



# AIR QUALITY CONTROL ADVISORY COUNCIL

## AGENDA

May 14, 2012  
8:15 a.m.

Montgomery Park  
Aqua Conference Room, 1<sup>st</sup> Floor  
1800 Washington Boulevard  
Baltimore, Maryland 21230

8:15 a.m.      Welcome and Introductions      John Quinn, Advisory Council Chair  
Tad Aburn, Air Director

8:20 a.m.      Approval of Meeting Minutes      John Quinn

**Action Items for Discussion/Approval:**

8:30 a.m.      New Source Review amendments      Diane Franks  
COMAR 26.11.01, .17

8:45 a.m.      Kraft Pulp Mill amendments      Eddie Durant  
COMAR 26.11.14

9:15 a.m.      Portland Cement Plant – opacity amendments      Randy Mosier  
COMAR 26.11.30.06

9:30 a.m.      HMIWI – interim compliance dates      Husain Waheed  
COMAR 26.11.08.08-2

9:45 a.m.      Permits to Construct Requirements amendments      Dave Mummert  
COMAR 26.11.02.09

**Briefings**

10:00 a.m.      California Low Emission Vehicles      Tim Shepherd

10:30 a.m.      Low Sulfur Home Heating Oil      Marcia Ways

10:45 a.m.      Confirm Next Meeting Dates      Members

10:50 a.m.      Adjourn

# Title 26 DEPARTMENT OF THE ENVIRONMENT

## Subtitle 11 AIR QUALITY

### Chapter 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) — (31) (text unchanged)

(31-1) "*PM<sub>2.5</sub>*" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers.

(32) (text unchanged)

(32-1) "*PM<sub>2.5</sub> 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.

(33) — (53) (text unchanged)

C. — D. (text unchanged)

.02 — .11 (text unchanged)

# Title 26 DEPARTMENT OF THE ENVIRONMENT

## Subtitle 11 AIR QUALITY

### Chapter 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) — (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<sub>x</sub>:

(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) PM<sub>10</sub>—15 tons per year. ]

(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) 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, or 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) Direct PM<sub>2.5</sub> emissions: 10 tpy;
  - (d) Sulfur dioxide: 40 tpy;
  - (e) Lead: 0.6 tpy;
  - (f) PM<sub>10</sub> emissions: 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<sub>x</sub>;
- (2) New major stationary sources and major modifications that are major for PM<sub>2.5</sub> or its precursors and are located in Baltimore City or Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, Prince George's or 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) through (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<sub>x</sub> 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)

**.03 — .09 (text unchanged)**



# ***Facts About...***

## **Amendments to COMAR 26.11.14 Control of Emissions from Kraft Pulp Mills**

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05-07-12

### **Purpose of New Amendments**

The primary purpose of this action is to accurately describe the Volatile Organic Compound (VOC) control system and requirements, to incorporate existing NO<sub>x</sub> RACT requirements into this Chapter, amend the use of the word “allowance” to read “NO<sub>x</sub> Ozone Season Allowance”, to clarify that the Monitoring and Reporting Requirements apply to the owner of a boiler and combustion turbine at a Kraft pulp mill, and to include emission limits for sulfur dioxide that were part of a consent order with the Department and New Page Corporation (formerly Luke Paper Co.).

### **Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)**

These amendments will be submitted to EPA to be included in the approved SIP.

### **Background**

#### NO<sub>x</sub> Emissions

The NO<sub>x</sub> emissions discharge through a common stack and are currently subject to reasonably available control technology (RACT) requirements under COMAR 26.11.09.08 and 26.11.14.07A(2)(b) respectively. RACT requires the units to reduce NO<sub>x</sub> emissions to meet an emissions rate of 0.70 pounds per million Btu during the period May 1 to September 30 (ozone season) of each year and a rate of 0.99 pounds per million Btu for the rest of the year. COMAR 26.11.14.07 prohibits total NO<sub>x</sub> ozone season emissions from the New Page Kraft pulp mill stack from exceeding 947 tons, unless the pulp mill acquires an allowance for each ton of NO<sub>x</sub> they emit over 947 tons. The regulation allows the pulp mill to secure up to 95 allowances for each period in which they exceed the 947 ton emission cap.

#### VOC Emissions

In 2001, Regulation .06 (Control of Volatile Organic Compounds) was added to COMAR 26.11.14 for the control of VOC emissions from several process installations at Kraft pulp mills. The regulation established RACT standards to specifically control VOC emissions from Kraft pulp mill operations statewide that have actual emissions of 20 pounds or more of VOCs per day and the potential to

emit total plant-wide VOC emissions of 25 tons or more per year. In addition, Kraft pulp mills are required to install VOC emission controls to meet the requirements of the Paper and Pulp MACT (40 CFR Part 63, Subpart S).

### Sulfur Dioxide Emissions

The applicable control requirements for SO<sub>2</sub> consist primarily of a September 6, 1983 consent order entered into by and between the Department and the New Page Corporation located in Luke, Maryland. The consent order established SO<sub>2</sub> emission limits for all fuel burning equipment at the facility.

### **Sources Affected and Location**

This amendment affects two coal fired units and one gas fired unit at the Kraft pulp mill located in Luke, Maryland.

### **Requirements**

This action does not establish any new standards or requirements from fuel burning equipment located at Kraft pulp mills. The action primarily clarifies processes and consolidates requirements into a unique chapter of COMAR pertaining to Kraft pulp mills. The revisions to the regulation:

- Clarify that air emissions from brown stock washers are to be collected and combusted;
- Clarify that evaporators, digester blow tank systems, and brown stock washers shall be controlled by removing 90 percent or more of the condensate VOC loading by demonstrating a VOC removal or destruction efficiency of the condensate stream stripper of 90 percent or greater or a system analysis of these units;
- Allow the use of other approved methods by the Department to demonstrate the collective VOC removal efficiency of the condensate steam stripper and other control systems as required;
- Include the requirement that Kraft pulp mills must meet an emission rate of 0.70 pounds of NO<sub>x</sub> per million Btu in addition to an emission limit of 947 tons of NO<sub>x</sub> during the period May 1 through September 30 of each year;
- Changes the word(s) “allowance” or “NO<sub>x</sub> allowance” used in §B(2), §B(3) and §C(1) and (2) of Regulation .07 to “NO<sub>x</sub> ozone season allowance”;
- Changes reference to COMAR 26.11.01.10G(2)(d) in D(2) of Regulation .07 regarding the submission of CEM quarterly reports to the Department to COMAR 26.11.01.11E(2); and,
- Codifies an existing Consent Order into new Regulation .08 (Control of Sulfur Dioxide Emissions) which limits sulfur dioxide emissions from all fuel burning equipment at a Kraft pulp mill to no more than 66 tons per day and a range of 9.4 tons at 50 percent buoyancy to 17.6 tons at 100 percent buoyancy for each three-hour period..

**Expected Emissions Reductions**

There is no emission reduction expected as a result of this action.

**Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public**

There is no economic impact on affected sources or the Department.

**Economic Impact on Small Businesses**

The affected source does not fit the definition of a small business.

**Is there an Equivalent Federal Standard to this Proposed Regulatory Action?**

No. This action codifies existing standards into new chapter COMAR 26.11.14.

## **Title 26 DEPARTMENT OF THE ENVIRONMENT**

### **Subtitle 11 AIR QUALITY**

#### **Chapter 09 Control of Fuel-Burning Equipment, Stationary Internal Combustion Engines, and Certain Fuel-Burning Installations**

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

##### **.08 Control of NO<sub>x</sub> Emissions for Major Stationary Sources.**

- A.—B. (text unchanged)
- C. Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 250 Million Btu Per Hour or Greater.
  - (1) (text unchanged)
  - (2) The maximum NO<sub>x</sub> emission rates as pounds of NO<sub>x</sub> per Million Btu per hour are:
    - (a)—(g) (text unchanged)
    - (h) 0.70 for fuel burning equipment stacks at a non-electric generating facility during the period May 1 through September 30 of each year and 0.99 during the period October 1 through April 30 of each year.]
  - D.—K. (text unchanged)

## **Title 26 DEPARTMENT OF THE ENVIRONMENT**

### **Subtitle 11 AIR QUALITY**

#### **Chapter 14 Control of Emissions from Kraft Pulp Mills**

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—.05 (text unchanged)**

##### **.06 Control of Volatile Organic Compounds.**

- A. (text unchanged)
- B. Control of VOC Emissions from Specific Installations.
  - (1) (text unchanged)
  - (2) Digester Blow Tank Systems and Knotters.
    - (a) Condensates from digester blow tank systems shall be collected and treated in a condensate steam stripper or other control system [which has a VOC removal or destruction efficiency of 90 percent or greater].
    - (b) (text unchanged)
  - (3) Evaporators.
    - (a) (text unchanged)
    - (b) Condensates from the evaporators shall be segregated so that the foul condensates are collected and treated in a condensate steam stripper or other control system [that has a VOC removal or destruction efficiency of 90 percent or greater].
  - (4) Brown Stock Washers.
    - (a) Wash water for brown stock washers shall consist of any combination of fresh or clean water and clean condensates.
    - (b) *Air emissions from the brown stock washers shall be collected and combusted.*
  - (5)—(6) (text unchanged)
  - (7) *The evaporators, digester blow tank systems, and brown stock washers shall be controlled by removing 90 percent or greater of the condensate VOC loading by demonstrating:*
    - (a) *That the VOC removal or destruction efficiencies of the condensate steam stripper is 90 percent or greater; or*
    - (b) *Through a system analysis of the condensate stripper, evaporators, digester blow system tanks, and brown stock washers that VOC removal or destruction efficiency is 90 percent or greater..*
- C. (text unchanged)
- D. Testing and Recordkeeping.

(1) Tests shall be performed annually using EPA Test Method 25D found in 40 CFR Part 60 *or other methods approved by the Department* to demonstrate the *collective* VOC removal efficiency of the condensate steam stripper and other control systems as required.

(2)—(5) (text unchanged)

**.07 Control of NO<sub>x</sub> Emissions from Fuel Burning Equipment.**

A. Applicability and NO<sub>x</sub> Emission Standards.

(1) (text unchanged)

(2) The total combined NO<sub>x</sub> emissions of all fuel burning equipment at the Luke Kraft pulp mill to which this regulation applies may not exceed the following:

(a) Except as provided in §B(1) of this regulation, *an emission limit of 0.70 pounds of NO<sub>x</sub> per million Btu* and 947 tons of NO<sub>x</sub> during the period May 1 through September 30 of each year; and

(b) (text unchanged)

(3) (text unchanged)

B. Demonstrating Compliance.

(1) If during the period May 1 through September 30 of any year the NO<sub>x</sub> emission limit in §A(2)(a) of this regulation is exceeded, the owner or operator of a Kraft pulp mill shall acquire one NO<sub>x</sub> ozone season allowance (as that term is defined at COMAR 26.11.01.01B(24-1)) for each ton or partial ton of NO<sub>x</sub> emissions in excess of the limit in §A(2)(a) of this regulation.

(2) The total number of *NO<sub>x</sub> ozone season* allowances acquired pursuant to §B(1) of this regulation for any one period may not exceed 95 and shall be of the same vintage year in which the emission limit is exceeded.

(3) *NO<sub>x</sub> ozone season* [A]allowances acquired pursuant to §B(1) of this regulation shall be acquired on or before November 30 and shall be submitted to the Department for retirement by December 30 of the year in which the emission limit is exceeded.

C. Achieving Compliance Through the Use of *NO<sub>x</sub> ozone season* [A]allowances. The owner or operator of a Kraft pulp mill subject to this regulation that achieves compliance through the use of allowances pursuant to §B of this regulation shall:

(1) Acquire the *NO<sub>x</sub> ozone season* allowances from a source that has been allocated allowances under COMAR 26.11.28, a *NO<sub>x</sub> ozone season* allowance broker or other entity that has *NO<sub>x</sub> ozone season* allowances and agrees to transfer them; and

(2) Transfer the *NO<sub>x</sub> ozone season* allowances to the Department for retirement.

D. Monitoring and Reporting Requirements.

(1) [The owner or operator of a] *For boilers or combustion units at a Kraft pulp mill* subject to this regulation, *the owner or operator of the Kraft pulp mill* shall:

(a)—(b) (text unchanged)

(2) The owner or operator of a Kraft pulp mill subject to this regulation shall include emissions data obtained from a CEM pursuant to §D(1) of this regulation in the CEM quarterly reports submitted to the Department pursuant to [COMAR 26.11.01.10G(2)(d)] *COMAR 26.11.01.11E(2)*.

**.08 Control of Sulfur Dioxide Emissions.**

A. *Sulfur dioxide emissions from all fuel burning equipment at a Kraft pulp mill may not exceed:*

(1) *66 tons per day as calculated from midnight to midnight; and*

(2) *For each three-hour period (calculated as block averages), a range of 9.4 tons at 50 percent buoyancy to 17.6 tons at 100 percent buoyancy, represented by a curve defined as follows:*

$$Y = -11.16 X^2 + 33.14 X - 4.38$$

Where:

*X = fractional plume buoyancy (0.5 to 1.0); and*

*Y = emission limit (ton/3 hours)*

B. *For purposes of control and reporting, combined boiler load and buoyancy are considered directly proportional.*





# ***Facts About...***

## **COMAR 26.11.30 Control of Emissions from Portland Cement Manufacturing Plants**

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04/17/12

### **Purpose of New Chapter**

The primary purpose of this chapter is to:

1. Combine all of the existing requirements in COMAR 26.11.01, .06, and .29 regarding NO<sub>x</sub>, SO<sub>x</sub>, visible emissions and particulate matter that apply to Portland cement manufacturing plants into one chapter; and
2. Repeal NO<sub>x</sub> RACT requirements in COMAR 26.11.09.08 which apply to Portland cement manufacturing plants, as the NO<sub>x</sub> requirements in COMAR 26.11.29, established under the EPA NO<sub>x</sub> SIP Call, constitute RACT for Portland cement kilns.

### **Background**

Although Portland cement plants burn fuel in the cement kiln, the kilns are not considered fuel burning equipment as defined in COMAR 26.11.01 and are therefore subject to different NO<sub>x</sub> and SO<sub>x</sub> emission standards. The existing COMAR 26.11.06.05 establishes a concentration standard for SO<sub>x</sub> depending on the location of the plant and the date the plant was constructed. The existing COMAR 26.11.29 contains NO<sub>x</sub> emission standards and monitoring requirements for Portland cement plants. These requirements for SO<sub>x</sub> and NO<sub>x</sub> are being moved into this new chapter. The visibility emission standards established in COMAR 26.11.06.02 are being mirrored in this new chapter, and the continuous opacity monitoring requirements in COMAR 26.11.01.10 are incorporated by reference. The new chapter will also include specific particulate matter requirements that are already in place for confined sources in COMAR 26.11.06.03.

One of the Portland cement plants in Maryland has replaced its existing plant with a new more efficient plant with added capacity. This facility is subject to different and more restrictive requirements established in the permit to construct issued by the Department.

### **Sources Affected and Location**

There are two existing Portland cement manufacturing plants in Maryland. The larger plant has a pre-calciner kiln and is located in Carroll County. The smaller plant has a long-dry kiln and is located in Washington County.

## **Requirements**

The main purpose of this action is to combine existing requirements for cement plants into a single chapter.

## **Expected Emissions Reductions**

There are no emission reductions expected as a result of this action.

## **Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public**

The impact on affected sources is expected to be minimal. There is no economic impact on the Department, other government agencies, trade groups or the public. All other requirements in this chapter are existing requirements.

## **Economic Impact on Small Businesses**

There is no economic impact on small businesses.

## **Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)**

This chapter will be submitted to the EPA for inclusion in the approved SIP.

## **Is there an Equivalent Federal Standard to this Proposed Regulatory Action?**

There is an equivalent federal standard for the use of CEMS to demonstrate NOx compliance by cement plants. It is found in 40 CFR 60 Appendix F.

## Title 26 DEPARTMENT OF THE ENVIRONMENT

### Subtitle 11 AIR QUALITY

#### Chapter 09 Control of Fuel-Burning Equipment, Stationary Internal Combustion Engines, and Certain Fuel-Burning Installations

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

##### **.08 Control of NO<sub>x</sub> Emissions for Major Stationary Sources.**

A.—G. (text unchanged)

H. Requirements for [Cement Manufacturing Facilities,] Municipal Waste Combustors, and Hospital, Medical, and Infectious Waste Incinerators.

(1) A person who owns or operates a [cement manufacturing facility or a] municipal waste combustor shall install, operate, and maintain a CEM for NO<sub>x</sub> emissions.

[(2) NO<sub>x</sub> emissions from cement manufacturing kilns may not exceed the following total hourly NO<sub>x</sub> emissions as determined on a 30-day rolling average of the daily average:

(a) 1,000 pounds for a facility with a total kiln capacity of 600,000 tons per year or less; and

(b) 1,800 pounds for a facility with a total kiln capacity greater than 600,000 tons per year.]

[(3)] (2) NO<sub>x</sub> emissions from municipal waste combustors may not exceed the NO<sub>x</sub> emissions standards in *COMAR 26.11.08.07 and COMAR 26.11.08.08* [(205 ppm 24-hour average)] or applicable Prevention of Significant Deterioration limits, whichever is more restrictive.

[(4)] (3) NO<sub>x</sub> emissions from hospital, medical, and infectious waste incinerators as defined in *COMAR 26.11.08.01B(18)* may not exceed the NO<sub>x</sub> emission standards in *COMAR 26.11.08.08-1A(2)* (250 ppm 24-hour average) as applicable.

I. Requirements for Glass Melting Furnaces [and Internal Combustion Engines at Natural Gas Pipeline Stations].

(1)—(2) (text unchanged)

[(3) A person who owns or operates an internal combustion engine at a natural gas pipeline station with a capacity factor over 15 percent shall perform either parametric optimization or engine rebuild to meet the following emission standards:

(a) Facilities with five or less engines shall meet a combined maximum hourly emission rate of 300 pounds per hour; and

(b) Facilities with more than five engines shall meet a combined maximum hourly emissions rate of 566 pounds per hour.

(4) Records demonstrating performance of parametric optimization shall be maintained on site for at least 2 years and made available to the Department upon request.]

J.—K. (text unchanged)

## Title 26 DEPARTMENT OF THE ENVIRONMENT

### Subtitle 11 AIR QUALITY

#### Chapter 30 Control of Portland Cement Manufacturing Plants

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

##### **ALL NEW MATTER**

*.01 Scope. This chapter contains all of the general requirements that apply to Portland cement manufacturing plants. New or modified cement plants may be subject to more restrictive requirements that are included in a permit issued by the Department. Portland cement manufacturing plants subject to this chapter may also be subject to federal New Source Performance Standards under 40CFR Part 60 Subpart F and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry under 40CFR Part 63 Subpart LLL.*

**.02 Applicability.**

A. The requirements of this chapter apply to cement kilns and other installations located at Portland cement manufacturing plants.

B. Any source which is subject to the provisions of this chapter is also subject to the provisions of any other chapter. However, when this chapter establishes an emission standard for a specific installation which differs from the general emission standards in COMAR 26.11.06.01--09, this chapter takes precedence.

**.03 Definitions.**

A. Definitions. In this chapter, the following terms have the meanings indicated.

B. Terms defined.

(1) "Cement kiln" means an installation, including any associated pre-heater or pre-calciner devices, that produces clinker by heating limestone and other materials to produce Portland cement.

(2) "Cement manufacturing installation" means process equipment used for subsequent production of Portland cement.

(3) "Clinker cooler" means an installation into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced air draft or natural draft supply system.

(4) "Long dry kiln" means a cement kiln that does not have a pre-calciner and in which dry starting raw materials are fed into the kiln.

(5) "Pre-calciner kiln" means a cement kiln that contains a pre-calciner at the bottom of the pre-heater tower before the materials enter the kiln.

**.04 Visible Emission Standards.**

A. The owner or operator of a cement manufacturing installation may not cause or permit the discharge of emissions which exceed the visibility standards in §B of this regulation:

B. Visibility Standards.

(1) In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.

(2) In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

C. The owner or operator shall install and operate a continuous opacity monitor ("COM") on each cement kiln in accordance with COMAR 26.11.01.10.

**.05 Particulate Matter.**

A. The owner or operator of a cement manufacturing installation may not cause or permit the discharge of emissions of particulate matter to exceed the limits in §B of this regulation:

B. Emission Limits.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, a person may not cause or permit particulate matter to be discharged from any installation in excess of 0.05 grains per standard cubic foot dry.

(2) Areas III and IV. In Areas III and IV, a person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 grains per standard cubic foot dry.

**.06 Sulfur Compounds.**

A. Sulfur Dioxide (SO<sub>2</sub>):

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, an owner or operator of a cement manufacturing installation may not cause emissions into the atmosphere with an SO<sub>2</sub> concentration greater than 2,000 ppm for sources constructed before January 17, 1972 or 500 ppm for sources constructed on or after January 17, 1972.

(2) Areas III and IV. In Areas III and IV, an owner or operator of a cement manufacturing installation may not cause emissions into the atmosphere with an SO<sub>2</sub> concentration greater than 2,000 ppm for sources constructed before February 21, 1971 or 500 ppm for sources constructed on or after February 21, 1971.

B. Sulfuric Acid and Sulfur Trioxide.

(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, an owner or operator of a cement manufacturing installation may not cause emissions of sulfuric acid, sulfur trioxide, or any combination of them, in excess of 70 milligrams per cubic meter reported as sulfuric acid, for any source constructed before January 17, 1972 or 35 milligrams per cubic meter reported as sulfuric acid, for any source constructed on or after January 17, 1972.

(2) Areas III and IV. In Areas III and IV, an owner or operator of a cement manufacturing installation may not cause emissions of sulfuric acid, sulfur trioxide, or any combination of them, in excess of 70 milligrams per cubic meter reported as sulfuric acid for any source constructed before February 21, 1971 or 35 milligrams per cubic meter reported as sulfuric acid for any source constructed on or after February 21, 1971.

C. All calculations of emissions for §§A and B of this regulation shall be adjusted to standard conditions and 7 percent oxygen.

**.07 Nitrogen Oxides (NO<sub>x</sub>).**

A. A person who owns or operates a cement kiln at a Portland cement manufacturing plant shall, on or before May 1, 2003 and until April 1, 2011, either meet the applicable NOx emission standards in §B of this regulation or implement one of the following control measures:

- (1) Install low NOx burners on each kiln; or
- (2) Modify each kiln to implement mid-kiln firing.

B. Emission Standards for Cement Kilns.

- (1) For long dry kilns, maximum emissions of 5.1 pounds of NOx per ton of clinker produced; and
- (2) For pre-calciner kilns, maximum emissions of 2.8 pounds of NOx per ton of clinker produced.

C. Compliance with the emission standards in §B of this regulation shall be demonstrated as a 30-day rolling average.

D. On and after April 1, 2011, the requirements in §A of this regulation no longer apply and cement kilns shall meet the applicable NOx emission standards in §B of this regulation.

**.08 Continuous Emission Monitoring Requirements.**

A. The owner or operator of a Portland cement manufacturing plant shall:

- (1) Continuously monitor NOx emissions with a continuous emissions monitor (CEM) system in accordance with COMAR 26.11.01.11B(1) and (4) and C;
- (2) Collect NOx emissions data that was obtained pursuant to §A(1) of this regulation; and
- (3) Submit emissions data collected pursuant to §A(2) of this regulation to the Department as specified under COMAR 26.11.01.11E(2).

B. The NOx emissions data collected pursuant to §A(2) of this regulation shall be used to demonstrate compliance with the applicable NOx emission rate in Regulation .07B of this chapter.

C. Except for one 30-day rolling average per calendar quarter, compliance with the applicable NOx emission rate in regulation .07B of this chapter shall be achieved at all times.

**END ALL NEW MATTER**



# ***Facts About...***

## **Amendments to — COMAR 26.11.08 Control of Incinerators**

May 1, 2012

### **Purpose of Amendment**

The purpose of this amendment is to amend the requirements pertaining to the compliance schedule for hospital, medical, infectious and medical waste incinerators (HMIWI) that are required to comply with COMAR 26.11.08.08-2.

Based on testing and analysis conducted by affected sources, flexibility in meeting the interim compliance dates is needed to better accomplish and optimize the required level of control and achieve compliance by October 6, 2014. The type of technologies being explored require frequent modifications and adjustments before they can perform at optimal level. While the results show that compliance with the compliance date is feasible, the interim dates may deter the research and development of compliance options. The proposed amendment allows a source to propose and follow an alternate plan and schedule for meeting the October 6, 2014 compliance date.

### **Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)**

This regulation will be submitted to the U.S. EPA for approval as a revision to Maryland's 111(d) Plan.

### **Background**

EPA is required to develop and adopt new source performance standards (NSPS) and EG for solid waste incineration units pursuant to CAA Sections 111 and 129. New sources (NSPS program) are regulated under Sections 111(b) and 129(a) of the CAA. Existing sources are regulated under Sections 111(d) and 129(b) of the CAA. The NSPS are directly enforceable Federal regulations, and under CAA Section 129(f)(1) become effective 6 months after promulgation. Under CAA Section 129(f)(2), the EG become effective and enforceable as expeditiously as practicable after EPA approves a State plan implementing the EG but no later than 3 years after such approval or 5 years after the date the EG are promulgated, whichever is earlier.

Hospital waste consists of discards generated at a hospital, and medical/infectious waste is generated in the diagnosis, treatment, or immunization of human beings or animals, in research, or in the production or testing of biologicals. Household or hazardous waste, or human and animal remains not generated as medical waste are not included.

Maximum achievable control technology standards for existing HMIWI are set in EG for particulate matter (PM); heavy metals, including lead (Pb), cadmium (Cd), and mercury (Hg); toxic organics, including chlorinated dibenzo-p-dioxins/ dibenzofurans (CDD/CDF); carbon monoxide (CO); nitrogen oxides (NOX); and acid gases, including hydrogen chloride (HCl) and sulfur dioxide (SO<sub>2</sub>).

### **Affected Sources and Location**

The proposed amendments affect HMIWIs in Maryland.

### **Requirements**

The proposed amendments require HMIWIs in Maryland to submit to the Department an alternative compliance plan that meets the requirements of the regulation by no later than October 6, 2014.

### **Expected Emissions Reductions**

As result of adopting an alternate compliance plan, the final compliance date is not changed and therefore there will be no impact on the emissions.

### **Economic Impact on Affected Sources and the Department**

There are no economic impacts on affected sources or the Department.

### **Economic Impact on Small Businesses**

The Department is unaware of any small business in Maryland that is affected by these amendments.

### **Is there an Equivalent Federal Standard to this Proposed Regulatory Action?**

These amendments adopt the requirements of the EPA's EG for HMIWI (40 CFR 60 Subpart Ce, October 6, 2009). There are no other standards for this category.

# Title 26 DEPARTMENT OF THE ENVIRONMENT

## Subtitle 11 AIR QUALITY

### Chapter 08 Control of Incinerators

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 2-406, 10-102, and 10-103, Annotated Code of Maryland

#### **.08-2 Emission Standards and Requirements for HMIWIs Under 40 CFR 60 Subpart Ce as Revised October 6, 2009.**

A.—D. (text unchanged)

E. Compliance Schedules. A person who owns or operates a HMIWI subject to this regulation shall:

(1)—(2) (text unchanged)

(3) *A person who anticipates an inability to comply with the interim compliance dates described in §E(2)(a) – (c) may submit to the Department an alternative compliance plan designed to achieve compliance with §E(2)(d)-(e) of this regulation, and shall be bound by such plan upon the Department's approval.*

F.—H. (text unchanged)





# ***Facts About...***

## **Amendment to COMAR 26.11.02.09 regarding Permits to Construct Requirements**

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April 4, 2012

### **Purpose of New Regulation/Amendment**

The primary purpose of this amendment is to correct an unintended consequence of a recent amendment to COMAR 26.11.01.01. The amendment to the definition of a NESHAP source that became effective on March 5, 2012 expands the universe of sources required to obtain a permit to construct under COMAR 26.11.02.09.

### **Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)**

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

### **Background**

COMAR 26.11.02.09A(4) requires all NESHAP sources as defined in COMAR 26.11.01.01 to obtain a permit to construct. With the recent change to the definition (effective on March 5, 2012), now all MACT sources ( a subset of NESHAP sources) , including all of the numerous Maximum Achievable Control Technology (MACT) area sources will be required to obtain a permit to construct. Prior to the revision of the NESHAP definition under 26.11.01.01, some MACT area sources were exempt from the permit to construct requirement because they met the criteria for COMAR 26.11.02.10 Sources Exempt from Permits to Construct and Approvals. The Department desires to keep these exemptions. The exempted sources have minimal emissions of air pollutants and negligible environmental impact which is the reason that they qualified for the exemption under COMAR 26.11.02.10. All sources (including NESHAP sources) not otherwise exempt under COMAR 26.11.02.10 will be required to obtain a permit to construct.

### **Sources Affected and Location**

Sources across the State that are affected by a MACT area source category. Examples are internal combustion engines with a design capacity of less than 500 bhp (i.e. emergency electric generators rated less than 373 kW) and a myriad of small miscellaneous metal coating operations.

## **Requirements**

This amendment restores the permit to construct exemptions under COMAR 26.11.02.10 for applicable MACT area sources that existed prior to the revision of the definition of "NESHAP source" under COMAR 26.11.01.01 that became effective on March 5, 2012.

## **Expected Emissions Reductions**

No emissions reductions will result from this amendment because it merely updates a citation.

## **Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public**

Without this amendment, the unintended consequence of the revised definition of NESHAP source will impact businesses that are now required to obtain a permit to construct for sources which previously were exempted.

## **Economic Impact on Small Businesses**

Without this amendment, the unintended consequence of the revised definition of NESHAP source will impact small businesses. Most MACT area sources are small businesses.

## **Is there an Equivalent Federal Standard to this Proposed Regulatory Action?**

No.

# Title 26 DEPARTMENT OF THE ENVIRONMENT

## Subtitle 11 AIR QUALITY

### Chapter 02 Permits, Approvals, and Registration

Authority: Environment Article, §§ 1-101, 1-404, 2-101—2-103, 2-301—2-303, and 2-401—2-404, Annotated Code of Maryland

#### **.09 Sources Subject to Permits to Construct and Approvals.**

A. A person may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits to construct and approvals:

(1) —(3) (text unchanged)

(4) National Emission Standards for Hazardous Air Pollutants Source (NESHAP source), as defined at COMAR [26.11.01.01] 26.11.01.01B(21)(a)—permit to construct required, except for generating stations constructed by electric companies;

(5) —(6) (text unchanged)

B. — D. (text unchanged)