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 federal requirements for stationary internal combustion (IC) 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 so as 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 (NOx) emission requirements for emergency generators and load shaving units. Traditionally, stationary internal combustion (IC) 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 IC engines during non-emergencies to reduce their electric bill during high-demand days. Owners of IC engines also entered into contractual agreements to operate their stationary IC engines and perform other electricity curtailment activities to both reduce the cost of
electricity and maintain electric system reliability. MDE adopted regulations in an effort to achieve reductions in NOx emissions during the summer ozone season when these practices were most frequently employed. Most stationary IC engines are fired with diesel fuel and have minimal NOx emission controls which when operated resulted in excess NOx 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.

MDE’s stationary IC engine regulations were further amended and recodified under a new Chapter COMAR 26.11.36 – Distributed Generation on June 13, 2011. In 2011, 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 IC engines under an electricity grid demand response event.

MDE requires stationary IC engines over 500 hp to obtain a “Permit to Construct & Registration Application” under COMAR 26.11.02 - Permits, Approvals and Registration. This requirement remains the same. The forms for this are located at MDE’s website under “Permits” and the “ARMA Programs”.

Engines are typically used by facilities to provide electric power when the normal supply is interrupted. Stationary IC engines are common combustion sources that collectively can have a significant impact on air quality and public health. Engines emit air pollutants when fuel is burned; including carbon monoxide (CO), NOx, 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 IC engines through two types of regulations; National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS).

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 Reciprocating Internal Combustion Engines (RICE) are outlined in the Code of Federal Regulations under 40 CFR 63, Subpart ZZZZ.

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 III. The NSPS for Stationary Spark Ignition IC Engines is outlined in the Code of Federal Regulations under 40 CFR Part 60, Subpart JJJJ.

This action will adopt the above federal requirements for stationary IC engines into COMAR 26.11.36 and make the Maryland regulations consistent with the federal regulations.

During the development and finalization of the federal rules since 2006, the Delaware Department
of Natural Resources filed a lawsuit challenging the operation of stationary IC 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. On April 15, 2016, EPA issued a guidance document addressing the vacatur of these and other provisions of the stationary IC engine NSPS and NESHAP rules.¹

Sources Affected and Location

This action affects the owner or operator of stationary IC 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 Regulations .01 – Definitions, and .10 – Sources Exempt from Permits to Construct and Approvals, of COMAR 26.11.02 - Permits, Approvals and Registration, as needed in order to reflect the amendments being made to COMAR 26.11.36.

As a result of this action, stationary IC engines in Maryland will meet the federal requirements for stationary IC engines, as prescribed in 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII or JJJJ.

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 IC engine under contract to operate during electricity grid demand response (non-emergency events) operates and meets federal standards and emission limits.

Expected Emissions Reductions

There is no expected impact to emissions, since 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60,

¹ See, Delaware v. EPA, 785 F .3d I (D.C. Cir. 2015); https://www.epa.gov/sites/production/files/2016-06/documents/ricevacaturguidance041516.pdf
Subpart III or JJJJ already regulate the operation, reporting and maintenance of the generating units.

**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 III or JJJJ. This action removes Maryland’s outdated definitions and requirements from COMAR 26.11.36.