INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



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Mike Braun
Governor

Clint Woods
Commissioner

December 19, 2025

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

Re: Preliminary Recommendations for Air Quality Designations under the 2024 Revised Secondary Annual Sulfur Dioxide (SO₂) National Ambient Air Quality Standard (NAAQS)

Dear Regional Administrator Vogel:

On December 10, 2024, United States Environmental Protection Agency (U.S. EPA) revised the secondary SO₂ NAAQS from a three-hour average, not to be exceeded more than once per year, of 0.5 parts per million (ppm) to an annual standard with a level of 10 parts per billion (ppb), averaged over three years (89 FR 105692).¹

This letter is in response to U.S. EPA's subsequent guidance memorandum (guidance memo), "Initial Area Designations for the 2024 Revised Secondary Annual Sulfur Dioxide National Ambient Air Quality Standard" (Revised January 16, 2025), concerning the implementation of the new standard in accordance with Section 107(d) of the federal Clean Air Act (CAA). U.S. EPA's guidance memo states that air quality designations will be proposed in late-August 2026 and final designations will be promulgated no later than December 11, 2026. The deadline for states to submit their initial air quality designations recommendations to U.S. EPA is December 11, 2025.

U.S. EPA determined in the final NAAQS rulemaking that the current monitoring network is adequate to provide the data needed to implement the 2024 revised secondary annual SO₂ NAAQS.² As discussed in its guidance memo, U.S. EPA published 2022-2024 annual design values for states to use in making their initial

² See Section IV of the final rule: https://www.govinfo.gov/content/pkg/FR-2024-12-27/pdf/2024-29463.pdf.



¹ For the guidance memo, please see: https://www.epa.gov/so2-pollution/secondary-annual-sulfur-dioxide-national. For information about the rule, please see: https://www.epa.gov/so2-pollution/secondary-national-ambient-air-quality-standards-naaqs-nitrogen-dioxide-no2-and.

designation recommendations.³ U.S. EPA's preliminary review of the Air Quality System (AQS) monitoring data indicates the vast majority of the country are attaining the 2024 revised secondary annual SO₂ NAAQS.

Indiana's SO₂ Monitoring Network

Indiana's SO₂ monitoring network is operated in compliance with the requirements in 40 Code of Federal Regulations (CFR) Part 58 Appendix D §4.4. Ten SO₂ monitors operated during the period covering 2022-2024, including eight operated by the State of Indiana and two operated by industrial sources. Figure 1 displays the SO₂ monitor locations, names, and Site IDs.

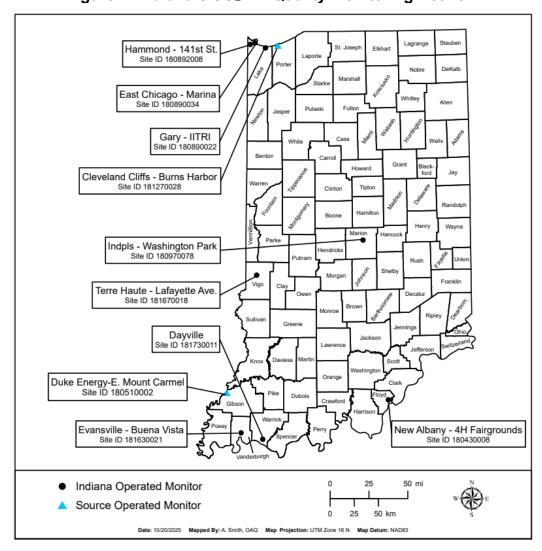


Figure 1: Indiana's SO₂ Air Quality Monitoring Network

³ See U.S. EPA's 2024 Design Value Reports, "Sulfur Dioxide Design Values, 2024," Table 5b. Site-level Design Values for the 2024 Annual Secondary Sulfur Dioxide NAAQS (https://www.epa.gov/air-trends/air-quality-design-values#report).

Annual SO₂ Monitoring Data for 2022 to 2024

The 2024 revised secondary annual SO₂ NAAQS is violated when SO₂ monitor values averaged over three years exceed a value of 10 ppb. The annual mean concentration averaged over three consecutive years is the design value (DV).⁴ Generally, the attainment status of an area (i.e., core-based statistical area (CBSA), county, etc.) is based on the highest DV reported.

U.S. EPA AQS data for the 2024 revised secondary annual SO₂ NAAQS for Indiana monitors, which is summarized in Table 1, was evaluated to determine the state's attainment status. The data shows 2022, 2023, and 2024 annual mean values between 0.2 to 1.6 ppb and 2022-2024 design values (DVs) well below the standard of 10 ppb, at 0 to 1 ppb.

Table 1: Summary of Indiana's SO₂ Air Quality Monitor Values for the 2024 Revised Secondary Annual NAAQS (2022-2024)

Site Status Annual Mean Value County Site ID Site Name 2022-2024 (ppb) Design Value (ppb) 2023 2022 2024 1.1^b 180430008 4H Fairgrounds 0.7 Invalid Floyda 180431004 Green Valley Elem. Sch. Invalid 8.0 180510002 Duke Energy - E. Mt. Carmel Gibson 1.6 1.0 1.1 1 180890022 Gary - IITRI 0.6 1.3 0.9 1 180890034 8.0 1 Lake East Chicago - Marina 0.9 0.6 180892008 Hammond - 141st St. 0.7 1.1 0.6 1 Marion 180970078 Indianapolis - Washington Park 0.3 0.2 0.2 0 Porter 181270028 Cleveland Cliffs - Burns Harbor 0.9 8.0 1 1.1 Vanderburgh 181630021 Evansville - Buena Vista 1.0 0.2 0.4 1 Vigo 181670018 Terre Haute - Lafayette Ave 0.5 1.0 0.2 0.9^bWarrick 181730011 Dayville 1.3 1.1 Invalid

Indiana shares borders with other states in the following CBSAs: Chicago-Naperville-Elgin, Illinois-Indiana-Wisconsin (IL-IN-WI); Louisville/Jefferson County, Kentucky-Indiana (KY-IN); Cincinnati, Ohio-Kentucky-Indiana (OH-KY-IN), and, Evansville, Indiana-Kentucky (IN-KY). AQS data, summarized in Table 2, was evaluated to

^a Site ID 180431004 (Green Valley Elementary School) was discontinued on 1/4/2023 and Site ID 18043008 (4H Fairgrounds) began on 1/11/2023 as part of a planned relocation.

^b Monitoring sites must meet the data completeness requirements listed in Appendix T to 40 CFR Part 50 in order to have a valid DV. Data was incomplete for 2024 for Site ID 180430008 (4H Fairgrounds) and Site ID 181730011(Dayville).

⁴ Design values are computed and published annually by U.S. EPA (https://www.epa.gov/air-trends/air-quality-design-values).

determine the state's potential contributions to violations in these nearby areas. The data shows annual mean values between 0.0 and 2.4 ppb and DVs well below the standard of 10 ppb, at 0 to 2 ppb.

Table 2: Summary of SO₂ Air Quality Monitor Values in Neighboring Areas for the 2024 Revised Secondary Annual NAAQS (2022-2024)

State Name	County Name	Core-Based Statistical Area	Site ID	Annual Mean Value (ppb)			2022-2024 Design Value
				2022	2023	2024	(ppb)
Illinois	Cook	Chicago-Naperville-Elgin, IL-IN-WI	170310076	1.2	1.9	0.7	1
			170311601	0.8	1.3	0.0	1
			170314201	0.2	0.4	0.8	0
Kentucky	Campbell	Cincinnati, OH-KY-IN	210373002	0.6	0.7	0.2	1
	Henderson	Evansville, IN-KY	211011011	1.3	2.4	2.4	2
	Jefferson	Louisville/Jefferson County, KY-IN	211110051	0.7	0.7	1.2	1
			211110067	1.1	8.0	1.2	1
			211111041	0.5	0.3ª	0.9	Invalid
Ohio	Butler	Cincinnati, OH-KY-IN	390170019	0.3	0.1	0.3	0
			390170020	0.6	0.5	0.6	1
			390170021	1.0	0.6	0.2	1
	Hamilton	Cincinnati, OH-KY-IN	390610010	0.8	0.1	0.2	0
			390610040	0.7	1.0	0.5	1

^a Monitoring sites must meet the data completeness requirements listed in Appendix T to 40 CFR Part 50 in order to have a valid DV. Site ID 211111041 (Jefferson County, Kentucky) data was incomplete for 2023.

Indiana has worked diligently with federal, state, and local partners to ensure compliance with the NAAQS in all areas of the state. All of Indiana SO₂ monitors currently measure concentrations below the standard, and SO₂ emissions from stationary sources across the state have been reduced by approximately 94% over the past 20 years.

Conclusion

In accordance with Section 107(d) of the federal CAA, Indiana has conducted a thorough analysis of air quality data and factors outlined in U.S. EPA's guidance memo for the designation of areas under the 2024 revised secondary annual SO₂ NAAQS. IDEM believes 2022-2024 SO₂ monitoring data presented in Tables 1 and 2 sufficiently demonstrates that all Indiana monitors are meeting the standard and are not contributing to violations of the standard in nearby areas. As such, as provided in Enclosure 1, IDEM recommends all of the monitored counties in Indiana with a valid design value be designated as attainment and all other counties within Indiana be designated as unclassifiable under the revised 2024 secondary annual SO₂ NAAQS.

Ms. Anne Vogel Page **5** of **5**

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

Consistent with U.S. EPA's January 16, 2025 guidance, Indiana reserves the right to make necessary updates to its recommendations once 2025 monitoring data becomes certified. I would like to thank U.S. EPA for the opportunity to provide feedback regarding initial designation recommendations under the 2024 revised secondary annual SO₂ NAAQS. IDEM looks forward to continued coordination with Region 5 staff as the designation process moves forward.

If you have any questions or need additional information, please contact Matt Stuckey, Assistant Commissioner, Office of Air Quality, at (317) 233-0203 or mstuckey@idem.IN.gov.

Sincerely,

Clint Woods Commissioner

Enclosure 1: Indiana's Preliminary Recommendations for Air Quality Designations under the 2024 Revised Secondary Annual Sulfur Dioxide (SO₂) National Ambient Air Quality Standard (NAAQS)

cc: Sara Arra, U.S. EPA Region 5
Chris Panos, EPA Region 5
Michael Compher, EPA Region 5
Eric Svingen, EPA Region 5
Krista Thomason, EPA Region 5
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Enclosure 1

Indiana's Preliminary Recommendations for Air Quality Designations under the 2024 Revised Secondary Annual Sulfur Dioxide (SO₂) National Ambient Air Quality Standard (NAAQS)*

County	Recommendation			
Adams	Unclassifiable			
Allen	Unclassifiable			
Bartholomew	Unclassifiable			
Benton	Unclassifiable			
Blackford	Unclassifiable			
Boone	Unclassifiable			
Brown	Unclassifiable			
Carroll	Unclassifiable			
Cass	Unclassifiable			
Clark	Unclassifiable			
Clay	Unclassifiable			
Clinton	Unclassifiable			
Crawford	Unclassifiable			
Daviess	Unclassifiable			
Dearborn	Unclassifiable			
Decatur	Unclassifiable			
DeKalb	Unclassifiable			
Delaware	Unclassifiable			
Dubois	Unclassifiable			
Elkhart	Unclassifiable			
Fayette	Unclassifiable			
Floyd	Unclassifiable			
Fountain	Unclassifiable			
Franklin	Unclassifiable			
Fulton	Unclassifiable			
Gibson	Attainment			
Grant	Unclassifiable			
Greene	Unclassifiable			
Hamilton	Unclassifiable			
Hancock	Unclassifiable			
Harrison	Unclassifiable			
Hendricks	Unclassifiable			
Henry	Unclassifiable			
Howard	Unclassifiable			
Huntington	Unclassifiable			
Jackson	Unclassifiable			
Jasper	Unclassifiable			

County	Recommendation
Jay	Unclassifiable
Jefferson	Unclassifiable
Jennings	Unclassifiable
Johnson	Unclassifiable
Knox	Unclassifiable
Kosciusko	Unclassifiable
LaPorte	Unclassifiable
LaGrange	Unclassifiable
Lake	Attainment
Lawrence	Unclassifiable
Madison	Unclassifiable
Marion	Attainment
Marshall	Unclassifiable
Martin	Unclassifiable
Miami	Unclassifiable
Monroe	Unclassifiable
Montgomery	Unclassifiable
Morgan	Unclassifiable
Newton	Unclassifiable
Noble	Unclassifiable
Ohio	Unclassifiable
Orange	Unclassifiable
Owen	Unclassifiable
Parke	Unclassifiable
Perry	Unclassifiable
Pike	Unclassifiable
Porter	Attainment
Posey	Unclassifiable
Pulaski	Unclassifiable
Putnam	Unclassifiable
Randolph	Unclassifiable
Ripley	Unclassifiable
Rush	Unclassifiable
St. Joseph	Unclassifiable
Scott	Unclassifiable
Shelby	Unclassifiable
Spencer	Unclassifiable
Starke	Unclassifiable
Steuben	Unclassifiable
Sullivan	Unclassifiable

County	Recommendation			
Switzerland	Unclassifiable			
Tippecanoe	Unclassifiable			
Tipton	Unclassifiable			
Union	Unclassifiable			
Vanderburgh	Attainment			
Vermillion	Unclassifiable			
Vigo	Attainment			
Wabash	Unclassifiable			
Warren	Unclassifiable			
Warrick	Unclassifiable			
Washington	Unclassifiable			
Wayne	Unclassifiable			
Wells	Unclassifiable			
White	Unclassifiable			
Whitley	Unclassifiable			

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