

**Summary of Reasons Supporting the Adoption of the Proposed
Amendments to the Alabama Department of Environmental
Management’s Administrative Code for Division 3 (Air Division)
And
State Implementation Plan (SIP)**

Revisions to the Division 3 Code and the Alabama State Implementation Plan (SIP) are being proposed to incorporate by reference changes to the EPA’s New Source Performance Standards (NSPS), and National Emissions Standards for Hazardous Air Pollutants (NESHAPs). The definition of Volatile Organic Compound (VOCs) is being proposed for revision. Chapter 8 is being revised to include changes under the NOx SIP Call. Appendix D (Nonattainment Areas) is being proposed for revision. Also, included is the deletion of Clean Air Interstate Rules (CAIR) from the Alabama’s SIP and the inclusion of an update to the maintenance plan for the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) into the SIP.

A detailed index of changes is attached with this summary.

Revisions to Maintenance Plan for 1997 8-hour Ozone NAAQS

The proposed revisions to the Alabama SIP concern an update to the initial 10 year maintenance plan for the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) as required by Section 175 of the Clean Air Act. On April 15, 2004, the United States Environmental Protection Agency (EPA) designated Birmingham (Jefferson and Shelby counties) as marginal nonattainment for the 1997 8-hour ozone NAAQS. Based on monitoring data from 2003-2005 showing compliance with the standard, ADEM submitted a redesignation request, and maintenance plan to EPA requesting that the Birmingham area be redesignated to attainment. As a result, on May 12, 2006, the Birmingham area was redesignated to attainment/maintenance for the 1997 8-hour ozone NAAQS. Under section 175A(b), 8 years after the redesignation of an area to attainment, and after the submittal of the initial 10 year maintenance plan, states are required to submit an additional revision to their SIPs which provide a plan for maintaining the NAAQS for 10 years after the expiration of the initial 10 year maintenance plan. On April 6, 2015, in anticipation of the revocation of the 1997 8-hour standard, the EPA advised the State of Alabama against submitting a revision. However, on February 16, 2018, the United States Court of Appeals decided against EPA waiving the 175A maintenance plan requirement.

These revisions to the Alabama SIP are intended to satisfy that requirement.

Revisions to Chapter 335-3-1

The definition of Volatile Organic compounds (VOC) in Rule 335-3-1-.02(gggg) is being proposed for revision to reflect EPA's definition.

November 28, 2018, 83 FR 61127

40 CFR 51 Subpart F

Air Quality: Revision to the Regulatory Definition of Volatile Organic Compounds – Exclusion of cis-1,1,1,4,4,4-hexafluorobut-2-ene (HFO-1336mzz-Z)

SUMMARY: On May 1, 2018, the U.S. Environmental Protection Agency (EPA) published a proposed rule seeking comments in response to a petition requesting the revision of the EPA's regulatory definition of volatile organic compounds (VOC) to exempt cis- 1,1,1,4,4,4-hexafluorobut-2-ene (also known as HFO-1336mzz-Z; CAS number 692-49-9). EPA revised the regulatory definition of VOC under the Clean Air Act (CAA) to add HFO-1336mzz-Z to the list of compounds excluded from the regulatory definition of VOC on the basis that this compound makes a negligible contribution to tropospheric ozone (O3) formation.

Revisions to Chapter 335-3-3

ADEM is proposing to revise rule 335-3-3-.05 (Incineration of Commercial and Industrial Solid Waste) in Chapter 335-3-3 (Control of Open Burning and Incineration) to reflect EPA's amendments to 40 CFR Subpart DDDD – Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units.

April 16, 2019, 84 FR 15846

40 CFR 60, Subparts CCCC and DDDD

Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Technical Amendments

SUMMARY: Following requests for clarification of its June 2016 final action, the Environmental Protection Agency (EPA) published proposed amendments to several provisions of the 2016 New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Commercial and Industrial Solid Waste Incineration (CISWI). EPA finalized the proposed amendments, which provide clarity and address implementation issues

in the final CISWI NSPS and EG, as well as correcting inconsistencies and errors in these provisions.

Revisions to Chapter 335-3-8

ADEM is proposing to add Rules 335-3-8-.71 (NO_x Budget Program) and 335-3-8-.72 (NO_x Budget Program Monitoring and Reporting) to Chapter 335-3-8 (Control of Nitrogen Oxide Emissions). Rule 335-3-8-.71 is being proposed for addition to regulate NO_x emissions from non-EGU (electric generating unit) sources subject to the NO_x SIP call emissions budget. Rule 335-3-8-.72 is being proposed for addition to establish monitoring requirements other than 40 CFR Part 75 monitoring requirements as promulgated by EPA on March 8, 2019 (84 FR 8422).

March 8, 2019, 84 FR 8422

40 CFR 51 Subpart G

40 CFR 52 Subpart A

Emissions Monitoring Provisions in State Implementation Plans Required Under the NO_x SIP Call

SUMMARY: The Environmental Protection Agency (EPA) revised some of the regulations that were originally promulgated in 1998 to implement the NO_x SIP Call. The revisions give covered states greater flexibility concerning the form of the nitrogen oxides (NO_x) emissions monitoring requirements that the states must include in their state implementation plans (SIPs) for certain emissions sources. Other revisions remove obsolete provisions and clarify the remaining regulations but do not substantively alter any current regulatory requirements.

SIP Only Revisions (CAIR) and NO_x Trading Budget to Chapters 335-3-1, 335-3-5, and 335-3-8

On March 10, 2005, EPA promulgated the Clean Air Interstate Rule (CAIR), which addressed interstate transport under both the 1997 8-hour ozone and PM_{2.5} NAAQS. CAIR was incorporated into Alabama's regulations on April 3, 2007, and into Alabama's SIP on October 31, 2007 (72 FR 55659). EPA sunsetted and replaced CAIR with the Cross-State Air Pollution Rule (CSAPR), which was promulgated on August 8, 2011 (76 FR 48208), and took effect January 1, 2015. All CAIR and CAIR-related regulations were repealed from the ADEM Administrative Code Chapters 335-3-1, 335-3-5 and 335-3-8 on March 14, 2012, however, the rules were not removed from the SIP at that time. EPA

approved the addition of the CSAPR rules into the SIP on August 31, 2016. This created duplicated rules in the SIP. ADEM is proposing to remove the CAIR rules from the SIP to eliminate this duplication.

Revisions to Chapter 335-3-10

ADEM proposes technical amendments to rules in Chapter 335-3-10.

EPA has set emission standards, notification and testing procedures, and monitoring requirements for a number of individual industrial sources or source categories. Standards of performance are not intended to achieve any specific air quality level. Instead, they are designed to reflect best-demonstrated technology (taking into account costs) for the source in question. New source performance standards apply only to stationary sources that are constructed, modified, or reconstructed after a relevant standard is established. In 1978, EPA published a list assigning priorities to 72 categories of sources for which new standards eventually would be developed. As soon as new standards are promulgated, facilities planning construction, reconstruction, or modification must comply.

ADEM incorporates by reference, the federal New Source Performance Standards (NSPS) into the Department's regulations concerning Air Pollution found in ADEM Admin. Code div. 335-3. This incorporation allows the EPA to delegate administrative enforcement of these regulations to ADEM.

March 12, 2018, 83 FR 10628

40 CFR 60, Subpart OOOOa

Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Amendments

SUMMARY: EPA finalized amendments of certain requirements that are contained within the final rule titled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources," published in the Federal Register on June 3, 2016 (2016 Rule). The Environmental Protection Agency (EPA) finalized amendments of two narrow provisions of the requirements for the collection of fugitive emission components at well sites and compressor stations and removed the requirement for completion of delayed repair during unscheduled or emergency vent blowdowns.

November 14, 2018, 83 FR 56713
40 CFR 60, Subpart A and Appendices A, B and F
Testing Regulations for Air Emission Sources

SUMMARY: EPA amended certain existing testing regulations to reflect corrections, updates, and the addition of alternative equipment and methods for source testing of emissions. These revisions will improve the quality of data and provide flexibility in the use of approved alternative procedures. The revisions do not impose any new substantive requirements on source owners or operators.

November 26, 2018, 83 FR 60696
40 CFR 60 Subparts A and Ja
National Emission Standards for Hazardous Air Pollutants and New Source Performance Standards: Petroleum Refinery Sector Amendments

SUMMARY: EPA finalized amendments to the petroleum refinery National Emission Standards for Hazardous Air Pollutants (NESHAP) (referred to as Refinery MACT 1 and Refinery MACT 2) and to the New Source Performance Standards (NSPS) for Petroleum Refineries to clarify the requirements of these rules and to make technical corrections and minor revisions to requirements for work practice standards, recordkeeping, and reporting which were proposed in the **Federal Register** on April 10, 2018. EPA also finalized amendments to the compliance date of the requirements for existing maintenance vents from August 1, 2017, to December 26, 2018, which were proposed in the **Federal Register** on July 10, 2018.

April 16, 2019, 84 FR 15846
40 CFR 60, Subparts CCCC and DDDD
Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Technical Amendments

SUMMARY: Following requests for clarification of its June 2016 final action, the Environmental Protection Agency (EPA) published proposed amendments to several provisions of the 2016 New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Commercial and Industrial Solid Waste Incineration (CISWI). EPA finalized the proposed amendments, which provide clarity and address implementation issues in the final CISWI NSPS and EG, as well as correcting inconsistencies and errors in these provisions.

ADEM proposes to incorporate EPA amendments to Subpart DDDD, CISWI EG, in Rule 335-3-3-.05.

Revisions to Chapter 335-3-11

ADEM proposes technical amendments to rules in chapter 335-3-11. These rules will incorporate revisions regulations in 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Source Categories) and 40 CFR Part 61 (NESHAPS) by reference, into the State regulations.

The Environmental Protection Agency (EPA), in accordance with Section 112 of the Clean Air Act (CAA) as amended in 1990, is required to issue emission standards for all major sources of the 188 listed hazardous air pollutants. On July 16, 1992 [57 FR 31576], the EPA published an initial list of source categories for which air toxics emission standards are to be promulgated. By the year 2000, the EPA was required to develop rules for all of these categories that require maximum achievable reduction in emissions, considering cost and other factors. These rules are generally known as “maximum achievable control technology” (MACT) standards. On December 15, 1995 [60 FR 57346] under Section 112(l)(5) and 40 CFR 63.91, the EPA granted full approval to the State of Alabama for the State’s program for receiving delegation of Section 112 standards that are unchanged from Federal rules as promulgated.

This Chapter is periodically updated to incorporate standards for additional source categories as they are promulgated by the EPA.

March, 20 2018, 83 FR 12118

40 CFR 63 Appendix A

Revisions to Method 301: Field Validation of Pollutant Measurement Methods from Various Waste Media

SUMMARY: The Environmental Protection Agency (EPA) published editorial and technical revisions to the EPA’s Method 301 “Field Validation of Pollutant Measurement Methods from Various Waste Media” to correct and update the method. In addition, the EPA clarified the regulatory applicability of Method 301 as well as its suitability for use with other regulations. The revisions include ruggedness testing for validation of test methods intended for application at multiple sources, determination of the limit of detection for all method validations, incorporating procedures for determining the limit of detection, revising

the sampling requirements for the method comparison procedure, adding storage and sampling procedures for sorbent sampling systems, and clarifying acceptable statistical results for candidate test methods. EPA also clarified the applicability of Method 301 to their regulations and adding equations to clarify calculation of the correction factor, standard deviation, estimated variance of a validated test method, standard deviation of differences, and t-statistic for all validation approaches. EPA also made minor changes in response to public comments. Changes made to the Method 301 field validation protocol under this action apply only to methods submitted to the EPA for approval after the effective date of this final rule.

July 2, 2018, 83 FR 30879

40 CFR 63 Subpart UUUUU

Remaining Requirements for Mercury and Air Toxics Standards (MATS) Electronic Reporting Requirements

SUMMARY: The Environmental Protection Agency (EPA) extended the period during which certain electronic reports required by the Mercury and Air Toxics Standards (MATS) may be submitted as portable document format (PDF) files using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. The end date of that period is extended from June 30, 2018, to July 1, 2020. This extension is necessary because the electronic reporting system that owners or operators of affected MATS sources will be required to use when PDF filing is no longer allowed will not be available by June 30, 2018. This extension does not alter the responsibility of owners or operators of affected MATS sources to comply with the applicable MATS and report their compliance information to the appropriate authority. In addition, this extension ensures that the compliance information can be submitted in a timely manner and made available to the public. Finally, this rule is effective on July 1, 2018, to provide the regulated community a continuous and viable vehicle to submit compliance reports.

July 25, 2018, 83 FR 35122

40 CFR 63, Subpart LLL

National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry Residual Risk and Technology Review

SUMMARY: EPA finalized the residual risk and technology review (RTR) conducted for the Portland Cement Manufacturing Industry source category regulated under national emission standards for hazardous air pollutants (NESHAP). The amendments included no revisions to the

numerical emission limits of the rule based on the RTR. The amendments reflect corrections and clarifications of the rule requirements and provisions. While the amendments do not result in reductions in emissions of hazardous air pollutants (HAP), this action results in improved monitoring, compliance, and implementation of the rule.

August 3, 2018, 83 FR 38036

40 CFR 63 Subpart LLL

National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry Residual Risk and Technology Review

In rule document 2018–15718 beginning on page 35122 in the issue of Wednesday, July 25, 2018, a correction was made to Table 1 to Subpart LLL of Part 63- Applicability of General Provisions.

October 15, 2018, 83 FR 51842

40 CFR 63 Subparts A and OOO

National Emission Standards for Hazardous Air Pollutants: Manufacture of Amino/Phenolic Resins Risk and Technology Review Reconsideration

SUMMARY: EPA finalized amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Manufacture of Amino/Phenolic Resins (APR). These amendments are in response to petitions for reconsideration regarding the APR NESHAP rule revisions that were promulgated on October 8, 2014. EPA revised the maximum achievable control technology (MACT) standard for continuous process vents (CPVs) at existing affected sources. In addition, EPA extended the compliance date for CPVs at existing sources. EPA also are revised the requirements for storage vessels at new and existing sources during periods when an emission control system used to control vents on fixed roof storage vessels is undergoing planned routine maintenance. To improve the clarity of the APR NESHAP, EPA also finalized five minor technical rule corrections. In this action, EPA has not reopened any other aspects of the October 2014 final amendments to the NESHAP for the Manufacture of APR, including other issues raised in petitions for reconsideration of the October 2014 rule.

November 14, 2018, 83 FR 56713

**40 CFR 63, Subparts A, DDDDD, UUUUU, and Appendix A
Testing Regulations for Air Emission Sources**

SUMMARY: EPA amended certain existing testing regulations to reflect corrections, updates, and the addition of alternative equipment and methods for source testing of emissions. These revisions will improve the quality of data and provide flexibility in the use of approved alternative procedures. The revisions do not impose any new substantive requirements on source owners or operators.

November 20, 2018, 83 FR 58506
40 CFR 63 Appendix A
Revisions to Testing Regulations for Air Emission Sources

In rule document 2018-24747, appearing on pages 56713 through 56734 in the issue of Wednesday, November 14, 2018 EPA made the following correction:

On page 56732, the asterisks directly above Eq. 323-8 were printed in error and those after were omitted. The equation is corrected.

November 26, 2018, 83 FR 60696
40 CFR 63, Subparts CC and UUU
National Emission Standards for Hazardous Air Pollutants and New Source Performance Standards: Petroleum Refinery Sector Amendments

SUMMARY: EPA finalized amendments to the petroleum refinery National Emission Standards for Hazardous Air Pollutants (NESHAP) (referred to as Refinery MACT 1 and Refinery MACT 2) and to the New Source Performance Standards (NSPS) for Petroleum Refineries to clarify the requirements of these rules and to make technical corrections and minor revisions to requirements for work practice standards, recordkeeping, and reporting which were proposed in the **Federal Register** on April 10, 2018. EPA finalized amendments to the compliance date of the requirements for existing maintenance vents from August 1, 2017, to December 26, 2018, which were proposed in the **Federal Register** on July 10, 2018.

February 8, 2019, 84 FR 2742
40 CFR 63 Subpart QQQQ
National Emission Standards for Hazardous Air Pollutants: Friction Materials Manufacturing Facilities Residual Risk and Technology Review

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Friction Materials Manufacturing Facilities source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, EPA took final action addressing periods of startup, shutdown, and malfunction (SSM). EPA finalized its proposed determination that the risks from the category are acceptable and that the current NESHAP provides an ample margin of safety to protect public health. EPA identified no new cost-effective controls under the technology review to achieve further emissions reductions. These final amendments include amendments to revise reporting requirements for deviations. These amendments are made under the authority of the Clean Air Act (CAA) and will improve the effectiveness of the rule. The amendments are environmentally neutral.

February 28, 2019, 84 FR 6676

40 CFR 63, Subparts A and HHHH

National Emission Standards for Hazardous Air Pollutants: Wet-Formed Fiberglass Mat Production Residual Risk and Technology Review

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Wet-Formed Fiberglass Mat Production source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, EPA took final action addressing startup, shutdown, and malfunction (SSM), electronic reporting, and clarification of rule provisions. These final amendments address emissions during periods of SSM; add electronic reporting; revise certain monitoring, recordkeeping, and reporting requirements; and include other miscellaneous technical and editorial changes. These final amendments will result in improved compliance and implementation of the rule.

March 4, 2019, 84 FR 7682

40 CFR 63 Subparts A, QQQQ, and Appendix A

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products Residual Risk and Technology Review

SUMMARY: EPA finalized the residual risk and technology review (RTR) conducted for the Surface Coating of Wood Building Products source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, EPA took final action addressing periods of startup, shutdown, and malfunction (SSM). EPA finalized

proposed determination that the risks are acceptable and that the current NESHAP provides an ample margin of safety to protect public health. EPA identified no new cost-effective controls under the technology review to achieve further emissions reductions. These amendments include provisions regarding electronic reporting, adding an alternative compliance equation under the current standards, and technical and editorial changes. This action also finalizes a new EPA test method to measure isocyanate compounds in certain surface coatings. These amendments are being made under the authority of the Clean Air Act (CAA) and will improve the effectiveness of the rule. The amendments are environmentally neutral.

March 15, 2019, 84 FR 9590

40 CFR 63 Subparts A, NNNN, OOOO and RRRR

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews

SUMMARY: The Environmental Protection Agency (EPA) took final action on the residual risk and technology reviews (RTRs) conducted for the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, EPA took final action addressing emissions during periods of startup, shutdown, and malfunction (SSM); electronic reporting for performance test results and compliance reports; the addition of EPA Method 18 and updates to several measurement methods; and the addition of requirements for periodic performance testing. Additionally, several miscellaneous technical amendments were made to improve the clarity of the rule requirements. EPA made no revisions to the numerical emission limits based on these risk analyses or technology reviews.

May 23, 2019, 84 FR 23727

40 CFR 63, Subpart UUUUU

In Title 40 of the Code of Federal Regulations, Part 63, 63.8980 to end of part 63, revised as of July 1, 2018, EPA made corrections in Subpart UUUUU.

Appendix D (Nonattainment Areas)

Appendix D is being proposed for revision to reflect that there are no nonattainment areas within the State.

**Revision to the Alabama Department of Environmental Management's Administrative Code for
Division 3 (Air Division), and the
State of Alabama's Federal State Implementation Plan**

NO_x Ozone Season Budget Program for Non-EGU Sources

**Clean Air Act Section 110(l) Non-Interference Demonstration to
Remove CAIR and
Incorporate NO_x SIP Call Monitoring Requirements for
Large Non-EGUs**

November 2019

Table of Contents

Purpose.....3

Background.....5

Large Non-EGU Emissions in Alabama.....6

 1. Streamlined Large Non-EGU NOx SIP Call Compliance Demonstration.....6

 2. Large Non-EGU Potential to Emit (PTE) Compliance Demonstration.....8

Proposed SIP Revision and Section 110(l) Non-Interference Demonstration.....9

 1. Removal of CAIR from the State of Alabama’s Federal SIP.....9

 2. Monitoring.....11

Conclusion.....13

Appendix 1 CAMD Emissions Table – Non-EGUs

Appendix 2 Table of Federally Enforceable Limits for Permitted Large Non-EGU Units

Appendix 3 Documentation for Closure of Shutdown Units

Appendix 4 Text of Final Regulation 335-3-8-.71 & 335-3-8-.72

Appendix 5 Public Notice Materials

Purpose

The State of Alabama respectfully submits to the U.S. Environmental Protection Agency (EPA) this revision to the Alabama Department of Environmental Management's (ADEM) Administrative Code for Division 3 (Air Division) and to the State Implementation Plan (SIP). Specifically, ADEM is:

1. Revising Regulation 335-3-8 to add 335-3-8.71, *NOx Ozone Season Budget Program for Non-EGU Sources*, and 335-3-8.72, *NOx Budget Program Monitoring and Reporting*, to maintain state compliance with the federal NOx SIP Call regulations at 40 CFR 51.121 and 51.122; and
2. Revising the SIP to repeal the Clean Air Interstate Rule (CAIR) regulations. Specifically, ADEM requests the removal of the CAIR rules located in the table below from the SIP. The SIP-approved regulations at 335-3-5 for CSAPR SO2 Group 2 and 335-3-8 for NOx annual and the existing SO2 and NOx annual and ozone season have the same regulatory citations as the CAIR rules. The removal of the CAIR rules will address the duplicative regulatory citations at 335-3-5 and 335-3-8. Additionally, ADEM requests that the EPA approve into the SIP the following regulations: 335-3-8.71, *NOxBudget Program*, and 335-3-8.72, *NOx Budget Program Monitoring and Reporting*. ADEM also requests to redesignate existing 335-3-8-.14, *New Combustion Sources*, as new 335-3-8-.05, *New Combustion Sources*, in the approved SIP, consistent with the analogous redesignation that has already been implemented in the state's regulations.

Rule No.	Rule Title	Effective Date	Amended Dates
335-3-1-.14	Emissions Reporting Requirements Relating to Budgets for NOx Emissions	April 6, 2001	April 3, 2007
335-3-5-.06	State Clean Air Interstate Rule (CAIR) SO2 Trading Program General Provisions	July 11, 2006	April 3, 2007; March 31, 2009
335-3-5-.07	CAIR Designated Representative for CAIR SO2 Sources	July 11, 2006	April 3, 2007; March 31, 2009
335-3-5-.08	Permits	July 11, 2006	April 3, 2007
335-3-5-.11	CAIR SO2 Allowance Tracking System	July 11, 2006	April 3, 2007; March 31, 2009
335-3-5-.12	CAIR SO2 Allowance Transfers	July 11, 2006	April 3, 2007
335-3-5-.13	Monitoring and Reporting	July 11, 2006	April 3, 2007; March 31, 2009
335-3-5-.14	CAIR SO2 Opt-In Units	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.05	NOX Budget Trading Program	April 6, 2001	July 11, 2006; April 3, 2007
335-3-8-.06	Authorized Account Representative for NOX Budget Sources	April 6, 2001	
335-3-8-.07	Permits	April 6, 2001	

335-3-8-.08	Compliance Certification	April 6, 2001	
335-3-8-.09	NOX Allowance Allocations	April 6, 2001	
335-3-8-.10	NOX Allowance Tracking System	April 6, 2001	October 3, 2002; April 3, 2003; April 3, 2007
335-3-8-.11	NOX Allowance Transfers	April 6, 2001	
335-3-8-.12	Monitoring and Reporting	April 6, 2001	April 3, 2003
335-3-8-.13	Individual Unit Opt-ins	April 6, 2001	
335-3-8-.16	CAIR NOX Annual Trading Program	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.17	CAIR Designated Representative for CAIR NOX Sources	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.18	CAIR Permits	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.20	CAIR NOX Allowance Allocations	July 11, 2006	April 3, 2007
335-3-8-.21	CAIR NOX Allowance Tracking System	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.23	CAIR Monitoring and Reporting	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.24	CAIR NOX Opt-in Units	July 11, 2006	April 3, 2007
335-3-8-.25	CAIR NOX Ozone Season Trading Program	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.26	CAIR Designated Representative for CAIR NOX Ozone Season Sources	July 11, 2006	April 3, 2007
335-3-8-.27	CAIR NOX Ozone Season Permits	July 11, 2006	April 3, 2007
335-3-8-.29	CAIR NOX Ozone Season Allowance Allocations	July 11, 2006	April 3, 2007
335-3-8-.30	CAIR NOX Ozone Season Allowance Tracking System	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.32	CAIR NOX Ozone Season Monitoring and Reporting	July 11, 2006	April 3, 2007; March 31, 2009
335-3-8-.33	CAIR NOX Ozone Season Opt-in Units	July 11, 2006	April 3, 2007

Background

The NO_x SIP Call, published in the Federal Register (63 FR 57356) on October 27, 1998, was issued by the U.S. Environmental Protection Agency (EPA) to address “good neighbor” requirements with respect to the 1979 1-hour ozone National Ambient Air Quality Standard (NAAQS). The NO_x SIP Call required specific states identified as contributing significantly to ozone levels in other states, to amend their State Implementation Plans (SIPs) to reduce regional transport of ozone and the ozone precursor, NO_x, across state boundaries in the eastern half of the U.S. To meet its NO_x SIP Call obligations, Alabama adopted the NO_x Budget Trading Program, a cap and trade emissions trading program, and required reductions from both commercial EGUs of more than 25 MWe capacity, and large non-EGU fossil fuel-fired boilers with heat input exceeding 250 million BTU/hour.

On March 10, 2005, the EPA promulgated CAIR, which addressed interstate transport under both the 1997 8-hour ozone and PM_{2.5} NAAQS. CAIR replaced the federal NO_x Budget Trading Program with a new ozone season NO_x Trading Program that included large non-EGUs. The inclusion of large non-EGUs in the CAIR ozone season NO_x trading program was optional, but Alabama elected to include them in the program. CAIR was incorporated into Alabama’s regulations on April 3, 2007, and into Alabama’s SIP on October 31, 2007 (72 FR 55659). As a part of this action, EPA also approved the sunset of Alabama’s NO_x Budget Trading Program rules after the 2008 ozone season. Consistent with CAIR’s requirements, Alabama sunsetted its NO_x Budget Trading Program regulations on September 30, 2008. EPA determined that the SIP revision fully implemented the CAIR requirements for Alabama, which in turn, satisfied Alabama’s NO_x SIP Call obligations.

Following considerable litigation in the Federal courts, the EPA ultimately sunsetted and replaced CAIR with the Cross-State Air Pollution Rule (CSAPR), which was promulgated on August 8, 2011 (76 FR 48208), and finally took effect January 1, 2015. Under CSAPR, a new budget trading program was established to address interstate transport of ozone season NO_x emissions under the 1997 ozone NAAQS, and annual emissions of SO₂ and NO_x under the 1997 annual PM_{2.5} NAAQS and the 2006 24-hour PM_{2.5} NAAQS. The CSAPR SO₂ and NO_x annual budget trading programs and Alabama’s CSAPR SO₂ and NO_x annual trading budgets have now been adopted by the state through ADEM Administrative Code 335-3-5 and 335-3-8, which has been submitted as a separate revision to Alabama’s SIP. The EPA has approved Alabama’s CSAPR SO₂ and annual NO_x trading rules in the SIP (81 FR 59869).

Alabama has elected not to include its large non-EGUs in the CSAPR Update ozone season NO_x trading program. The EPA has approved Alabama’s CSAPR Update ozone season NO_x trading program rules for the EGUs in to the SIP; cited at 82 FR 46674. The CSAPR Update Rule, promulgated on October 26, 2016 (81 FR 74504), revised the CSAPR ozone-season NO_x emission trading program to reflect the stringency of the 2008 ozone NAAQS.

The EPA last revised its NO_x SIP Call regulations in a rulemaking titled “Emissions Monitoring Provisions in State Implementation Plans Required under the NO_x SIP Call”. This NO_x SIP Call Update rule, published in the Federal Register (84 FR 8422) on March 8, 2019, amends 40 CFR 51.121(i)(4) to allow states to revise NO_x SIP Call SIPs to establish alternative monitoring and reporting requirements for certain sources not otherwise required to perform part 75 monitoring under other programs such as the Acid Rain Program or CSAPR. Specifically, the revised regulations “make the inclusion of part 75 monitoring requirements optional rather than mandatory” by giving states “the flexibility to establish their own preferred forms of monitoring requirements for NO_x SIP Call purposes, subject to the existing general provisions at § 51.121(i)... and (i)(1) concerning SIP monitoring requirements....”.

Because the federal SIP now includes approved CSAPR and CSAPR Update rules that replace the previously approved CAIR rules for the EGUS, the Department proposed revisions to the federal SIP to repeal the CAIR regulations from 335-3-1, 335-3-5 and 335-3-8. Additionally, Alabama is revising the ADEM Administrative Code Chapter 335-3-8 to include 335-3-8-.71, *NOx Budget Program*, and 335-3-8-.72, *NOx Budget Program Monitoring and Reporting*, to ensure continued compliance with the NOx SIP Call requirements for large non-EGUs. These revisions include provisions that require continued monitoring and reporting under 40 CFR Part 75, Subpart H where applicable but allow for alternative monitoring methods for any NOx SIP Call budget units that are not required to implement Part 75 monitoring.

The above amendments to ADEM Administrative Code 335-3-8 were approved by the Environmental Management Commission in February 2020, and became state effective forty-five days after publication in the Alabama Administrative Monthly in April 2020 (final version of the regulation appears in Appendix 4).

Public notice of a public hearing and 30-day comment period on the Department's rulemaking and SIP revision were published in the four regional newspapers and on the Department's website on November 24, 2019, (Appendix 5). The public comment period ended on January 10, 2020. Appendix 5 presents a summary of the public comments received and the responses provided by the Department. A public hearing was held on January 8, 2020.

Large Non-EGU Emissions in Alabama

1. Streamlined Large Non-EGU NOx SIP Call Compliance Demonstration

Alabama's NOx SIP Call state budget for large non-EGUs is 2,328 tons per ozone season. As part of the Department's first attempt to address this issue in 2015, the Department prepared a draft compliance demonstration for large non-EGU NOx SIP Call compliance, which calculated the potential NOx emissions (assuming all units operated during every hour of ozone season) from the 2015 NOx emissions rate (tons/hour). The maximum combined ozone-season emissions were determined to be 1,419.8 tons, which is well below Alabama's budget.

The Department's draft compliance demonstration data is detailed in the table below. For each unit, the average actual hourly ozone-season NOx emission rate was calculated for the 2015 ozone season by dividing the unit's ozone-season NOx emissions (tons) by the unit operating hours for that ozone season. The rates were multiplied by the number of ozone season hours (3762) to obtain the value of the total potential ozone season NOx emissions for each unit. The maximum ozone-season emissions total from all fifteen large non-EGU units was determined to be 1,419 tons. This total was compared to Alabama's Large Non-EGU NOx SIP Call Budget (2,328 tons). The calculations are summarized below, and the values used can be found in Appendix 1.

Table 1: Large Non-EGU Ozone Season Max Emissions based on the 2015 Emissions Year

Facility Name	State County	Facility ID (ORISPL)	Unit ID	NOx (tons)	Operating Time (hr)	NOx Emissions Rate (tons/hr)	Potential NOx Emissions (tons)
Ascend (Decatur Plant)	01103	880041	X015	179	3,575	0.050	184.05
Ascend (Decatur Plant)	01103	880041	Z005	76	2,331	0.032	119.30
Ascend (Decatur Plant)	01103	880041	Z006	69	2,079	0.033	122.21
Indorama Ventures Xylenes and PTA Formerly BP Amoco Chemical Co.	01103	880075	AB8301	18	3,032	0.006	22.03
International Paper-Prattville Mill	01001	52140	Z006	191	3,625	0.053	193.05
International Paper-Prattville Mill	01001	52140	Z008	384	2,843	0.135	495.41
International Paper-Riverdale Mill	01047	54096	X026	36	3,440	0.011	38.68
International Paper-Riverdale Mill	01047	54096	Z007	8	1,359	0.006	21.07
US Steel (Fairfield Works)	01073	50730	206	5	554	0.009	32.65
US Steel (Fairfield Works)	01073	50730	208	23	3,487	0.006	23.78
US Steel (Fairfield Works)	01073	50730	209	23	2,019	0.011	41.21
US Steel (Fairfield Works)	01073	50730	210	12	1,759	0.007	24.87
WestRock Coated Board Formerly MeadWestvaco Coated Board	01113	54802	X022	29	3,597	0.008	30.09
WestRock Coated Board Formerly MeadWestvaco Coated Board	01113	54802	Z008	28	3,517	0.008	28.84
WestRock CP, LLC Formerly RockTenn CP Stevenson Mill	01071	880101	PB3	31	2,674	0.012	42.59
Actual 2015 Emissions:				1,111			1419.83

Since the submission of the original draft compliance demonstration, five units have shut down, including all four units at US Steele (Fairfield Works) in Jefferson County and unit Z005 at Ascend Decatur in Morgan County (see Appendix 3). This significantly decreases the overall potential to emit. Table 2 is included below to provide a more accurate demonstration. All units in Table 2 are currently in operation, however, unit Z006 at Ascend will be shutting down in 2020. In the compliance demonstration shown below, the average actual hourly ozone-season NOx emission rate was calculated for the 2018 ozone season by dividing the unit's ozone-season NOx emissions (tons) by the unit operating hours for that ozone season. The rates were multiplied by the number of ozone-season hours (3,672) to obtain the value of the total potential ozone-season NOx emissions. The maximum ozone-season emissions total from all ten large non-EGU units, if operated for the entire ozone season, was determined to be 1,045 tons. This total was then compared to Alabama's Large Non-EGU NOx SIP Call Budget (2,328 tons) which is well below Alabama's budget. The calculations are summarized below, and the values used can be found in Appendix 1.

Table 2: Large Non-EGU Ozone Season Max Emissions based on the 2018 Emissions Year

Facility Name	State County	Facility ID (ORISPL)	Unit ID	NOx (tons)	Operating Time (hr)	NOx Emissions Rate (tons/hr)	Potential NOx Emissions (tons)
Ascend (Decatur Plant)	01103	880041	X015	192	3,516	0.055	200.79
Ascend (Decatur Plant)	01103	880041	Z006	17	470	0.036	134.01
Indorama Ventures Xylenes and PTA Formerly BP Amoco Chemical Co.	01103	880075	AB8301	20	3,516	0.006	20.56
International Paper-Prattville Mill	01001	52140	Z006	136	3,628	0.038	138.13
International Paper-Prattville Mill	01001	52140	Z008	173	3,641	0.048	174.98
International Paper-Riverdale Mill	01047	54096	X026	50	3,641	0.014	50.58
International Paper-Riverdale Mill	01047	54096	Z007	56	957	0.058	213.45
WestRock Coated Board Formerly MeadWestvaco Coated Board	01113	54802	X022	31	3,563	0.009	31.84
WestRock Coated Board Formerly MeadWestvaco Coated Board	01113	54802	Z008	37	3,516	0.010	38.23
WestRock CP, LLC Formerly RockTenn CP Stevenson Mill	01071	880101	PB3	25	2,171	0.012	42.60
Actual 2018 Emissions:				738			1045.16

2. Large Non-EGU Potential to Emit (PTE) Compliance Demonstration

To verify the large non-EGUs' actual potential to emit (PTE), the Department first compiled a list of federally enforceable NOx limitations for the ten applicable large non-EGU NOx SIP Call units currently in operation in the state. Then, using the most realistic federally enforceable limit (e.g. the limit specific to the unit's common practice), the maximum ozone-season combined NOx potential to emit was calculated for each unit. For units which do not have a federally enforceable limit, the average actual hourly ozone-season NOx emission rate and the total potential ozone-season NOx emissions were calculated as described above. A listing of the federally enforceable limits is shown in Appendix 2.

The results are shown in the table below. The total PTE for all units in any given ozone season is 1,813 tons, well below Alabama's Large Non-EGU NOx SIP Call Budget (2,328 tons).

Table 3: Large Non-EGU Ozone Season NOx Potential-to-Emit

Facility Name	Facility ID (ORISPL)	Unit ID	2018 NOx Emissions (tons)	Potential OS Emissions (tons)
Ascend (Decatur Plant)	880041	X015	192	290
Ascend (Decatur Plant)	880041	Z006	17	206
Indorama Ventures Xylenes and PTA Formerly BP Amoco Chemical Co.	880075	AB8301	20	38
International Paper-Prattville Mill	52140	Z006	136	141
International Paper-Prattville Mill	52140	Z008	173	588
International Paper-Riverdale Mill	54096	X026	50	131
International Paper-Riverdale Mill	54096	Z007	56	219
WestRock Coated Board Formerly MeadWestvaco Coated Board	54802	X022	31	100
WestRock Coated Board Formerly MeadWestvaco Coated Board	54802	Z008	37	39
WestRock CP, LLC Formerly RockTenn CP Stevenson Mill	880101	PB3	25	61
			738	1,813

Together, the data in Table 1, Table 2, and Table 3 firmly demonstrate that NOx emissions from the state’s large non-EGUs are and will remain well below budgeted levels into the future, both from an actual and potential to emit standpoint. Both the newly formulated state NOx SIP Call regulations and the existing federally enforceable permit limitations on large non-EGU emissions will ensure Alabama’s continued compliance with non-EGU NOx SIP Call limits following CAIR’s repeal.

Proposed SIP Revision and Section 110(l) Non-Interference Demonstration

1. Removal of CAIR from the State of Alabama’s Federal SIP

With CAIR having been replaced by CSAPR at both the federal and state level, ADEM proposes to remove CAIR from the SIP. All CAIR and CAIR-related regulations were repealed from the ADEM Administrative Code Chapters 335-3-1, 335-3-5 and 335-3-8 on March 14, 2012. Given CAIR’s repeal and the fact that CSAPR does not account for affected large non-EGUs that were subject to the NOx SIP Call, ADEM is proposing to revise Chapter 335-3-8 to add 335-3-8-.71, *NOx Budget Program*, and 335-3-8-.72, *NOx Budget Program Monitoring and Reporting*, to ensure the state’s continued compliance with applicable large non-EGU NOx SIP Call budgets and all applicable requirements under 40 CFR 51.121. The final text of the amended Chapter 335-3-8, to include 335-3-8-.71 and 335-3-8-.72, is included as Appendix 4.

The revision to ADEM Administrative Code Chapter 335-3-8 includes provisions to ensure that the state's large non-EGUs will continue to satisfy the NOx SIP Call's requirements. As required under 40 CFR 51.121, 335-3-8-.71 and 335-3-8-.72 establish appropriate applicability, monitoring, reporting and other related provisions, and also establish the state's large non-EGU NOx SIP Call budget of 2,328 tons per year for all subject units. The budget limit is supported by existing SIP-approved, federally enforceable limits on subject sources (including any applicable NSPS, MACT, and other enforceable permit requirements). These limits and requirements will ensure these sources remain well below the NOx SIP Call budget levels. By January 31 of each year, the state shall supply to EPA an annual review of the actual NOx emissions during the previous control period from all NOx Budget units, in compliance with 40 CFR 51.122(c)(1)(i).

The Notice of Final Regulation and public record is included in Appendix 5. These regulations were promulgated in accordance with applicable state procedures, including notice and comment, and were approved by the Alabama Environmental Management Commission at a public hearing held on January 8, 2020. These regulations became state-effective in April 2020.

The removal of CAIR will not interfere with continued attainment of the NAAQS or any other applicable requirement of the Clean Air Act. For EGUs, the State's CAIR rules have been replaced by the State's CSAPR rules, which have already been approved into the SIP. For large non-EGUs, the CAIR rules cannot be implemented and would have no impact on NOx ozone season emissions. Therefore, no increase in NOx emissions will result from the removal of the CAIR rules from the SIP. As discussed above, the Department has revised Chapter 335-3-8, to include 335-3-8-.71, *NOx Budget Program*, and 335-3-8-.72, *NOx Budget Program Monitoring and Reporting*, which incorporate the applicable NOx SIP Call regulations into the ADEM Administrative Code. The addition of 335-3-8-.71 and 335-3-8-.72 will replace the CAIR regulations through which Alabama previously met its NOx SIP Call obligations for large non-EGUs. Because EPA stopped administering the CAIR trading programs after 2014, the approved CAIR rules in the state's SIP have not been capable of implementation for several years. Even though the CAIR programs were not implemented, NOx ozone season emissions from Alabama's subject large non-EGUs have remained well below their NOx SIP Call-required budget. Since the CAIR trading programs can no longer be implemented, and since recent emissions from the state's large non-EGUs have been below NOx SIP Call budget levels even without implementation of the CAIR trading programs, CAIR's removal from Alabama's federal SIP and subsequent replacement with 335-3-8-.71 and 335-3-8-.72 should not result in increased emissions from subject large non-EGUs. As such, emissions are expected to remain well below NOx SIP Call budget levels. Alabama is in compliance with all federal NAAQS. Additionally, Alabama adopted CSAPR into the Alabama Administrative Code and federal SIP to satisfy the Prong 4 requirements for the Regional Haze and infrastructure SIPs. CSAPR and the CSAPR Update were approved by EPA into Alabama's SIP in 2016 and 2017, respectively.

The Department's removal of CAIR from its federal SIP, and partial replacement by rules 335-3-8.71 and 335-3-8.72, is appropriate and consistent with all applicable requirements, including 40 CFR 51.121 and section 110(1) of the CAA. The CAIR trading programs can no longer be implemented and have already been replaced for EGUs by CSAPR trading programs approved into the SIP. For large non-EGUs, recent emission levels have been well below NOx SIP Call budget levels despite the lack of CAIR implementation, demonstrating that the CAIR rules have not been driving emissions levels, and rules 335-3-8.71 and 335-3-8.72 will address ongoing NOx SIP Call requirements.

2. Monitoring

The monitoring and reporting requirements included in 335-3-8-.72 require all owners and operators of covered NOx budget units to implement a monitoring and reporting system necessary to attribute ozone season NOx mass emissions to each NOx Budget Unit at the source and provide a compliance certification report to be received by the Department by November 30th following each ozone season. These requirements will ensure compliance with NOx SIP Call budget limits.

With the repeal of Alabama's CAIR regulations from the federal SIP and the revisions to Chapter 335-3-8 to add 335-3-8-.71 and 335-3-8-.72 to comply with the requirements of the applicable portions of the NOx SIP Call, the Department will administratively modify the subject federally enforceable Title V operating permits for each facility to remove any outdated CAIR conditions and replace them with NOx SIP Call permit conditions. The monitoring requirements for each source will be specified in each source's NOx SIP Call permit condition. A NOx Budget Unit that is otherwise required by any regulation or permit to operate a CEMS in accordance with 40 CFR Part 75 shall adhere to the monitoring and reporting requirements of 40 CFR Part 75. On March 8, 2019, the EPA published the NOx SIP Call Update Rule to amend the NOx SIP Call to provide additional flexibility to states to specify alternative monitoring options for large non-EGUs. Specifically, the revised regulatory language amends 40 CFR 51.121(i)(4) to make Part 75 monitoring, recordkeeping, and reporting optional, such that state SIPs may establish alternative requirements for NOx SIP Call budget units that meet the general requirements of 40 CFR 51.121(i) and (i)(1). The Department will require facilities with large non-EGUs requesting alternative monitoring to calculate the NOx mass emissions (tons) for each ozone season and report the total emissions to the Department no later than November 30th following that ozone season.

For units which are required or elect to operate a NOx CEMS but are not subject to the requirements of Part 75, the two options allowed for the calculation for NOx mass emissions would be as follows:

$$M = (R) \cdot (HI) \cdot \text{top} / 2000$$

Where M is NOx mass emissions (tons),
R is NOx emission rate (lb/MMBtu),
HI is heat input rate (MMBtu/hr), and
top is operating time (hr).

Using this calculation, the NOx emission rate would be calculated from Part 60 CEMS measurements using Method 19 in Appendix A to 40 CFR Part 60. The heat input rate would be calculated by totaling the heating value of the fuels used multiplied by the amount of each respective fuel utilized. Each CEMS monitor shall meet the requirements of 40 CFR Part 60 Appendix B, Performance Specifications 2 and Appendix F; or

$$M = 0.1194(R) \cdot (Q) \cdot \text{top} / 2000$$

Where M is the NOx mass emissions (tons),
R is the NOx emissions concentration (ppm_w)
Q is the flow rate (mmscf/hr), and
top is the operating time (hr).

Using this calculation, the NOx emission concentration would be determined from CEMS measurements. The flow rate would be determined by the average flow rate of the unit under normal operating conditions as demonstrated by previous 40 CFR Part 75 monitoring, or the flow rate of the unit as determined by 40

CFR Part 60, Appendix A, Methods 1-4. Each CEMS monitor shall meet the requirements of 40 CFR Part 60 Appendix B, Performance Specifications 2 and Appendix F.

A NOx Budget Unit not electing to or required by any regulation or permit to operate a NOx CEMS shall calculate the NOx mass emissions (tons) for each ozone season and report the total as part of the compliance certification report to the Department no later than November 30th following that ozone season. The calculation for NOx mass emissions for sources which have previously operated CEMS subject to the requirements of 40 CFR Part 75 will utilize the average NOx emission rate of the unit under normal operating conditions as demonstrated by previous 40 CFR Part 75 monitoring and the average flow rate of the unit under normal operating conditions as demonstrated by previous 40 CFR Part 75 monitoring. If the unit operating parameters, such as fuel composition, change beyond normal conditions from that of the Part 75 monitoring, additional testing may be required to verify the NOx emissions rate and the flow rate, or to establish new emission and flow rate factors.

For units which do not have historical emission and operational factors from Part 75 CEMS, initial testing utilizing 40 CFR Part 60, Appendix A, Methods 1-4 and 7 or 7e shall be performed, followed by at least two annual tests which shall be used to establish emission and flow rate factors. If the unit operating parameters, such as fuel composition, change beyond normal conditions during the initial testing, additional testing may be required to verify the NOx emissions rate and the flow rate, or to establish new emission and flow rate factors.

A monitoring protocol for each NOx Budget Unit will be required to be submitted to the Department for review and approval.

The Department commits to conduct an annual review of its emission inventory data for large non-EGUs, including any new applicable unit emissions, to verify the NOx SIP Call large non-EGU ozone-season NOx budgets have not been exceeded. For each control period in which one or more NOx Budget units at a source are subject to the NOx Budget program, the source shall submit to the Department by November 30 of that year, a compliance certification report for each source covering all such units. The report shall identify each NOx Budget unit, a certification that each NOx Budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx Budget Program applicable to the unit, including whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, all NOx mass emissions produced by the given unit for the control period covered by the report, and all supporting documentation.

By January 31st of each year, the Department will conduct and supply to EPA an annual review of actual NOx emissions from all covered large non-EGUs, including any new units, during the previous control period in compliance with the requirements of 40 CFR 51.122(c)(1)(i) to ensure that the total emissions remain below the NOx budgets. Should the total emissions from covered large non-EGUs for the control period exceed their respective NOx budgets, the Department will, within one year of determining the exceedance of the NOx budget, submit a revised state implementation plan to EPA which compensates for the exceedance and ensures the NOx budget is met in future years.

In Alabama, several of the original large non-EGU sources are no longer subject to the NOx SIP Call due to shut-downs. The remaining facilities, through compliance with federally enforceable permit restrictions and fuel conversions, have potentials-to-emit that are well below the NOx SIP Call budget, and the emissions of the majority of NOx Budget units are sufficiently monitored using Part 75 and Part 60 methods. It is clear from present and historical data presented in the above demonstrations that Alabama's large non-EGU emissions are and will remain below NOx SIP Call budget levels. Given the level of confidence in these sources' continued compliance, the Department has determined that the NOx SIP Call

monitoring requirements can be satisfied under the less onerous requirements in these regulations. Those sources specifically required to comply with Part 75 monitoring requirements due to regulation or permit conditions other than due to the NO_x SIP call will continue to do so.

As stated by EPA in the final NO_x SIP Call Update Rule (84 FR 8422), the alternative monitoring flexibility allowed under the reinstated NO_x SIP Call provisions will not interfere with continued attainment of the NAAQS, as “this action is not expected to cause any change in emissions or air quality”. As can be seen in the emissions tables above, Alabama’s large non-EGU emissions are well below the NO_x SIP Call budget. Additionally, EPA’s proposed NO_x SIP Call Update Rule (83 FR 48751) demonstrates that 2017 emissions from NO_x SIP Call budget units *not* otherwise subject to Part 75 represent only 7.5% of Alabama’s NO_x SIP Call annual emission budget. As previously discussed, the adopted monitoring flexibility will be available only to those non-EGU sources that are not otherwise required to continue Part 75 monitoring and reporting. As further discussed above, these sources have been shown to have potentials-to-emit well below budgeted levels. This indicates that the preexisting NO_x SIP Call budgets and Part 75 monitoring and reporting requirements have not themselves been a key factor in limiting emissions. As such, no increase in emissions should result from the added option to monitor and report under more flexible options in lieu of Part 75.

Conclusion

The Department respectfully requests that EPA approve this SIP revision for removal of the state’s NO_x Budget Trading Program rules (which the EPA has already approved sunseting) and the state’s CAIR rules from the SIP, and revisions to ADEM Administrative Code Chapter 335-3-8 to include 335-3-8-.71, *NO_x Budget Program*, and 335-3-8-.72, *NO_x Budget Program Monitoring and Reporting*, to maintain state compliance with the federal NO_x SIP Call regulations at 40 CFR 51.121 and 51.122. This includes the Department’s demonstration of continued NO_x SIP Call compliance among large non-EGUs following the repeal of state CAIR regulations. CAIR has been sunsetted and replaced on the federal level with CSAPR, and the Department has taken the necessary precursor steps, *i.e.*, the promulgation of state CSAPR and NO_x SIP Call regulations, to do the same in Alabama. Additionally, EPA has approved Alabama’s CSAPR rules and the CSAPR Update trading program rules for EGUs into the SIP. As demonstrated above, Alabama will continue to show compliance with the NO_x SIP Call going forward, and will verify emissions compliance annually.

Appendix 1

Non-EGU Emissions

Facility Name	FIPS	Facility ID ORIS	Unit ID	2011		2012		2013		2014		2015		2016		2017		2018	
				NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)	NOx (tons)	Operating Time (hr)
Ascend (Decatur Plant)	01103	880041	X015	192.53	3,125.25	271.98	3,334.00	131.50	3,502.00	172.98	3,590.50	179.18	3,574.75	158.55	3,551.00	181.58	3,499.00	192.28	3,516.25
Ascend (Decatur Plant)	01103	880041	Z005	19.26	461.75	23.92	506.50	19.61	657.50	8.40	488.00	75.73	2,331.00	11.02	331.00		0.00		0.00
Ascend (Decatur Plant)	01103	880041	Z006	31.57	646.25	51.95	1,153.75	24.09	766.50	31.64	1,102.00	69.18	2,078.75	59.45	1,458.25	30.38	868.25	17.14	469.75
Indorama Ventures Xylenes and PTA, LLC	01103	880075	AB4302		0.00		0.00												
Indorama Ventures Xylenes and PTA, LLC	01103	880075	AB8301	10.69	1,810.00	22.05	3,445.00	18.34	3,057.00	21.20	3,533.00	18.19	3,032.00	21.20	3,534.00	16.80	2,800.00	19.69	3,516.00
International Paper-Courtland Mill	01079	50245	GTX017	32.36	1,833.87	37.42	2,840.98	5.48	232.89		0.00								
International Paper-Courtland Mill	01079	50245	PBX007	7.89	1,403.51	9.69	3,270.24	6.43	2,155.97		0.00								
International Paper-Prattville Mill	01001	52140	Z006	182.79	3,669.87	216.66	3,671.65	199.40	3,570.03	202.12	3,671.03	190.57	3,624.70	181.73	3,640.80	176.56	3,661.34	136.46	3,627.57
International Paper-Prattville Mill	01001	52140	Z008	465.71	3,569.75	450.21	3,630.60	477.72	3,644.75	454.74	3,550.74	383.56	2,842.96	432.30	3,665.14	163.35	3,506.46	173.49	3,640.61
International Paper-Riverdale Mill	01047	54096	X026	343.42	3,386.40	104.75	3,273.89	45.28	3,409.01	33.73	3,662.93	36.24	3,440.07	44.09	3,588.26	42.15	3,607.86	50.15	3,641.18
International Paper-Riverdale Mill	01047	54096	Z007	49.68	1,437.63	31.30	2,249.55	12.83	2,851.70	23.15	663.01	7.80	1,358.82	44.03	845.58	15.40	1,270.15	55.61	956.71
Resolute FP - Coosa Pines Mill	01121	54216	AOW#1		0.00		0.00		0.00		0.00								
Resolute FP - Coosa Pines Mill	01121	54216	AOW#2	69.68	2,483.50	32.74	1,424.00	60.69	2,188.50		0.00								
Resolute FP - Coosa Pines Mill	01121	54216	AOW#3	84.22	2,888.25	48.96	2,130.25	57.29	2,501.75		0.00								
Resolute FP - Coosa Pines Mill	01121	54216	AOW#4	49.66	1,884.25	97.84	2,813.00	142.07	2,819.50		0.00								
US Steel (Fairfield Works)	01073	50730	206	0.05	617.57	0.00	35.72	10.30	1,434.78	6.18	843.40	4.93	553.94						
US Steel (Fairfield Works)	01073	50730	208	28.34	3,315.00	7.34	3,295.05	4.65	2,680.85	6.75	2,709.65	22.58	3,487.08						
US Steel (Fairfield Works)	01073	50730	209	27.95	3,645.68	27.64	3,617.48	25.30	3,513.17	20.53	3,652.11	22.66	2,018.87						
US Steel (Fairfield Works)	01073	50730	210	25.39	3,522.71	108.21	3,653.11	25.42	3,553.86	19.55	3,618.21	11.92	1,759.42						
WestRock Coated Board	01113	54802	X022	9.34	1,224.91	38.25	3,444.60	42.15	3,471.91	27.64	3,412.35	29.47	3,596.93	28.53	3,515.61	28.00	3,617.86	30.90	3,563.44
WestRock Coated Board	01113	54802	Z008	62.44	3,569.70	7.92	910.50	36.40	3,516.08	31.58	3,666.03	27.62	3,516.95	16.28	2,195.61	19.99	3,639.77	36.61	3,515.82
WestRock CP, LLC	01071	880101	PB3							38.29	3,381.00	31.02	2,674.00	40.00	3,448.00	41.27	3,558.00	25.18	2,171.00
Total:				1,692.96		1,588.83		1,344.95		1,098.45		1,110.63		1,037.17		715.47		737.50	

Emissions used in these demonstrations were obtained from the Clean Air Markets Division (CAMD), with the exception of the West Rock Coated Board emissions. Actuals provided to the department from the facility were used for units X022 and X008 (ORIS 54802).

Appendix 2

Table of Federally Enforceable Limits for Permitted Large Non-EGU Units

Facility	Unit ID	Federally Enforceable NOX Limit(s)	Type of Limit and Applicable Requirement
Ascend (Decatur Plant)	X015	0.2 lb/mmBTU while burning fossil fuels	NSPS Limit 40 CFR 60 Subpart D
		0.36 lb/mmBTU while burning any fuels	BART
	Z006	109.72 lb/hr	BART
		this unit will be shutting down in 2020	Based on application submitted on February 19, 2019
Indorama Ventures Xylenes and PTA, LLC	AB8301	0.038 lb/mmBTU and 15.2 lb/hr on loads running higher than 25% capacity	PSD Limit ADEM Admin Code 335-3-14-.04
		0.05 lb/mmBTU and 15.2 lb/hr on loads running lower than 25% capacity	PSD Limit ADEM Admin Code 335-3-14-.04
International Paper - Prattville Mill	Z006		
	Z008	427 lb/hr while burning any fuels	PSD Limit ADEM Admin Code 335-3-14-.04
		0.7 lb/mmBTU while burning fossil fuels and wood waste	NSPS Limit 40 CFR 60 Subpart D Rule 335-3-10-.02(2)
International Paper - Riverdale Mill	X026	25 ppm at 15% O2 on a dry basis and 47.8 lb/hr in Gas Turbine while burning natural gas 44 ppm at 15% O2 and 88.3 lb/hr in Gas Turbine while burning fuel oil	NSPS Limit 40 CFR Subpart GG ADEM Admin Code 335-3-10-.02(33) PSD – 335-3-14-.04
		110.4 lb/hr and 1027000 gal/yr (combined Gas Turbine and Duct Burner) while burning fuel oil	PSD Limit ADEM Admin Code 335-3-14-.04
		69.9 lb/hr (combined Gas Turbine and Duct Burner) while burning natural gas	PSD Limit ADEM Admin Code 335-3-14-.04
	Z007		
WestRock Coated Board	X022	33 lb/hr in Gas Turbine while burning natural gas	PSD Limit ADEM Admin Code 335-3-14-.04
		20 lb/hr in Duct Burner while burning natural gas	PSD Limit ADEM Admin Code 335-3-14-.04
		or 25ppmv at 15% O2 in gas turbine and <0.1 lb/mmBTU HI in duct burner	NSPS Limit Rule 335-3-10-.02(2)(b) Subpart Db Rule 335-3-10-.02(33) Subpart GG
	Z008		
WestRock CP, LLC	PB3	0.2 lb/mmBTU while burning fuel oil	PSD Limit ADEM Admin Code 335-3-14-.04
		0.12 lb/mmBTU while burning natural gas	PSD Limit ADEM Admin Code 335-3-14-.04

Appendix 3

Documentation for Closure of Shutdown Units

Ascend Performance Materials

Documentation for Closure of Shutdown Units



Via E-Mail

September 19, 2018

Mr. Eric Reidy
Engineering Branch, Air Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

RE: Permit No. 712-0010-X104 (Boiler No. 5)
Termination of Air Permit

Dear Mr. Reidy,

I am returning the attached voided air permit for Boiler 5 (Emission Unit Z005) as required for the issuance of air construction permit 712-0010-X112 (Boiler R-2).

If you have any questions or need additional information, please contact me at (256) 552-2216 or via e-mail at rfburk@ascendmaterials.com.

Sincerely,

A handwritten signature in blue ink that reads 'Robert Burke'.

Robert Burke, REM, CESCO
Principal Environmental Engineer

Attachment



AIR PERMIT

PERMITTEE: ASCEND PERFORMANCE MATERIALS OPERATIONS, LLC
FACILITY NAME: ASCEND PERFORMANCE MATERIALS OPERATIONS, LLC
LOCATION: DECATUR, MORGAN, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
712-0010-X104	290 MMBtu/hr Spreader-Stoker Coal-Fired Boiler with Electrostatic Precipitator (ESP) and Selective Non-Catalytic Reduction (SNCR) for Control (Boiler No. 5)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: January 26, 2016

Alabama Department of Environmental Management

**U.S. Steel
Fairfield Works**

Documentation for Closure of Shutdown Units

2. DESCRIPTION OF FACILITY AND PROCESSES

The Pipe Mill and Flat Roll Mill are located in Fairfield, Alabama (Jefferson County). The Pipe Mill manufactures seamless carbon steel pipes from solid steel cylinders called “rounds”, which are supplied by the nearby Flat Roll Mill or other non-U. S. Steel facilities. The Fairfield Works is classified under Standard Industrial Classification (SIC) Code 3312, *Iron and Steel Production*.

The main process at the Pipe Mill is the forming of rounds into seamless pipes. This process involves reheating the rounds, piercing the rounds with mandrels, and elongating the hot, pierced rounds to form the pipe. After the pipe has been elongated, it is heat treated and hydrotested. Additionally, a protective coating is applied to the threads, and the pipe is marked and coated with varnish.

The Flat Roll Mill is an integrated steelmaking facility which includes steelmaking, casting, and steel finishing operations to produce a variety of steel products, including coils and sheets.

This section details the current facility operations, as well as the proposed projects at the Fairfield Works. A detailed list of all current and proposed equipment, including equipment that will be permanently shut down, is included in Appendix A.

2.1. FACILITY OPERATIONS

The Fairfield Works is currently comprised of numerous primary process areas. The status of the future operation of each existing and proposed emission unit at the Pipe Mill and Flat Roll Mill following startup of the Coupling, Q&T and EAF projects is summarized in Table 2-1 below. Note that several emission units that are currently in operation at the Flat Roll Mill will be associated with the Pipe Mill following completion of the EAF project.

Table 2-1. Emission Units Status

Emission Unit ID	Emission Unit Description	Emission Unit Status	Future Operation
226	No. 5 Galvanizing Unit	No Change	Flat Roll Mill
230	Storage Tanks	No Change	Flat Roll Mill
---	Roadways (Existing) - Paved	Associated Change - Coupling, Q&T, EAF	Flat Roll Mill
---	Roadways (Existing) - Unpaved	Associated Change - Coupling, Q&T, EAF	Flat Roll Mill
NEW	Package Boiler #1 (8.16 MMBtu/hr)	New	Flat Roll Mill
NEW	Package Boiler #2 (8.16 MMBtu/hr)	New	Flat Roll Mill
003	Bloom Reheat Furnace – Rated at 340 MMBtu/hr	No Change	Pipe Mill
004	Mandrel Piercing Mill with Venturi Rod Scrubber	No Change	Pipe Mill
005	Tube Reheat Furnace – Rated at 114 MMBtu/hr	No Change	Pipe Mill
006	Austenitizing Furnace – Rated at 86.6 MMBtu/hr	No Change	Pipe Mill
007	Tempering Furnace – Rated at 66.5 MMBtu/hr	No Change	Pipe Mill
008	Pipe Coater No.1	No Change	Pipe Mill
009	Pipe Coater No. 2	No Change	Pipe Mill
010	Mandrel Preheat Furnace – Rated at 4 MMBtu/hr	No Change	Pipe Mill
221	Continuous Slab Caster and Torch Cut-Off Station	No Change	Pipe Mill

Emission Unit ID	Emission Unit Description	Emission Unit Status	Future Operation
222	Continuous Rounds Caster and Torch Cut-Off Station	No Change	Pipe Mill
011a	Caterpillar G516 Emergency Generator	No Change	Pipe Mill
011b	4,000 Gallon Storage Tank	No Change	Pipe Mill
Insignificant	Cooling Towers	No Change	Pipe Mill
---	Roadways (Existing) - Paved	Associated Change - Coupling, Q&T, EAF	Pipe Mill
---	Roadways (Existing) - Unpaved	Associated Change - Coupling, Q&T, EAF	Pipe Mill
212	South Hot Metal Mixer And Desulphurization Baghouse	Associated Change - EAF	Pipe Mill
217	U/X Burnt Lime Silo	Associated Change - EAF	Pipe Mill
218	North Burnt Lime Silo	Associated Change - EAF	Pipe Mill
219	LMF with Baghouse	Associated Change - EAF	Pipe Mill
220	LMF Handling Operations with Baghouse	Associated Change - EAF	Pipe Mill
COUP-1	Steam Boiler - 80 HP	New - Coupling	Pipe Mill
COUP-2	Chemical Conversion Coating Process	New - Coupling	Pipe Mill
COUP-3	Painting Process	New - Coupling	Pipe Mill
COUP-4	Stenciling Process - (Aerosol Can Spray)	New - Coupling	Pipe Mill
Insignificant	Mill Bay Gas Heaters (130 heaters, each rated 37,500 Btu/hr)	New - Coupling	Pipe Mill
Insignificant	Cleaning Oven - Tool Stripping Furnace (1 MMBtu/hr)	New - Coupling	Pipe Mill
Insignificant	Drying Oven (1 MMBtu/hr)	New - Coupling	Pipe Mill
NEW	New EAF with New Baghouse	New - EAF	Pipe Mill
NEW	New Vacuum Tank Degasser (VTD) Alloy Addition to N. Mixer BH	New - EAF	Pipe Mill
NEW	New Vacuum Tank Degasser (VTD) Process w/ Fabric Filters	New - EAF	Pipe Mill
NEW	Melt Shop Cooling Tower (Non-Contact)	New - EAF	Pipe Mill
NEW	Material Handling Activities	New - EAF	Pipe Mill
NEW	Emergency Diesel Generator #1 (2200 HP @ 50 hrs/yr)	New - EAF	Pipe Mill
NEW	Emergency Diesel Generator #2 (2200 HP @ 50 hrs/yr)	New - EAF	Pipe Mill
NEW	Vertical Ladle Preheater (15 MMBtu/hr)	New - EAF	Pipe Mill
NEW	Melt Shop Fugitives	New - EAF	Pipe Mill
Insignificant	Scrap Burning Stations	New - Q&T	Pipe Mill
Insignificant	Hydraulic Oil Tank	New - Q&T	Pipe Mill
QT-1	Austenitizing Furnace (62.4 MMBtu/hr)	New - Q&T	Pipe Mill
QT-2	Contact Cooling Tower	New - Q&T	Pipe Mill
QT-3	Tempering Furnace (34 MMBtu/hr)	New - Q&T	Pipe Mill
QT-4	Stenciler Units	New - Q&T	Pipe Mill
201	Material Handling Activities	Permanent Shutdown	N/A
202	Coal Handling Activities with Baghouses	Permanent Shutdown	N/A
203	No. 8 Blast Furnace - Flame Suppression	Permanent Shutdown	N/A

Emission Unit ID	Emission Unit Description	Emission Unit Status	Future Operation
204	No. 8 Blast Furnace	Permanent Shutdown	N/A
205	No. 8 Blast Furnace Waste Gas Flare	Permanent Shutdown	N/A
206	Boiler No. 5	Permanent Shutdown	N/A
207	Boiler No. 7	Permanent Shutdown	N/A
208	Boiler No. 8	Permanent Shutdown	N/A
209	Boiler No. 9	Permanent Shutdown	N/A
210	Boiler No. 10	Permanent Shutdown	N/A
211	North Hot Metal Mixer And Desulphurization Baghouse	Permanent Shutdown	N/A
211/212	Hot Metal Mixers (Metal Transfer)	Permanent Shutdown	N/A
211/212	Molten Reladling (All Qbops)	Permanent Shutdown	N/A
213	Basic Oxygen Furnace C	Permanent Shutdown	N/A
214	Basic Oxygen Furnace X	Permanent Shutdown	N/A
215	Basic Oxygen Furnace U	Permanent Shutdown	N/A
216	South Burnt Lime Silo	Permanent Shutdown	N/A
223	Slab Reheat Furnace, Roughing Mill, and 6 Stand Rolling Mills	Permanent Shutdown	N/A
224	No. 4 Continuous Pickling Process	Permanent Shutdown	N/A
225	No. 4 Galvanizing Unit	Permanent Shutdown	N/A
227	Hydrogen Reformer	Permanent Shutdown	N/A
228	Sheet Mill Annealing Ovens	Permanent Shutdown	N/A
229	Cold Reduction Unit	Permanent Shutdown	N/A
231	Q-BOP SE Baghouse	Permanent Shutdown	N/A
231A	Q-BOP Area Fugitives (Tapping & Charging)	Permanent Shutdown	N/A
232	Cast House Emissions Baghouse	Permanent Shutdown	N/A
232A	Blast Furnace Cast House (Fugitives)	Permanent Shutdown	N/A
---	Blast Furnace Cooling Towers	Permanent Shutdown	N/A
---	Slips	Permanent Shutdown	N/A

The following sections of this application describes the primary process areas that will remain in operation at the Fairfield Works following the implementation of the Coupling, Q&T, and EAF projects. The sources identified for permanent shut down in Table 2-2 above are not included in the remainder of this Title V renewal application.

2.2. PIPE FORMING OPERATIONS

2.2.1. Combustion Units and Shaping Operations

The Pipe Mill operates a number of combustion units that facilitate the process of forming rounds into the final seamless steel pipe. The Bloom Reheat Furnace (emission unit [EU] No. 003) is a 340 MMBtu/hr natural gas, top and bottom fired walking beam furnace. Rounds from the Bloom Caster are delivered to the Pipe Mill, cut to size, and then fed through the Bloom Reheat Furnace, which heats the rounds to a maximum temperature of 2,330 °F for further processing.

From the Reheat Furnace, the hot rounds are transferred through a high-pressure water descaler to the Rotary Piercing Mill, where the solid rounds are pierced using mandrel piercing bars. Once the mandrel piercing bar has