

- (xxi) Chemical process plants;
- (xxii) Fossil fuel boilers (or combination of them) totaling more than 250 million Btu per hour heat input;
- (xxiii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiv) Taconite ore processing plants;
- (xxv) Glass fiber processing plants;
- (xxvi) Charcoal production plants;
- (b) Any other source which emits or has the potential to emit 250 tons per year or more of any air pollutant, except for greenhouse gases, regulated under the Federal Clean Air Act (42 U.S.C. 7401 et seq.);
- (c) Beginning January 2, 2011, sources of GHGs to which 40 CFR 52.21(b)(49)(iv) applies; and
- (d) Beginning July 1, 2011, sources of GHGs to which 40 CFR 52.21(b)(49)(v) applies.]
- (38) — (53) (text unchanged)

26.11.06 General Emission Standards, Prohibitions, and Restrictions

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 10-102, and 10-103, Annotated Code of Maryland

.14 Control of PSD Sources.

- A. (text unchanged)
- B. General Requirements.

(1) A person may not construct, modify, or operate, or cause to be constructed, modified, or operated, a Prevention of Significant Deterioration (PSD) source, as defined in COMAR 26.11.01.01B(37), which will result in violation of any provision of 40 CFR §52.21, as [published in the 2009 edition, as amended by the “Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule” (75 FR 31514) and the “Deferral for CO₂ Emissions from Bioenergy and Other Biogenic Sources under the Prevention of Significant Deterioration and Title V Programs” (76 FR 43490)] *amended*.

(2) (text unchanged)

ROBERT M. SUMMERS, Ph.D.
Secretary of the Environment

Subtitle 11 AIR QUALITY

Notice of Proposed Action

[13-095-P]

The Secretary of the Environment proposes to amend:

- (1) Regulation .01 under **COMAR 26.11.01 General Administrative Provisions**; and
- (2) Regulations .01 and .02 under **COMAR 26.11.17 Nonattainment Provisions for Major New Sources and Major Modifications**.

Statement of Purpose

The purpose of this action is to incorporate federal standards for the New Source Review (NSR) program for fine particulate matter and its precursors into the Code of Maryland Regulations (COMAR). Fine particulate matter is defined as particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers and is referred to as PM_{2.5}. Maryland’s nonattainment area (NAA) NSR program is contained in COMAR 26.11.17, and applies to major stationary sources and major modifications which are major for PM_{2.5} or its precursors at facilities located in Baltimore City, Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, Prince George’s and Washington counties.

These amendments will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland’s State Implementation Plan (SIP).

Background

On July 18, 1997, the EPA revised the National Ambient Air Quality Standards (NAAQS) for PM to add new standards for fine particles, using PM_{2.5} as the indicator. Health-based (primary) annual and 24-hour standards for PM_{2.5} were established at 15 micrograms per cubic meter (µg/m³) and 65 µg/m³, respectively (62 FR 38652). At the same time that the primary standards were set, the EPA also established welfare-based (secondary) standards identical to the primary standards.

Epidemiological studies measuring health effects associated with PM_{2.5} have shown a significant correlation between elevated PM_{2.5} levels and premature mortality. Other important effects associated with PM_{2.5} exposure include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems. Individuals particularly sensitive to PM_{2.5} exposure include older adults, people with heart and lung disease, and children.

The Clean Air Fine Particle Implementation Rule was proposed in the Federal Register on November 1, 2005 and included proposed revisions to the NSR program along with plans to implement the 1997 PM_{2.5} NAAQS (70 FR 65984). Details included requirements and guidance for State and local air pollution agencies to follow in developing State Implementation Plans (SIPs) and NSR program provisions. On April 25, 2007, the final implementation rule that included all the SIP related provisions was promulgated by the EPA (72 FR 20585).

On October 17, 2006, the EPA revised the primary and secondary NAAQS for PM_{2.5} and PM₁₀ (71 FR 61143). In the final rule, the EPA reduced the 24-hour NAAQS for PM_{2.5} to 35 µg/m³ and retained the existing annual PM_{2.5} NAAQS of 15 µg/m³.

On May 16, 2008, the EPA finalized the NSR provisions of the November 1, 2005 proposed rule, and included details on major source threshold, significant emissions rate, and applicability of NSR to PM_{2.5} precursors (“Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5})” (73 FR 28321)). In this final rule, changes associated with PM_{2.5} and its precursors to nonattainment area (NAA) NSR and NSR prevention of significant deterioration (PSD) programs were established.

In the development of the federal regulation, the EPA identified sulfur dioxide (SO₂) and nitrogen oxides (NO_x) as precursors for PM_{2.5}; the MDE is adopting the same precursors (SO₂ and NO_x) to its nonattainment program for PM_{2.5}. Per 73 FR 28321, the final federal rule was effective on July 15, 2008, and the federal NSR requirements were effective on January 1, 2011.

Sources Affected and Location

Section I.A. of 73 FR 28321 identifies the following industries as potentially affected by this new rule: electric services, petroleum refining, industrial organic/inorganic chemicals, natural gas liquids, natural gas transport, pulp and paper mill, automobile manufacturing and pharmaceuticals. Major stationary sources and major modifications located in PM_{2.5} nonattainment areas in Maryland, specifically in Baltimore City, Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, Prince George’s and Washington counties, would therefore be subject to the NSR program.

A review of sources located in Maryland and which submitted annual emission certification reports between 2007 and 2010 identified ten (10) sources with emissions greater than 100 tons per year (tpy) PM_{2.5}. Evaluating this, these sources, if newly locating to

PROPOSED ACTION ON REGULATIONS

Maryland, would trigger NSR for major stationary sources. This in turn suggests that historically a limited number of sources would have been affected by this regulation.

Of the ten (10) sources reporting greater than 100 tpy PM_{2.5} between the period of 2007 and 2010, seven (7) are electric generating units.

Requirements

These amendments to COMAR 26.11.17, Nonattainment Provisions for Major New Sources and Major Modifications, reflecting the amendments to 40 CFR 51.165 and 40 CFR 51 Appendix S, establish the following:

- SO₂ and NO_x are precursors to PM_{2.5};
- The emission rate applicable to Major Stationary Source threshold for PM_{2.5} and its precursors is 100 tpy; and
- The emission rate applicable to Major Modification for PM_{2.5} is 10 tpy direct PM_{2.5}, 40 tpy of SO₂ and 40 tpy of NO_x.

Nonattainment NSR requirements include, but are not limited to:

- Installation of Lowest Achievable Emission Rate (LAER) control technology;
- Offsetting new emissions with creditable emissions reductions;
- Certification that all major sources owned and operated in the State by the same owner are in compliance with all applicable requirements under the Act;
- An alternative siting analysis demonstrating that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification; and
- Public comment on the permit.

Expected Emissions Reductions

The offset requirements of the amendments require emission reductions equal to the emissions of the new PM_{2.5} major source or major modification to occur or to have occurred in the past so that emissions in the NAA with the new source are equal to emissions in the NAA without the source. A source must also install controls to comply with the lowest achievable emission rate which may not have occurred in the absence of the NSR program.

Comparison to Federal Standards

There is a corresponding federal standard to this proposed action, but the proposed action is not more restrictive or stringent.

Estimate of Economic Impact

I. Summary of Economic Impact. With the inclusion of PM_{2.5} NAA NSR program into COMAR 26.11.17, there may be an associated cost on affected facilities. At the time that a facility becomes subject to the NSR program as a new major stationary source or major modification in an area of nonattainment, at a minimum the following requirements must be met:

- Installation of Lowest Achievable Emission Rate (LAER) control technology;
- Offsetting new emissions with creditable emissions reductions; and
- An alternative siting analysis demonstrating that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Each of these requirements have an associated cost, impacted by the size, complexity and other pollutants emitted from the facility.

Additional economic impact on affected sources would be incurred due to costs associated with measuring, recording and reporting requirements.

There is no impact on the Department as a result of these amendments.

II. Types of Economic Impact.	Revenue (R+/R-)	
	Expenditure (E+/E-)	Magnitude
A. On issuing agency:	NONE	
B. On other State agencies:	NONE	
C. On local governments:	NONE	
	Benefit (+)	Magnitude
	Cost (-)	
D. On regulated industries or trade groups:	(-)	Indeterminable at this time.
E. On other industries or trade groups:	NONE	
F. Direct and indirect effects on public:	(+)	Indeterminable

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

D. With the inclusion of PM_{2.5} NAA NSR program into COMAR 26.11.17, there may be an associated cost on affected facilities. At the time that a facility becomes subject to the NSR program as a new major stationary source or major modification in an area of nonattainment, at a minimum the following requirements must be met:

- Installation of Lowest Achievable Emission Rate (LAER) control technology;
- Offsetting new emissions with creditable emissions reductions; and
- An alternative siting analysis demonstrating that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Each of these requirements have an associated cost, impacted by the size, complexity and other pollutants emitted from the facility.

Additional economic impact on affected sources would be incurred due to costs associated with measuring, recording and reporting requirements.

F. This action will help improve Maryland's air quality and will result in fewer negative health effects on the general public from air pollution.

Economic Impact on Small Businesses

The proposed action has minimal or no economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has an impact on individuals with disabilities as follows:

This action will have a positive impact on individuals with disabilities involving respiratory problems by reducing air pollutants that contribute to disease.

Opportunity for Public Comment

The Department of the Environment will hold a public hearing on the proposed action on May 7, 2013 at 10 a.m. at the Department of the Environment, 1800 Washington Boulevard, 1st Floor Conference Rooms, Baltimore, Maryland 21230-1720. Interested persons are invited to attend and express their views. Comments may be sent to Deborah Rabin, Regulations Coordinator, Air and Radiation

Management Administration, Department of the Environment, 1800 Washington Boulevard, Suite 730, Baltimore, Maryland 21230-1720, or emailed to drabin@mde.state.md.us. Comments must be received not later than May 7, 2013, or be submitted at the hearing. For more information, call Deborah Rabin at (410) 537-3240.

Copies of the proposed action and supporting documents are available for review at the following locations: The Air and Radiation Management Administration; regional offices of the Department in Cumberland and Salisburys; all local air quality control offices; and local health departments in those counties not having separate air quality control offices.

Anyone needing special accommodations at the public hearing should contact the Department's Fair Practices Office at (410) 537-3964. TTY users may contact the Department through the Maryland Relay Service at 1-800-735-2258.

26.11.01 General Administrative Provisions

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 10-102, and 10-103, Annotated Code of Maryland

.01 Definitions.

A. In this subtitle, the following terms have the meanings indicated.

B. Terms Defined.

(1) — (28) (text unchanged)

(29) "Particulate matter (PM)" means any material, except water in uncombined form, that is or has been airborne, and exists as a liquid or a solid at standard conditions.

(30) (text unchanged)

(30-1) "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers.

(30-2) "PM_{2.5} emissions" means finely divided solid or liquid materials with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, discharged into the ambient air.

(31) — (53) (text unchanged)

26.11.17 Nonattainment Provisions for Major New Sources and Major Modifications

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 10-102 and 10-103, Annotated Code of Maryland

.01 Definitions.

A. For the purpose of this chapter, the following terms have the meanings indicated. Other applicable definitions may be found in COMAR 26.11.01.01.

B. Terms Defined.

(1) — (23) (text unchanged)

(24) "Regulated NSR pollutant" means any pollutant for which a national ambient air quality standard has been promulgated and any pollutant that is a constituent or precursor of the pollutant for which there is an ambient air quality standard, provided that the constituent or precursor may only be regulated under this chapter as part of regulation of the pollutant. *After January 1, 2011, PM_{2.5} and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperature. These emissions shall be accounted for in applicability determinations and in establishing emission limitation in permits. Compliance with PM_{2.5} and PM₁₀ emission limitations shall be as described in CFR 51.165(a)(1)(xxvii)(D). Precursors identified for the purpose of NSR in Maryland are:*

(a) Nitrogen oxides and volatile organic compounds are precursors of ozone in all ozone nonattainment areas.

(b) Nitrogen oxides and sulfur dioxide are precursors of PM_{2.5} in all PM_{2.5} nonattainment areas.

(25) (text unchanged)

(26) "Significant" means, in reference to a net emissions increase, a significant emissions increase or the potential of a source to emit a regulated NSR pollutant, or a rate of emissions that would equal or exceed any of the following rates:

[(a) For VOC or NO_x:

(i) 25 tons/year in Baltimore City or Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, or Prince George's counties; or

(ii) 40 tons/year in Allegany, Caroline, Dorchester, Garrett, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Washington, Wicomico, and Worcester counties.

(b) For all other regulated NSR pollutants:

(i) Carbon monoxide—100 tons per year;

(ii) Sulfur dioxide—40 tons per year;

(iii) Lead—0.6 tons per year; and

(iv) PM₁₀—15 tons per year.]

(a) *Volatile organic compounds or nitrogen oxides: 25 tons per year (tpy) in Baltimore City or Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, and Prince George's counties;*

(b) *Volatile organic compounds or nitrogen oxides: 40 tpy in Allegany, Caroline, Dorchester, Garrett, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Washington, Wicomico, and Worcester counties.*

(c) *PM_{2.5} emissions: 10 tpy;*

(d) *Sulfur dioxide: 40 tpy;*

(e) *Lead: 0.6 tpy;*

(f) *PM₁₀: 15 tpy; and*

(g) *Carbon monoxide: 100 tpy.*

(27) (text unchanged)

.02 Applicability.

[A. This chapter applies Statewide to:]

A. *This chapter applies Statewide, unless specified otherwise throughout this Chapter, to:*

(1) New major stationary sources and major modifications that are major for VOC or NO_x;

(2) *New major stationary sources and major modifications that are major for PM_{2.5} or its precursors and are located in Baltimore City or Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, Prince George's, and Washington counties;*

[(2)] (3)—[(3)] (4) (text unchanged)

B. A person may apply for and obtain a permit to construct a new major stationary source or a major modification at an existing major stationary source [in an area designated as nonattainment for a particular pollutant or, as applicable, within the Ozone Transport Region,] *after meeting the conditions of §A(1) — (4) of this regulation* if all of the provisions in this chapter are met.

C. *Major stationary sources and major modifications, whether located in attainment or nonattainment areas, may also be subject to the Prevention of Significant Deterioration requirements in COMAR 26.11.06.14.*

[C.] D. (text unchanged)

[D. Major stationary sources that are located in ozone or NO_x attainment areas may also be subject to the Prevention of Significant Deterioration requirements in COMAR 26.11.06.14.]

E. (text unchanged)

F. Major Modification.

(1) A project is a major modification for a regulated NSR pollutant if it causes a significant emissions increase and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major

modification only if it also results in a significant net emissions increase.

(2) Applicability Tests.

(a) Actual-to-Projected-Actual Applicability Test for Projects That Involve Only Existing Emissions Units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.

(b) Actual-to-Potential Test for Projects That Involve Only Construction of a New Emissions Unit or Units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project, equals or exceeds the significant amount for that pollutant.

(c) Hybrid Test for Projects That Involve Multiple Types of Emissions Units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in §F(2)(a) and (b) of this regulation, as applicable, with respect to each emissions unit, for each type of emissions unit, equals or exceeds the significant amount for that pollutant.

G.—I. (text unchanged)

ROBERT M. SUMMERS, Ph.D.
Secretary of the Environment

Subtitle 11 AIR QUALITY

26.11.27 Emission Limitations for Power Plants

Authority: Environmental Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 2-1003, 10-102, [and] 10-103, and 10-1002, Annotated Code of Maryland

Notice of Proposed Action

[13-094-P]

The Secretary of the Environment proposes to amend Regulations .02 and .03 under **COMAR 26.11.27 Emission Limitations for Power Plants**.

Statement of Purpose

The purpose of this action is to reinstate the original annual and ozone season emission limits for NO_x and annual emission limits for SO₂ for R. Paul Smith Power Station electric generating units as established under COMAR 26.11.27 Emission Limitations for Power Plants adopted permanently effective July 16, 2007. This action is in response to a request by R. Paul Smith to the Maryland Department of the Environment (MDE) to retain its Title V permit although the power plant has ceased operations as of September 1, 2012.

This action will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's State Implementation Plan.

Background

Under the Healthy Air Act (HAA) which is codified as COMAR 26.11.27 – Emission Limitations for Power Plants, R. Paul Smith units 3 and 4 are defined as an affected facility subject to the requirements of §2-1003(c), Annotated Code of Maryland. The exception provisions of the HAA authorize the Department to allow the R. Paul Smith facility, units 3 and 4, to operate without complying with the emissions requirements of the HAA if PJM Interconnection, Inc. (PJM Inc.) determines that the termination of operation of the facility will adversely affect the reliability of electrical service in the PJM region. PJM Inc. conducted an

evaluation in 2006 and determined that R. Paul Smith is needed to maintain reliability.

The HAA also requires that if R. Paul Smith units 3 and 4 are allowed to operate without complying with the emissions requirements then the following conditions must be met: “(1) The facility may not operate at emissions levels greater than the highest level measured at the facility during the calendar years 2000 through 2004; and (2) The Department upon review of the operations of the facility shall adopt regulations to establish an alternative emissions requirement for the facility.”

The Department consequently made amendments to the HAA, which on September 7, 2009 became effective. The Department continued to monitor the necessity to maintain the R. Paul Smith facility and formally contacted PJM Inc. to request a reevaluation of the plant on March 14, 2011. The Department maintained the position to revise the regulations, if needed, based on PJM's reevaluation and the Department's findings.

On January 26, 2012, R. Paul Smith informed PJM of its intent to retire R. Paul Smith units 3 and 4. At no time did PJM object to the planned shut-down on concerns of reliability. On September 1, 2012, R. Paul Smith units 3 and 4 formally ceased operations though the power plant wishes to retain its Title V permit. The Department, therefore, is reestablishing the emission limits of the original HAA for R. Paul Smith units 3 and 4 and should the units ever come back online they would be required to meet the more stringent emission standards.

Sources Affected and Location

The R. Paul Smith facility is the only source affected by the amendments. R. Paul Smith Electric Power Generation Station is owned and operated by the FirstEnergy Corporation which has ceased the operations of the power plant as of September 2012. The facility, located in Washington County, Maryland operated two coal-fired boilers (unit 3 and unit 4).

Requirements

The proposed amendments will reinstate the following annual and ozone NO_x and annual SO₂ emission limits for R. Paul Smith, effective September 1, 2012:

1. An annual emission limit of 55 tons of NO_x for unit 3 and 288 tons of NO_x for unit 4;
2. An ozone season emission limit of 22 tons of NO_x for unit 3 and 118 tons of NO_x for unit 4; and
3. An annual emission limit of 124 tons of SO₂ for unit 3 and 644 tons of SO₂ for unit 4.

Expected Emissions Reductions

The proposed action provides no emission reductions. However, should the R. Paul Smith facility re-open then units 3 and 4 would be subject to stricter emission standards.

Comparison to Federal Standards

There is no corresponding federal standard to this proposed action.

Estimate of Economic Impact

The proposed action has no economic impact.

Economic Impact on Small Businesses

The proposed action has minimal or no economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Opportunity for Public Comment

The Department of the Environment will hold a public hearing on the proposed action on May 7, 2013, at 10 a.m., at the Department of the Environment, 1800 Washington Boulevard, 1st Floor Conference