

CSI - Ohio

The Common Sense Initiative

Business Impact Analysis

Agency Name: Ohio Environmental Protection Agency

Regulation/Package Title: OAC Chapter 3745-14: "Nitrogen Oxides (NOx) Budget Program Rules" – Phase 2 rulemaking

Rule Number(s): OAC Chapter 3745-14-01, 3745-14-03 and 3745-14-08

Date: December 8, 2017

Rule Type:

- | | |
|---|--|
| <input type="checkbox"/> New/Rescind | <input type="checkbox"/> 5-Year Review |
| <input checked="" type="checkbox"/> Amended/No Change | <input type="checkbox"/> Rescinded |

The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

Regulatory Intent

1. Please briefly describe the draft regulation in plain language.

Please include the key provisions of the regulation as well as any proposed amendments.

Ohio Administrative Code (OAC) Chapter 3745-14 establishes Ohio's Nitrogen Oxide (NOx) Budget Program. This program was originally promulgated as a trading program in 2002 in response to U.S. EPA's 1998 NOx State Implementation Plan (SIP) Call. The NOx Budget Trading (NBT) Program was a market-based cap and trade program created to reduce the regional transport of NOx emissions from power plants and other large combustion sources that contribute to ozone nonattainment in the eastern United States. These rules

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created an ozone season NOx allowance and trading program for electric generating units (EGUs) and large non-EGUs.

This is the second in two phases of rulemaking to revise OAC Chapter 3745-14. In the first phase, Ohio EPA is revising OAC Chapter 3745-14 to demonstrate continued compliance by large non-Electric Generating Units (non-EGUs) with the NOx SIP Call following U.S. EPA's discontinuation of compliance trading options under the NBT Program. During the comment period for the Phase 1 rulemaking, Ohio EPA received comments requesting an alternative to continuous monitoring and reporting of emissions under 40 CFR Part 75 (commonly referred to as Part 75 monitoring and reporting). Ohio EPA agreed to pursue this alternative in a second phase of rulemaking. This rulemaking is the second phase to incorporate requested alternatives to the existing Part 75 monitoring and reporting requirements.

Under the revised rules, facilities can request approval for alternative monitoring and reporting requirements in lieu of the Part 75 requirements. The alternative monitoring must include monitoring of heat input and fuel use and an approved emission factor for current operating conditions. Request for the alternative is made via an application for an operating permit which includes an emission factor analysis and description of the proposed monitoring procedures for heat input and fuel use. The approved emission factor, monitoring procedures for heat input and fuel use, and associated terms and conditions must be approved in the applicable operating permit prior to use of the alternative. Ozone season NOx emissions data will be reported as part of the Fee Emissions Reports which are currently required under OAC Chapter 3745-78. Stack tests must be conducted to demonstrate the approved emission factor continues to be representative of current operating conditions. If the emissions factor analysis submitted with the permit application did not include a stack test, an initial stack test is required within ninety days of permit issuance. Ongoing stack tests are required at least once every five years from the date of the previous stack test. Records of daily heat input and fuel use and daily NOx emissions must be maintained and made available upon request.

2. Please list the Ohio statute authorizing the Agency to adopt this regulation.

Rule Number	Authorizing Statute	Proposed Action
3745-14-(01, 04, 08)	3704.03(E)	Amended

3. Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program? If yes, please briefly explain the source and substance of the federal requirement.

As noted above, OAC Chapter 3745-14 was promulgated to satisfy the requirements of U.S. EPA's NOx SIP Call, formally titled "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone" (63 FR 57356, October 27, 1998). These rules were

submitted to U.S. EPA for inclusion in Ohio's state implementation plan (SIP) to satisfy the requirements of the NOx SIP Call.

Under Section 110 of the Clean Air Act (CAA), any control strategies that a state enacts to achieve attainment of a standard must remain in force to assist in maintaining the standard. Because these rules are part of Ohio's federally adopted control strategy to attain the standard, OAC Chapter 3745-14 must remain in effect to show continued compliance with the NOx SIP Call for non-EGUs, to avoid sanctions for back-sliding.

4. If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.

These rules do not exceed federal requirements.

5. What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?

The public purpose of these rules is to improve the health and welfare of the citizens in the eastern United States impacted by the regional transport of emissions from Ohio. These rules also benefit the citizens of Ohio, as emissions reductions achieved through these rules help with the attainment and maintenance of the ozone, nitrogen dioxide, and PM2.5 National Ambient Air Quality Standards (NAAQS) in Ohio. These rules were adopted as a part of Ohio's SIP to satisfy the requirements of the NOx SIP Call on June 27, 2005 (70 FR 36845).

6. How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?

The rules in OAC Chapter 3745-14 were originally promulgated in 2002. Since 2002, the state of Ohio has attained the NAAQS for the 1997 and 2008 8-hr ozone standards in all non-attainment areas statewide. The fact that the state is now attaining and maintaining the ozone NAAQS is, in part, a measure of the success of these rules and Ohio's strategy for attaining the NAAQS in general.

Development of the Regulation

7. Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.

If applicable, please include the date and medium by which the stakeholders were initially contacted.

On October 28, 2016, Ohio EPA sent a letter outlining the proposed approach for the Phase 1 rulemaking to the non-EGU facilities regulated under the NOx Budget Trading rules. Ohio EPA also established an initial 30-day early stakeholder outreach period ending January 23,

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2017. Ohio EPA Division of Air Pollution Control (DAPC) sent the notices of our request for comments electronically to the 3,100+ members of Ohio EPA's electronic Interested Parties list for DAPC rulemaking. DAPC also posted the notice on our website and placed the notice in the Director's Weekly Review publication.

Comments received during the Phase 1 rulemaking led to the initiation of this current, second phase of rulemaking to incorporate requested alternatives to the existing Part 75 monitoring and reporting requirements. On August 3, 2017, Ohio EPA notified all affected non-EGUs by email of an opportunity to request specific alternative monitoring and reporting requirements to be incorporated into the rule.

8. What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?

Requests for alternatives to Part 75 monitoring and reporting were received from ArcelorMittal, AK Steel, and Glatfelter. Ohio EPA carefully considered each request and drafted alternative monitoring and reporting requirements that would be available not just to these facilities, but to any non-EGU which requested approval in the future.

9. What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?

Ohio EPA has drafted the rule such that the requested alternative will be evaluated and approved using scientific data at the time of request. This scientific data will include U.S. EPA approved emission factors, stack test data, continuous emission monitoring data and other relevant data in the establishment of an approved emission factor. NO_x emissions will then be determined using this approved emission factor along with monitored heat input and fuel use data.

10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn't the Agency consider regulatory alternatives?

As noted above, this current rulemaking is intended to allow an alternative to the existing monitoring and reporting requirements. The alternative to this rulemaking would be to retain the existing requirements, which based on comments received during the Phase 1 rulemaking, are clearly unpopular with the regulated community.

11. Did the Agency specifically consider a performance-based regulation? Please explain. *Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.*

The rules in Chapter 3745-14 are performance-based regulations. The rules set emission budgets which must be met, and allow regulated sources to determine the methods by which they will meet the limits.

12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?

Ohio EPA is the only agency having jurisdiction over the control of air pollution, and is specifically directed, under Section 3704.03 of the Revised Code to develop rules for the control of emissions of air pollutants. The rules in this chapter are unique within the Ohio EPA and do not duplicate the rules of this or any other agency.

13. Please describe the Agency's plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.

Ohio EPA is working with existing facilities as their permits come up for renewal to ensure that their permits reflect the appropriate requirements under the revised rules. Ohio EPA will also work with new facilities to ensure that they understand their responsibilities and have the appropriate terms in their air pollution control permits. Ohio would use the Part 75 reporting, or the alternative provided in this rulemaking, to perform an annual review to show all existing and new non-EGU NO_x SIP Call units continue to meet the state-wide NO_x budget.

Adverse Impact to Business

14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:

- a. Identify the scope of the impacted business community;**
- b. Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and**
- c. Quantify the expected adverse impact from the regulation.**

The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a "representative business." Please include the source for your information/estimated impact.

Generally, facilities subject to these rules include fossil-fuel fired stationary boilers, combustion turbines, or combined cycle systems, including EGUs serving a generator with a nameplate capacity greater than 25 MWe and producing electricity for sale to the grid, and non-EGUs with a maximum design heat input greater than 250 mmBTU/hr, that do not serve a generator producing electricity for sale.

There is no cost of compliance with these rules for EGUs, as they will demonstrate compliance with the NOx SIP Call through the federal Cross-State Air Pollution Control Rule (CSAPR) trading program.

For non-EGUs, the cost of compliance for the revised rules in OAC Chapter 3745-14 would only include the costs of submitting compliance certifications in accordance with OAC rule 3745-14-04 and the cost of monitoring and reporting in accordance with OAC rule 3745-14-08.

OAC rule 3745-14-04 establishes the requirements for submittal of a compliance certification report at the end of each control period or ozone season. The compliance certification would be submitted by the facility's designated representative, who would typically be an existing employee of an affected facility. There are minimal costs associated with the requirement for this representative. The required duties would represent a fraction of the individual's time. This compliance reporting requirement has been in place since the original effective date of these rules. The original cost for compliance for this rule has not changed significantly from the previous filings. Ohio EPA estimates it would require 20 to 40 man-hours per year for a representative to perform this duty at a rate of \$50 per hour or approximately \$1,000 to \$2,000. This cost represents personnel costs only. The revisions to this rule do not change the cost of compliance.

OAC rule 3745-14-08 contains the provisions and outlines the requirements owners and operators of affected units (NOx budget units) must follow to comply with the monitoring, record keeping, and reporting requirements of the NOx Budget program. The NOx Budget program required owners and operators of each NOx unit to install all monitoring systems required under the rule, certify the systems and record, quality-assure, and report the data for the monitoring systems to the administrator. All of the existing units in the program have had these monitoring systems installed and operating since the beginning of the program (2004).

Newly installed NOx budget units either at existing facilities or completely new facilities, would need to install these monitoring systems, which consist of a continuous emission monitoring system (or "CEMS"). Ohio EPA estimates the capital cost for installing a CEMS is between \$56,000 and \$112,000, depending on the site specific installation challenges. The estimated cost of the CEMS includes: NOx monitor, O2 monitor, probe/filter box, sample conditioner, heated sampler line (\$55/ft), climate controller rack, PC and software start-up service, and training. The actual cost can exceed the values listed above if the stack servicing the unit does not currently have proper shelter for the equipment and available electric hook-ups which would therefore need to be installed. Annual average operating costs for most systems is estimated to be between \$15,000 and \$20,000 addressing maintenance, calibration gasses as well as certifications and audits. Costs may be more for systems subject to more extreme conditions. However, there are existing options for requesting an alternative within the framework of Part 75 that could reduce these costs.

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Also, there would be some minor costs associated with the quarterly reporting and compliance certification requirements of this rule for emissions of NO_x and heat input data to be performed by the designated representative. Ohio EPA estimates these reporting requirements for affected units require at most 20 man-hours per year at a rate of \$50 per hour, or approximately \$1,000. This cost represents personnel costs only.

Ultimately, the requirements imposed by these rules are incorporated into air pollution permits. These permits are already required under a different chapter of the revised code. These requirements will also include the methods for maintaining records and submitting reports. The estimated costs discussed above include any additional costs associated with the permit process as well as the cost of any recordkeeping or reporting required to fulfill the requirements of these rules.

The revisions to this rule offer an additional alternative to the existing monitoring and reporting requirements which will dramatically reduce the costs of compliance. With the approval of alternative monitoring and reporting, the costs noted above for operating and maintaining CEMS, quarterly reporting, and replacement costs when the existing CEMS have reached the end of their useful life, will no longer be incurred. Instead, costs would include those associated with obtaining a permit, monitoring heat input and fuel use, conducting stack tests, reporting data, and maintaining records.

Costs for obtaining a permit include personnel costs to prepare the application including development of the emission factor analysis, and in some cases an application fee. Depending on the type of facility, either a Title V operating permit application or a Permit-to-Install-and-Operate (PTIO) application is required. Applications may be prepared and submitted by facility representatives or a facility may hire a consultant to prepare their application so that a facility representative can submit the application. The decision to hire a consultant often depends on the size of the facility, type of facility, and how complicated/extensive the permitting action and analysis is. An application may take a facility a few hours to prepare and comprise 30 pages or less, or it could take several months to prepare and contain hundreds of pages of documents. The cost to prepare these applications (and comply with permit requirements) can vary across a wide range being as little as \$100 to \$30,000 (typical estimated cost to have a larger project application be completed by a consulting firm). Ohio EPA does not charge an application fee for Title V permits. For PTIOs, the application fee amount varies depending on the type of facility and project. Fee requirements are contained ORC 3745.11 and range from \$50 to thousands of dollars.

Costs to monitor heat input and fuel use include capital costs for initial installation of a new monitoring system of approximately \$10,000 to \$50,000, depending on the type of equipment purchased and site specific installation needs. Annual average operating and maintenance costs for most systems is estimated to be between \$2,000 and \$10,000. Some facilities may already conduct monitoring for fuel use and/or heat input as part of their

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normal operations and therefore would not incur the capital costs. Stack testing typically costs up to fifteen thousand dollars per testing event and will need to be repeated every five years. Ozone season NOx emissions data will be reported as part of the Fee Emissions Reports (FER) which are currently required under OAC Chapter 3745-78. There will be minimal additional personnel costs associated with reporting additional emissions data on the FER. Costs to maintain records of daily heat input and fuel use and daily NOx emissions are expected to be significantly less than records maintenance costs under the existing requirements. Overall, the alternative monitoring and reporting requirements will provide a cost savings of tens of thousands of dollars in annual operating costs, as well as \$56,000 to \$112,000 for capital replacement costs, as compared to the existing current requirements while providing the same level of environmental protection.

15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?

The state of Ohio is required by the CAA to satisfy the requirements of U.S. EPA's NOx SIP Call. The state of Ohio is also required by the CAA to enact rules to bring nonattainment areas into attainment with the standard. Once the NAAQS is attained, the rules are then necessary to fulfill the requirements under the CAA for Ohio's plan for maintaining the NAAQS.

Regulatory Flexibility

16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.

By federal rule, sources that are subject to these rules must collectively meet the statewide emissions cap established under the rules. There are existing options for requesting alternative monitoring provisions provided within the framework of Part 75. This Phase 2 rulemaking is intended to offer an additional alternative to the existing monitoring and reporting requirements.

17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?

The Ohio EPA uses enforcement discretion regarding fines, and penalties for facilities committing a first-time violation are typically waived.

18. What resources are available to assist small businesses with compliance of the regulation?

The following resources are available:

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- Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) is a non-regulatory program that provides information and resources to help small businesses comply with environmental regulations. OCAPP also helps customers identify and implement pollution prevention measures that can save money, increase business performance and benefit the environment. Services of the office include a toll-free hotline, on-site compliance and pollution prevention assessments, workshops/training, plain-English publications library and assistance in completing permit application forms. Additional information is available at <http://www.epa.ohio.gov/ocapp>.
- Ohio EPA also has a permit assistance web page (http://www.epa.ohio.gov/dir/permit_assistance.aspx) that contains links to several items to help businesses navigate the permit process, including the Permit Wizard, Answer Place, Ohio EPA's Guide to Environmental Permitting and eBusiness Center.
- Ohio EPA maintains the Compliance Assistance Hotline 800-329-7518, weekdays from 8:00 a.m. to 5:00 p.m.
- US. EPA Small Business Gateway also has information on environmental regulations for small businesses available at <http://www.epa.gov/smallbusiness/> and a Small Business Ombudsman Hotline 800-368-5883.
- Ohio EPA's DAPC maintains a SIP Development section through which SIP related rulemaking is performed. DAPC's rules coordinator, Paul Braun, the primary contact for this rulemaking, is available to answer questions. He can be reached by calling 614-644-3734 or by e-mail at paul.braun@epa.ohio.gov.