



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

January 13, 2017

Mr. Robert A. Kaplan
Acting Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3950

Re: Preliminary Recommendations Concerning
Round 3 Air Quality Designations for the
2010 Primary 1-Hour Sulfur Dioxide National
Ambient Air Quality Standard

Dear Mr. Kaplan:

This letter is in response to United States Environmental Protection Agency's (U.S. EPA's) July 22, 2016, memorandum *Area Designations for the 2010 Primary Sulfur Dioxide National Ambient Air Quality Standard-Round 3* and prior guidance on area designations issued by U.S. EPA on March 20, 2015. The letter's primary purpose is to provide information for U.S. EPA's evaluation prior to Round 3 designations. As required, the Indiana Department of Environmental Management (IDEM) is providing new modeling analyses for areas where modeling is being used to characterize air quality around certain sulfur dioxide (SO₂) sources, as well as preliminary recommendations for Round 3 designations. IDEM is also including information about newly installed air monitors where air monitoring is being used to characterize air quality around certain SO₂ sources for Round 4 designations.

Implementation of the 2010 primary 1-hour SO₂ standard began in 2013 when U.S. EPA established nonattainment areas based on 2010-2012 monitoring data. Subsequently, on March 2, 2015, U.S. EPA entered into a consent decree with the Sierra Club and Natural Resources Defense Council (NRDC) establishing a timeline for the completion of air quality characterizations and designations in all remaining areas of the country. The court order directed U.S. EPA to complete the designations in three additional rounds: Round 2 by July 2, 2016, Round 3 by December 31, 2017, and Round 4 by December 31, 2020.

On June 30, 2016, U.S. EPA completed designations for all Round 2 sources. U.S. EPA has designated all of Indiana's Round 2 sources as unclassifiable/attainment. The final rule was published in the Federal Register on July 12, 2016 (81 FR 45039).

On August 10, 2015, U.S. EPA announced the Data Requirements Rule (DRR), which requires the characterization of air quality near sources with SO₂ emissions at or greater than 2,000 tons per year (tpy) or have been identified by IDEM or U.S. EPA “as requiring further air quality characterization.” Under the DRR, states must submit air quality information to U.S. EPA according to timeframes that coincide with the court-ordered dates for designations in all remaining areas under Rounds 3 and 4.

IDEM has been working with U.S. EPA to identify all sources in Indiana that are subject to the DRR and provide data for the characterization of nearby air quality. As required, on January 7, 2016, IDEM submitted a list of 11 stationary sources identified for air quality characterization under the DRR, thus beginning the Round 3 designation process. On March 26, 2016, U.S. EPA added six sources to the list, including: five Round 2 sources that U.S. EPA identified as also meeting DRR characterization requirements; and one source, U.S. Mineral Products (Isolatek), for which U.S. EPA believed further study was necessary. IDEM disagrees with U.S. EPA’s addition of U.S. Mineral Products to the list of Indiana sources subject to the DRR, as further explained in Attachment 3. Table 1 contains an up-to-date list of DRR sources identified by U.S. EPA and IDEM, along with the selected approaches for air quality characterization for each source area.

Table 1: Indiana SO₂ Sources Subject to the Data Requirements Rule

Facility	County	2014 SO ₂ Emissions (Tons)	Selected Approach for Characterization
Duke – Gallagher	Floyd	3,524	Modeling
Duke – Gibson	Gibson	22,055	Round 2 Source ^a
U.S. Mineral Products (Isolatek) ^b	Huntington	< 2,000	See Attachment 3
NIPSCO – R.M. Schahfer	Jasper	8,412	Modeling
Indiana-Kentucky Electric Corporation - Clifty Creek	Jefferson	3,731	Round 2 Source ^a
ArcelorMittal USA	Lake	2,163	Modeling
Coke Energy	Lake	4,952	Modeling
U.S. Steel – Gary Works	Lake	3,285	Modeling
NIPSCO – Michigan City	LaPorte	15,991	Round 2 Source ^a
ArcelorMittal – Burns Harbor	Porter	12,189	Monitoring See Attachment 5
SABIC Innovative Plastics	Posey	4,030	Modeling
Vectren – A.B. Brown	Posey	8,080	Round 2 Source ^a
AEP – Rockport	Spencer	54,979	Round 2 Source ^a
Hoosier Energy – Merom	Sullivan	3,318	Modeling
Duke – Cayuga	Vermillion	3,448	Modeling
Alcoa Warrick Power Plant	Warrick	4,993	See Attachment 4
Alcoa Warrick Operations	Warrick	3,500	See Attachment 4

^a IDEM completed a characterization for this source under Round 2 designation requirements.

U.S. EPA issued final Round 2 designations on June 30, 2016 (81 FR 45039).

^b Added by U.S. EPA.

By January 1, 2017, each state air agency must ensure that new ambient air monitors are operational where air monitoring is selected to inform Round 4 designations. Only one DRR source, ArcelorMittal – Burns Harbor, opted for ambient monitoring of SO₂ to characterize air quality. See Attachment 5 for information regarding the operation of SO₂ monitors at the ArcelorMittal – Burns Harbor facility. U.S. EPA will evaluate three complete years of air monitoring data from these monitors for the completion of Round 4 designations by the court-ordered date of December 31, 2020.

By January 13, 2017, each state air agency must provide to U.S. EPA its modeling analysis for source-areas where modeling is used to determine Round 3 designations. Table 2 contains IDEM's Round 3 designation recommendations, based on new air quality modeling analyses for the source areas.

Table 2: Indiana's Round 3 Designation Recommendations

Source	County	Boundary/Area	Recommendation
Duke Energy Gallagher	Floyd	County	Attainment
U.S. Mineral Products (Isolatek)	Huntington	See Attachment 3	See Attachment 3
NIPSCO R.M. Schahfer	Jasper (P)	Kankakee Township	Attainment
ArcelorMittal USA, Coke Energy, U.S. Steel Gary Works	Lake (P)	Calumet Township North Township	Attainment
SABIC Innovative Plastics	Posey (P)	Black Township	Attainment
Hoosier Energy Merom	Sullivan (P)	Gill Township	Attainment
Duke Energy Cayuga	Vermillion (P)	Eugene Township Vermillion Township	Attainment
Alcoa Warrick Power Plant, Alcoa Warrick Operations Plant	Warrick (P)	Anderson Township	Attainment See Attachment 4

(P) denotes partial county recommendation

IDEM is attaching new modeling analyses, as required, and several additional documents listed here, to provide U.S. EPA with detailed information for review prior to completing Round 3 designations.

Attachment 1: Indiana's Preliminary Recommendations Concerning Round 3 Designations for the 2010 Primary 1-Hour Sulfur Dioxide (SO₂) National Ambient Air Quality Standards (NAAQS)

Attachment 2: Indiana's Air Quality Modeling Technical Support Document Preliminary Designation Recommendations Data Requirements Rule (Round 3) for the 2010 Primary 1-Hour Sulfur Dioxide (SO₂) National Ambient Air Quality Standards (NAAQS)

Attachment 3: U.S. Mineral Products (Isolatek) Discussion

Attachment 4: Alcoa Warrick Attainment Discussion

Attachment 5: ArcelorMittal - Burns Harbor SO₂ Air Quality Monitor System
Documentation

This submittal consists of one (1) hard copy of the required documentation. An electronic version of the submittal in PDF format that is identical to the hard copy has been sent to Doug Aburano, Chief of U.S. EPA Region 5's Attainment Planning and Maintenance Section and Chris Panos of U.S. EPA Region 5.

Thank you for this opportunity to submit information, including Indiana's new modeling analyses and preliminary recommendations, for Round 3 designations under the 2010 primary 1-hour SO₂ NAAQS. If you have any questions or need additional information, please contact Keith Baugues, Assistant Commissioner, Office of Air Quality, at (317) 232-8222 or kbaugues@idem.IN.gov.

Sincerely,



Bruno Pigott
Commissioner

BP/kb/sd/bc/gf/as
Attachments

cc: Chris Panos, U.S. EPA Region 5 (no enclosures)
John Summerhays, U.S. EPA Region 5 (no enclosures)
Doug Aburano, U.S. EPA Region 5 (no enclosures)
Keith Baugues, IDEM-OAQ (no enclosures)
Scott Deloney, IDEM-OAQ (no enclosures)
Brian Callahan, IDEM-OAQ (w/ enclosures)
Mark Derf, IDEM-OAQ (w/ enclosures)
Gale Ferris, IDEM-OAQ (w/ enclosures)
Amy Smith, IDEM-OAQ (w/ enclosures)
File Copy

Attachment 1

Indiana's Preliminary Recommendations
Concerning Round 3 Designations for the 2010 Primary
1-Hour Sulfur Dioxide (SO₂) National Ambient Air
Quality Standards (NAAQS)

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Source	County	Boundary/Area	Recommendation
Duke Energy Gallagher	Floyd	County	Attainment
U.S. Mineral Products (Isolatek)	Huntington	See Attachment 3	See Attachment 3
NIPSCO R.M. Schahfer	Jasper (P)	Kankakee Township	Attainment
ArcelorMittal USA, Coke Energy, U.S. Steel Gary Works	Lake (P)	Calumet Township and North Township	Attainment
SABIC Innovative Plastics	Posey (P)	Black Township	Attainment
Hoosier Energy Merom	Sullivan (P)	Gill Township	Attainment
Duke Energy Cayuga	Vermillion (P)	Eugene Township Vermillion Township	Attainment
Alcoa Warrick Power Plant, Alcoa Warrick Operations Plant	Warrick (P)	Anderson Township	Attainment See Attachment 4

(P) denotes partial county recommendation

The following sources, though identified by U.S. EPA as being subject to the Data Requirements Rule, were addressed under Round 2 designations and designated by U.S. EPA on June 30, 2016 (81 FR 45039).

Area Name	Source Area	County Name	Designation
Gibson County, IN	Duke Gibson	Gibson	Unclassifiable/Attainment
Jefferson County, IN	IKEC Clifty Creek	Jefferson (P)	Unclassifiable/Attainment
LaPorte County, IN	NIPSCO Michigan City	LaPorte	Unclassifiable/Attainment
Posey County, IN	Vectren A.B. Brown	Posey (P)	Unclassifiable/Attainment
Spencer County, IN	AEP Rockport	Spencer (P)	Unclassifiable/Attainment

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