



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

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Michael R. Pence  
Governor

Carol S. Comer  
Commissioner

STATE OF INDIANA                    )  
  ) SS:       BEFORE THE INDIANA DEPARTMENT  
COUNTY OF MARION                )           OF ENVIRONMENTAL MANAGEMENT

IN THE MATTER OF:                    )  
ORDER OF THE COMMISSIONER        )  
PURSUANT TO IC 13-14-2-1            )  
FOR SABIC INNOVATIVE PLASTICS      )  
MT. VERNON, LLC                        )

## NOTICE AND ORDER OF THE COMMISSIONER OF THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

On September 9, 2016, SABIC Innovative Plastics Mt. Vernon, LLC (SABIC) submitted a Petition to the Commissioner of the Indiana Department of Environmental Management (IDEM) that requested that the Commissioner limit the emissions of Sulfur Dioxide (SO<sub>2</sub>) from SABIC’s Mt. Vernon plant. The purpose of the petition request was to allow SABIC to limit its SO<sub>2</sub> emissions below the applicability threshold of the federal SO<sub>2</sub> Data Requirements Rule at 40 CFR 51 Subpart BB and concurrently ensure compliance with the 2010 1-hour SO<sub>2</sub> National Ambient Air Quality Standard (NAAQS). The Commissioner has determined that the Petition should be granted according to the terms specified below:

### LEGAL BACKGROUND

SABIC Innovative Plastics Mt. Vernon, LLC owns a stationary integrated plastics and engineering resin manufacturing facility with Source I.D. Number 129-00002, located at 1 Lexan Lane in Mount Vernon, Posey County, Indiana, and permitted under the Part 70 air operating permit program.

The United States Environmental Protection Agency (U.S. EPA) published the final Data Requirements Rule (DRR) for the 2010 1-hour SO<sub>2</sub> Primary National Ambient Air Quality Standard (NAAQS), in the *Federal Register* on August 21, 2015 (80 FR 51052). The DRR was promulgated in order to establish minimum requirements for air agencies to characterize 1-hour SO<sub>2</sub> air quality concentrations across the country, with an emphasis on doing so in the vicinity of sources that have the largest annual SO<sub>2</sub> emissions to aid in the implementation of the 2010 primary 1-hour SO<sub>2</sub> standard. Implementation of the new 1-hour SO<sub>2</sub> standard began in 2013 when U.S. EPA established nonattainment areas based on monitoring data. On March 2, 2015, U.S. EPA entered into a federal Consent Decree with the Sierra Club and Natural Resources Defense Council (NRDC) that established a timeline for the completion of air quality characterizations and designations in all remaining areas of the country. The Consent Decree required 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 January 7, 2016, Indiana submitted to U.S. EPA a list of 11 stationary sources, including SABIC, for air quality characterization pursuant to the DRR requirements as part of the Round 3 designation process. The DRR considers air dispersion modeling and ambient air monitoring appropriate ways to assess local SO<sub>2</sub> concentrations and the DRR also provides states with a third option to establish a permanent and federally enforceable facility-wide limit on SO<sub>2</sub> emissions from a listed source to below 2,000 tons per year. A source that limits its SO<sub>2</sub> emissions under the third option is not subject to the requirements for air quality characterization.

Indiana informed U.S. EPA on June 30, 2016 that SABIC had selected the DRR modeling option to characterize the ambient air quality in the area. Subsequently, Indiana has learned that modifications made at the SABIC facility due to a Co-Gen project that was permitted as PSD/Significant Source Modification No.: 129-33998-00002 and issued on November 20, 2014 have resulted in the reduction of potential SO<sub>2</sub> emissions at the facility.

On September 9, 2016, SABIC submitted a request to the Commissioner to impose permanent and federally enforceable SO<sub>2</sub> emission limitations and emission rates on SABIC in order to ensure continued attainment of the SO<sub>2</sub> NAAQS in the area surrounding SABIC. SABIC proposed SO<sub>2</sub> emission limitations, applicable to specific emissions units and source-wide, as follows:

- a. Limitation on source-wide SO<sub>2</sub> emissions of 2,000 tons per year;
- b. Limitation on SO<sub>2</sub> emissions from 08-706 COS Vent Oxidizer and 08-708 COS Flare;
- c. Limitation on sulfur content of diesel fuel used in diesel-powered engines; and
- d. Limitation requiring coal-fired boilers (01-001 BW1-BOILER, 01-001 BW2-BOILER and 09-002 E-BOILER) at the facility to permanently cease operation prior to January 13, 2017.

Pursuant to IC 13-14-2-1(b) and IC 13-14-2-7(1), the Commissioner may issue Orders to secure compliance with Indiana's environmental statutes and rules, including the ambient air quality standard for SO<sub>2</sub> at 326 Indiana Administrative Code ("IAC") 1-3-4(b)(1)(A).

### **FINDINGS**

Based on the foregoing information, IDEM, through its Commissioner, finds the following:

1. Permanent and enforceable SO<sub>2</sub> emission limitations and emission rates for SABIC are required that limit SO<sub>2</sub> emissions in order to provide assurance of attainment of the 2010 1-hour SO<sub>2</sub> NAAQS in the area surrounding SABIC's facility without continued assessment of the SO<sub>2</sub> concentrations through air dispersion modeling or ambient air monitoring.
2. Adding SO<sub>2</sub> emission limitations and emission rates to SABIC's Part 70 Operating Permit, while federally enforceable, is not permanent and, therefore, is not adequate to assure continued attainment of the SO<sub>2</sub> NAAQS. An Order of the Commissioner of IDEM (Order) is

required to ensure SO<sub>2</sub> emission limitations and emission rates remain permanent and enforceable, as required by 42 U.S.C. § 7407(d)(3)(E)(iii).

3. In addition, the approval by U.S. EPA of the Order into the Indiana State Implementation Plan ("SIP") is required to make the Order requirements permanent and federally enforceable. Upon approval into the Indiana SIP, the Order requirements become applicable requirements as defined in 326 IAC 2-7-1(6).

4. Based on modeling conducted by IDEM, the SO<sub>2</sub> emission limitations and emission rates proposed by SABIC were clarified and adjusted in order to assure continued attainment of the 1-hour SO<sub>2</sub> NAAQS. The annual source-wide SO<sub>2</sub> limitation of 2,000 tons was not necessary in order to demonstrate compliance with the DRR.

This Notice and Order of the Commissioner of the Indiana Department of Environmental Management (Order) is issued pursuant to Indiana Code (IC) 13-14-1-9, IC 13-14-2-1, and IC 13-14-2-7.

### ORDER

1. SO<sub>2</sub> emission limitations and emission rates are set forth below for the following emission units: 01-101 NE BOILER, 01-014 BW GAS, 08-706 COS Vent Oxidizer, 08-707 COS Flare, 12-701 H-790, 03-007 H-520, 03-008 H-530A, 03-008 H-530B, 12-169 H-390, 13-049 H-900, 13-321 H-900B, 13-155 SC-1/2, 04-063 H-7090, 04-050 H-6060, 08-001 F-972, 19-001 COGEN, 19-002 AUX BOILER, 19-003 AUX2 BOILER, 19-004 CG1 BOILER, 09-106 R BOILER.

2. The COS Vent Oxidizer and the COS Flare shall not exceed the following SO<sub>2</sub> emission rates:

- a. 415 lb/hr, one (1) hour average; and
- b. 269.21 lb/hr, twenty-four (24) hour rolling average, based on daily coke usage and daily sulfur input.

3. The NE BOILER (01-101) shall not exceed an SO<sub>2</sub> emission rate of 0.15 lb/hr, one (1) hour average.

4. The BW GAS (01-014) shall not exceed an SO<sub>2</sub> emission rate of 0.15 lb/hr, one (1) hour average.

5. The H-790 (12-701) shall not exceed an SO<sub>2</sub> emission rate of 0.02 lb/hr, one (1) hour average.

6. The H-520 (03-007) shall not exceed an SO<sub>2</sub> emission rate of 0.0045 lb/hr, one (1) hour average.

7. The H-530A (03-008) shall not exceed an SO<sub>2</sub> emission rate of 27.8 lb/hr, one (1) hour average.

8. The H-530B (03-008) shall not exceed an SO<sub>2</sub> emission rate of 27.8 lb/hr, one (1) hour average.
9. The H-390 (12-169) shall not exceed an SO<sub>2</sub> emission rate of 0.0102 lb/hr, one (1) hour average.
10. The H-900 (13-049) shall not exceed an SO<sub>2</sub> emission rate of 1.86 lb/hr, one (1) hour average.
11. The H-900B (13-321) shall not exceed an SO<sub>2</sub> emission rate of 0.0188 lb/hr, one (1) hour average.
12. The SC 1/2 (13-155) shall not exceed an SO<sub>2</sub> emission rate of 0.0008 lb/hr, one (1) hour average.
13. The H-7090 (04-063) shall not exceed an SO<sub>2</sub> emission rate of 0.00235 lb/hr, one (1) hour average.
14. The H-6060 (04-050) shall not exceed an SO<sub>2</sub> emission rate of 0.00153 lb/hr, one (1) hour average.
15. The F-972 (08-001) shall not exceed an SO<sub>2</sub> emission rate of 0.518 lb/hr, one (1) hour average.
16. The COGEN (19-001) shall not exceed an SO<sub>2</sub> emission rate of 1.17 lb/hr, one (1) hour average.
17. The AUX BOILER (19-002) shall not exceed an SO<sub>2</sub> emission rate of 0.15 lb/hr, one (1) hour average.
18. The AUX2 BOILER (19-003) shall not exceed an SO<sub>2</sub> emission rate of 0.15 lb/hr, one (1) hour average.
19. The CG1 BOILER (19-004), if constructed, shall not exceed an SO<sub>2</sub> emission rate of 0.15 lb/hr, one (1) hour average.
20. The R BOILER (09-106) shall not exceed an SO<sub>2</sub> emission rate of 0.11 lb/hr, one (1) hour average.
21. To achieve the SO<sub>2</sub> emission rate and emission limitation in Paragraph 2.a, daily sulfur input to the carbon monoxide generators, identified as COG1, COG2, COG3, COG4, COG5, COG6, COG7, COG8, COG9, COG10, COG11, COG12, COG13, COG14, COG15, and COG16, shall be limited to no more than 2.49 tons per day.
22. All site emergency generators and pumps, standby energy curtailment diesel generators and mobile diesel units, temporary and portable emergency generators shall operate on No. 2 diesel fuel containing 15 parts per million (ppm) by weight or less of sulfur.
23. SABIC shall comply with the SO<sub>2</sub> emission limitations and emission rates, and the No. 2 diesel fuel sulfur content limit, beginning January 13, 2017.

24. As required by 326 IAC 2-7-2(d)(1) and 326 IAC 2-7-5, SABIC shall apply to incorporate Order requirements, including reporting and recordkeeping requirements and methods to determine compliance, into its Part 70 Operating Permit within ninety (90) days of U.S. EPA approval of the Commissioner's Order into the Indiana SIP.

25. From January 13, 2017 until IDEM issues a Permit incorporating Order requirements, SABIC shall comply with the reporting and recordkeeping requirements and methods to determine compliance specified in this paragraph.

a. Reporting: SABIC shall submit to IDEM, on a quarterly basis, a report of the daily coke input and corresponding sulfur content for the COS Vent Oxidizer and COS Flare.

b. Recordkeeping: SABIC shall maintain records of daily coke input and corresponding sulfur content, and sulfur content of No. 2 diesel fuel.

c. Method to determine compliance: Compliance shall be determined on a daily basis, based on 326 IAC 3-5.

i. Daily sulfur input for the group of carbon monoxide generators (COG1-16), calculated by taking the daily coke usage and multiplying by the percent weight of corresponding sulfur content.

ii. The sulfur content of the coke used in the carbon monoxide generators shall be analyzed daily as received (vendor delivery analysis may be used, approved by IDEM on 08/01/2005) for each day the carbon monoxide generators operate.

iii. Actual fuel usage for natural gas, diesel and fuel oil and liquid waste fuel-fired emission units or, in the alternative, the maximum design fuel usage.

26. This Order shall apply to and be binding upon SABIC, its successors and assigns. No change in ownership, corporate, or partnership status of SABIC shall in any way alter its status or responsibilities under this Order.

27. The requirements of this Order supersede any less stringent requirements applicable to SABIC.

#### **EFFECTIVE DATE OF ORDER**

Pursuant to IC 13-14-2-1(d), IC 4-21.5-3-1, IC 4-21.5-3-5(a)(6), and 40 Code of Federal Regulations ("CFR") 51.102, IDEM will give notice of this Order to each entity to whom the Order is directed and affected neighbors by mailing and to the general public by web publication.

Pursuant to IC 4-21.5-3-7(a)(3), IC 4-21.5-3-2(e), and IC 4-21.5-3-5, this Order may be appealed by filing a Petition for review within eighteen (18) days after the date affected persons were given notice of the Order by U.S. mail. Information on petitions for review of this Order can be found at IC 4-21.5-3-7.

Pursuant to IC 4-21.5-3-5(f) and IC 4-21.5-3-2(e), the Order is effective eighteen (18) days from mailing of notice unless a Petition for review has been filed before or on the eighteenth (18<sup>th</sup>) day. However, the compliance date for the emission limitations in this Order is January 13, 2017.

Pursuant to 40 CFR 51.103, IDEM will submit this Order to U.S. EPA as a revision to the Indiana SIP. Upon approval by the U.S. EPA, this Order will be part of the Indiana SIP.

Persons seeking judicial review of this Order may do so in accordance with IC 4-21.5-5.

If you have procedural or scheduling questions regarding your request for review, you may contact the Office of Environmental Adjudication at (317) 232-8591. If you have questions regarding this Order, please contact Mark Derf, Office of Air Quality, by telephone at (317) 233-5682 or email at MDERF@idem.IN.gov.

Dated at Indianapolis, Indiana this 20<sup>th</sup> day of October, 2016.

A handwritten signature in black ink, appearing to read "Carol S. Comer", is written over a horizontal line. The signature is cursive and extends to the right of the line.

Carol S. Comer  
Commissioner  
Indiana Department of Environmental Management