AIR QUALITY CONTROL ADVISORY COUNCIL
AGENDA
March 13, 2017

Maryland Department of the Environment
Aqua Conference Room (1st Floor MDE Lobby)
1800 Washington Boulevard
Baltimore MD 21230
https://global.gotomeeting.com/join/881359405
United States: +1 (571) 317-3122
Access Code: 881-359-405

8:15 a.m.	Welcome and Introductions	John Quinn, Advisory Council Chair Tad Aburn, Air Director
8:25 a.m.	Approval of Meeting Minutes	John Quinn

Action Items for Discussion/Approval:

8:30 a.m.	COMAR 26.11.36 – Distributed Generation	Carolyn Jones
9:15 a.m.	COMAR 26.11.09.11 – Small Wood Boilers	Eddie Durant
9:45 a.m.	COMAR 26.11.33 – Architectural Coatings	Eddie Durant

Briefings:

10:00 a.m.	Maryland's Progress on Updating the Greenhouse Gas Reduction Act	Brian Hug
10:30 a.m.	Adjourn	

Next Meeting Dates:
June 19, 2017; September 18, 2017; December 11, 2017

03-06-17

Facts About…

Amendments to:

- **COMAR 26.11.02.01 – Definitions;**
- **COMAR 26.11.02.10 – Sources Exempt from Permits to Construct and Approvals; and**
- **COMAR 26.11.36 – Distributed Generation**

Purpose of New Regulation/Amendment

The primary purpose of this action is to amend existing requirements for emergency generators and load shaving units (engines) codified under COMAR 26.11.36 –Distributed Generation to reflect changes in the federal requirements for stationary internal combustion engines (ICE) and Reciprocating Internal Combustion Engines (RICE) (hereinafter collectively referred to as "stationary engines"). In addition, changes to Regulations .01 – Definitions, and .10 - Sources Exempt from Permits to Construct and Approvals, of COMAR 26.11.02 – Permits, Approvals, and Registration, are being completed to coincide with the amendments being made to COMAR 26.11.36.

Submission to EPA as Revision to Maryland's SIP

This action will not be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's State Implementation Plan (SIP).

Background

On May 18, 2009, the Maryland Department of the Environment (MDE) adopted new regulations under COMAR 26.11.09.08-1 which established nitrogen oxide (NO_x) emission requirements for emergency generators and load shaving units. Traditionally, stationary engines were installed at facilities as an emergency back-up of power in the event of a failure of electric power from the grid. Over time, as the cost of electricity increased, many facilities would operate their stationary engines during non-emergencies to reduce their electric bill during high-demand days. Owners of stationary engines also entered into contractual agreements to operate their stationary engines and perform other electricity curtailment activities to both reduce the cost of electricity and maintain electric system reliability. MDE adopted these regulations in an effort to achieve reductions in NO_x emissions during the summer ozone season when these practices were most frequently employed. Most stationary engines are fired with diesel fuel and have minimal NO_x emission controls which when operated resulted in excess NO_x emissions on the hottest and worst days for air pollution. Reductions in NOx emissions help the State to maintain and attain the

National Ambient Air Quality Standard (NAAQS) for Ozone.

On June 13, 2011, MDE further amended and recodified the stationary engine regulations under a new Chapter COMAR 26.11.36 – Distributed Generation. The new COMAR 26.11.36 also established new annual reporting requirements for Curtailment Service Providers (CSPs) that negotiate contracts with facilities, that might operate onsite stationary engines under an electricity grid demand response event.

MDE excludes certain stationary engines from acquiring a "Permit to Construct & Registration Application" under COMAR 26.11.02 - Permits, Approvals and Registration. Emergency stationary engines with an output less than 500 hp and non-emergency stationary engines that serve as a primary source of power for agricultural equipment or industrial equipment, with an output less than 500 hp, are exempt from getting a permit to construct. The permit forms for this are located at MDE's website under "Air Quality Permitting" and "Permits to Construct and Operate Application Forms".

Facilities typically use Stationary engines to provide electric power when the normal supply is interrupted. Stationary engines are common combustion sources that collectively can have a significant impact on air quality and public health. Stationary engines emit air pollutants when fuel is burned; including carbon monoxide (CO), NO_x, volatile organic compounds (VOCs), and particulate matter (PM). The health effects of these pollutants include a range of respiratory (breathing) issues, especially asthma among children and seniors. The Clean Air Act authorizes EPA to control emissions from stationary sources of air pollution. EPA regulates stationary engines through two types of regulations, the National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS). Specifically,

1.) NESHAP regulates emissions of hazardous air pollutants (HAPs) from new, existing and modified sources. These standards require application of technology-based emissions standards referred to as Maximum Achievable Control Technology (MACT). The NESHAP for RICE are outlined in the Code of Federal Regulations under 40 CFR 63, Subpart ZZZZ. Stationary Reciprocating Internal Combustion Engine is defined in 40 CFR § 63.6675;

2.) NSPS regulates emissions of criteria pollutants from new, modified, and reconstructed sources. NSPS standards require initial performance testing and ongoing monitoring to demonstrate compliance with established standards for that source category. The NSPS for Stationary Compression Ignition IC Engines is outlined in the Code of Federal Regulations under 40 CFR Part 60, Subpart IIII. The NSPS for Stationary Spark Ignition IC Engines is outlined in the Code of Federal Regulations under 40 CFR Part 60, Subpart JJJJ. Stationary Internal Combustion Engine is defined the same in 40 CFR § 60.4219 and 40 CFR § 60.4248.

MDE's action adopts 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 60, Subpart IIII and JJJJ for stationary engines into COMAR 26.11.36 and makes the Maryland regulations consistent with the

federal regulations.

MDE is exempting certain portions of the federal requirements due to the decision of the D.C. Circuit Court of Appeals in Delaware v. EPA. [1] In that case, the Delaware Department of Natural Resources challenged the operation of stationary engines for up to 100 hours under Emergency Demand Response Operation. The court vacated portions of the 100 hour provision that allowed for emergency demand response operation in two circumstances: when a Reliability Coordinator (such as an independent electric grid operator) has declared an Energy Emergency Alert Level 2, or when there is a deviation of voltage or frequency of five percent or greater. The provisions that were vacated are 40 CFR § 60.4211 (f)(2)(ii)-(iii), § 60.4243(d)(2)(ii)-(iii), and § 63.6640(f)(2)(ii)-(iii). Therefore, stationary engines are required to comply with the federal requirements in 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII or JJJJ, except for these vacated provisions.

On April 15, 2016, EPA issued a guidance document addressing the vacatur of these provisions of the stationary engine NSPS and NESHAP rules, however; the CFR has not yet been updated to reflect these changes.

Sources Affected and Location

This action affects the owner or operator of stationary engines. These engines are typically located at businesses, commercial, industrial and institutional facilities, to provide electric power when the normal supply is interrupted. A common term for this type of engine is “back-up generator or emergency generator”.

Requirements

This action amends COMAR 26.11.36 - Distributed Generation by removing definitions from Regulation .01 and removing Regulation .03 - NOx Standards, which conflict with federal regulations. Additionally, this action will make changes to COMAR 26.11.02 - Permits, Approvals and Registration Regulations .01 – Definitions and .10 – Sources Exempt from Permits to Construct and Approvals, as needed in order to reflect the amendments being made to COMAR 26.11.36.

In summary, amendments to COMAR 26.11.36 and 26.11.02 incorporate 40 CFR Part 63, Subpart ZZZZ, 40 CFR Part 60, Subpart IIII or JJJJ, and changes necessitated by the vacatur language resulting from the above mentioned lawsuit. As currently required under COMAR 26.11.36.04, CSPs and their participating facilities are responsible for confirming that any stationary engine under contract to operate during electricity grid demand response (non-emergency events) operates and meets federal standards and emission limits.

MDE requires stationary engines to obtain a “Permit to Construct & Registration Application” under

[1] *See*, Delaware v. EPA, 785 F .3d l (D.C. Cir. 2015); https://www.epa.gov/sites/production/files/2016-06/documents/ricevacaturguidance041516.pdf

COMAR 26.11.02 - Permits, Approvals and Registration. Emergency stationary engines with an output less than 500 hp and non-emergency stationary engines that serve as a primary source of power for agricultural equipment or industrial equipment, with an output less than 500 hp, are exempt from permit to construct requirements.

Expected Emissions Reductions

There is no expected impact to emissions, since 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII or JJJJ already regulate the operation, reporting and maintenance of the generating units. However, the federal restrictions on engine use should avoid certain older, less-controlled engines from running on hot days, which results in public health protections.

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

The economic impact to these engines has been determined under the federal regulations. The public health protections warrant the federal regulations, and Maryland is clarifying coordination of the federal and state regulations. This action will not have an economic impact on the Department, other state agencies, local government, other industries or trade groups, or the public.

Economic Impact on Small Businesses

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

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

Yes. This action adopts the federal requirements as codified under 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII or JJJJ. This action removes Maryland's outdated definitions and requirements from COMAR 26.11.36.

Draft 03/03/2017

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 02 Permits, Approvals, and Registration

Authority: Environment Article, §§1-101, 1-404, 1-601—1-606, 2-101—2-103, 2-301—2-303, and 2-401—2-404, Annotated Code of Maryland

.01 Definitions.

A. In this chapter and in COMAR 26.11.03, the following terms have the meanings indicated.

B. Terms Defined.

(1) − (17) (text unchanged)

(17-1)"Emergency Stationary Internal Combustion Engine" is defined in 40 CFR Part 60, Subpart IIII or JJJJ, as amended.

(17-2) "Emergency Stationary Reciprocating Internal Combustion Engine (RICE)" is defined in 40 CFR Part 63, Subpart ZZZZ, as amended.

(18) − (56) (text unchanged)

C. (text unchanged)

.02 - .09 (text unchanged).

.10 Sources Exempt from Permits to Construct and Approvals.

A person may construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, a permit to construct:

A. – D. (text unchanged)

E. *Emergency* **[**S**]**stationary internal combustion engines or *emergency stationary reciprocating internal combustion engines (RICE*) with an output less than 500 brake horsepower (373 kilowatts) **[**and which are not used to generate electricity for sale or load shaving as that term is defined in COMAR 26.11.36.01B**]**;

E-1. Stationary internal combustion engines or stationary reciprocating internal combustion engines (RICE) that serve as a primary source of power for agricultural equipment or industrial equipment, with an output less than 500 brake horsepower (373 kilowatts).

F. – X. (text unchanged)

.11 - .19 (text unchanged).

Draft 02/28/2017

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 36 Distributed Generation

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

.01 Definitions.

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

B. Terms Defined.

(1) – (2) (text unchanged)

(3) "Demand response program" means a program that provides incentives to electricity consumers at a facility that curtails electricity usage **[**, particularly during peak periods or emergencies, and that affects pricing, system stability, and overall planning in the electricity market**]**.

[(4) "Economic response program" means a demand response program where a facility is economically incentivized to curtail on-site electricity demand from the grid when prices are high, which primarily occurs during peak electricity demand periods.

(5) Emergency.

(a) "Emergency" means a condition where the primary energy or power source is disrupted or discontinued due to conditions beyond the control of the owner or operator of a facility, including:

(i) A failure of the electrical grid;

(ii) On-site disaster or equipment failure; or

(iii) Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.

(b) "Emergency" includes a PJM declared emergency.

(6) "Emergency generator" means:

(a) A engine used only during an emergency or for testing and engine maintenance purposes; and

(b) An engine that operates during an emergency according to the procedures in the PJM Emergency Operations Manual for a PJM declared emergency.

(7) "Emergency response program" means a demand response program where a facility curtails on-site electricity demand only during an emergency declared by the PJM in accordance with Manual 13, Emergency Operations, Revision 40, Effective Date August 13, 2010, as amended.**]**

[(8)**]***(4)* "Engine" means a stationary *reciprocating* internal combustion engine *(RICE) or stationary internal combustion engine, subject to 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subparts IIII or JJJJ, as amended*.

[(9)**]***(5)* "Facility" means a commercial, institutional, or industrial establishment that has on-site capability to generate electric power to be used internally to reduce on-site electric power consumption, to reduce the overall electric system demand, or for other purposes.

[(10) Load Shaving Unit.

(a) "Load shaving unit" means an engine that operates for other than an emergency to generate electricity for use on-site or for sale.

(b) "Load shaving unit" does not include an engine:

(i) Whose primary function is to generate electricity for use by the public; or

(ii) That serves as the primary source of power for agricultural equipment or industrial equipment, including the period when equipment or a facility is being maintained and the engine is used in place of the primary power source.**]**

[(11)**]***(6)* "Participating engine" means an internal combustion engine located at a participating facility that is operated as part of a demand response program.

[(12)**]***(7)* "Participating facility" means a facility that has entered into a valid contract with a CSP to participate in a demand response program.

[(13) "PJM declared emergency" means a condition that exists where the PJM Interconnection, LLC notifies electric distributors that an emergency exists or may occur and it is necessary to implement the procedures in the PJM Manual 13 Emergency Operations, as revised.**]**

.02 Applicability.

This chapter applies to a person who owns or operates an *engine as defined in §.01B of this chapter* **[**emergency generator, load shaving unit,**]** or *a* curtailment service provider.

.03 [Emergency Generators and Load Shaving Units NOx Requirements] ***Requirements for Stationary Engines*.**

*A. The owner or operator of an engine is subject to requirements under 40 CFR Part 63 Subpart ZZZZ, as applicable.**

B. The owner or operator of an engine is subject to requirements, as applicable, under:

(1) 40 CFR Part 60 Subpart IIII; or*

(2) 40 CFR Part 60 Subpart JJJJ.*

[A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.

(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.

(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.

(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:

(a) Located at a nuclear power plant; or

(b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.

(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation.

B. Requirements for Existing Load Shaving Units Installed on or Before January 1, 2009.

(1) The owner or operator of an existing load shaving unit that was installed on or before January 1, 2009, shall:

(a) Install a NOx control system to meet an emissions standard of 1.4 grams per brake horsepower or less;

(b) Replace the engine with a new engine that meets federal new source performance standards and was manufactured after January 1, 2009; or

(c) Not operate the engine for more than a total of 10 hours during the period of May 1 to September 30 of any year.

(2) The 10-hour limit in §B(1)(c) of this regulation is exclusive of the time that the unit operates for emergency purposes and the time for testing and engine maintenance.

(3) Upon request and on a case-by-case basis, the Department may, for the purpose of engine registration and compliance, treat a group of small engines, under the same or different ownership and performing the same function, as a single entity and establish alternative requirements for the engines.

(4) For engines to be equipped with NOx controls or replaced with a new engine that meets federal standards, compliance shall be achieved by July 1, 2010, or a later date approved by the Department.

(5) If an owner or operator purchases and installs a used engine, that engine, for the purpose of this regulation, is considered an existing engine unless the used engine was manufactured after January 1, 2009.

C. Requirements for New Load Shaving Units Installed After January 1, 2009.

(1) Except as provided in §§B(1)(b) and C(3) of this regulation, a load shaving unit that is installed after January 1, 2009:

(a) Shall be equipped with a NOx control system that meets a NOx emissions rate of not more than 1.4 grams per brake horsepower; or

(b) May not operate the engine for more than a total of 10-hours during the period of May 1 to September 30 of any year.

(2) The-10 hour limit in §C(1)(b) of this regulation is exclusive of the time that the unit operates for emergency purposes and the time for testing and engine maintenance.

(3) An engine with a capacity of 1,000 horsepower or less manufactured and installed after January 1, 2009, that meets applicable federal new source performance standards is exempt from the requirements in §C(1) of this regulation.

D. Alternative Method of Achieving Compliance.

(1) The owner or operator of a load shaving unit may, in lieu of meeting the requirements of §B or C of this regulation, achieve compliance by securing ozone season NOx allowances for the NOx emitted for load shaving purposes during the period of May 1 to September 30 of each year.

(2) The owner or operator of a load shaving unit who chooses to secure ozone season NOx allowances in lieu of complying with §B or C of this regulation shall:

(a) Secure not less than one ozone season NOx allowance;

(b) Round up to the next whole number if the number of allowances to be secured under §D(3)(c) or (4)(d) results in a fractional number;

(c) When calculating the amount of NOx emitted for load shaving purposes during the period May 1 to September 30 under §D(3)(a) or (4)(a) and (b) of this regulation, exclude from those calculations the amount of NOx emitted during the initial 10 hours of operation during that period; and

(d) Secure the ozone season NOx allowances by December 31 of each year and submit those allowances to the Department for retirement by February 1 of the following year.

(3) The owner or operator of an existing load shaving unit installed on or before January 1, 2009, who chooses to secure ozone season NOx allowances in lieu of compliance with §B of this regulation shall:

(a) Calculate, in tons, the total amount of NOx emitted during the period May 1 to September 30;

(b) Multiply the total tons of NOx emitted, as calculated in §D(3)(a) of this regulation, by three; and

(c) Secure at least the same number of ozone season NOx allowances as the number resulting from the calculation performed in §D(3)(b) of this regulation.

(4) The owner or operator of a new load shaving unit installed after January 1, 2009, who chooses to secure ozone season NOx allowances in lieu of compliance with §C of this regulation shall:

(a) Calculate, in tons, the total amount of NOx emitted during the period May 1 to September 30;

(b) Calculate, in tons, the total amount of NOx that would have been emitted during the period May 1 to September 30 if the engine had met the NOx emission rate of 1.4 grams per brake horsepower;

(c) Subtract the number calculated in §D(4)(b) from the number calculated in §D(4)(a), then multiply the result by five; and

(d) Secure at least the same number of ozone season NOx allowances as the number resulting from the calculations performed in §D(4)(c) of this regulation.

E. Record Keeping.

(1) The owner or operator of a load shaving unit shall maintain an operating log that includes the date the unit operated and the total operating time for each day that the unit operated.

(2) The operating log shall be maintained for 5 years and made available to the Department upon request.

F. Determining a Violation. A load shaving unit required to meet the NOx emissions standards or the operational limitations in this regulation may be subject to a penalty for each day the unit operates in violation of the requirements.**]**

** In May 2015, the United States Court of Appeals for the District of Columbia Circuit vacated paragraphs 40 CFR 60.4211 (f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). Therefore, engines subject to this chapter do not have to comply with those provisions.*

.04 Annual Report Requirement for Curtailment Service Providers (CSPs).

A. A CSP that administers a demand response program for a participating facility in the State shall provide the following information to the Department in an annual report:

(1) – (2) (text unchanged)

(3) A description of the demand response program for each participating engine **[**, that is, whether it is an economic response program or an emergency response program**]**;

(4) As called for by the CSP, the dates on which each engine was requested to operate during the year and the hours of operation on each date, including:

(a) The reason for operating the engine under a demand response program **[**, that is, whether it is an economic response program or an emergency response program**]**;

(b) – (c) (text unchanged)

(5) – (7) (text unchanged)

B. – C. (text unchanged)

3-10-17

Facts About...

Repeal of COMAR 26.11.09.11 Control of Particulate Matter from Small Wood Boilers and associated definitions in COMAR 26.11.09.01

Purpose of the Amendment

The purpose of this action is to repeal existing Regulation .11 under COMAR 26.11.09 and associated definitions in COMAR 26.11.09.01 as there are new, federal rules in place regulating residential hydronic heaters under 40 CFR 60, subpart QQQQ. Repealing Maryland's small wood boiler regulation will remove any conflict that currently exists between our existing regulation and 40 CFR 60, Subpart QQQQ. . Maryland's existing COMAR 26.11.09.11 sets emission and operating standards and compliance procedures for small wood boilers (350,000 Btu or less). Wood boilers with a rated thermal output greater than 350,000 Btu/hr are subject to the standards and requirements under COMAR 26.11.09.12 - Standards for Biomass Fuel-Burning Equipment Equal to or Greater Than 350,000 Btu/hr.

Submission to EPA as Revision to Maryland's SIP

No.

Background

A small wood boiler is a furnace, boiler or stove that is designed to burn wood for heating and hot water needs. These units are often located away from the residence or business in a self-contained shed with a smoke stack. This shed protects a firebox surrounded by a water jacket in which water is heated then pumped through underground pipes to homes, shops, swimming pools, spas or any application that requires heat or hot water.

While the fundamental design of a wood boiler maximizes the transfer of heat to the water, wood boilers that do not have sufficient emission controls may cumulatively be a significant source of air pollution, which contribute to various environmental and health problems. Given the increased use of wood boilers in areas throughout the country, a number of states and local municipalities have developed regulations to require emission standards for wood boilers. In 2007, EPA launched a voluntary program to encourage manufacturers to make wood boilers (also known as hydronic heaters) cleaner. Through the voluntary hydronic heater program, manufacturers have redesigned some models to make new units available to consumers that are 90 percent cleaner on average than unqualified models, based on laboratory testing[2].

In April 2009, the Maryland Department of the Environment (MDE) adopted COMAR 26.11.09.11

[2] US EPA – Voluntary Hydronic Heater Program. https://www.epa.gov/burnwise/voluntary-hydronic-heater-program

– Control of Particulate Matter from Small Wood Boilers, which established stringent particulate matter (PM) limits for small wood boilers, and fuel and labeling requirements for small wood boilers based upon EPA's voluntary program.

Small wood boilers were not previously covered by EPA's air emissions standards. On February 3, 2015, EPA strengthened its clean air standards for residential wood heaters to make new wood boilers significantly cleaner and improve air quality in communities where people burn wood for heat. The updates, which are based on improved wood heater technology, establish the first ever federal air standards for hydronic heaters. EPA's final rule, promulgated as one of its New Source Performance Standards (NSPS), will phase in emission limits over a five-year period, beginning in 2015. Under the federal rule, a more stringent PM limit is established beginning in 2020. The standards apply only to new wood heaters and will not affect wood heaters already in use.Repealing Maryland's small wood boiler regulation will remove any conflict that currently exists between our existing regulation and 40 CFR 60, Subpart QQQQ.

Sources Affected and Location

The repeal of COMAR 26.11.09.11 removes Maryland specific requirements for small wood boilers (units that are 350,000 Btu or less). Since May 15, 2015. EPA has regulated the manufacture, sale, distribution, installation and operation of residential hydronic heaters nationwide.

Requirements

EPA's rule for residential hydronic heaters builds on the EPA's voluntary program to ensure that all new wood-fired hydronic heaters will be cleaner, establishing particle pollution emissions limits for these heaters in two steps. Particle pollution (also called particulate matter or PM) is a major constituent of wood smoke.

Step 1: The Step 1 PM emissions limit, effective in 2015, is identical to the current qualifying level for EPA's voluntary Hydronic Heater Program. Most models that were "Phase 2" qualified (using EPA Method 28WHH) under the voluntary program automatically will be certified as meeting the Step 1 limit. This will reduce the potential for testing delays. The Step 1 PM limit is 0.32 pounds per million Btu heat output (weighted average), with a cap of 18 grams per hour for individual test runs. The limit is for crib testing. If tested with cordwood, emissions test method must be approved, and stoves must meet crib wood limit.

In Step 2 (2020), hydronic heaters will have to meet stronger emissions limits. The Step 2 limit is 0.10 pounds per million Btu heat output for each burn rate. The Step 2 limits includes an alternative limit of 0.15 pounds per million Btu heat output for each burn rate. If tested with cordwood; method must be approved.

EPA maintains a list of certified hydronic heaters[3]. These certified and labeled hydronic heaters can be installed in Maryland.

[3] US EPA – List of EPA Certified Hydronic Heaters ttps://www.epa.gov/compliance/list-epa-certified-hydronic-heaters

The rule does not apply to heaters that are fueled solely by gas, oil or coal.

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

Effective May 15, 2015, the U.S. EPA adopted new source performance standards (NSPS) for residential wood heaters (40 CFR Part 60, Subpart QQQQ).

Expected Emissions Reductions

The use and sale of small wood boilers in Maryland have been regulated since 2009, which has resulted in less polluting and cleaner burning units in operation. Nationwide, the EPA estimates that as a result of the NSPS for hydronic heaters, PM and volatile organic compound (VOC) emissions from units covered by the rule are estimated to drop by approximately 70 percent (8,300 tons/year for PM and 9,300 tons/year for VOC) compared to estimated emissions without the final rule. In addition, the EPA estimates that the rule will result in an estimated reduction of carbon monoxide emissions of 62 percent (46,000 tons/year).

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

The proposed action will have:

• Minimal impact on the Department and local municipalities. The Department believes the repeal of the regulation will result in minimal additional impact since enforcement of similar emission standards, labeling requirements, and other requirements and standards for owners and operators of small wood boilers has occurred in Maryland since 2009.

• Minimal impact on manufacturers. Manufacturers of small wood boilers may incur additional costs as a result of redesigning or producing new units to meet the federal Step 2 emission standards and requirements in the EPA rule. EPA's Step 2 emission standard of 0.10 pounds per million Btu with an alternative standard of 0.15 pounds per million Btu is to be met in 2020. Many small wood boilers currently on the market already meet this proposed standard. There are no known manufacturers of small wood boilers in the State.

• Minimal impact on prospective purchasers and operators of new compliant small wood boilers. Since 2009, Maryland residents have had the opportunity to purchase cleaner burning small wood boilers, and since 2010, units offered for sale have had to meet a particulate matter emission limit of 0.32 pounds per million Btu – which is the same as the Step 1 standard in the EPA rule. Prospective purchasers may see an increase in the cost of new boilers once manufacturers of small wood boilers must comply with the federal emission limit of 0.10 pounds particulate matter per million Btu (alternative standard of 0.15 particulate matter pounds per million Btu) no later than May 1, 2020.

• Minimal impact on retailers. Since April 1, 2010, units sold in Maryland are required to meet a particulate matter emission limit of 0.32 pounds per million Btu. Furthermore, retailers are required to only sell units to Maryland residents that meet this emission limit. In an effort to assist retailers, the EPA's rule allowed retailers of small wood boilers to sell their existing inventory until December

31, 2015. After this date, heaters sold at retail in the United States are required to meet EPA emission standards and requirements.

• Minimal impact on owners and operators of existing wood boilers since they are not required to meet the emission, certification, and labeling standards in the new federal rule. Owners and operators of existing small wood boilers are required to comply with all State, county and local laws and not cause a nuisance or condition of air pollution.

• Minimal impact on public health. Home owners and their neighbors (or citizens of Maryland) will benefit from cleaner technology requirements. Less uncontrolled smoke, particulate matter, nuisance odors and toxic compound emissions will be generated from the new units under the federal rule and this will result in better health protections.

Economic Impact on Small Businesses

There is no small business in Maryland that has been identified to incur substantial economic impact as a result of the proposed action. The affected sources are likely to meet the federal standards at minimum cost.

Draft 3/10/2017

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

.01 Definitions.

A. (text unchanged)

B. Terms Defined.

(1)— (1-2) (text unchanged)

[(2) "Clean wood" means wood that has no paint, stains, or other types of coatings, and wood that has not been treated with any substance, including but not limited to copper chromium arsenate, creosote, or pentachlorophenol.]

[(3)] *(2)*—[(8)] *(7)* (text unchanged)

[(9) "Manufacturer" means a person who imports, manufactures, assembles, or produces a small wood boiler.]

[(10)] *(8)*—[(13)] *(11)* (text unchanged)]

[(14) "Small wood boiler" means a fuel-burning device:

(a) With a rated thermal output of less than 350,000 Btu per hour;

(b) Designed to burn clean wood or other approved solid fuels;

(c) That the manufacturer specifies for outdoor installation or indoor installation; and

(d) That distributes heated fluid through pipes for the purpose of supplying heat and/or hot water to building spaces.]

[(15)]*(12)*—[(18)] *(15)* (text unchanged)

.04 Prohibition of Certain New Fuel-Burning Equipment.

A. Areas I, II, V, and VI.[Except as provided in Regulation .11 of this chapter, the] *The* following apply in Areas I, II, V, and VI:

(1)—(3) (text unchanged)

B. Areas III and IV.[Except as provided in Regulation .11 of this chapter, the] *The* following apply in Areas III and IV:

(1)—(3) (text unchanged)

C. (text unchanged).

.06 Control of Particulate Matter.

A.—C. (text unchanged)

D. [Small Wood Boilers and] Biomass Fuel-Burning Equipment.

[(1) Small wood boilers are subject to particulate matter requirements of Regulation .11 of this chapter and exempt from the provisions of §§A and B of this regulation.]

[(2)] The provisions of §§A and B of this regulation shall not apply to fuel-burning equipment installed after May 1, 2014 that burns only biomass fuels; however, the particulate matter requirements of Regulation .12 of this chapter apply.

Draft 3/10/2017

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

.11 Repealed

2-16-17

Facts About...

Repeal of COMAR 26.11.33 – Architectural Coatings

Purpose of this Action

The purpose of this action is to repeal the entire Chapter including Regulations .01 - .14 from COMAR 26.11.33 – Architectural Coatings, which is superseded by COMAR 26.11.39 – Architectural and Industrial Maintenance (AIM) Coatings.

Submission to EPA as Revision to Maryland's SIP

This repeal will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's State Implementation Plan. COMAR 26.11.39 has already been proposed to EPA as the replacement.

Background

In 2004, the Maryland Department of the Environment (MDE) adopted COMAR 26.11.33 - Architectural Coatings which established VOC content limits for architectural and industrial coatings, established recordkeeping and container labeling requirements for manufactures of paints and coatings, and painting practices for the use and application of coatings. COMAR 26.11.33 is based on the 2001 model rule developed by the OTC.

On April 25, 2016, the Department adopted COMAR 26.11.39 – Architectural and Industrial Maintenance (AIM) Coatings, which incorporates Phase II of the OTC AIM 2011 model rule. Rather than amend the existing AIM regulations in COMAR 26.11.33, the Department decided to create a new chapter (COMAR 26.11.39) to seamlessly update the new product categories and standards of the Phase II OTC AIM 2011 model rule. The Department maintained COMAR 26.11.33 until January 1, 2017, when the standards and requirements of COMAR 26.11.39 became effective.

Expected Emissions Reductions

None.

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

The proposed action has no economic impact. As of January 1, 2017, affected sources are subject to the requirements and standards in COMAR 26.11.39 - Architectural and Industrial Maintenance (AIM) Coatings.

Draft 2/15/2017

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

[Chapter 33 Architectural Coatings]

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 - .14 Repealed