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**TITLE 326 AIR POLLUTION CONTROL DIVISION****SECOND NOTICE OF COMMENT PERIOD**

LSA Document #15-414

**NO<sub>x</sub> EMISSIONS FROM LARGE AFFECTED UNITS AND REPEAL OF NO<sub>x</sub> BUDGET TRADING PROGRAM****PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) is soliciting public comment on new rules at [326 IAC 10-2](#) concerning nitrogen oxide (NO<sub>x</sub>) emissions for the ozone season from certain large affected units formerly regulated under the NO<sub>x</sub> Budget Trading Program and the Clean Air Interstate Rule (CAIR), on the repeal of the NO<sub>x</sub> Budget Trading Program rule at [326 IAC 10-4](#), and on the repeal of portions of the CAIR rule at [326 IAC 24-3](#). IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

**HISTORY**

First Notice of Comment Period: December 9, 2015, Indiana Register (DIN: [20151209-IR-326150414FNA](#)).

**CITATIONS AFFECTED:** [326 IAC 10-2](#); [326 IAC 10-3-1](#); [326 IAC 10-4](#); [326 IAC 24-3](#).

**AUTHORITY:** [IC 13-14-8](#); [IC 13-17-3](#).

**SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING****Basic Purpose and Background**

The United States Environmental Protection Agency (U.S. EPA) published the Cross State Air Pollution Rule (CSAPR) in the Federal Register (FR) on August 8, 2011 (76 FR 48208), in order to reduce the interstate transport of fine particulate matter and ozone. The rule replaces U.S. EPA's CAIR, which was remanded by a December 2008 court decision that kept CAIR in place temporarily while directing U.S. EPA to issue a replacement rule. CSAPR requires twenty-eight (28) states in the eastern half of the United States, including Indiana, to significantly improve air quality by reducing NO<sub>x</sub> and sulfur dioxide (SO<sub>2</sub>) power plant emissions that cross state lines and contribute to ground-level ozone and fine particle pollution in other states. The SO<sub>2</sub> and NO<sub>x</sub> requirements for electric generating units (EGUs) at power plants under CAIR have been replaced by CSAPR and are being addressed through a separate state rulemaking (LSA Document #16-209).

In the First Notice of Comment Period published in the Indiana Register on December 9, 2015, the units affected by this rulemaking were referred to as "non-electric generating units" or "non-EGUs." This term is not the term used in the NO<sub>x</sub> Budget Trading Program or CAIR rules, and does not accurately reflect all the potential units in this category. Therefore, the term "large affected units" is used in this notice. Large affected units are large industrial fossil fuel-fired boilers with a heat input of greater than two hundred fifty (250) million British thermal units (MMBtu) per hour, and also electric generating units covered under the NO<sub>x</sub> state implementation plan (SIP) Call, but not regulated under CSAPR. IDEM is not aware of any EGUs in Indiana that would fall under this latter category but, to fully cover all potential units that were part of the NO<sub>x</sub> SIP Call, they are included in this rulemaking.

In 2001, IDEM included large affected units as part of the Indiana NO<sub>x</sub> Budget Trading Program rule at [326 IAC 10-4](#), in response to the NO<sub>x</sub> SIP Call issued by U.S. EPA. The NO<sub>x</sub> SIP Call required eastern states to submit SIPs that set statewide ozone season NO<sub>x</sub> budgets to reduce emissions of NO<sub>x</sub> addressing long-range transport of ozone. In 2007, the large affected units were moved as a group to the Indiana CAIR ozone season NO<sub>x</sub> trading program rule at [326 IAC 24-3](#) in accordance with the requirements of the federal CAIR program. U.S. EPA did not allow these large affected units to be included in CSAPR in 2011. Although the new ozone season program promulgated with the CSAPR Update rule in October 2016 allows the inclusion of these large affected units, IDEM is not proposing to include them because U.S. EPA would require IDEM to reduce the NO<sub>x</sub> emissions budget for large affected units from what is currently required, thus limiting the ability to include them in Indiana's CSAPR SIP. Large affected units remain subject to the federal NO<sub>x</sub> SIP Call requirements at 40 CFR 51.121; therefore, IDEM proposes to adopt these federal requirements into state rules in this rulemaking.

States that relied on emission reductions from the NO<sub>x</sub> Budget Trading Program to meet NO<sub>x</sub> SIP Call requirements from these units need to identify another way to ensure continued compliance with the federal rule. The federal NO<sub>x</sub> SIP Call rule at 40 CFR 51.121 generally requires that states choosing to rely on large affected units for meeting the emission reduction requirements must establish a NO<sub>x</sub> mass emissions cap on each source and require monitoring in accordance with 40 CFR 75, Subpart H. U.S. EPA allows states that have large affected units to demonstrate that, at current emission rates at maximum ozone season operating hours, emissions from large affected units as a group will remain below the NO<sub>x</sub> budget. U.S. EPA described this demonstration option in a frequently asked questions (FAQ) document provided at the time CSAPR was promulgated in 2011. IDEM

proposes to demonstrate that large affected units will remain below the NO<sub>x</sub> budget using this option. U.S. EPA is not requiring enforceable caps on either individual large affected units or all of the large affected units as a group. When new large affected units are permitted by the state, IDEM will need to update the demonstration to show that the units as a group are still below the budget.

IDEM is proposing to add a new rule at [326 IAC 10-2](#) to adopt NO<sub>x</sub> monitoring requirements for large affected units, based on the NO<sub>x</sub> monitoring requirements previously required in the NO<sub>x</sub> budget trading rules at [326 IAC 10-4](#) and subsequently the CAIR rules at [326 IAC 24-3](#). The only requirement remaining from CAIR for the trading program large affected units is to monitor for NO<sub>x</sub> in accordance with 40 CFR 75, Subpart H, often referred to as "Part 75 monitoring requirements".

In 2001, under the NO<sub>x</sub> SIP Call requirements, blast furnace gas units, a subset of large affected units, were regulated under [326 IAC 10-3](#) and were not part of the trading program under [326 IAC 10-4](#). These units have a relatively low NO<sub>x</sub> emission rate and IDEM did not require them to make reductions under the trading program, so these units had no net effect on the amount of total reductions achieved by the NO<sub>x</sub> SIP Call units. The source-specific emission limits included in the non-trading rule at [326 IAC 10-3](#) were based on uncontrolled emissions. Subsequent to the initial SIP approval, some of the blast furnace units were moved from [326 IAC 10-3](#) to the trading program rules at [326 IAC 10-4](#) at the request of affected sources. U.S. EPA was able to approve this subsequent change into Indiana's SIP because the availability of blast furnace gas is limited based on steel production and it was not expected that steel production within the state would shift from a unit covered by the trading program to one outside the program. When the CAIR trading program was replaced with CSAPR, some blast furnace gas units were regulated under the CAIR trading program under [326 IAC 24-3](#) and some continued to be under the non-trading based rules for specific source categories under [326 IAC 10-3](#).

The difference in how blast furnace gas units are regulated results in some units being subject to the Part 75 monitoring requirements in the trading rules and some to the emission factor based monitoring requirements in [326 IAC 10-3](#). Because blast furnace gas units did not contribute to the NO<sub>x</sub> reductions required by the NO<sub>x</sub> SIP Call and are no longer part of a trading program, IDEM is proposing that the set of blast furnace gas units that were a part of the previous trading program monitor NO<sub>x</sub> emissions using the emission factor-based monitoring in the new rule at [326 IAC 10-2-7](#), rather than the Part 75 monitoring requirements. IDEM considers this consistent with the requirement in 40 CFR 51.121(i)(4) and 40 CFR 51.121(i)(5) for units burning more than 50% blast furnace gas. IDEM believes it was not U.S. EPA's intent to require blast furnace gas units that were not part of the trading program to use Part 75 monitoring because these low emitting units were not considered fossil-fuel fired under 40 CFR 51.121(i)(5). Blast furnace gas units will be required to demonstrate that more than 50% of the heat input is derived from the blast furnace gas over the ozone control period. IDEM does not propose to regulate all blast furnace gas units under [326 IAC 10-3](#) because U.S. EPA requires that IDEM continually demonstrate that all of the trading program based large affected units, and any new units under [326 IAC 10-2](#), as a group, are below the budget.

IDEM is proposing to remove references to [326 IAC 10-4](#) and [326 IAC 24](#) in [326 IAC 10-3-1](#) because these rules will be repealed. A sunset clause was added to the NO<sub>x</sub> Budget Trading Program at [326 IAC 10-4-16](#) when CAIR replaced it. The NO<sub>x</sub> Budget Trading Program was not repealed at that time because the rule was still needed for documenting compliance after the end of the ozone season; it is no longer needed and will be repealed. At this time IDEM proposes that CAIR will be repealed in the rulemaking that adopts CSAPR requirements at the state level (LSA Document #16-209) except for portions of the CAIR ozone season rule at [326 IAC 24-3](#), which will be repealed in this rulemaking. The changes to the CAIR references in the Regional Haze rule at [326 IAC 26-1](#) will also be considered in the CSAPR rulemaking.

IDEM has worked closely with staff at U.S. EPA on this rulemaking and will continue to work with them on the appropriate monitoring requirements for blast furnace gas units. These revisions will be submitted to U.S. EPA for approval into Indiana's SIP. IDEM seeks comment on the affected citations listed, including suggestions for specific language, any other provisions of Title 326 that may be affected by this rulemaking, and alternative ways to achieve the purpose of the rulemaking.

#### **[IC 13-14-9-4](#) Identification of Restrictions and Requirements Not Imposed under Federal Law**

No element of the draft rule imposes either a restriction or a requirement on persons to whom the draft rule applies that is not imposed under federal law.

#### **Potential Fiscal Impact**

This rulemaking does not impose any costs beyond those already required under 40 CFR 51.121 and 40 CFR 96. Affected sources still must continue to comply with the operating and maintenance requirements for monitors under the federal rules.

#### **Public Participation and Work Group Information**

At this time, no work group is planned for the rulemaking. If you feel that a work group or other informal discussion on the rule is appropriate, please contact Jack Harmon, Rules Development Branch, Office of Legal Counsel at (317) 234-9535 or (800) 451-6027 (in Indiana).

## **SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD**

IDEM requested public comment from December 9, 2015, through January 8, 2016, on draft rule language. IDEM received comments from the following parties by the comment period deadline:

Alcoa Power Generating Inc. – Warrick Power Plant (APGI)

Citizen's Energy Group (CEG)

Purdue University (PU)

SABIC Innovative Plastics Mt. Vernon, LLC (SABIC)

United States Steel Corporation (USS)

Squire Patton Boggs (US) LLP, for ArcelorMittal USA LLC (AM), and Primary Energy (PE)

Following is a summary of the comments received and IDEM's responses thereto:

*Comment:* Several commenters support IDEM's proposal to conform to federal regulations without imposing new mass emission limitations on existing units. These amendments to Indiana's SIP follow U.S. EPA's decision to regulate EGUs differently than non-EGUs (hereafter known as large affected units), comply with the NO<sub>x</sub> SIP Call, and simplify Indiana's current NO<sub>x</sub> rules. (APGI)(CEG)(SABIC)(AM)(PE)

*Comment:* Purdue supports IDEM's proposed repeal of the NO<sub>x</sub> Budget Trading Program and CAIR. CAIR requirements have been replaced with CSAPR, which does not include large affected units. As a consequence, Purdue agrees with IDEM that these rules are no longer needed and can be repealed. (PU)

*Comment:* With IDEM's demonstration in place, Indiana correctly concludes that there is no need to impose new mass emission limits on individual large affected units to meet its NO<sub>x</sub> SIP Call obligation. Individual mass emission limits would undermine the flexibility that both U.S. EPA and IDEM intended when the NO<sub>x</sub> Budget Trading Program and CAIR were implemented for large affected units. Adding emission limits for individual sources after cooperative trading programs have succeeded undermines these programs and creates disincentives that could jeopardize the success of future trading programs. IDEM's proposed "group budget" approach preserves the cap on total NO<sub>x</sub> emissions from large affected units in accordance with the NO<sub>x</sub> SIP Call on downwind states. This approach preserves both air quality and economic opportunity in Indiana. (SABIC)(AM)(PE)

*Response:* The proposed revisions to Indiana's rules are in accordance with U.S. EPA's decision to regulate EGUs at utilities differently from the large affected units regulated under CAIR to comply with the federal NO<sub>x</sub> SIP Call and CSAPR, which replaced CAIR. The commenter refers to the "NO<sub>x</sub> SIP Call on downwind states"; however, the NO<sub>x</sub> SIP Call was "on" upwind states, including Indiana, to address their contribution to pollution in downwind states.

In this rulemaking, units also known as non-EGUs are regulated under the term "large affected units", as used in the NO<sub>x</sub> SIP Call trading rules at [326 IAC 10-4](#). With CSAPR now in effect, NO<sub>x</sub> SIP Call requirements remain in place for large affected units. These large affected units are not addressed in CSAPR as they were in CAIR; therefore, states that relied on large affected units for NO<sub>x</sub> emission reductions required by the NO<sub>x</sub> SIP Call must ensure continued compliance with the NO<sub>x</sub> SIP Call. The new ozone season program promulgated with the CSAPR Update rule in October 2016 allows the inclusion of these large affected units, but U.S. EPA restricted budgets, limiting the ability for states to include them in their CSAPR SIPs. The NO<sub>x</sub> SIP Call generally requires that states choosing to rely on large affected units for meeting NO<sub>x</sub> SIP Call emission reduction requirements establish a NO<sub>x</sub> mass emissions cap on each source and require monitoring in accordance with 40 CFR 75, Subpart H. However, U.S. EPA is allowing states that relied on large affected units to meet NO<sub>x</sub> ozone season emission reduction requirements to demonstrate that current emission rates at maximum ozone season operating hours will emit below the NO<sub>x</sub> SIP Call budget as a group. U.S. EPA has agreed to consider this, in lieu of individual mass emissions caps, but U.S. EPA still requires Part 75 monitoring to ensure compliance.

IDEM has initiated a separate rulemaking to address CSAPR and the final CSAPR Update Rule for the 2008 ozone National Ambient Air Quality Standards. The repeal of CAIR and replacement of the reference to CAIR in the Regional Haze Rule will be addressed in the CSAPR rulemaking, LSA Document #16-209. The Proposed Rule was published in the Indiana Register on May 3, 2017.

*Comment:* IDEM has properly demonstrated, using one of U.S. EPA's recommended options, that the remaining large affected units subject to this rulemaking cannot exceed the large affected unit budget of 9,777 tons of NO<sub>x</sub> per ozone season even when operating every hour of every day throughout the ozone season. Therefore, IDEM has demonstrated compliance with the NO<sub>x</sub> SIP Call budget levels approved by U.S. EPA for large affected units, and can continue to provide sufficient protection to downwind states without imposing any controls on the Indiana large affected units. New or modified large affected units will need to be evaluated by IDEM to verify that the NO<sub>x</sub> ozone season budget will not be exceeded, but there are currently over 3,000 tons of ozone season NO<sub>x</sub> emissions available in the budget for new or modified units. (SABIC)(AM)(PE)

*Comment:* IDEM has demonstrated that the large affected units that used to be in the CAIR and NO<sub>x</sub> Budget Trading Program in Indiana will not exceed the ozone season NO<sub>x</sub> budget levels, even if all the remaining large affected units operated every hour of the ozone season at their highest annual average NO<sub>x</sub> emission rate from the period 2011 to 2014. (AM)(PE)

*Response:* This rule applies to large affected units that were subject to Indiana's NO<sub>x</sub> Budget Trading Program, and subsequently CAIR, and any new sources that meet the applicability criteria for this rule. IDEM will

submit a demonstration to U.S. EPA Region 5 using "worst case scenario" NO<sub>x</sub> emission projections from the large affected units during the ozone season to demonstrate that the total NO<sub>x</sub> emission projections for large affected units are well below the ozone season NO<sub>x</sub> budget. Although the ozone season under the ambient monitoring rules was extended from May 1 to April 1, NO<sub>x</sub> monitoring requirements will be limited to the NO<sub>x</sub> SIP Call/CAIR season since the budgets for which the demonstration is based were developed with the shorter ozone season. U.S. EPA has agreed to consider this in lieu of individual mass emissions caps because the agency considers the demonstration to stay below the budget to be a control measure imposed to control NO<sub>x</sub> emissions according to 40 CFR 51.121(i)(4), which requires a continuous emission monitoring system (CEMS) in accordance with 40 CFR Part 75. Sources will monitor to continually show that the total NO<sub>x</sub> emissions from large affected units in Indiana during the ozone season remain below the state's ozone season NO<sub>x</sub> budget each year.

*Comment:* Commenters encourage IDEM to consider more cost effective methods to demonstrate compliance with the NO<sub>x</sub> budget than IDEM's proposal to use NO<sub>x</sub> CEMS operated and maintained in accordance with 40 CFR Part 75 requirements. (CEG)(SABIC)(AM)(PE)

*Response:* Part 75 monitoring requirements must remain in place to ensure continued compliance with NO<sub>x</sub> emission reduction requirements in the NO<sub>x</sub> SIP Call rule. Indiana obtained NO<sub>x</sub> emission reductions from both EGUs and large affected units to comply with the requirements of the NO<sub>x</sub> SIP Call, so the state would have to demonstrate that only reductions from EGUs are needed moving forward. Part 75 monitoring is not required where a state can successfully demonstrate that the NO<sub>x</sub> SIP Call requirements can be achieved without any reductions from affected sources; however, IDEM is unable to determine whether or not it is possible to show that no emission reductions from large affected units would be required in the future. U.S. EPA has provided no formal or informal guidance to specify what information is required to demonstrate compliance for this option. The requirements for this demonstration are not the same as the requirements for the demonstration to show that the maximum ozone season emissions from large affected units are well below the NO<sub>x</sub> SIP Call budget referred to in the response to the first comment. So, while other monitoring methods can provide less burdensome and costly ways to demonstrate compliance with the NO<sub>x</sub> budget, keeping Part 75 monitoring in place is a federal mandate required for U.S. EPA approval of this rulemaking.

*Comment:* Purdue does not believe Part 75 NO<sub>x</sub> monitoring provisions are necessary for its boilers, given that its boilers do not fall within a source category that would be regulated under [326 IAC 10](#). Certain Purdue boilers are subject to New Source Performance Standards under 40 CFR Part 60, and would be required to perform monitoring for NO<sub>x</sub> consistent with the requirements of 40 CFR Part 60, not the monitoring requirements of Part 75. Purdue recommends that IDEM remove Part 75 NO<sub>x</sub> monitoring requirements applicable to large affected units as a part of the NO<sub>x</sub> Trading Rule and only require such monitoring to the extent required under federal statutes. (PU)

*Response:* Although the large affected units at Purdue are subject to less stringent monitoring provisions under 40 CFR Part 60 than those required under 40 CFR Part 75, the Part 75 monitoring requirements must remain in place to ensure continued compliance with NO<sub>x</sub> emission requirements under the NO<sub>x</sub> SIP Call rule. Purdue's large affected units meet the applicability criteria for this rule because they are fossil-fuel-fired boilers with a maximum heat input greater than 250 MMBtu per hour. The criteria for requiring Part 75 monitoring are found at 40 CFR 51.121. According to 40 CFR 51.121(i)(4), a CEMS is required for monitoring where control measures are imposed to control NO<sub>x</sub> emissions.

When CSAPR replaced CAIR, U.S. EPA added 40 CFR 51.121(r)(2) at the same time it removed enforcement of the CAIR SIPs. This provision requires a state to revise its SIP by adopting control measures to satisfy the same portion of the state's NO<sub>x</sub> emission reduction requirements as the state projected the emission trading program under the NO<sub>x</sub> SIP Call would satisfy.

The strict interpretation of this provision would be to require Indiana to put in place individual mass emissions caps in addition to monitoring. However, IDEM will submit a demonstration to U.S. EPA Region 5 using "worst case scenario" NO<sub>x</sub> emission projections from the large affected units during the ozone season to demonstrate that the total NO<sub>x</sub> emission projections for large affected units are well below the ozone season NO<sub>x</sub> budget. U.S. EPA has agreed to consider this in lieu of enforceable mass emissions caps because the agency considers the demonstration to stay below the budget to be a control measure imposed to control NO<sub>x</sub> emissions, which therefore requires CEMS monitoring in accordance with 40 CFR Part 75.

Part 75 regulations offer an exemption for low mass NO<sub>x</sub> emitting units. The low mass emissions (LME) exemption in Part 75 is available to units that emit less than 50 tons of NO<sub>x</sub> per ozone season. IDEM has included the LME option as part of the Part 75 monitoring provisions in the draft rule language at [326 IAC 10-2-5\(c\)](#).

*Comment:* U.S. Steel generally agrees with IDEM's proposal to eliminate obsolete rules in response to CSAPR. However, U.S. Steel believes that the proposal includes costly and burdensome Part 75 monitoring that is no longer necessary or appropriate. The Part 75 monitoring is no longer required by federal law. Specifically, there is no longer a need for Part 75 monitoring since the units are not subject to a budget trading program and IDEM is using "worst case scenario" NO<sub>x</sub> emissions projections for the large affected units during the ozone season and the projections are well below the ozone season NO<sub>x</sub> budget. There are other more appropriate, less costly and burdensome means available that allow IDEM to demonstrate that it is complying with its ongoing NO<sub>x</sub>

SIP Call obligations. U.S. Steel believes the generally-accepted and technically-appropriate approach of using source-specific data along with operating data is more appropriate in light of IDEM's conservative approach to implement the rule change. U.S. Steel strongly believes that the changes in the law make the continued use of Part 75 monitoring unnecessarily burdensome in the regulated community, and to continue to subject such units to Part 75 monitoring is inconsistent with the spirit and intent of Governor Pence's Executive Order 13-03. (USS)

*Response:* IDEM understands U.S. Steel's position that Part 75 monitoring requirements are more rigorous and costly; however, Indiana has requested guidance on this issue from U.S. EPA. U.S. EPA has indicated that Part 75 monitoring requirements must remain in place to ensure continued compliance with NO<sub>x</sub> emission reduction requirements under the NO<sub>x</sub> SIP Call in accordance with 40 CFR 51.121. Therefore, Indiana has included Part 75 monitoring as a requirement for large affected units in the state's NO<sub>x</sub> rules. IDEM is proposing to monitor NO<sub>x</sub> emissions from affected units that burn blast furnace gas using monitoring methods included in [326 IAC 10-3](#).

*Comment:* According to IDEM's analysis, existing large affected units are only capable of emitting enough NO<sub>x</sub> during the ozone season to use 65% of the total trading program NO<sub>x</sub> budget. Since the maximum uncontrolled ozone season NO<sub>x</sub> emission rate for all large affected units is comfortably below the ozone season NO<sub>x</sub> budget, continuously monitoring NO<sub>x</sub> emissions is no longer necessary to demonstrate compliance with the NO<sub>x</sub> SIP Call. IDEM should eliminate the CEMS requirement for large affected units. (AM)(PE)(SABIC)

*Comment:* U.S. EPA suggested the Part 75 monitoring remain in place for large affected units, in response to FAQs on this topic. However, this informal FAQ document does not create a federal obligation for Indiana. It was not subject to notice and comment rulemaking and is not based on any Clean Air Act mandate. U.S. EPA's FAQ response acknowledges that Part 75 monitoring is not required where a state demonstrates that the NO<sub>x</sub> SIP Call requirements have been achieved without any reductions from large affected units. Where a state no longer needs to verify NO<sub>x</sub> reductions from large affected units, U.S. EPA's response recommends, but does not require, that states continue Part 75 monitoring, record keeping, and reporting on large affected units. Indiana should not volunteer to impose more burdensome monitoring than what is required by federal rule. (AM)(PE)(SABIC)

*Comment:* The SIP is only required to contain control measures "adequate to prohibit emissions of NO<sub>x</sub> that would otherwise be projected. . . to cause the jurisdiction's overall NO<sub>x</sub> emissions to be in excess of the budget for that jurisdiction." Since the NO<sub>x</sub> emissions from the large affected units are not projected to exceed the budget, the revised SIP rule contains no measures to control NO<sub>x</sub> from the remaining large affected units. It follows logically that continuous monitoring is unnecessary when there is no NO<sub>x</sub> level at the individual source to verify. The federal rule at 40 CFR 51.121(i)(4) follows this logic, so IDEM is under no obligation to require the unnecessary Part 75 monitoring that U.S. EPA recommends. (AM)(PE)(SABIC)

*Comment:* IDEM is only required to assess whether the collective emissions from the large affected trading units exceeds the overall NO<sub>x</sub> SIP Call cap. IDEM has determined that the overall NO<sub>x</sub> SIP Call cap is 35% higher than the maximum ozone season NO<sub>x</sub> rate for large affected units. There is no need for minute-by-minute or even hour-by-hour NO<sub>x</sub> emissions information when the relevant compliance measure is the collective emissions from all large affected units over the course of the ozone season. The significant burdens associated with Part 75 monitoring, which includes some of the most rigorous testing and verification procedures for any monitoring devices under the Clean Air Act, are not warranted here. (AM)(PE)(SABIC)

*Comment:* By proposing to retain Part 75 monitoring, IDEM is proposing requirements that are more stringent than federally required. Continuing this rigorous monitoring when the regulatory purpose for it is being repealed is arbitrary and capricious and vulnerable to challenge. IDEM should remove burdensome monitoring requirements that are no longer needed or required to generate information necessary to demonstrate compliance. (AM)(PE)(SABIC)

*Comment:* Even in the unlikely event that new or modified large affected units in the future cause the maximum potential NO<sub>x</sub> rate to exceed the NO<sub>x</sub> budget, monitoring should be narrowly tailored to meet the new need for estimating actual total mass NO<sub>x</sub> emissions emitted by large affected units during the ozone season. (AM)(PE)(SABIC)

*Comment:* It is not necessary to verify NO<sub>x</sub> emissions continuously with CEMS throughout each subsequent ozone season when a reliable emission factor has already been established for each large affected unit with the benefit of source-specific NO<sub>x</sub> monitoring data during the trading program years. If verification of the emission factor becomes necessary in the future, this can be accomplished with periodic stack testing at far less cost and burden than CEMS. The established emission factor can then be applied to parametric monitoring data such as operating hours, heat input, or fuel consumption. This is precisely the method that IDEM selected, and U.S. EPA approved, to evaluate NO<sub>x</sub> emissions from the large industrial boilers that were not part of a trading program to ensure Indiana met its NO<sub>x</sub> SIP Call obligations for these sources. IDEM did not require CEMS for non-trading, large industrial boilers in response to the NO<sub>x</sub> SIP Call. ArcelorMittal and Primary Energy understand that IDEM is only proposing to retain CEMS on units already equipped with them due to participation in the NO<sub>x</sub> Budget Trading Program or the CAIR trading program, and is not proposing to require CEMS on non-trading units. The commenters request that IDEM clarify this point in the modified rules. These parametric data are already monitored by most sources and can be collected on appropriate intervals as needed for IDEM's NO<sub>x</sub> SIP Call

demonstration. This approach generates the data needed for IDEM's demonstration that is meeting the NO<sub>x</sub> SIP Call obligations while minimizing the burden on the regulated community. (AM)(PE)

*Comment:* If verification of actual emissions becomes necessary in the future, this can be accomplished in a less burdensome manner, e.g., with periodic stack testing and parametric monitoring. This approach would generate the data needed for IDEM's demonstration that it is meeting the NO<sub>x</sub> SIP Call obligations while minimizing the burden on the regulated community. (SABIC)

*Response:* IDEM is proposing Part 75 monitoring requirements to comply with 40 CFR 51.121, not the FAQs document. Part 75 monitoring is dependent on applicability, not whether the unit was previously part of the NO<sub>x</sub> budget trading program. New sources that meet the applicability of a large affected unit will be subject to Part 75 monitoring.

*Comment:* Part 75 contains provisions that distort the accuracy of the NO<sub>x</sub> emission rate. For instance, Part 75 penalizes a source for monitor downtime by requiring assumed NO<sub>x</sub> emission rates that far exceed actual NO<sub>x</sub> emission rates. ArcelorMittal and Primary Energy are finding that older CEMS experience more downtime and, therefore, the Part 75 penalty for downtime is an increasingly significant component of the ozone season NO<sub>x</sub> calculation for its large affected units. This may have been justified as an incentive to properly monitor under a trading program when a source may purchase NO<sub>x</sub> allowances to cover the elevated assumed gap-filling emission rates. However, now that trading is over, this Part 75 assumption interferes with IDEM's obligation to accurately estimate ozone season emissions for large affected units to properly demonstrate that aggregate emissions from large affected units are below the ozone season NO<sub>x</sub> budget for these sources. IDEM's demonstration using an established emission factor multiplied by operating hours avoids the gap-filling distortion built into Part 75 monitoring. (AM)(PE)

*Response:* IDEM acknowledges that Part 75 monitoring contains provisions that can distort the accuracy of the NO<sub>x</sub> emission rate by penalizing sources for monitor downtime. However, Part 75 monitoring requirements must remain in place to ensure continued compliance with NO<sub>x</sub> emission reduction requirements under the NO<sub>x</sub> SIP Call in accordance with 40 CFR 51.121. Any overestimation of emissions will not interfere with IDEM's initial demonstration to U.S. EPA to show that emissions from large affected units are below the budget because the demonstration projects emissions well below the ozone season budget considering current emission rates at maximum ozone season operating hours.

*Comment:* IDEM stated that the potential fiscal impact of Alternative 1 was that there was "no cost burden on affected sources because these sources are already regulated by a similar program under CAIR." This statement could be read to mean that IDEM is only proposing to retain CEMS on units that are already equipped with them due to participation in the CAIR trading program, but is proposing not to require CEMS on non-trading units (such as SABIC's cogen project); SABIC supports this interpretation. Thus, if IDEM does not completely eliminate Part 75 monitoring in the final rule changes, we request that IDEM clarify in the modified rules that units that do not participate in the CAIR trading program are not required to install Part 75 monitoring. (SABIC)

*Response:* The interpretation by the commenter regarding the requirements of CEMS is not accurate. IDEM is not proposing to eliminate the requirement of CEMS on non-trading units. IDEM's statement in Alternative 1 does not acknowledge the fact that there is a cost burden to sources with large affected units that are directly associated with adherence to Part 75 monitoring requirements applicable to certain sources that asked to be included in the NO<sub>x</sub> Budget Trading Program or CAIR, compared to the monitoring requirements the same sources would have been subject to had they not been included in the trading program. However, this rule applies to sources that were subject to Indiana's NO<sub>x</sub> Budget Trading Program or CAIR and any new sources that meet the applicability criteria in this rule. Part 75 monitoring for new and existing sources is already required for compliance with the federal NO<sub>x</sub> SIP Call rule; therefore, there are no new costs from this rulemaking. As such, IDEM acknowledges that the statement referred to here should have stated that there would be "no new additional cost burden" to affected sources since Part 75 monitoring is already applicable to the existing and new sources under a previous federal program.

*Comment:* ArcelorMittal and Primary Energy disagree with IDEM's assumption that this rulemaking will impose "no cost burden on affected sources." Part 75 monitoring will remain costly for sources with large affected units, but now these costs cannot be offset by the sale of allowances. Many sources installed their CEMS over a decade ago, and several monitoring components are nearing the end of their useful life. Total replacement will eventually cost in excess of \$350,000 for each large affected unit required to operate a Part 75 CEMS. However, in the interim, where the CEMS unit can be salvaged and maintained, software upgrades and hardware replacements will need to be made if these units are to continue CEMS operations, with costs in the tens of thousands of dollars for each unit. This is in addition to the annual operating cost of each CEMS unit, which includes software licensing fees, calibration gases, RATA testing, and consultant fees. These annual operating costs can approach \$100,000 each year. IDEM must consider these costs attributable to this rulemaking because, as discussed above, large affected units are not otherwise required by federal rule to continue to comply with Part 75 monitoring. Indiana should not impose monitoring costs and burdens more stringent than the federal requirements, as this places Indiana businesses at a competitive disadvantage. (AM)(PE)

*Response:* While IDEM understands that affected sources no longer have excess allowances to sell, the

federal requirement to monitor under 40 CFR 51.121 was put in place as part of the NO<sub>x</sub> SIP Call, whether they were part of a trading program or not. Had there been no new rulemaking, the maintenance costs and the replacement costs of monitoring systems would still be a recurring cost to sources with monitoring systems on large affected units. Therefore, there would be no additional cost burden to affected sources since Part 75 monitoring is already applicable to the existing and new sources under a previous federal program. IDEM has included the LME option as part of the Part 75 monitoring provisions to reduce the cost burden on low emitting sources. Also, IDEM is proposing to require non-Part 75 monitoring methods for blast furnace gas units that burn more than 50% blast furnace gas.

*Comment:* U.S. Steel believes that it is not IDEM's intent to repeal the Part 75 monitoring exemption afforded to blast furnace gas-fired boilers if they meet the criteria of [326 IAC 10-3](#), as afforded by 40 CFR 51.121(i)(5). Therefore, U.S. Steel believes any future rule should clarify the exemption that large affected boilers are not subject to Part 75 monitoring and that the sources are not subject to disparate treatment simply because the boilers were previously part of a trading program. (USS)

*Comment:* ArcelorMittal's Indiana Harbor East boilers, which burn primarily blast furnace gas, can avoid Part 75 monitoring on the basis that blast furnace gas and other non-fossil fuels have comprised 50 percent or more of their annual heat input as set forth at 40 CFR 51.121(i)(5). This is the option that ArcelorMittal has used for its other large industrial boilers at Indiana Harbor West and Burns Harbor, which meet the requirements for minimum blast furnace gas use at [326 IAC 10-3](#). This rule does not require compliance with Part 75 monitoring because, according to 40 CFR 51.121(i)(5), these blast furnace gas-fired units are not fossil fuel-fired units for which Part 75 monitoring is required. IDEM should clarify that the Indiana Harbor East large affected unit boilers have the option of complying with the [326 IAC 10-3](#) rule provisions and by doing so, these large affected units will no longer be required to comply with Part 75 monitoring. This ensures that Indiana Harbor East's decision to "opt in" to a trading program that is now being repealed, does not trap their units into expensive and burdensome Part 75 monitoring that other similar units are not required to do.

If IDEM insists on going beyond federal regulations and requiring Part 75 monitoring for large affected units, then units that formerly opted into the trading program should be given an opportunity to opt out. The majority of ArcelorMittal's large industrial boilers meet their NO<sub>x</sub> SIP Call obligations under [326 IAC 10-3](#) by combusting 50% blast furnace gas or more on an annual heat input basis and meeting a 0.17 lb/MMBtu NO<sub>x</sub> emission limit. These units are not required to comply with Part 75 monitoring. Instead, they use fuel-specific emission factors multiplied by monitored fuel use during the ozone season to demonstrate compliance with the rule requirements.

ArcelorMittal operates four blast furnace gas-fired large affected units that opted into the NO<sub>x</sub> Budget and CAIR trading programs. Those trading programs will be repealed. Since the sole basis for opting in is being taken away, IDEM should allow these blast furnace gas-fired large affected units to opt out of the large affected unit budget and avoid Part 75 monitoring by complying with [326 IAC 10-3](#). These sources should not be penalized with indefinite CEMS obligations because they chose to opt in to a program that no longer exists. (AM)(PE)

*Response:* IDEM agrees that blast furnace gas should not be considered a fossil fuel for the purpose of 40 CFR 51.121(i)(5). Therefore, large affected units that are blast furnace gas units will not be required to conduct Part 75 monitoring if blast furnace gas comprises 50% or more of their ozone season heat input. IDEM believes that U.S. EPA's intent was to not include blast furnace gas-fired units as affected units subject to Part 75 monitoring because these units are low NO<sub>x</sub> emission units. U.S. EPA demonstrated this intent by approving IDEM's approach to blast furnace gas units in [326 IAC 10-3](#) into Indiana's SIP on November 8, 2001, at 66 FR 56465, and in a specific discussion of the exemption in the proposed rule published in the Federal Register on July 2, 2001, at 66 FR 34864. IDEM has clarified in the draft rule language that blast furnace gas-fired large affected units meeting the minimum requirements established in 40 CFR 51.121(i)(5) will not be required to comply with Part 75 monitoring. IDEM is proposing monitoring language at [326 IAC 10-2-7](#) similar to the language in [326 IAC 10-3](#). IDEM will continue to discuss this proposal with U.S. EPA throughout this rulemaking.

## REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Comments may be submitted in one of the following ways:

(1) By mail or common carrier to the following address:

LSA Document #15-414 NO<sub>x</sub> Emissions  
Jack Harmon  
Rules Development Branch  
Office of Legal Counsel  
Indiana Department of Environmental Management  
Indiana Government Center North  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

(2) By facsimile to (317) 233-5970. Please confirm the timely receipt of faxed comments by calling the Rules

Development Branch at (317) 232-8922.

(3) By electronic mail to jaharmon@idem.in.gov. To confirm timely delivery of submitted comments, please request a document receipt when sending the electronic mail. **PLEASE NOTE: Electronic mail comments will NOT be considered part of the official written comment period unless they are sent to the address indicated in this notice.**

(4) Hand delivered to the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, to properly identify each comment with the rulemaking action it is intended to address, each comment document must clearly specify the LSA document number of the rulemaking.

#### COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped not later than August 4, 2017. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this action may be obtained from Jack Harmon, Rules Development Branch, Office of Legal Counsel, (317) 234-9535 or (800) 451-6027 (in Indiana).

#### DRAFT RULE

SECTION 1. [326 IAC 10-2](#) IS ADDED TO READ AS FOLLOWS:

#### Rule 2. NO<sub>x</sub> Emissions from Large Affected Units

##### [326 IAC 10-2-1](#) Applicability

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 1. (a) The owner or operator of a unit, as defined in section 2 of this rule, that meets the applicability requirements in subsection (b) shall comply with the nitrogen oxide (NO<sub>x</sub>) monitoring, record keeping, and reporting requirements in sections 3 through 9 of this rule, unless the unit is subject to:

- (1) the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program established under 40 CFR 97, Subpart EEEEE;
- (2) an equivalent trading program established under regulations approved as a state implementation plan revision under 40 CFR 52.38(b)(9); or
- (3) [326 IAC 10-3-1\(a\)\(2\)](#).

(b) This rule applies to the owner or operator of a unit that meets the following criteria:

(1) For a cogeneration unit that has a maximum design heat input capacity of greater than two hundred fifty (250) million British thermal units (MMBtu) per hour, the following:

- (A) For a unit commencing operation before January 1, 1997, a unit that qualified as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1995 and 1996.
- (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that qualified as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1997 and 1998.
- (C) For a unit commencing operation on or after January 1, 1999, a unit qualifying as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for each year beginning 1999.

(2) For a unit that is not a cogeneration unit and that has a maximum design heat input capacity of greater than two hundred fifty (250) MMBtu per hour, the following:

- (A) For a unit commencing operation before January 1, 1997, a unit that did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1995 or 1996.
- (B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that did not serve a generator producing electricity for sale under a firm contract to the electric grid during 1997 or 1998.
- (C) For a unit commencing operation on or after January 1, 1999, a unit that at:
  - (i) no time serves a generator producing electricity for sale; or
  - (ii) any time serves a generator producing electricity for sale, if the generator has a nameplate capacity of twenty-five (25) megawatt electrical (MWe) output or less and has the potential to use no more than fifty percent (50%) of the potential electrical output capacity of the unit.

(3) For a cogeneration unit serving a generator with a nameplate capacity greater than twenty-five (25) megawatt electrical (MWe), the following:



(A) For a unit commencing operation before January 1, 1997, a unit that failed to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1995 and 1996.

(B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that failed to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for 1997 and 1998.

(C) For a unit commencing operation on or after January 1, 1999, a unit failing to qualify as an unaffected unit under the acid rain program, in 40 CFR 72.6(b)(4), for any year.

(4) For a unit that is not a cogeneration unit serving a generator with a nameplate capacity greater than twenty-five (25) megawatt electrical (MWe), the following:

(A) For a unit commencing operation before January 1, 1997, a unit that served a generator during 1995 or 1996 that produced electricity for sale under a firm contract to the electric grid.

(B) For a unit commencing operation on or after January 1, 1997, and before January 1, 1999, a unit that served a generator during 1997 or 1998 that produced electricity for sale under a firm contract to the electric grid.

(C) For a unit commencing operation on or after January 1, 1999, a unit serving a generator at any time that produced electricity for sale.

(5) For purposes of this rule, "electricity for sale under a firm contract to the electric grid" means electricity for sale where the capacity involved is intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.

(c) Any provision of this rule that applies to the designated representative of a large affected unit also applies to the owners or operators of the unit.

(Air Pollution Control Division; [326 IAC 10-2-1](#))

### [326 IAC 10-2-2](#) Definitions

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 2. (a) For purposes of complying with the requirements of this rule, the definitions in this rule and 40 CFR 72.2\* apply and take precedence in any conflict between these definitions and [326 IAC 1-2](#).

(b) The term "affected unit" in 40 CFR 75\* is replaced by the term "large affected unit" as defined in this section.

(c) In addition to the definitions in [IC 13-11-2](#), [326 IAC 1-2](#), and 40 CFR 72.2\*, the following definitions apply throughout this rule:

(1) "Boiler" means an enclosed combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(2) "Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes, through the sequential use of energy, where "sequential use of energy" means the use of reject heat from:

(A) electricity production in a useful thermal energy application or process; or

(B) a useful thermal energy application or process in electricity production.

(3) "Combined cycle system" means a system comprised of one (1) or more combustion turbines, heat recovery steam generators, and steam turbines, configured to improve overall efficiency of electricity generation or steam production.

(4) "Combustion turbine" means:

(A) an enclosed device comprising a compressor, a combustor, and a turbine, in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(B) any associated duct burner, heat recovery steam generator and steam turbine, if the enclosed device under clause (A) is combined cycle.

(5) "Commencing commercial operation" means, with regards to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, subject to the following:

(A) For a unit that is a large affected unit, on the date the unit commences commercial operation, the

date will remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered.

(B) For a unit that is not a large affected unit, on the date the unit commences commercial operation, the date that the unit becomes a large affected unit, as defined under subdivision 11, will be the unit's date of commencement of commercial operation.

(C) Except as provided in clauses (A) and (B), for a unit not serving a generator producing electricity for sale, the unit's date of commencement of operation is the unit's date of commencement of commercial operation.

(6) "Commencing operation" means the following:

(A) A unit commences operation on either the date:

(i) of commencement of any mechanical, chemical, or electronic process, including start-up of a unit's combustion chamber; or

(ii) a unit meets the applicability criteria in section 1 of this rule, if the unit was in operation prior to the date on which it met the applicability criteria in section 1 of this rule.

(B) A unit that undergoes a physical change after the date the unit commences operation, other than replacement of the unit by a unit at the same source, retains the unit's date of commencement of operation, and is treated as the same unit.

(C) A unit that is replaced by a unit at the same source, such as repowered, after the date the unit commences operation retains the replaced unit's date of commencement, and the replacement unit is treated as a separate unit with a separate date for commencement of operation.

(7) "Designated representative" means the person who is authorized by the owner or operator of the unit to represent and legally bind the owner or operator in matters pertaining to this rule, following the procedures for authorization and the responsibilities of the designated representative in 40 CFR 72, Subpart B\*, including the authorization of an alternate designated representative.

(8) "Fossil fuel" means natural gas, petroleum, coal, or any solid, liquid, or gaseous fuel derived from these materials.

(9) "Fossil fuel-fired" means the following:

(A) Except as provided in clause (B), the combustion of fossil fuel, alone or in combination with any other fuel, under any of the following scenarios:

(i) The fossil fuel actually combusted comprises more than fifty percent (50%) of the annual heat input on a British thermal unit (Btu) basis during any year starting in 1995. If a unit had no heat input in 1995, then during the last year of operation of the unit prior to 1995.

(ii) Fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year, provided that the unit is fossil fuel-fired as of the date during the year that the unit begins combusting fossil fuel.

(B) For the purposes of determining applicability in section 1(b)(3) and 1(b)(4) of this rule, combusting any amount of fossil fuel in any calendar year.

(10) "Heat input" means the product, expressed in Btu per unit of time (Btu/time), of the following:

(A) The gross calorific value of the fuel, expressed in Btu per pound (Btu/lb).

(B) The fuel feed rate into a combustion device, expressed in mass of fuel per unit of time (lb/time), as measured, recorded, and reported in accordance with 40 CFR 75, Subpart H\*.

Heat input does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(11) "Large affected unit" means a unit that meets the applicability criteria in section 1 of this rule.

(12) "Maximum design heat input" means the maximum amount of fuel per hour, in million British thermal units per hour (MMBtu/hr), that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

(13) "Nameplate capacity" means the maximum electrical generating output, expressed in megawatt electrical (MWe), that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

(14) "Operator" means any person who operates, controls, or supervises the operation of a unit, including any holding company, utility system, or plant manager of the unit.

(15) "Owner" means any of the following persons:

(A) The holder of:

(i) any portion of the legal or equitable title; or

(ii) a leasehold interest;

in a unit.

(B) Any purchaser of power from a unit under a life-of-the-unit, firm power contractual arrangement, except that, unless expressly provided for in a leasehold agreement, owner does not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments

are not based, either directly or indirectly, on the revenues or income from the large affected unit.

(16) "Ozone control period" means the inclusive period:

(A) beginning either:

(i) May 1 of a calendar year; or

(ii) on the deadline for meeting the unit's monitor certification requirements under section 4(a) of this rule; and

(B) ending on September 30 of the same year.

(17) "Potential electrical output capacity" means thirty-three percent (33%) of a unit's maximum design heat input.

(18) "Replacement", "replace", or "replaced" means the demolition of, or the permanent shutdown and permanent disabling of, a unit, and the construction of another unit, to be used instead of the demolished or shutdown unit.

(19) "Repowered" means replacement of a coal-fired boiler with one (1) of the following coal-fired technologies at the same source as the coal-fired boiler:

(A) Atmospheric or pressurized fluidized bed combustion.

(B) Integrated gasification combined cycle.

(C) Magnetohydrodynamics.

(D) Direct and indirect coal-fired turbines.

(E) Integrated gasification fuel cells.

(F) As determined by U.S. EPA in consultation with the Secretary of Energy, a derivative of one (1) or more of the technologies under clauses (A) through (E), and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

(20) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or a combined cycle system.

(21) "Unit operating day" means a calendar day in which a unit combusts any fuel.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-2](#))

### [326 IAC 10-2-3](#) Monitoring provisions

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 3. (a) The owner or operator of a large affected unit subject to this rule, and to the extent applicable, the designated representative, shall comply with the monitoring, record keeping, and reporting requirements as provided in this rule and in 40 CFR 75, Subpart H\*, except as provided in section 7 of this rule. The owner or operator of a unit that is not a large affected unit, but that is required to monitor under 40 CFR 75.72(b)(2)(ii)\*, shall comply with the same monitoring, record keeping, and reporting requirements as a large affected unit.

(b) The owner or operator of each large affected unit shall do the following:

(1) Install all monitoring systems required under this section for monitoring NO<sub>x</sub> ozone season mass emissions and individual unit heat input. This includes all systems required to monitor the following operating parameters in accordance with 40 CFR 75.71\* and 40 CFR 75.72\*, as applicable:

(A) NO<sub>x</sub> emission rate.

(B) NO<sub>x</sub> concentration.

(C) Stack gas moisture content.

(D) Stack gas flow rate.

(E) CO<sub>2</sub> or O<sub>2</sub> concentration.

(F) Fuel flow rate.

(2) Complete all certification tests required under section 5(b) of this rule and meet all other requirements of this section and 40 CFR 75\* applicable to the monitoring systems under subdivision (1).

(3) Record, report, and quality assure the data from the monitoring systems under subdivision (1).

(c) The designated representative for a large affected unit shall submit written notice to the department and U.S. EPA in accordance with 40 CFR 75.61\*.

(d) The owner or operator of a large affected unit is subject to the applicable provisions of 40 CFR 75\* concerning units in long term cold storage.

(e) The prohibitions in 40 CFR 75.70(c)\* apply to any monitoring system, alternative monitoring system, alternative reference method, or any other alternative for a continuous emissions monitoring system required under this rule.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-3](#))

### **[326 IAC 10-2-4](#) Compliance dates for monitoring**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 4. (a) Except as provided in section 3(d) of this rule, the owner or operator shall meet the monitoring system certification and other requirements of section 3(b) of this rule on or before the applicable dates in this section. The owner or operator shall record, report, and quality assure the data from the monitoring systems under section 3(b)(1) of this rule on and after the following dates:

(1) For units that commenced operation before the effective date of this rule, the effective date of this rule.

(2) For the owner or operator of a large affected unit that commences operation after the effective date of this rule, and that reports on an annual basis under section 9(b) of this rule, by one hundred eighty (180) calendar days after the date on which the unit commences commercial operation.

(3) For the owner or operator of a large affected unit that commences operation after the effective date of this rule, and that reports on a control period basis under section 9(b) of this rule, by the later of the following dates:

(A) One hundred eighty (180) calendar days after the date on which the unit commences commercial operation.

(B) If the compliance date under clause (A) is not during a control period, then by May 1 immediately following the compliance date under clause (A).

(4) For the owner or operator of a large affected unit for which construction of a new stack or flue or installation of add-on NO<sub>x</sub> emission controls is completed after the effective date of this rule, and that reports on an annual basis under section 9(b) of this rule, compliance by the earlier of:

(A) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO<sub>x</sub> emissions controls; or

(B) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO<sub>x</sub> emissions controls.

(5) For the owner or operator of a large affected unit for which construction of a new stack or flue or installation of add-on NO<sub>x</sub> emission controls is completed after the effective date of this rule and that reports on a control period basis under section 9(b) of this rule, by the later of the following dates:

(A) The earlier of:

(i) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO<sub>x</sub> emissions controls; or

(ii) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue or add-on NO<sub>x</sub> emissions controls.

(B) If the compliance date under clause (A) is not during a control period, May 1 immediately following the compliance date under clause (A).

(b) The owner or operator of a large affected unit that does not meet the applicable compliance date set forth in subsection (a) for any monitoring system under section 3 of this rule shall, for each

monitoring system, determine, record, and report maximum potential or, as appropriate, minimum potential, values for the following:

- (1) NO<sub>x</sub> emission rate.
- (2) NO<sub>x</sub> concentration.
- (3) Stack gas moisture content.
- (4) Stack gas flow rate.
- (5) Fuel flow rate.
- (6) Any other parameters required to determine NO<sub>x</sub> mass emissions and heat input in accordance with the following, as applicable:
  - (A) 40 CFR 75.31(b)(2)\*.
  - (B) 40 CFR 75.31(c)(3)\*.
  - (C) 40 CFR 75, Appendix D, Section 2.4\*.
  - (D) 40 CFR 75, Appendix E, Section 2.5\*.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-4](#))

### **[326 IAC 10-2-5](#) Certification and recertification**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 5. (a) The owner or operator of a large affected unit is exempt from the initial certification requirements of this section for a monitoring system under section 3 of this rule if the following conditions are met:

- (1) The monitoring system has been previously certified in accordance with 40 CFR 75\*.
- (2) The applicable quality assurance and quality control requirements of 40 CFR 75.21\*, 40 CFR 75, Appendix B\*, 40 CFR 75, Appendix D\*, and 40 CFR 75, Appendix E\* are fully met for the certified monitoring system described in subdivision (1).

(b) The recertification provisions of this section apply to a monitoring system that is exempt from initial certification requirements under this section.

(c) Except as provided in subsection (a), the owner or operator of a large affected unit shall comply with the initial certification and recertification procedures in 40 CFR 75.20\* for a continuous monitoring system (a continuous emission monitoring system or an excepted monitoring system under 40 CFR 75, Appendix D\* or 40 CFR 75, Appendix E\*). The owner or operator of a unit that qualifies to use the low mass emissions (LME) excepted monitoring methodology under 40 CFR 75.19\* or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E\* shall comply with the procedures in subsection (d) or section 8(b) of this rule, respectively.

(d) The owner or operator of a unit qualified under 40 CFR 75.19\* to use the LME excepted methodology shall meet the applicable certification and recertification requirements in 40 CFR 75.19(a)(2)\* and 40 CFR 75.20(h)\*. If the owner or operator of the unit elects to certify a fuel flowmeter system for heat input determination, the owner or operator shall meet the certification and recertification requirements in 40 CFR 75.20(g)\*.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-5](#))

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**[326 IAC 10-2-6](#) Data substitution**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 6. If a monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75\*, data must be substituted using the applicable missing data procedures from one (1) of the following:

- (1) 40 CFR 75, Subpart D\*.
- (2) 40 CFR 75, Subpart H\*.
- (3) 40 CFR 75, Appendix D\*.
- (4) 40 CFR 75, Appendix E\*.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-6](#))

**[326 IAC 10-2-7](#) Blast furnace units**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 7. The owner or operator of a large affected unit combusting blast furnace gas is exempt from section 3 of this rule by demonstrating compliance with the following requirements:

- (1) The owner or operator shall ensure that greater than fifty percent (50%) of the heat input is derived from blast furnace gas averaged over each ozone control period. By May 1, 2018, the owner or operator of an affected boiler shall submit to the department a compliance plan for approval by the department and U.S. EPA including the following:
  - (A) Baseline stack test data, or proposed testing, for establishment of fuel specific emission factors, or the emission factors for the type of boiler from the Compilation of Air Pollutant Emission Factors (AP-42), as defined at [326 IAC 1-1-3.5](#) for each fuel to be combusted. The fuel specific emission factor must be developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Methods 7\*, 7A\*, 7C\*, 7D\*, or 7E\*, based on a range of typical operating conditions. The owner or operator shall:
    - (i) establish that these operating conditions are representative, subject to approval by the department; and
    - (ii) certify that the emissions testing is being conducted under representative conditions.
  - (B) Anticipated fuel usage and combination of fuels.
- (2) Ozone control period emissions must be determined as outlined in the site-specific compliance plan submitted under subdivision (1).
- (3) For each ozone control period the owner or operator of a boiler under subdivision (1) shall monitor fuel usage and percentage of heat input derived from each fuel combusted to demonstrate that greater than fifty percent (50%) of the heat input is derived from blast furnace gas.
- (4) During periods of blast furnace reline, startup, and periods of malfunction, the affected boilers are not required to meet the requirements to derive fifty percent (50%) of the heat input from blast furnace gas.
- (5) The owner or operator of a large affected unit combusting blast furnace gas subject to this section shall submit a report to the department documenting compliance with all applicable requirements of this rule in accordance with its site specific compliance plan detailed under subdivision (1) for the ozone control period of each year by October 31, beginning in 2018 and each year thereafter.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-7](#))

**[326 IAC 10-2-8](#) Petition for approval of alternatives**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 8. (a) A petition under 40 CFR 75.66\* requesting approval of alternatives to any requirement of section 3, 4, 5, 6, or 9 of this rule may be made as follows:

- (1) Except as provided in subdivision (3), the designated representative of a large affected unit that is subject to an acid rain emissions limitation may submit a petition to U.S. EPA requesting approval to apply an alternative to any requirement of section 3, 4, 5, 6, or 9 of this rule. The designated representative may not use the alternative unless the alternative is approved in writing by U.S. EPA.
- (2) The designated representative of a large affected unit that is not subject to an acid rain limitation may submit a petition to both the department and U.S. EPA requesting approval to apply an alternative to any requirement of section 3, 4, 5, 6, or 9 of this rule. The designated representative may not use the alternative unless the alternative is approved in writing by both the department and U.S. EPA.
- (3) The designated representative of a large affected unit that is subject to an acid rain emissions limitation may submit a petition to both the department and U.S. EPA requesting approval to apply an alternative to a requirement concerning any additional continuous emission monitoring system required under 40 CFR 75.72\*. The designated representative may not use the alternative unless the alternative is approved in writing by both the department and U.S. EPA.

(b) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by U.S. EPA and, if applicable, the department under 40 CFR 75, Subpart E\*, shall comply with the applicable notification and application procedures of 40 CFR 75.20(f)\*.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-8](#))

**[326 IAC 10-2-9](#) Record keeping and reporting**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 9. (a) Except for a unit subject to section 7 of this rule, the designated representative of a large affected unit shall comply with all applicable record keeping and reporting requirements in this section and 40 CFR 75.73\*, as follows:

- (1) The owner or operator of a large affected unit shall comply with requirements of both:
  - (A) 40 CFR 75.73(c)\*; and
  - (B) 40 CFR 75.73(e)\*.
- (2) The designated representative shall submit an application to the department within forty-five (45) days after completing all initial certification or recertification tests required under section 5 of this rule, including the information required under 40 CFR 75.63\*.

(b) The designated representative shall submit quarterly reports as follows:

- (1) If the large affected unit is subject to an acid rain emissions limitation or if the owner or operator of the unit chooses to report on an annual basis under this section, the designated representative shall:
  - (A) meet the requirements of 40 CFR 75, Subpart H\* for the entire year; and
  - (B) report the NO<sub>x</sub> mass emissions data and heat input data in an electronic quarterly report in a format prescribed by U.S. EPA, for each calendar quarter corresponding to the earlier of:
    - (i) the date of provisional certification; or
    - (ii) for a unit that commences commercial operation on or after the effective date of this rule, the calendar quarter corresponding to the earlier of:
      - (AA) the date of provisional certification; or
      - (BB) the applicable deadline for initial certification under section 4(a) of this rule.
- (2) If the large affected unit is not subject to an acid rain emissions limitation, the designated

representative shall meet either of the following requirements:

- (A) If the owner or operator chooses to report on an annual basis, both of the following:
- (i) Meet the requirements of 40 CFR 75, Subpart H\* for the entire year.
  - (ii) Report the NO<sub>x</sub> mass emissions data and heat input data for the unit in accordance with this clause.
- (B) If the owner or operator does not choose to report on an annual basis, both of the following:
- (i) Meet the requirements of 40 CFR 75, Subpart H\* for the control period.
  - (ii) Report NO<sub>x</sub> mass emissions data and heat input data for the control period in an electronic quarterly report in a format prescribed by U.S. EPA, for each calendar year beginning with:
    - (AA) the effective date of this rule; or
    - (BB) for a unit that commences commercial operation on or after the effective date of this rule, the calendar quarter corresponding to the earlier of:
      - (aa) if it falls during the control period, the date of provisional certification;
      - (bb) if it falls during the control period, the applicable deadline for initial certification under section 4(a) of this rule; or
      - (cc) if neither subitem (aa) nor (bb) fall during the control period, the quarter that includes May 1 through June 20 of the first control period after the date of provisional certification or the applicable deadline for initial certification under section 4(a) of this rule.
- (3) For large affected units that are also subject to an acid rain emissions limitation or another annual trading program, quarterly reports must include the following:
- (A) Applicable data and information required by 40 CFR 75, Subparts F through H\* as applicable.
  - (B) NO<sub>x</sub> mass emission data, heat input data, and other information required by this rule.

(c) The designated representative shall submit to U.S. EPA a compliance certification, in a format prescribed by U.S. EPA, in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored.

The certification must state that:

- (1) the monitoring data submitted were recorded in accordance with the applicable requirements of this section and 40 CFR 75\*, including the quality assurance procedures and specifications;
- (2) for a unit with add-on NO<sub>x</sub> ozone season emission controls and for all hours where NO<sub>x</sub> data are substituted in accordance with 40 CFR 75.34(a)(1)\*, the add-on emission controls were operating within the range of parameters listed in the quality assurance and quality control program under 40 CFR 75, Appendix B\* and the substitute data values do not systematically underestimate NO<sub>x</sub> emissions; and
- (3) for a unit that is reporting on a control period basis under subsection (b)(2)(B), the NO<sub>x</sub> mass emission rate and NO<sub>x</sub> concentration values substituted for missing data under 40 CFR 75, Subpart D\* are calculated using only values from a control period and do not systematically underestimate NO<sub>x</sub> emissions.

(d) Owners and operators of each large affected unit at the source shall comply with the following record keeping and reporting requirements:

- (1) Unless otherwise provided, the owners and operators of each large affected unit at the source shall keep on site each of the following documents:
  - (A) The current certificate of representation for the designated representative for each large affected unit, and all documents that demonstrate the truth of the statements in the certificate of representation.
  - (B) All emissions monitoring information, in accordance with section 3 of this rule, with retention for a minimum of three (3) years.
  - (C) Copies of all reports and other submissions and all records made or required under this rule for a period of five (5) years from the date the document was created.
- (2) The designated representative of each large affected unit at the source shall submit the reports required under this rule.

\*These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, [www.gpo.gov](http://www.gpo.gov), or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, Indiana 46204.

(Air Pollution Control Division; [326 IAC 10-2-9](#))



SECTION 2. [326 IAC 10-3-1](#) IS AMENDED TO READ AS FOLLOWS:

### **326 IAC 10-3-1 Applicability**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-15](#); [IC 13-17](#)

Sec. 1. (a) This rule applies to any of the following:

- (1) **A** Portland cement kiln with process rates equal to or greater than **the following**:
  - (A) **For** long dry kilns, of twelve (12) tons per hour (tph).
  - (B) **For** long wet kilns, of ten (10) tph.
  - (C) **For** preheater kilns, of sixteen (16) tph. or
  - (D) **For** precalciner and combined preheater and precalciner kilns, of twenty-two (22) tph.
- (2) The following affected boilers:

Source	Point ID	Unit
(A) <del>Bethlehem Steel Corporation</del> <b>ArcelorMittal Burns Harbor</b>	075	Boiler #7
	076	Boiler #8
	077	Boiler #9
	078	Boiler #10
	079	Boiler #11
(B) <del>LTV Steel Company</del> <b>ArcelorMittal Indiana Harbor</b>	080	Boiler #12
	020	Boiler #4
	021	Boiler #5
	022	Boiler #6
	023	Boiler #7
	024	Boiler #8

~~(3) Any other blast furnace gas fired boiler with a heat input greater than two hundred fifty million (250,000,000) British thermal units per hour that is not subject to [326 IAC 10-4](#) or [326 IAC 24-3](#).~~

(b) A unit subject to this rule and a New Source Performance Standard, ~~(NSPS)~~, a National Emission Standard for Hazardous Air Pollutants, or an emission limit established under [326 IAC 2](#) ~~shall~~ **must** comply with the limitations and requirements of the more stringent rule. For a unit subject to this rule and [326 IAC 10-1](#), compliance with the emission limits in section 3(a)(1)(A) of this rule during the ozone control period ~~shall be~~ **is** deemed to be compliance with the emission limits in [326 IAC 10-1-4\(b\)\(1\)](#) during the ozone control period, and ~~such~~ **the** limits ~~shall~~ supersede those in [326 IAC 10-1-4\(b\)\(1\)](#) during the ozone control period.

~~(c) The monitoring, record-keeping, and reporting requirements under sections 4 and 5 of this rule shall not apply to a unit that opts into the NO<sub>x</sub> budget trading program under [326 IAC 10-4](#) or [326 IAC 24](#).~~

~~(d) (c) The requirements of this rule shall not apply to the specific units subject to this rule during startup and shutdown periods and periods of malfunction.~~

~~(e) (d) During periods of blast furnace reline, startup, and period periods of malfunction, the affected boilers shall be~~ **are** not ~~be~~ required to meet the requirement ~~to derive~~ **of greater than** fifty percent (50%) of the heat input from blast furnace gas.

*(Air Pollution Control Division; [326 IAC 10-3-1](#); filed Aug 17, 2001, 3:45 p.m.: 25 IR 14; errata filed Nov 29, 2001, 12:20 p.m.: 25 IR 1183; filed Jul 7, 2003, 4:00 p.m.: 26 IR 3550; filed Jan 26, 2007, 10:25 a.m.: [20070221-IR-326050117FRA](#))*

SECTION 3. THE FOLLOWING ARE REPEALED: [326 IAC 10-4](#); [326 IAC 24-3-1](#); [326 IAC 24-3-2](#); [326 IAC 24-3-4](#); [326 IAC 24-3-11](#).

[Notice of Public Hearing](#)

