

# CSI - Ohio

The Common Sense Initiative

## Business Impact Analysis

Agency Name: Ohio Environmental Protection Agency

Regulation/Package Title: OAC Chapter 3745-14: "Nitrogen Oxides – Budget Trading Rules" and OAC Chapter 3745-109: "Clean Air Interstate Rule (CAIR)"

Rule Number(s): OAC Chapter 3745-14, Rules 01 to 12; OAC Chapter 3745-109, Rules 01 to 21

Date: July 7, 2017

**Rule Type:**

New/Rescind

5-Year Review

Amended/No Change

Rescinded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 NOx Budget Trading Program. This program was originally promulgated in 2002 in response to U.S. EPA's 1998 NOx SIP Call. The NOx Budget Trading Program was a market-based cap and trade program created to reduce the regional transport of Nitrogen Oxide (NOx) emissions from power plants and other large combustion sources that contribute to ozone nonattainment in the eastern United States. These rules created an ozone season NOx allowance and trading program for electric generating units (EGUs) and large non-EGUs.

This program was superseded by the Clean Air Interstate Rules Program (CAIR) in 2009. To meet the requirements of CAIR, Ohio EPA promulgated OAC Chapter 3745-109, which established annual and ozone season NOx budgets and sulfur dioxide (SO<sub>2</sub>) budgets for large EGUs. Ohio also opted to incorporate large non-EGUs previously regulated under OAC Chapter 3745-14 into OAC Chapter 3745-109, in order to meet the obligations of the NOx SIP call through the CAIR trading program. However, Ohio EPA maintained the rules in OAC Chapter 3745-14 as a fall back in the event that the CAIR program was ever discontinued, as CAIR was subject to many federal court challenges that put its future in question.

In 2011, U.S. EPA finalized the Cross State Air Pollution Rule (CSAPR) as a replacement for CAIR. CSAPR became effective on January 1, 2015 for SO<sub>2</sub> and annual NOx, and May 1, 2015 for ozone season NOx. Notably, CSAPR did not initially contain provisions to incorporate large non-EGUs. With the replacement of CAIR by CSAPR, those non-EGUs previously regulated under CAIR were again subject to Ohio's NOx Budget Trading Program rules, although U.S. EPA no longer administered the trading portion of the program.

U.S. EPA has indicated non-EGUs are required to show continued compliance with the NOx SIP Call. Therefore, Ohio EPA is revising OAC Chapter 3745-14 to rescind provisions of the rules pertaining to individual unit allocations and trading, while retaining provisions in the rules pertaining to applicability, the statewide emissions budget, and Part 75 monitoring and reporting, as well as OAC rules 3745-14-11 and 3745-14-12 regarding portland cement kilns and stationary internal combustion engines (which are not part of this rulemaking). The CAIR rules in OAC Chapter 3745-109 are being rescinded as they have been replaced by the federal CSAPR program.

Under the revised rules, EGUs will continue to demonstrate compliance with the NOx SIP Call through the CSAPR trading program. Non-EGUs would be required to conduct Part 75 monitoring and reporting, and would be required to submit compliance certifications indicating they have met the Part 75 monitoring and reporting requirements. These

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requirements would continue to be included in a Title V or non-Title V permit. However, non-EGUs would no longer receive individual NOx allowances, be part of a trading program, or be required to certify compliance with any allocation or budget. Rather, Ohio would use the Part 75 reporting to perform an annual review to show all existing and new non-EGU NOx SIP Call units continue to meet the state-wide NOx budget. Note: Ohio EPA intends to follow this rulemaking with a second phase of rulemaking revising OAC rule 3745-14-08 to incorporate alternatives to the existing Part 75 monitoring and reporting requirements.

Specifically, OAC rules 3745-14-02, 3745-14-05, 3745-14-06, 3745-14-07, 3745-14-09 and 3745-14-10 and all of OAC Chapter 3745-109 will be rescinded. Amendments to OAC rules 3745-14-01, 3745-14-03, 3745-14-04 and 3745-14-08 include:

- Moving the statewide NOx budget from OAC rule 3745-14-05 (which is being rescinded) to OAC rule 3745-14-01
- Adding provisions for Ohio EPA to conduct an annual review to determine if the statewide budget is met, and provisions should the statewide budget be exceeded
- Removing unit allocation and trading provisions
- Specifying non-EGU NOx budget units subject to OAC Chapter 3745-14
- Updating the EGU exemption to reference CSAPR
- Removing the retired unit exemption, as it is no longer applicable
- Removing unnecessary definitions
- Adding a definition for “designated representative”
- Replacing “NOx budget trading program” with “NOx budget program” to reflect the absence of trading
- Replacing “NOx authorized account representative” with “designated representative”, the term used in Part 75 monitoring
- Updating referenced material
- Eliminating requirements for NOx budget permit to be included as a complete and segregable portion of a Title V or non-title V permit (note: terms related to OAC Chapter 3745-14 will still be included in a Title V or non-title V operating permit)
- Requiring the owner or operator of a NOx budget unit to submit an application for a Title V or non-title V operating permit for each subject NOx budget source
- Revising compliance certification provisions to rule remove unnecessary provisions (streamlining the amount of information that must be contained in the compliance certification)
- Eliminating the requirement for the compliance certification to be submitted to U.S. EPA (it will have to be submitted to Ohio EPA only)
- Updating monitoring/reporting provisions
- Eliminating NOx budget opt-in provisions, as they are no longer applicable

Note: There are two other rules in OAC Chapter 3745-14 (OAC rule 3745-14-11 portland cement kilns and OAC rule 3745-14-12 stationary internal combustion engines) which will remain unchanged and are not part of this rulemaking, as they were not affected by the CAIR or CSAPR rules or elimination of U.S. EPA’s NOx budget trading program.

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

<b>Rule Number</b>	<b>Authorizing Statute</b>	<b>Proposed Action</b>
3745-14-(01, 03, 04, 08)	3704.03(E)	Amended
3745-14-(02, 05, 06, 07, 09, 10); 3745-109-(01-21)	3704.03(E)	Rescind

**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). OAC Chapter 3745-109 was promulgated to satisfy the requirements of the federal CAIR program (70 FR 25162, May 12, 2005). 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 and CAIR.

On July 6, 2011, U.S. EPA finalized CSAPR as a replacement for CAIR [77 FR 10342], which became effective in 2015. As noted above, CSAPR did not initially contain provisions to incorporate large non-EGUs. With the replacement of CAIR by CSAPR, those non-EGUs previously regulated under CAIR were again regulated under 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, portions of 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. Because the CSAPR program is more stringent than the superseded CAIR program for EGUs, Ohio EPA may rescind OAC Chapter 3745-109.

**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 PM 2.5 NAAQS in Ohio. These rules were adopted as a part of Ohio's SIP to satisfy the requirements of the NOx SIP Call and CAIR on June 27, 2005 (70 FR 36845) and September 25, 2009 (74 FR 48857).

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

The rules in OAC Chapters 3745-14 and 3745-109 were originally promulgated in 2002 and 2007, respectively. Since 2007, 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 to the non-EGU facilities regulated under the NOx Budget Trading and/or CAIR rules. Ohio EPA also established an initial 30-day early stakeholder outreach period ending January 23, 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.

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

Comments were received during the early stakeholder outreach period in support of the proposed rule revisions from AK Steel; Porter Wright Morris and Arthur LLP on behalf of numerous clients; and Shumaker, Loop & Kendrick LLP on behalf of the Ohio Utilities Group. Comments were received from ArcelorMittal following the October 28, 2016 letter and during the early stakeholder outreach period regarding the retained requirement for

continuous monitoring and reporting of emissions under 40 CFR Part 75 (commonly referred to as Part 75 monitoring and reporting).

On May 15, 2017, Ohio EPA held a stakeholder meeting with all affected non-EGUs requesting input on whether to pursue an alternative to Part 75 monitoring in a phased approach or to add the alternative to the current rulemaking. The majority of stakeholders preferred to add specific, approvable alternatives to the current rulemaking. Because Part 75 monitoring is already a SIP requirement, U.S. EPA will have to approve any alternatives as a revision to Ohio's SIP.

After careful consideration of the comments, Ohio EPA is proceeding using a phased approach. This will allow us to more quickly address the major issues resulting from the discontinuation of the NOx trading programs by U.S. EPA (i.e., rules and permit conditions that are not implementable; lack of a trading option) while we work with the facilities and U.S. EPA to develop source-specific monitoring options that Ohio EPA can request U.S. EPA approve as an alternative to the current SIP approved Part 75 monitoring. The current rulemaking will be followed by a second phase of rulemaking revising OAC rule 3745-14-08 to incorporate alternatives to the existing Part 75 monitoring and reporting requirements.

In addition, comments on the draft rules were received from U.S. EPA on April 19, 2017. While most of the comments were minor, they did note that Ohio needs to ensure the statewide NOx budget is enforceable. DAPC has incorporated rule language to address this comment which establish provisions for Ohio EPA to conduct an annual review to determine if the statewide budget is met, and provisions should the statewide budget be exceeded.

**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?**

The Ohio NOx Budget Trading Program rules (OAC Chapter 3745-14) are based on the federal model rule in 40 CFR Part 96 developed by U.S. EPA. The Ohio CAIR rules (OAC Chapter 3745-109) are based on the federal CAIR model rule developed by U.S. EPA. Both rules were developed by U.S. EPA based on research and investigation performed by their research branch in Triangle Park, North Carolina.

Revisions to OAC Chapter 3745-14 to show continued compliance with the NOx SIP Call for non-EGUs were based in part on ozone season NOx emissions and operating times from U.S. EPA's Clean Air Markets Database (CAMD).

**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, U.S. EPA has indicated Ohio is required to show continued compliance of non-EGUs with the NOx SIP Call. Although no formal guidance has been issued, U.S EPA presented three options for this process via a Fact Sheet:

Option 1: Streamlined demonstration. Demonstrate that total ozone-season NOx emissions from large non-EGU boilers and combustion turbines in the State that were included in the NOx Budget Trading Program but will not be included in the CSAPR ozone-season trading program could not exceed the large non-EGU budget imposed by the NOx SIP Call even if these units were to operate every hour of the ozone season. This was the option selected. In order to show continued compliance of non-EGUs with the NOx SIP Call under this option, Ohio EPA must retain provisions in OAC Chapter 3745-14 pertaining to applicability, the statewide emissions budget, and Part 75 monitoring and reporting, as well as rules OAC 3745-14-11 and 3745-14-12 regarding portland cement kilns and stationary internal combustion engines. As noted above, Ohio EPA intends to follow the current rulemaking with a second phase of rulemaking revising OAC rule 3745-14-08 to incorporate alternatives to the existing Part 75 monitoring and reporting requirements.

Option 2: Demonstrate that the NOx SIP Call reduction obligations for these large non-EGU boilers and combustion turbines are being met through alternative limits on these non-EGUs. As explained in 40 CFR 51.121(f)(2)(i), these alternatives include: Imposing a NOx mass emissions cap on each source; imposing a NOx emissions rate limit on each source and assuming maximum operating capacity for every such source for purposes of estimating NOx mass emissions; or imposing other regulatory requirements that the State has demonstrated to EPA provide equivalent or greater assurance that the State will comply with its ozone season NOx budget for large non-EGU boilers and combustion turbines. This option was not selected as it was determined that option 1 would be less burdensome on the regulated community.

Option 3: Demonstrate that additional ozone season NOx emission reductions from other sources covered by the NOx SIP Call have achieved extra reductions, over and above any required for those other sources by the NOx SIP Call, to the degree that overall reduction requirements of the NOx SIP Call have been achieved without any reductions from large non-EGUs. The option was not selected as it was determined that it would be difficult to make a satisfactory anti-backsliding demonstration required under CAA Section 110(l).

In addition, U.S. EPA published the CSAPR Update rule on October 26, 2016, which again allowed states to expand the applicability of the CSAPR NOx ozone season trading program to include non-EGUs [81 FR 74504]. Ohio EPA did not select this option, as the allowed increase to the CSAPR budget would be 1,541 tons per ozone season, a significant reduction from the budget of 4,028 tons per ozone season under the NOx budget trading program.

**11. Did the Agency specifically consider a performance-based regulation? Please explain.**

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*Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.*

The rules in these chapters 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 for Part 75 monitoring and compliance certifications. 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 to perform an annual review to show all existing and new non-EGU NO<sub>x</sub> SIP Call units continue to meet the state-wide 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 NO<sub>x</sub> SIP Call through the federal 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 revisions to the rule reduce the amount of information that must be submitted. 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.

OAC rule 3745-14-08 contains the provisions and outlines the requirements owners and operators of affected units (NO<sub>x</sub> budget units) must follow to comply with the monitoring, record keeping, and reporting requirements of the NO<sub>x</sub> Budget program. The NO<sub>x</sub> Budget program required owners and operators of each NO<sub>x</sub> 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 NO<sub>x</sub> 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: NO<sub>x</sub> monitor, O<sub>2</sub> 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.

Also, there would be some minor costs associated with the quarterly reporting and compliance certification requirements of this rule for emissions of NO<sub>x</sub> 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.

There is no cost of compliance with the CAIR program rules in OAC Chapter 3745-109, which are being rescinded as they have been superseded by the federal CSAPR program.

**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 NO<sub>x</sub> 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. In addition, Ohio EPA intends to follow this rulemaking with a second phase of rulemaking revising OAC rule 3745-14-08 to incorporate additional alternatives to the existing Part 75 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?**

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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:

- 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](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](mailto:paul.braun@epa.ohio.gov).