

**Maryland General Assembly  
Department of Legislative Services**

**Proposed Regulations  
Department of the Environment**  
(DLS Control No. 20-063)

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## **Overview and Legal and Fiscal Impact**

The regulations establish standards for the control and reporting of methane emissions from the natural gas industry. Among other things, the regulations establish requirements to reduce vented and fugitive emissions of methane from both new and existing natural gas facilities.

The regulations present no legal issue of concern.

The regulations have minimal fiscal impact on State agencies and no fiscal impact on local governments.

## **Regulations of COMAR Affected**

### **Department of the Environment:**

Air Quality: Control of Methane Emissions from the Natural Gas Industry:  
COMAR 26.11.41.01 – .07

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## **Legal Analysis**

### **Background**

The Maryland Commission on Climate Change (MCCC) was established by Executive Order in 2007 and codified in 2015 for the purpose of developing a plan for mitigating and adapting to climate change in Maryland, including by reducing greenhouse gas emissions. The Greenhouse Gas Emission Reduction Act (GGRA) was enacted in 2009 based on recommendations from MCCC. In 2016, GGRA was amended to include a goal of reducing the 2006 level of greenhouse emissions by 40% by 2030. The MCCC's Mitigation Workgroup recommended in the 2016 MCCC Annual Report that the State reduce methane emissions from natural gas infrastructure, among other things. Methane is a greenhouse gas that has a high capacity for retaining heat, although it exists in the atmosphere for shorter periods of time than some other greenhouse gases.

Under the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) is required to identify and establish performance standards for stationary sources that cause or contribute to air pollution in a manner that may endanger public health or welfare. The federal standards for the performance of natural gas facilities for which construction, modification or

reconstruction commenced after September 18, 2015 are contained in 40 CFR Part 60, Subpart OOOa (2016 NSPS OOOOa). 2016 NSPS OOOOa includes emission limits for methane and requires owners and operators of a facility to detect and repair leaks, including leaks of methane. On September 24, 2019, EPA proposed to remove (1) the transmission and storage of natural gas from all requirements of the regulation, and (2) requirements that limit methane emissions from the production and processing of natural gas. Alternatively, the EPA proposed to remove all methane emissions requirements for all segments of the natural gas industry. The provisions of the CAA authorize states to adopt standards or limitations on air pollutant emissions that are more stringent than the CAA and its implementing regulations.

According to the Department of the Environment, the new chapter established under the regulations is a response to both the EPA's proposed changes to 2016 NSPS OOOOa and the Mitigation Workgroup's recommendations in the 2016 MCCC Annual Report.

## **Summary of Regulations**

COMAR 26.11.41.01 establishes definitions for a number of terms that are used in the chapter, including "affected facility," which is defined to include (1) new, modified, or reconstructed natural gas compressor stations, natural gas underground storage facilities, or liquefied natural gas facilities; and (2) the five existing natural gas compressor stations, natural gas underground storage facilities, and liquefied natural gas facilities in the State.

COMAR 26.11.41.02 clarifies that the requirements in the chapter apply to affected facilities.

COMAR 26.11.41.03 establishes requirements for (1) natural gas compressor stations, (2) natural gas underground storage facilities that use natural gas or electric-powered equipment to compress natural gas, and (3) new liquefied natural gas facilities. The department is authorized to approve a new or alternative method of identifying leaking fugitive emissions components upon request. The requirements for affected facilities include:

- developing and submitting an initial methane monitoring plan to the department that includes information on certain components, equipment, and procedures;
- conducting audio, visual, and olfactory inspections and leak monitoring surveys, where the frequency depends on whether the facility uses natural gas or electricity to power equipment for compressing natural gas;
- repairing, replacing, or removing any leaking fugitive emissions component, resurveying the component, and, if necessary, preparing a plan for repairing a leaking fugitive emissions component;
- at least monthly, conducting an audio, visual, and olfactory inspection and recording inspection information on every natural gas storage well and observation well in a natural gas storage field, if applicable; and

- under certain circumstances, notifying and filing a report with the department, and making repairs on natural gas storage wells and observation wells.

Cove Point Liquefied Natural Gas facility is required to comply with leak detection and repair requirements identified in the Climate Change Action Plan and the leak detection and repair plan approved under the facility's Certificate of Public Convenience and Necessity.

COMAR 26.11.41.04 requires each continuous and intermittent bleed natural gas-powered pneumatic device to comply with the leak detection and repair requirements under Regulation .03 when the device is idle and not controlling beginning on January 1, 2021. Beginning January 1, 2022, these devices are prohibited from venting natural gas above a specified rate. Finally, beginning January 1, 2023, each of these devices must convert to using compressed air or electricity to operate, unless the facility is granted an exemption. To receive an exemption, the facility's owner and operator must collect all vented natural gas from the pneumatic device or submit a justification for the exemption to the department. If an exemption is approved, the owner and operator must tag, perform inspections and maintenance on, maintain, test, and, if necessary, repair the device as specified.

COMAR 26.11.41.05 requires all reciprocating natural gas compressor components to comply with the leak detection and repair requirements under Regulation .03. Beginning January 1, 2021, compressor vent stacks used to vent rod packing/seal emissions must employ a vapor collection system consistent with Regulation .06. Additionally, the emission flow rate through the reciprocating natural gas compressor rod packing/seal vent stack must be annually measured by April 1 using direct measurement while the compressor is operating at a normal operating temperature. The direct measurement may take place at a later date under certain circumstances. If the direct measurement exceeds a certain emission flow rate, the reciprocating natural gas compressor must be repaired or replaced within a certain period of time or, depending on the flow rate, have certain emission flow rate measurements taken at certain intervals of time. Finally, a delay in repairing reciprocating natural gas compressors is authorized under certain circumstances, but the repair must still occur within a specified period of time.

COMAR 26.11.41.06 establishes system requirements for an affected facility that uses a vapor collection system and vapor control device. The system must (1) beginning January 1, 2021, meet specified destructive or non-destructive vapor control device requirements under certain circumstances; (2) have no detectible emissions, as determined using specified auditory, visual, and olfactory inspections; (3) comply with the leak detection and repair requirements under Regulation .03; and (4) use a destructive or non-destructive vapor control device that meets certain specifications.

COMAR 26.11.41.07 establishes a number of record keeping and reporting requirements for affected facilities. Owners or operators must maintain, submit, and upon request, provide the department with a copy of records necessary to verify compliance with the regulations. The record keeping and reporting requirements include:

- reporting, maintaining, and posting records on each leak monitoring survey and audio, visual, olfactory inspection conducted in accordance with Regulation .03;
- maintaining specified records for each natural gas-powered continuous bleed pneumatic device;
- maintaining records and reporting information for each reciprocating natural gas compressor;
- submitting a blowdown notification plan to the department, providing notice of certain blowdown events, and submitting an annual report on certain blowdown emissions;
- submitting an annual report on methane, carbon dioxide, and nitrous oxide mass emissions which must be calculated and monitored, as specified; and
- requiring all reports to be submitted to the department at a specific address.

### **Legal Issues**

The regulations present no legal issue of concern. However, the Joint Committee on Administrative, Executive, and Legislative Review may wish to note that the department indicates that the regulations are more restrictive or stringent than a corresponding federal standard applicable to this subject area under 2016 NSPS OOOOa.

### **Statutory Authority and Legislative Intent**

The department cites §§ 1-404, 2-103, 2-1202, and 2-1205 of the Environment Article as statutory authority for the regulations. Section 1-404 grants the department broad authority to adopt regulations to carry out the provisions of law within its jurisdiction. Section 2-103 establishes the department’s “jurisdiction over emissions into the air and ambient air quality in this State.” Section 2-1205 require the State to develop plans, adopt regulations, and implement programs that reduce statewide greenhouse gas emissions. “Greenhouse gas” is defined in § 2-1202 to include methane.

This authority is correct and complete. The regulations comply with the legislative intent of the law.

### **Technical Corrections and Special Notes**

In response to suggestions from the Department of Legislative Services, staff for the department agree to make changes to the following regulations; (1) Regulation .03A(2)(c) and (d), A(5), A(10)(b), B(1), B(3), and C(2); (2) Regulation .04C; and (3) Regulation .07B(6).

## **Fiscal Analysis**

The regulations have minimal fiscal impact on State agencies and no fiscal impact on local governments.

### **Agency Estimate of Projected Fiscal Impact**

The department advises that the regulations have minimal impact on State agencies because current air compliance inspector staff will enforce the regulations. The department advises that there is no fiscal impact on local governments. The Department of Legislative Services concurs.

### **Impact on Budget**

There is no impact on the State operating or capital budget.

### **Agency Estimate of Projected Small Business Impact**

The department advises that the regulations have minimal or no economic impact on small businesses in the State because affected facilities are not small businesses. The Department of Legislative Services concurs. The department estimates that the affected facilities in the State will be required to spend an average of \$25,000 annually on leak surveys. The department further notes that some capital investment may be required. These capital costs are estimated to range from \$10,000 to \$100,000, depending on the sophistication of the engineering design and age of existing equipment. However, the department also notes that product loss will be decreased.

## **Contact Information**

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