



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mike Braun  
Governor

Clint Woods  
Commissioner

October 8, 2025

Ms. Anne Vogel  
Regional Administrator  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3950

Re: Supplement to the Second 10-Year  
Maintenance Plan for the Indiana Portion of  
the Cincinnati, Ohio-Kentucky-Indiana (OH-  
KY-IN) 2008 8-Hour Ozone Maintenance  
Area (Lawrenceburg Township, Dearborn  
County, Indiana)

Dear Ms. Vogel:

The purpose of this letter is to provide supplemental data for the *Second 10-Year Maintenance Plan for the Indiana Portion of the Cincinnati, Ohio-Kentucky-Indiana (OH-KY-IN) 2008 8-Hour Ozone Maintenance Area (Lawrenceburg Township, Dearborn County, Indiana)*, which the Indiana Department of Environmental Management (IDEM) submitted to United States Environmental Protection Agency (U.S. EPA) on April 1, 2025. The submittal includes emissions data for sources of ozone precursors, nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs), demonstrating Lawrenceburg Township in Dearborn County, Indiana, along with the remaining portion of the Cincinnati, OH-KY-IN 2008 8-hour ozone maintenance area, has continued and will continue to maintain compliance with the 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS) through the second 10-year maintenance period (i.e., April 7, 2037).

Prompted by a recent inquiry from U.S. EPA Region V staff, IDEM is submitting this supplement to maintain consistency with the second 10-year maintenance plans submitted by Ohio and Kentucky for the Cincinnati, OH-KY-IN 2008 8-hour ozone maintenance area.

As background, Ohio Environmental Protection Agency (Ohio EPA) discovered discrepancies with emissions inventories following the submittal of Ohio's second 10-year maintenance plan for the Cincinnati area on November 6, 2024, and submitted a supplement revising the inventories on August 19, 2025. Indiana has thoroughly evaluated Ohio EPA's supplement to identify affected portions of Indiana's document and is providing replacement pages that accurately reflect the changes to the emissions inventories. The replacement pages are provided in Enclosure 1 with strike-through text and include:

Visit [on.IN.gov/survey](https://on.IN.gov/survey) or scan the QR code to provide feedback.

*We appreciate your input!*



Ms. Anne Vogel  
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- Page 5, Table 2.1
- Page 5, Table 2.2
- Page 6, Table 2.3 (and preceding paragraph)
- Page 6, Table 2.4
- Page 7, Table 2.5 (and preceding paragraph)

None of the revisions presented in this supplement affect the results of Indiana's April 1, 2025, second 10-year maintenance plan submittal. As such, the entire Cincinnati area continues to meet 2008 8-hour ozone maintenance requirements, as supported by the updated tables identifying the resulting emission changes.

A copy of this submittal was sent to U.S. EPA through the State Planning Electronic Collaboration System (SPeCS).

IDEM requests U.S. EPA proceed with review and approval of the *Second 10-Year Maintenance Plan for the Indiana Portion of the Cincinnati, Ohio-Kentucky-Indiana (OH-KY-IN) 2008 8-Hour Ozone Maintenance Area (Lawrenceburg Township, Dearborn County, Indiana)* submitted on April 1, 2025, as supplemented by the corrected emissions data contained in this letter.

If you have any questions or need additional information, please contact Brian Callahan, Chief, Air Quality Standards and Implementation Section, Office of Air Quality at (317) 232-8244 or bcallaha@idem.IN.gov.

Sincerely,



Matt Stuckey  
Assistant Commissioner  
Office of Air Quality

MS/sad/bc/gf/as

Enclosure: Supplement to the *Second 10-Year Maintenance Plan for the Indiana Portion of the Cincinnati, Ohio-Kentucky-Indiana (OH-KY-IN) 2008 8-Hour Ozone Maintenance Area (Lawrenceburg Township, Dearborn County, Indiana)*

cc: Sara Arra, U.S. EPA Region 5 (no enclosure)  
Chris Panos, EPA Region 5 (no enclosure)  
Michael Compher, EPA Region 5 (no enclosure)  
Michael Leslie, U.S. EPA Region 5 (no enclosure)  
Eric Svingen, EPA Region 5 (no enclosure)  
Matt Stuckey, IDEM (no enclosure)  
Scott Deloney, IDEM (no enclosure)  
Brian Callahan, IDEM (no enclosure)  
Gale Ferris, IDEM (no enclosure)  
Amy Smith, IDEM (no enclosure)  
File Copy

## **Enclosure**

**Supplement to the Second 10-Year Maintenance Plan for the Indiana Portion of  
the Cincinnati, Ohio-Kentucky-Indiana (OH-KY-IN) 2008 8-Hour Ozone  
Maintenance Area (Lawrenceburg Township, Dearborn County, Indiana)**

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Table 2.1 contains the 2016 attainment year NO<sub>x</sub> and VOC emissions data for Indiana's portion of the maintenance area.

**Table 2.1: 2016 Attainment Year NO<sub>x</sub> and VOC Emissions (tsd), by Source Category, Dearborn County, IN**

Source Category	NO <sub>x</sub>	VOCs
Area	<del>0.33</del> 0.26	<del>1.38</del> 1.37
Non-road	0.38	0.37
On-road	0.57	0.20
Point-EGU	0.90	0.01
Point Non-EGU	0.85	6.20
<b>Total</b>	<b><del>3.03</del> 2.96</b>	<b><del>8.16</del> 8.15</b>

Table 2.2 contains the 2016 attainment year NO<sub>x</sub> and VOC emissions data for the entire Cincinnati, OH-KY-IN maintenance area.

**Table 2.2: 2016 Attainment Year NO<sub>x</sub> and VOC Emissions (tsd), by Source Category, Cincinnati, OH-KY-IN Area**

Source Category	NO <sub>x</sub>	VOCs
Area	<del>23.45</del> 11.90	<del>99.63</del> 65.80
Non-road	<del>23.33</del> 15.60	<del>23.64</del> 17.39
On-road	64.90	27.30
Point-EGU	<del>45.84</del> 45.61	<del>0.68</del> 0.66
Point Non-EGU	<del>44.30</del> 13.31	<del>46.45</del> 12.72
<b>Total</b>	<b><del>171.82</del> 151.32</b>	<b><del>167.70</del> 123.87</b>

## 2.2 Maintenance Demonstration

Maintenance is demonstrated when the projected maintenance year emissions totals are below the attainment year totals. The development of the 2037 maintenance year emissions data was derived by performing a linear extrapolation on the 2016 attainment year emissions inventory data using the TREND function in Microsoft Excel. If the TREND function resulted in a negative value, the emissions were assumed to not change.

Table 2.3 provides a comprehensive look at the 2016 attainment and 2037 projected maintenance year emissions data for Indiana's portion of the Cincinnati, OH-KY-IN maintenance area. VOC emissions are projected to increase for area, point-EGU, and point non-EGU categories and decrease for the non-road and on-road categories, resulting in ~~no overall change~~ **a small net increase** from 2016 to 2037. NO<sub>x</sub> emissions are expected to increase for the point non-EGU category and decrease for the four remaining source categories, resulting in an overall projected reduction from 2016 to 2037.

**Table 2.3: Comparison of 2016 Attainment Year and 2037 Maintenance Year Emissions by Source Category, Dearborn County, Indiana**

Source Category	NO <sub>x</sub> Emissions (tsd)			VOC Emissions (tsd)		
	2016	2037	Net Change (2016-2037)	2016	2037	Net Change (2016-2037)
Area	<del>0.33</del> 0.26	<del>0.25</del> 0.19	<del>-0.08</del> -0.07	<del>4.38</del> 1.37	1.58	<del>0.20</del> 0.21
Non-road	0.38	0.17	-0.21	0.37	0.27	-0.10
On-road	0.57	0.09	-0.48	0.20	0.07	-0.13
Point-EGU	0.90	0.39	-0.51	0.01	0.03	0.02
Point Non-EGU	0.85	1.12	0.27	6.20	6.21	0.01
<b>Total</b>	<b><del>3.03</del> 2.96</b>	<b><del>2.02</del> 1.96</b>	<b><del>-1.01</del> -1.00</b>	<b><del>8.16</del> 8.15</b>	<b>8.16</b>	<b><del>0.00</del> 0.01</b>

Table 2.4 provides data for the entire Cincinnati, OH-KY-IN maintenance area (Indiana, Kentucky, and Ohio combined). Small increases are projected for VOCs from area sources and NO<sub>x</sub> from point non-EGUs; however, emissions from all other source categories are projected to decrease, resulting in overall NO<sub>x</sub> and VOC reductions.

**Table 2.4: Comparison of 2016 Attainment Year and 2037 Maintenance Year Emissions by Source Category, Cincinnati, OH-KY-IN 2008 Ozone Maintenance Area**

Source Category	NO <sub>x</sub> Emissions (tsd)			VOC Emissions (tsd)		
	2016	2037	Net Change (2016-2037)	2016	2037	Net Change (2016-2037)
Area	<del>23.45</del> 11.90	<del>48.62</del> 8.97	<del>-4.83</del> -2.93	<del>99.63</del> 65.80	<del>402.37</del> 69.90	<del>2.74</del> 4.10
Non-road	<del>23.33</del> 15.60	<del>40.12</del> 7.49	<del>-13.21</del> -8.11	<del>23.64</del> 17.39	<del>17.45</del> 12.59	<del>-6.19</del> -4.80
On-road	64.90	10.09	-54.81	27.30	11.47	-15.83
Point-EGU	<del>45.84</del> 45.61	<del>8.87</del> 8.66	<del>-36.97</del> -36.95	<del>0.68</del> 0.66	<del>0.49</del> 0.42	<del>-0.19</del> -0.24
Point Non-EGU	<del>44.30</del> 13.31	<del>44.96</del> 13.88	<del>0.66</del> 0.57	<del>46.45</del> 12.72	<del>45.04</del> 11.33	<del>-1.41</del> -1.39
<b>Total</b>	<b><del>171.82</del> 151.32</b>	<b><del>62.66</del> 49.09</b>	<b><del>-109.16</del> -102.23</b>	<b><del>167.70</del> 123.87</b>	<b><del>146.82</del> 105.71</b>	<b><del>-20.88</del> -18.16</b>

Table 2.5 provides a summary of the total net change in NO<sub>x</sub> and VOC emissions from 2016 to 2037 (all sources, combined), and the margins of reductions expressed in percentages. As shown by the data, 2037 maintenance year emissions for the entire Cincinnati, OH-KY-IN maintenance area are projected to decrease from 2016 attainment year levels by margins of approximately ~~64%~~ **68%** for NO<sub>x</sub> and ~~12%~~ **15%** for VOCs. Based on the projected overall reductions, the area is expected to continue attaining the 2008 ozone standard throughout the second 10-year maintenance period.

**Table 2.5: Summary of Net Changes in NO<sub>x</sub> and VOC Emissions, 2016 – 2037**

Portion of the Maintenance Area	NO <sub>x</sub>				VOCs			
	2016	2037	Net Change		2016	2037	Net Change	
			tsd	Percentage			tsd	Percentage
Indiana	<del>3.03</del>	<del>2.02</del>	<del>-1.01</del>	<del>-33.33%</del>	<del>8.16</del>	<del>8.16</del>	<del>0.00</del>	<del>0.00%</del>
	2.96	1.96	-1.00	-33.78%	8.15	8.16	0.01	0.12%
Entire Cincinnati, OH-KY-IN Area	<del>171.82</del>	<del>62.66</del>	<del>-109.16</del>	<del>-63.53%</del>	<del>167.70</del>	<del>146.82</del>	<del>-20.88</del>	<del>-12.45%</del>
	151.32	49.09	-102.23	-67.56%	123.87	105.71	-18.16	-14.66%

### 2.3 Continued Air Quality Monitoring

Indiana is committed to addressing ozone monitoring requirements in accordance with 40 CFR Part 58 Appendix D, and work with appropriate neighboring agencies to address cross-state requirements. There are no ozone monitoring sites located within Indiana's portion of the Cincinnati, OH-KY-IN maintenance area. Indiana will consult with U.S. EPA should changes become necessary in the future.

### 2.4 Verification of Continued Attainment

Indiana has the legal authority to enforce and implement the requirements of the maintenance plan for Lawrenceburg Township, Dearborn County, IN. This includes the authority to adopt, implement, and enforce any subsequent emission control measures determined to be necessary to correct future ozone attainment problems.

Verification of continued attainment is accomplished through operation of the ambient ozone monitoring network and the periodic update of the area's emissions inventory. A multi-agency agreement between the Southwest Ohio Air Quality Agency (Cincinnati, OH)<sup>6</sup> and IDEM specifies that the Southwest Ohio Air Quality Agency will fulfill all the ozone monitoring requirements in the Cincinnati, OH-KY-IN core-based statistical area (CBSA). Indiana is not aware of any plans to discontinue operation, relocate, or otherwise change the existing ozone monitoring network other than through revisions in the network approved by U.S. EPA.

In addition, to track future levels of emissions, Indiana will continue to develop and

<sup>6</sup> A division of Hamilton County Environmental Services.