for Pierce Township can be found in Appendix C of both Ohio EPA's initial maintenance plan and the Division's initial maintenance plan.

The portions of Campbell County within the Area include five Census Tracts: 519.01, 519.03, 529.00, 531.00, and 533.01. Please note that population data from all five Census Tracts is not available prior to 2010 due to the redistricting of Census Tracts in Campbell County and their subsequent division into multiple separate tracts. However, complete data from the U.S. Census Bureau is available for the years 2010 and 2020; this data indicates that the population of the five Census Tracts in the Kentucky portion of the Area increased moderately by 8.4% from 2010 to 2020 (26,368 to 28,587 respectively). The Division's initial maintenance plan for the Area, completed in 2016, indicated a projected 2020 population of 26,749 in the Kentucky portion of the Area. Actual 2020 Census data indicated the population was 28,587.

The Division anticipates that the population of the five Census Tracts may continue to increase through the duration of the second maintenance period, which would lead to a marginal increase in emissions within the Area. As documented above in the attainment inventory portion, this increase has been calculated into the emissions projections during the maintenance period. However, this increase will not impact the Area's maintenance of the NAAQS. Based on this

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<sup>15</sup> Please see <https://eec.ky.gov/Environmental-Protection/Air/Documents/FINAL%20Complete%20SO2%20Campbell%20Package%202-23-16.pdf> for the Division's initial redesignation request and maintenance plan submittal.

<sup>16</sup> All Census data was retrieved using the United States Census data retrieval tool, accessible at <https://www.census.gov/data.html>



data, the Division concludes that population growth is unlikely to result in significant increases in ambient SO<sub>2</sub> concentrations in the Kentucky portion of the Area, as total SO<sub>2</sub> emissions during this timeframe will remain low.

*b. Maintenance Demonstration*

According to the *Calcagni Memo*, “[a] 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.”<sup>17</sup> In this section, the Division analyzes how projected emissions for the Area compare to the attainment emissions inventory; the Division does not find air quality modeling necessary to satisfy this maintenance plan requirement.

In accordance with 40 CFR 58, Appendices A, C, D, E, and G, the Division operates one continuous SO<sub>2</sub> monitor in Campbell County (21-037-3002), which is located within the Kentucky portion of the Area. There is no monitor located in Clermont County, Ohio. The monitor site in Campbell County serves 2,343 square miles and a population of 580,454 individuals, including the entirety of the population within the Area.<sup>18</sup>

Table 6 shows monitored annual 99<sup>th</sup> percentile values for the monitor over the past three years, as well as its respective 2021-2023 design value. Please note, the design value is the average of the three annual 99<sup>th</sup> percentile values, rounded to the nearest integer. The monitor has produced a 2021-2023 design value demonstrating that current air quality levels are significantly below the level of the 2010 SO<sub>2</sub> standard. Monitoring data shown in Table 6 can be found in Appendix A.

**Table 6 – 2021-2023 1-hour SO<sub>2</sub> 99<sup>th</sup> Percentile Values for the Campbell-Clermont, KY-OH Maintenance Area (ppb)**

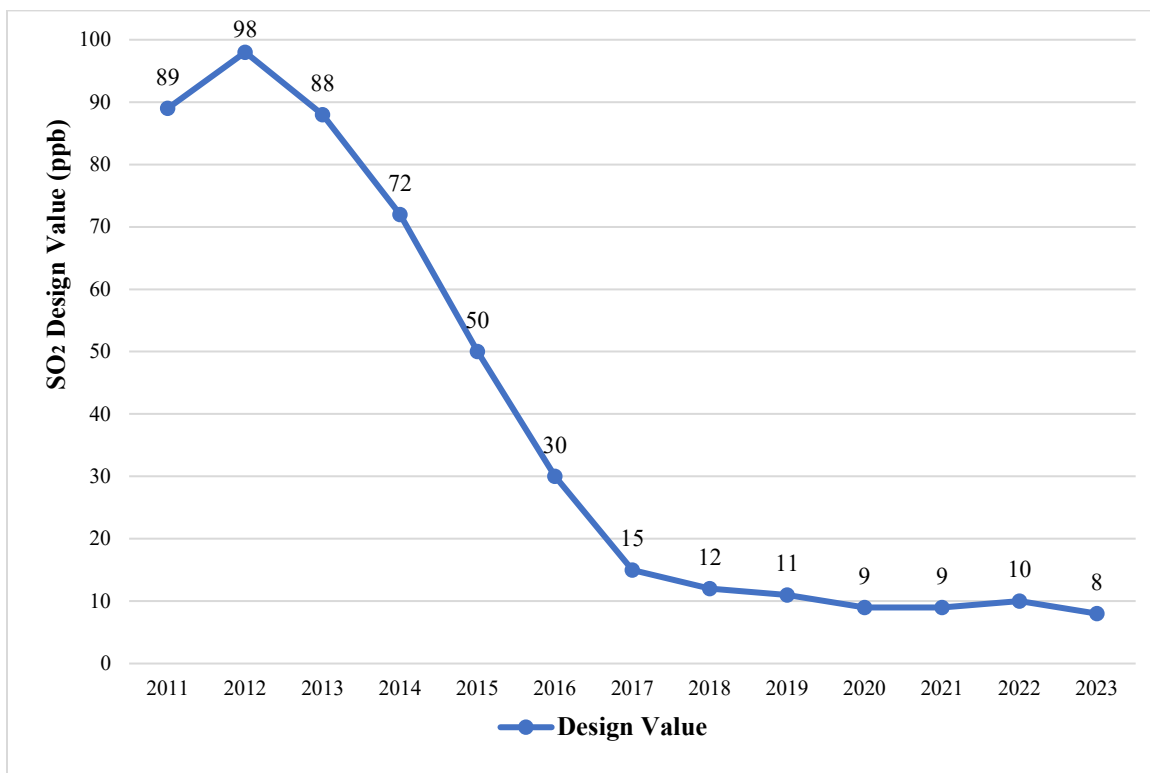
Site ID	County	2021 Annual 99 <sup>th</sup> Percentile Value	2022 Annual 99 <sup>th</sup> Percentile Value	2023 Annual 99 <sup>th</sup> Percentile Value	2021- 2023 Design Value
21-037-3002	Campbell, KY	9.0	9.9	4.8	8

<sup>17</sup> *Calcagni Memo*, *supra* note \*\* at 9.

<sup>18</sup> EPA, NetAssess2025 v1.1, available at <https://rconnect-public.epa.gov/NetAssess2025/>

Furthermore, the Area has a stable or improving air quality trend. This is evident from the decreasing trend in Figure 2, below, which displays the design values for the Kentucky portion of the Area from 2011 to 2023. Design values for the monitor in Campbell County, used to develop Figure 2, can be found in Appendix A.

**Figure 2 – 1-hour SO<sub>2</sub> Design Values for the Campbell-Clermont, KY-OH Maintenance Area (ppb)**



Moreover, as of September 1, 2014 (when the Beckjord facility ceased operations), there are no longer any significant point sources of SO<sub>2</sub> emissions located in the Area.

According to the *Calcagni Memo*, continued maintenance is demonstrated in an area when the projected emission totals for future years (i.e. 2037) are below the attainment year (in this case 2014) emissions totals. Table 7, below, shows a comparison of the 2014 attainment year, 2016 base year, and 2037 maintenance year emissions. The Division included the original 2014 attainment inventory numbers from the initial maintenance plan in this table to demonstrate the significant reductions from the permanent shutdown of the Beckjord facility. In 2016, SO<sub>2</sub> emissions in the Area decreased by 32,586 tpy when compared to the 2014 attainment year from the initial maintenance plan. Moreover, SO<sub>2</sub> emissions are expected to decline another 4 tpy from the 2016 base year to the 2037 second maintenance year. This subsequent reduction in emissions demonstrates that continued maintenance of the standard will occur in the Area.

**Table 7 – Campbell-Clermont, KY-OH Maintenance Area Comparison of 2014 Attainment Year (Initial Maintenance Plan), 2016 Base Year, and 2037 Second Maintenance Year Projected Emissions (tpy)**

	<b>2014 Attainment Year</b>	<b>2016 Base Year</b>	<b>2016 Decrease from 2014 Attainment Year</b>	<b>2037 Second Maintenance Year</b>	<b>2037 Projected Decrease from 2014 Attainment Year</b>	<b>2037 Projected Decrease from 2016 Base Year</b>
<b>SO<sub>2</sub> Emissions</b>	32,619.10	33.08	-32,586.02	28.77	-32,590.33	-4.31

*c. Monitoring Network*

According to the *Calcagni Memo*, areas should continue to operate an air quality monitoring network, in accordance with the Code of Federal Regulations (CFR) in 40 CFR Part 58, to verify continued attainment once redesignated. Additionally, the *Calcagni Memo* requires the maintenance plan to “contain provisions for continued operation of air quality monitors that will provide such verification.”<sup>19</sup>

The Division will continue to operate an ambient air quality monitoring network consistent with the network plan and assessments required by 40 CFR Part 58.10 and 40 CFR Part 58, Appendix D. Any modification to the network will be conducted in accordance with 40 CFR Part 58.14. As required by 40 CFR Part 58.16, all data collected will be recorded in the Air Quality System (AQS) database and will be available to the public.

*d. Verification of Continued Attainment*

If a maintenance demonstration is based on projected future inventories, the state submitting a maintenance plan should indicate how it will track progress against this metric to ensure assumptions about growth and other factors are accurate.<sup>20</sup>

The Division requires major point sources in all counties to submit air emissions information annually.<sup>21</sup> Pursuant to the Air Emissions Reporting Rule (AERR), 40 CFR Part 51 Subpart A, the Division assists in the preparation of new periodic inventories for all sectors every three years. These inventories will be prepared for future years to comply with the inventory reporting requirements established in the CFR. Emissions information will be compared to the 2014 attainment year and the 2037 projected maintenance year inventories to assess emission trends and to ensure continued compliance with the standard.

<sup>19</sup> *Calcagni Memo*, *supra* note 9, at 11.

<sup>20</sup> *Ibid.* at 11.

<sup>21</sup> 401 KAR 52:020, 401 KAR 52:030

The Kentucky portion of the Area currently has one monitor measuring SO<sub>2</sub>. In accordance with 40 CFR Part 58, the Division is committed to the continued operation of an EPA-approved ambient air quality monitoring network. Kentucky's Annual Monitoring Network Plan provides the framework for its air quality surveillance. The monitoring network plan undergoes an annual review process to ensure consistency with the regulation.<sup>22</sup>

The Division has the legal authority to implement and enforce the maintenance plan requirements for Campbell County.<sup>23</sup> This includes the right to enforce emission control measures that may be necessary to address future SO<sub>2</sub> attainment issues. Verification of continued attainment is achieved through the Division's operation and management of an ambient SO<sub>2</sub> monitoring network.

#### *e. Contingency Plan*

Section 175A(d) of the CAA requires maintenance plans to include provisions for the prompt correction of any violation of the NAAQS.<sup>24</sup> At a minimum, such contingency measures must include all measures contained in the SIP for the Area prior to redesignation. In addition to measures to be adopted to correct any violation, the plan should also contain "a schedule and procedure for adoption and implementation, and a specific time limit for action" as well as "specific indicators, or triggers" for action.<sup>25</sup>

As previously discussed, following the permanent shutdown of the Beckjord facility there are no other sources in the Area with the potential to cause a violation of the SO<sub>2</sub> NAAQS. Due to the absence of sources with a potential to cause a monitored violation of the SO<sub>2</sub> NAAQS in the Area, along with marginal population growth in the Kentucky portion of the Area, the Division does not anticipate any future cause for a violation of the SO<sub>2</sub> NAAQS in the Area.

Additionally, the Division has an active enforcement program to address NAAQS violations and the Division will continue to operate a comprehensive program to identify sources violating the SO<sub>2</sub> NAAQS and undertake an aggressive follow-up, in the event that a violation occurs, to ensure compliance and enforcement of the standard. In the event of a violation, the Division hereby commits to adopt and expeditiously implement necessary corrective actions in the following circumstances:

- A warning level response shall be prompted whenever the annual average 99th percentile maximum daily 1-hour SO<sub>2</sub> concentration of 75 ppb occurs in a single calendar year within the Area. A warning level response will consist of a study to evaluate the Area's emission inventory for all source sectors, exceptional events, and the prevention of significant deterioration practices at any new permitted stationary or area sources. The study will determine whether the SO<sub>2</sub> value indicates a trend toward higher SO<sub>2</sub> values or

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<sup>22</sup> Kentucky's Annual Monitoring Network Plan, available at <https://eec.ky.gov/Environmental-Protection/Air/Division%20Reports/2021%20Kentucky%20Annual%20Ambient%20Air%20Monitoring%20Network%20Plan.pdf>

<sup>23</sup> 40 C.F.R. Part 52 Subpart S - Kentucky

<sup>24</sup> 42 U.S.C. §7505a.(d).

<sup>25</sup> *Calcagni Memo*, *supra* note 9, at 12-13.

whether emissions appear to be increasing. The study will evaluate whether the trend, if any, is likely to continue and, if so, the control measures necessary to reverse the trend taking into consideration ease and timing for implementation as well as economic and social considerations. Implementation of necessary controls in response to a warning level response trigger will take place as expeditiously as possible, but in no event later than 12 months from the conclusion of the most recent calendar year.

- An action level response shall be prompted whenever a two-year average of the 99th percentile maximum daily 1-hour SO<sub>2</sub> concentrations of 76 ppb or greater occurs within the Area. A violation of the standard (the three-year average of the 99th percentile maximum daily 1-hour value SO<sub>2</sub> concentration of 75 ppb or greater) shall also prompt an action level response. In the event that the action level is triggered and is not found to be due to an exceptional event, malfunction, or noncompliance with a permit condition or rule requirement, the Division in conjunction with the metropolitan planning organization or regional council of governments, will determine additional control measures needed to assure future attainment of the 1-hour SO<sub>2</sub> NAAQS. In this case, measures that can be implemented in a short time will be selected in order to be in place within 18 months from the close of the calendar year that prompted the action level. The Division will also consider the timing of an action level trigger and determine if additional, significant new regulations not currently included as part of the maintenance provisions will be implemented in a timely manner and will constitute the response.

If a new measure/control is already promulgated and scheduled to be implemented at the federal or state level, and that measure/control is determined to be sufficient to address a violation of the SO<sub>2</sub> NAAQS, additional local measures may be unnecessary. Furthermore, the Division will submit to EPA an analysis to demonstrate the proposed measures are adequate to return the Area to attainment.

In the event that adoption of control measures is necessary in the Area, the control measures will be subject to Kentucky's administrative and legal process. This process will include publication of notices, an opportunity for public hearing and comment, and other measures required by Kentucky law for rulemaking. Contingency measures to be considered will be selected from a comprehensive list of measures deemed appropriate and effective at the time the selection is made. The selection of measures will be based on cost-effectiveness, emission reduction potential, economic and social considerations, or other factors that the Division deems appropriate.

*f. Public Participation*

In accordance with 40 CFR 51.102, the proposed SIP revision was available for public review and comment.

The proposed SIP revision was made available on the Division's website during the 37-day comment period from December 4, 2024, until January 10, 2025. A virtual public hearing was scheduled for January 10, 2025, at 10:00 a.m. (EDT). However, because there were no requests for the hearing, the hearing was canceled. The Division received written comments from EPA during the public comment period. The Division's response to those comments is provided in Appendix E, along with a copy of the public hearing notice.

### **III. Conclusion**

The most recent three years of SO<sub>2</sub> monitoring data (2021-2023) for the Area demonstrate continued compliance with the 2010 1-hour SO<sub>2</sub> NAAQS, with current air quality levels below the level of the standard. Furthermore, the Area has a stable or improving air quality trend. This maintenance plan shows emissions continue to remain below the level of the initial attainment inventory and the Division will continue to operate its monitoring network to verify continued attainment. The contingency plan is in place in the event of a violation of the standard.

The Division therefore requests that this subsequent 10-year maintenance plan for the Kentucky counties located within the Campbell-Clermont, KY-OH 2010 1-hour SO<sub>2</sub> maintenance area be approved by EPA.

# **Appendix A**

## **Monitoring Data**



User ID: JNALL

DESIGN VALUE REPORT

Report Request ID: 2204930 Report Code: AMP480 Jun. 26, 2024

GEOGRAPHIC SELECTIONS													
Tribal Code	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA Region		
	21	037	3002										

PROTOCOL SELECTIONS			
Parameter Classification	Parameter	Method	Duration
DESIGN VALUE	42401		

SELECTED OPTIONS	
Option Type	Option Value
SINGLE EVENT PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS
MERGE PDF FILES	YES
AGENCY ROLE	PQAO
USER SITE METADATA	STREET ADDRESS
QUARTERLY DATA IN WORKFILE	NO
WORKFILE DELIMITER	,
USE LINKED SITES	YES

DATE CRITERIA	
Start Date	End Date
2011	2023

APPLICABLE STANDARDS
Standard Description
SO2 1-hour 2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

- Notes:**
1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
  2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
  3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2011

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2011			2010			2009			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	109.0	U	4	99.0	U	4	60.0	U	89	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2012

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2012			2011			2010			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	85.0	Y	4	109.0	U	4	99.0	U	98	Y

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2013

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2013			2012			2011			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	71.0	Y	4	85.0	Y	4	109.0	U	88	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2014

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2014			2013			2012			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	61.0	Y	4	71.0	Y	4	85.0	Y	72	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2015

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2015			2014			2013			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	18.0	Y	4	61.0	Y	4	71.0	Y	50	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

Pollutant: Sulfur dioxide(42401)  
Standard Units: Parts per billion(008)  
NAAQS Standard: SO2 1-hour 2010  
Statistic: Annual 99th Percentile

Design Value Year: 2016  
REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.  
Level: 75  
State Name: Kentucky

Site ID	STREET ADDRESS	2016			2015			2014			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	12.0	Y	4	18.0	Y	4	61.0	Y	30	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)  
**Standard Units:** Parts per billion(008)  
**NAAQS Standard:** SO2 1-hour 2010  
**Statistic:** Annual 99th Percentile

**Level:** 75

**Design Value Year:** 2017

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

Site ID	STREET ADDRESS	2017			2016			2015			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	16.0	Y	4	12.0	Y	4	18.0	Y	15	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)  
**Standard Units:** Parts per billion(008)  
**NAAQS Standard:** SO2 1-hour 2010  
**Statistic:** Annual 99th Percentile

**Level:** 75

**Design Value Year:** 2018

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

Site ID	STREET ADDRESS	2018			2017			2016			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	9.0	M	4	16.0	Y	4	12.0	Y	12	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2019

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2019			2018			2017			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	8.0	Y	4	9.0	M	4	16.0	Y	11	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).

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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)  
**Standard Units:** Parts per billion(008)  
**NAAQS Standard:** SO2 1-hour 2010  
**Statistic:** Annual 99th Percentile

**Level:** 75

**Design Value Year:** 2020

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

Site ID	STREET ADDRESS	2020			2019			2018			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	10.0	Y	4	8.0	Y	4	9.0	M	9	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.  
3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2021

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2021			2020			2019			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	9.0	Y	4	10.0	Y	4	8.0	Y	9	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).

2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.

3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2022

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2022			2021			2020			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	9.9	Y	4	9.0	Y	4	10.0	Y	10	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

**Pollutant:** Sulfur dioxide(42401)

**Standard Units:** Parts per billion(008)

**NAAQS Standard:** SO2 1-hour 2010

**Statistic:** Annual 99th Percentile

**Design Value Year:** 2023

**REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.**

**State Name:** Kentucky

**Level:** 75

Site ID	STREET ADDRESS	2023			2022			2021			3-Year	
		Comp.	99th	Cert&	Comp.	99th	Cert&	Comp.	99th	Cert&	Design	Valid
		Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Qtrrs	Percentile	Eval	Value	Ind.
21-037-3002	524A JOHN'S HILL ROAD	4	4.8	S	4	9.9	Y	4	9.0	Y	8	Y

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).

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3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
PRELIMINARY DESIGN VALUE REPORT

Report Date: Jun. 26, 2024

CERTIFICATION EVALUATION AND CONCURRENCE FLAG MEANINGS

FLAG	MEANING
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AMP255 report or the certification and quality assurance report.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" concurrence flag.
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, the amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).

**Notes:** 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).  
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.  
3. Annual Values not meeting completeness criteria are marked with an asterisk ('\*').

## **Appendix B**

### **W.C. Beckjord Shutdown Notifications**



Duke Energy Ohio, Inc.  
139 E. 4<sup>th</sup> Street  
Cincinnati, OH 45202

October 14, 2014

Mr. Bradley M. Miller  
Southwest Ohio Air Quality Agency  
250 William Howard Taft Drive  
Cincinnati, Ohio 45219

RE: Duke Energy Ohio, Inc., W.C. Beckjord Station  
Facility ID No.: 1413100008  
Emissions Units: B001, B002, B003, B004, B005, and B006

Dear Mr. Miller:

This letter is to inform you that, as of October 1, 2014, the six coal-fired emissions units at W.C. Beckjord Station (B001, B002, B003, B004, B005, and B006) are permanently shut down and removed from service. It is the understanding of Duke Energy Ohio, Inc. that authorization to operate the affected units has ceased as of October 1, 2014 and the permittee shall not be required to meet any Title V permit requirements applicable to these emissions units, except for any residual requirements, such as the quarterly deviation reports and annual compliance certification covering the period during which the emissions units last operated.

Please call Andrew Roebel at 513-287-2356 if you should have any questions regarding this information.

Based on information and belief formed after reasonable inquiry, I certify that all factual statements in this transmittal are true, accurate and complete to the best of my knowledge.

Very truly yours,

A handwritten signature in dark ink that reads "Michael Sharp". The signature is written in a cursive, flowing style.

Michael Sharp  
GM III – NonReg Fossil Station



Duke Energy Ohio, Inc.  
139 E. 4<sup>th</sup> Street  
Cincinnati, OH 45202

May 28, 2015

Mr. Christopher Beekman  
Ohio EPA - DAPC  
Lazarus Government Center  
50 West Town St., Suite 700  
Columbus, Ohio 43215

RE: Duke Energy Ohio, Inc., W.C. Beckjord Station  
Facility ID No.: 1413100008  
Emissions Units: B007, B008, B009, and B010

Dear Mr. Beekman:

This letter is to inform you that, as of December 31, 2014, the four oil-fired emissions units at W.C. Beckjord Station (B007, B008, B009, and B010) are permanently shut down and removed from service. It is the understanding of Duke Energy Ohio, Inc. that authorization to operate the affected units has ceased as of December 31, 2014 and the permittee shall not be required to meet any Title V permit requirements applicable to these emissions units, except for any residual requirements, such as the quarterly deviation reports and annual compliance certification covering the period during which the emissions units last operated.

Please call Andrew Roebel at 513-287-2356 if you should have any questions regarding this information.

Based on information and belief formed after reasonable inquiry, I certify that all factual statements in this transmittal are true, accurate and complete to the best of my knowledge.

Very truly yours,

A handwritten signature in blue ink that reads "Mark J. Schmidt".

Mark J. Schmidt  
Manager – Reg Plant Demo & Retirement

# **Appendix C**

**William H. Zimmer**  
**Shutdown Notification**



## Retired Unit Exemption

For more information, see instructions and refer to 40 CFR 72.8, 97.405, 97.505, 97.605, 97.705, 97.805, 97.905, 97.1005 or a comparable state regulation, as applicable.

This submission is: ☒ New ☐ Revised

### STEP 1

Identify the unit by plant (source) name, State, plant code and unit ID#.

Plant (Source) Name Zimmer	State OH	Plant Code 6019	Unit ID# 1,A,B
-------------------------------	-------------	--------------------	-------------------

### STEP 2

Indicate the program(s) that the unit is subject to.

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Acid Rain                                  | <input checked="" type="checkbox"/> CSAPR SO <sub>2</sub> Group 1 |
| <input checked="" type="checkbox"/> CSAPR NO <sub>x</sub> Annual               | <input type="checkbox"/> CSAPR SO <sub>2</sub> Group 2            |
| <input type="checkbox"/> CSAPR NO <sub>x</sub> Ozone Season Group 1            | <input type="checkbox"/> Texas SO <sub>2</sub>                    |
| <input type="checkbox"/> CSAPR NO <sub>x</sub> Ozone Season Group 2            |   |
| <input checked="" type="checkbox"/> CSAPR NO <sub>x</sub> Ozone Season Group 3 |   |

### STEP 3

Identify the date on which the unit was (or will be) permanently retired.

December 31, 2022

### STEP 4

If the unit is subject to the Acid Rain Program, identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.8(d).

Calendar year starting January 1, 2023

### STEP 5 Read the applicable special provisions.

#### Acid Rain Program Special Provisions

(1) A unit exempt under 40 CFR 72.8 shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR part 73 subpart B.

(2) A unit exempt under 40 CFR 72.8 shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain permit application under 40 CFR 72.31 for the unit not less than 24 months prior to the date on which the unit is first to resume operation.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 72.8 shall comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) For any period for which a unit is exempt under 40 CFR 72.8, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.

(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.8 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. The owners and operators bear the burden of proof that the unit is permanently retired.

(6) On the earlier of the following dates, a unit exempt under 40 CFR 72.8(b) or (c) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the designated representative submits an Acid Rain permit application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain permit application. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under 40 CFR 72.8 shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

#### CSAPR NO<sub>x</sub> Annual Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.405 shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.405 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.405 shall comply with the requirements of the CSAPR NO<sub>x</sub> Annual Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.405 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under 40 CFR part 97 subpart AAAAA, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### CSAPR NO<sub>x</sub> Ozone Season Group 1 Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.505 shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.505 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.505 shall comply with the requirements of the CSAPR NO<sub>x</sub> Ozone Season Group 1 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.505 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under 40 CFR part 97 subpart BBBBB, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.805 shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.805 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.805 shall comply with the requirements of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.805 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under 40 CFR part 97 subpart EEEEE, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### CSAPR NO<sub>x</sub> Ozone Season Group 3 Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.1005 shall not emit any NO<sub>x</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.1005 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.1005 shall comply with the requirements of the CSAPR NO<sub>x</sub> Ozone Season Group 3 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.1005 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### CSAPR SO<sub>2</sub> Group 1 Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.605 shall not emit any SO<sub>2</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.605 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.605 shall comply with the requirements of the CSAPR SO<sub>2</sub> Group 1 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.605 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under 40 CFR part 97 subpart CCCCC, as a unit that commences commercial operation on the first date on which the unit resumes operation.

#### CSAPR SO<sub>2</sub> Group 2 Trading Program Special Provisions

(1) A unit exempt under 40 CFR 97.705 shall not emit any SO<sub>2</sub>, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.705 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.705 shall comply with the requirements of the CSAPR SO<sub>2</sub> Group 2 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under 40 CFR 97.705 shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under 40 CFR part 97 subpart DDDDD, as a unit that commences commercial operation on the first date on which the unit resumes operation.



Texas SO<sub>2</sub> Trading Program Special Provisions

- (1) A unit exempt under 40 CFR 97.905 shall not emit any SO<sub>2</sub>, starting on the date that the exemption takes effect.
- (2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 97.905 shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.
- (3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 97.905 shall comply with the requirements of the Texas SO<sub>2</sub> Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- (4) A unit exempt under 40 CFR 97.905 shall lose its exemption on the first date on which the unit resumes operation. A retired unit that resumes operation will not receive an allowance allocation under 40 CFR 97.911. The unit may receive allowances from the Supplemental Allowance Pool pursuant to 40 CFR 97.912. All other provisions of 40 CFR part 97 subpart FFFFFF regarding monitoring, reporting, recordkeeping and compliance will apply on the first date on which the unit resumes operation.

**STEP 6** Read the statement of compliance and the applicable certification statements, sign, and date.

**Statement of compliance**

I certify that the unit identified above at STEP 1 was (or will be) permanently retired on the date identified at STEP 3 and will comply with the applicable Special Provisions listed at STEP 5.

**Certification by designated representatives or alternate designated representatives**

I am authorized to make this submission on behalf of the owners and operators of the source and unit for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	John C. Osterbrink	Title	Plant Closure Manager
Owner Company Name	Zimmer Power Company LLC		
Email	Chris.Osterbrink@vistracorp.com	Phone	513.467.5266
Signature			
	Date	December 31, 2022	

**Certification by certifying officials of units subject only to the Acid Rain Program for which no designated representative has been authorized**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Title
Owner Company Name	
Email	Phone
Signature	Date



## Instructions for the Retired Unit Exemption Notice

Please type or print. If you have any questions regarding the submission of the Retired Unit Exemption notice, please contact CAMD or contact your local, State, or EPA Regional contact for the Acid Rain Program (ARP), Cross-State Air Pollution Rule (CSAPR), or Texas SO<sub>2</sub> Trading Program (TXSO<sub>2</sub>), as appropriate. You may also call EPA's Acid Rain Hotline at (202) 343- 9620.

**Submission Deadline:** For units subject only to the ARP, submit the Retired Unit Exemption notice by December 31 of the first year the unit is to be exempt. For units subject to the CSAPR or TXSO<sub>2</sub> programs (including units also subject to the ARP), submit the Retired Unit Exemption notice no later than 30 days after the date the unit is permanently retired (i.e., within 30 days of the date entered at STEP 3).

**STEP 1** Enter the plant name and state where the unit is located, the Plant Code for the facility, and the Unit ID for the unit, consistent with the data listed on the most current Certificate of Representation for the facility. A Plant Code is a number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, contact EIA at (202) 586-1029. For facilities that do not produce electricity, use the facility identifier assigned by EPA (beginning with "88"). If the facility does not produce electricity and has not been assigned a facility identifier, please send an email to CAMDForms@epa.gov.

**STEP 2** Identify the programs to which the unit is subject.

**STEP 3** Enter the date on which the unit was (or will be) permanently retired.

**STEP 4** If the unit is subject to the ARP, identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.8(d).

**STEP 5** Read the applicable special provisions.

**STEP 6** Read the statement of compliance and the applicable certification statements, sign, and date. For units subject only to the ARP, if no designated representative has been authorized, a certifying official for each owner of the unit must read the certification at STEP 6 labeled "certifying officials of units subject only to the Acid Rain Program", enter his or her name, title, name of the owner company for which he or she is the certifying official, phone number, email address, and then sign and date. A certifying official is not required to submit a Certificate of Representation. If there is more than one owner of a unit for which no designated representative has been authorized, each owner of the unit must have a certifying official sign the appropriate certification at STEP 6.

Submit the **original** Retired Unit Exemption notice to the title V permitting authority for the facility, and **mail a copy to one** of the following mailing addresses (**please note the different zip codes**):

**Regular or Certified mail:**

U.S. EPA  
CAMD – Market Operations Branch  
Attn: Exemptions  
1200 Pennsylvania Avenue, NW  
Mail Code 6204A  
Washington, DC 20460

**Overnight mail:**

U.S. EPA  
CAMD – Market Operations Branch  
Attn: Exemptions  
1200 Pennsylvania Avenue, NW  
WJC South, 4<sup>th</sup> Floor, Room # 4153C  
Washington, DC 20004  
(202) 564-8717

## **Paperwork Burden Estimate**

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control Nos. 2060-0258 and 2060-0667). Responses to this collection of information are mandatory (40 CFR 72.8, 97.405, 97.505, 97.605, 97.705, 97.805, 97.905 and 97.1005). 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 public reporting and recordkeeping burden for this collection of information is estimated to be 3.5 hours per response annually. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

# **Appendix D**

## **Emissions Inventory 2016v2 Emissions Modeling Platform Files**

*Accessible as Compressed File Folders,  
Containing Excel Worksheets, Titled:*

“2016\_inputs\_nonpoint”

“2016\_inputs\_nonroad”

“2032\_inputs\_nonpoint”

*Accessible as an Excel Worksheet Titled:*

“county\_sector\_2016v2\_summary”

# **Appendix E**

## **Public Notice and Statement of Consideration**

**KENTUCKY DIVISION FOR AIR QUALITY**  
**PUBLIC NOTICE FOR 2010 1-HOUR SULFUR DIOXIDE NATIONAL AMBIENT AIR**  
**QUALITY STANDARD, PROPOSED SECOND 10-YEAR MAINTENANCE PLAN FOR**  
**THE KENTUCKY PORTION OF THE CAMPBELL-CLERMONT, KY-OH AREA**

The Kentucky Energy and Environment Cabinet (Cabinet) is requesting EPA's approval that the proposed State Implementation Plan (SIP) revision satisfies the 2010 1-hour sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS) second 10-year maintenance plan requirements for the Kentucky portion of the Campbell-Clermont, KY-OH area. The draft SIP revision includes a projected maintenance year emissions inventory, maintenance demonstration, monitoring network description, verification of continued attainment and a contingency plan. The draft SIP shows that the Kentucky portion of the Campbell-Clermont, KY-OH area has maintained attainment for the 2010 1-hour SO<sub>2</sub> NAAQS and will continue to do so through the second maintenance period, i.e. 2037.

In accordance with 40 CFR 51.102, the Cabinet is making this proposed plan available for public inspection and provides the opportunity for public comment concerning Kentucky's second 10-year maintenance plan for the Kentucky portion of the Campbell-Clermont, KY-OH area. The proposed plan can be found at <https://eec.ky.gov/Environmental-Protection/Air/Pages/Public-Notices.aspx>. The public comment period will be open from December 4, 2024, through January 10, 2025. Comments should be sent to the contact person, via email or written mail, and must be received by January 10, 2025, to be considered part of the public record.

The Cabinet will conduct a virtual public hearing on January 10, 2025, at 10:00 a.m. (Eastern Time). This hearing will be held to receive comments on the proposed SIP revision. 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 are also provided in written form, if possible. It is not necessary that the hearing be held or attended in order for persons to comment on the proposed administrative regulation. If no request for a public hearing is received by January 3, 2025, the hearing will be cancelled, and notice of the cancellation will be posted at <https://eec.ky.gov/Environmental-Protection/Air/Pages/Public-Notices.aspx>.

Please note that registration is required to participate in this hearing. You must either email your name and mailing address to [blake.borwig@ky.gov](mailto:blake.borwig@ky.gov) or mail this information to Blake Borwig, Division for Air Quality, 300 Sower Blvd., 2nd Floor, Frankfort, KY 40601. Please put "Registration for the Campbell-Clermont, KY-OH area second maintenance plan public hearing" as the subject line, and state in the body of the message if you plan to speak during the hearing.

**CONTACT PERSON:** Blake Borwig, Environmental Scientist III, Evaluation Section, Division for Air Quality, 300 Sower Boulevard, Frankfort, Kentucky 40601. Phone: (502)782-2751  
Email: [blake.borwig@ky.gov](mailto:blake.borwig@ky.gov)

**The Energy and Environment 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.**

**STATEMENT OF CONSIDERATION  
Relating to Proposed SIP**

**2010 Sulfur Dioxide National Ambient Air Quality Standard Second 10-Year Maintenance  
Plan for the Kentucky Portion of the Campbell-Clermont, KY-OH Maintenance Area**

**Energy and Environment Cabinet  
Kentucky Department for Environmental Protection  
Division for Air Quality**

From December 4, 2024, until January 10, 2025, the Kentucky Division for Air Quality (Division) provided an opportunity for comments on the proposed State Implementation Plan (SIP) revision regarding the 2010 sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS) second 10-year maintenance plan for the Kentucky portion of the Campbell-Clermont, KY-OH maintenance area (Area). The public notice announcing the public comment period included an opportunity to request a virtual public hearing. A request for a public hearing was not received; therefore, the Division's scheduled virtual public hearing was canceled.

During the public comment period, the Division received comments from the U.S. Environmental Protection Agency (U.S. EPA). No other comments were received. All comments and responses are listed below.

**Response to Comments for the Proposed SIP Revision Regarding the 2010 SO<sub>2</sub> Second 10-year Maintenance Plan for the Kentucky Portion of the Campbell-Clermont, KY-OH Maintenance Area**

**1. Comment:** Section 1.a – Background & Introduction: History: The EPA suggests the Commonwealth consider reorganizing the Campbell-Clermont, KY-OH 2010 SO<sub>2</sub> Area (“Area”) background narrative on page 1 to provide chronological context regarding the shutdown of Walter C. Beckjord (Beckjord facility) and the consideration of the William H. Zimmer Station (Zimmer facility). This includes clarifying that the Zimmer facility was not included in the Area boundary. Additionally, the EPA recommends DAQ moving the last two paragraphs on page 11 that discuss the Zimmer facility to the “History” narrative in section 1.

*(David Akers, U.S. EPA)*

**Response:** The Division acknowledges this comment. Section 1.a of the SIP has been updated accordingly to provide a more thorough and chronological history of the Area.

**2. Comment:** The EPA recommends the Commonwealth provide the information requested below to document how the attainment and projected emission inventories were developed for all emission source categories for the Campbell County, KY portion of the SO<sub>2</sub> maintenance area in accordance with 40 CFR part 51:

- a. A comprehensive description of how the attainment and projected emission inventories were developed including documentation (e.g., data assumptions, source of state or national emissions data, modeling platform emission files, example calculations, etc.).



- b. Example calculations for the partial county percentages for Campbell County, including what the partial county percentages were and if a different percentage was used for the second SO<sub>2</sub> maintenance plan.
- c. A list of the emission inventory sectors considered to calculate the non-road emissions in Table 3.
- d. Additional clarification regarding the reliance on total county rather than partial county emissions data.

*(David Akers, U.S. EPA)*

**Response to 2.a:** The Division acknowledges this comment. The EMPv2 input files have been added to the SIP via Appendix D.

**Response to 2.b:** The Division acknowledges this comment. Footnote 12 has been added to address this concern (see page 5).

**Response to 2.c:** The Division acknowledges this comment. Footnote 14 has been added to address this concern (see page 7).

**Response to 2.d:** The Division acknowledges this comment. The narrative has been updated to include details on the Division's choice to rely on county-wide emissions data for Campbell County in the second maintenance plan (see page 7).

**3. Comment:** Please explain why residential wood combustion and point fire emissions are not included in the emission calculations. If they are included, please clarify which sector includes these emissions.

*(David Akers, U.S. EPA)*

**Response:** The Division acknowledges this comment. The Division has added a footnote to provide additional clarification regarding which sectors include these emissions. Please see footnote 14 on page 7.

**4. Comment:** Section II.e – Contingency Plan: The EPA recommends reorganizing the contingency measure discussion starting on page 14. Specifically, the EPA suggests DAQ remove the following statement on page 14 to clarify the contingency measures should the Area violate the 2010 standard during the 2nd maintenance period: “Thus, the Division cannot determine any specific contingency measures that may be appropriate to help address any future violations of the standard. Potential measures could include tighter SO<sub>2</sub> emissions offsets for new and modified major sources or additional SO<sub>2</sub> reasonably available control technology for affected sources in the Area.”

Instead, the EPA recommends DAQ clarify its intentions as part of the Commonwealth's warning level response in the event of a monitored violation. This could include, but is not limited to, a commitment to evaluate the Area's emission inventory for all source sectors, exceptional events, and the PSD and/or minor source permits for any new stationary or area

sources constructed in the Area during the 2nd maintenance period in addition to the Commonwealth's enforcement authority to identify the source of a monitored violation. The EPA is available for further discussion.

*(David Akers, U.S. EPA)*

**Response:** The Division acknowledges this comment. The Division removed the statement that EPA recommended be removed from this section of the SIP. The Division also clarified procedures for a warning level response; please see page 13.

**5. Comment:** Section II.e – Contingency Plan: In the first bullet on page 14, under the contingency plan, please correct the maximum daily 1-hour SO<sub>2</sub> concentration to 75 ppb.

*(David Akers, U.S. EPA)*

**Response:** The Division acknowledges this comment. The value of the maximum daily 1-hour SO<sub>2</sub> concentration has been updated in the first bullet on page 13.