Air Plan Approval; Indiana; Two Revised Sulfur Dioxide Rules for Lake County

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve revisions to the Indiana sulfur dioxide (SO$_2$) State Implementation Plan (SIP). The State of Indiana has requested these SIP revisions in order to satisfy the requirements of a Federal consent decree. If approved, these revisions would limit annual bypass venting limits in the sulfur-containing waste gas emissions from a coking and power generating facility in Lake County, Indiana which is owned and operated by Indiana Harbor Coke Company (IHCC) and Cokenergy LLC (Cokenergy). The revisions would also require Cokenergy to operate and maintain a permanent SO$_2$ flow rate monitor and improve the percent control capture efficiency of the facility. The rulemaking also includes technical corrections and clarifications that do not have a substantive effect of the application of the rule.

DATES: Comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2020-0369 at http://www.regulations.gov, or via
email to aburano.douglas@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “FOR FURTHER INFORMATION CONTACT” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Andrew Lee, Physical Scientist, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353-7645, lee.andrew.c@epa.gov. The EPA Region 5 office is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays and facility closures due to COVID-
SUPPLEMENTARY INFORMATION: Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

I. Background

On July 10, 2020, the Indiana Department of Environmental Management (IDEM) submitted a request for revisions of the Indiana SO₂ SIP for IHCC and Cokenergy, which operate a coking and power generating facility in East Chicago, Indiana. IHCC operates four coke oven batteries, and Cokenergy uses the coke oven gases to generate steam and electricity. The electricity and coke are used by the neighboring steel mill operated by ArcelorMittal. Under the terms of a consent decree entered on October 25, 2018, the two companies requested that Indiana revise 326 Indiana Administrative Code (IAC) 7-4.1-7 (Cokenergy) and 326 IAC 7-4.1-8 (IHCC) to address emissions of sulfur-containing waste gases. See United States and the State of Indiana v. Indiana Harbor Coke Company and Suncoke Energy, Inc. and Coke Energy, LLC, Civil Action No. 18-cv-35 (N.D.Ind. 2018). Indiana’s adoption and submittal of these revised rules to EPA for approval into the SIP satisfy part of the consent decree’s requirements.

II. Changes for the Facility

IHCC’s coke batteries produce coke as their main product. Hot coke oven gas is generated from heating coal in coke ovens to approximately 2000°F. The volatile products from the coal, produced by the high heat, are then combusted with oxygen to
provide heat from above and gas flues in the bottom of the chamber collect the combustion gases and provide heat from below. This recycling of gases is the fuel used for the ovens during normal operations. Once almost all the coke oven gases are combusted, the gas passes from the different ovens in a battery into a common tunnel and passes into an afterburner which oxidizes any gases that are not fully combusted. The gas stream is then directed to one of the sixteen heat recovery steam generators (HRSGs) operated by Cokenergy, where this heat is used to make steam to generate electricity. The coke oven gas cools as it passes through the HRSG, allowing the gas to be routed through air pollution control devices, including a flue gas desulfurization (FGD) unit and a baghouse, before venting through the main stack. When a HRSG is offline because of maintenance, malfunction or process concerns, or for any other reason, some of the gases must be vented through the common tunnel afterburner to a bypass vent stack because the extreme temperature of the gases would damage the pollution control equipment downstream. IHCC has sixteen bypass vent stacks, one associated with each HRSG.

The revised SIP decreases the amount of coke oven gas which can be allowed to vent to the atmosphere through the bypass vent stacks. Previously, the facility was permitted to vent fourteen percent (14%) of the coke oven waste gas through the common tunnel on an annual basis. Now, during normal operation of the HRSG, the revised rule limits venting gases out through the
bypass vent stacks to a maximum of thirteen percent (13%) of the coke oven waste gases leaving the common tunnel, as determined on an annual basis. However, if Cokenergy undertakes HRSG “retubing,” as defined in 326 IAC 7-4.1-7(e), then venting gases out through the bypass vent stacks is allowed up to a maximum of fourteen percent (14%) of the coke oven waste gases leaving the common tunnel, as determined on an annual basis for the calendar year that Cokenergy undertakes the HRSG retubing. The rule requires the facility to verify that the fourteen percent venting limit in 326 IAC 7-4.1-7(d)(1) is warranted by the retubing activities. If less than 3.25% of the annual venting is due to the retubing activities, then the facility may only vent 13% of their annual emissions via the bypass vent stacks. Overall, this action would increase the control capture efficiency of the facility by increasing the percentage of the exhaust gas stream routed to control devices.

Rule 326 IAC 7-4.1-7 retains the combined SO\textsubscript{2} limit for Cokenergy’s heat recovery coke carbonization waste gas stack and the 16-bypass vent stacks operated by IHCC for a 24-hour average SO\textsubscript{2} emission limit of 1,656 pounds per hour. The revised rule adds a requirement that Cokenergy install, operate, and maintain a permanent SO\textsubscript{2} flow rate monitor to continuously measure the flow rate in the heat recovery coke carbonization waste gas stack.

The revised proposed rule 326 IAC 7-4.1-8 continues to require that IHCC comply with the following requirements: the
coke ovens must recycle the gases emitted during the coking process in such a way that the recycled gases must be the only fuel source used for the ovens during normal operations, the gases must not be routed directly to the atmosphere unless they first pass through the common tunnel afterburner, and a maximum of 19% of the coke oven waste gases leaving the common tunnel may be vented to the atmosphere on a 24-hour basis. The sulfur dioxide limits on IHCC’s coke oven battery operations in 326 IAC 7-4.1-8(a) are unchanged. 326 IAC 7-4.1-8 includes the same new limitations on bypass vent stack usage as in 326 IAC 7-4.1-7, as discussed above. The rulemaking also includes technical corrections and clarifications that do not have a substantive effect of the application of the rules.

III. Compliance with the Clean Air Act (CAA)

CAA section 110(l) states that SIP revisions cannot be approved if they interfere with applicable requirements concerning attainment and reasonable further progress. EPA proposes to find that this proposed action is consistent with CAA section 110(l) because the proposed changes retain and/or tighten the existing SO₂ limits. EPA is therefore proposing to approve Indiana’s revised rules 326 IAC 7-4.1-7 and 326 IAC 7-4.1-8.

IV. What Action is EPA Taking?

EPA is proposing to approve Indiana’s July 10, 2020 request to revise 326 IAC 7-4.1-7 and 326 IAC 7-4.1-8. The proposed SO₂ SIP revisions are expected to strengthen the SIP and will also
fulfill the requirements of the Federal consent decree with Cokenergy LLC and IHCC.

V. Incorporation by Reference

In this proposed rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference Indiana rules 326 IAC 7-4.1-7 “Cokenergy LLC sulfur dioxide emission limitations” and 326 IAC 7-4.1-8 “Indiana Harbor Coke Company sulfur dioxide emission limitations”, effective on April 24, 2020. EPA has made, and will continue to make, these documents generally available through www.regulations.gov and at the EPA Region 5 Office (please contact the person identified in the “FOR FURTHER INFORMATION CONTACT” section of this preamble for more information).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by
the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);

• Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because it is not a significant regulatory action under Executive Order 12866;

• Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);

• Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);

• Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);

• Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

• Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

• Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

• Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
• Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur oxides.


Cheryl Newton,
Acting Regional Administrator, Region 5.

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