

Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)

FACTSHEET: TECHNICAL INFORMATION

Overview of the Regulations

These regulations are designed to reduce methane and volatile organic compound emissions from the upstream oil and gas sector. The regulations apply to upstream oil and gas facilities that extract, process, and/or transport hydrocarbon gas. More specifically, facilities that:

- produce and/or receive more than 60,000 m³ of hydrocarbon gas per year
- compress natural gas
- undertake hydraulic fracturing during well completions outside of British Columbia and Alberta with gas-to-oil ratios of at least 53:1.

When there is a high potential to emit (i.e. facilities that produce and/or receive $\geq 60,000\text{m}^3/\text{yr}$), the regulations introduce operating and maintenance requirements for industry to regularly inspect and repair their equipment and ensure that they control intentional and unintentional emissions. These measures focus on:

- a general inspection program that requires industry to scan their systems and components three times each year for leaks or operating problems
- a compressor maintenance check-up once each year to prevent significant deterioration of the sealing system
- requirements to control venting at the general facility level and at the equipment/process level

The regulations require fewer actions for smaller facilities that typically produce and/or receive less hydrocarbon gas ($\leq 60,000\text{m}^3/\text{yr}$).

The regulations focus on emissions reduction outcomes and provide flexibility for industry to meet the regulatory reduction requirements with the technology and process changes that are best suited to the facility design and production profile.

What is the timeline for implementation and registration?

Companies must register their facilities before April 30th, 2020, or within 120 days of when the facility begins to be covered by any of the requirements. There are also provisions in the regulations to retain information for record-keeping, inspection purposes, and for on-demand reporting to Environment and Climate Change Canada.

Regulatory requirements for fugitive equipment leaks, venting from well completions, and compressors, come into force on January 1, 2020. Regulatory requirements for facility production venting restrictions and venting limits for pneumatic equipment come into force on January 1, 2023.

Did you know?

Canada's methane regulations were developed after extensive consultations with provinces, territories, industry, and other stakeholders. There are also provincial regulations, directives, and guidelines contributing to reduce methane emissions in the oil and gas sector.



Key Requirements of the Regulations

Emission Source	Requirements
Fugitive (leaks) For facilities that produce and/or receive more than 60,000 m ³ of hydrocarbon gas per year	<ul style="list-style-type: none"> Implementation of a leak detection and repair (LDAR) program to identify and minimize hydrocarbon gas leaks Inspections for leaks three times per year An alternative LDAR program is possible. Alternate leak detection methods may be used if it is demonstrated that the emission reductions are equivalent to the reductions that would be achieved with the required inspection program. Corrective action when leaks \geq 500 ppm are found Coming into force date: January 1, 2020
Venting from compressors	<ul style="list-style-type: none"> For compressors with a rated brake power \geq 75 kW and operated at least 5% of the time over the last 3 years Vent gas from seals or rod packings and distance pieces must be either captured (to be conserved or destroyed) or vented and measured annually/continuously Corrective action when emissions are higher than the applicable limit Coming into force date: January 1, 2020
Venting from well completions involving hydraulic fracturing	<ul style="list-style-type: none"> For facilities located outside of British Columbia and Alberta with a gas-to-oil ratios of at least 53:1 No venting Conservation of hydrocarbon gas for re-use on site or for sale, or flaring / clean incineration of hydrocarbon gas Coming into force date: January 1, 2020
General facility production venting For facilities that produce and/or receive more than 60,000 m ³ of hydrocarbon gas per year	<ul style="list-style-type: none"> For facilities where the combined venting, destroyed and delivered hydrocarbon gas volume exceeds 40,000 m³ Venting limit of 15,000 m³ of hydrocarbon gas per year Conservation of hydrocarbon gas for re-use on site or for sale, or flaring / clean incineration of hydrocarbon gas Coming into force date: January 1, 2023
Venting from pneumatic devices For facilities that produce and/or receive more than 60,000 m ³ of hydrocarbon gas per year	<ul style="list-style-type: none"> For pneumatic controllers and pneumatic pumps (if the combined volume of hydrocarbon gas pumped by all pumps is greater than 20L per day) Venting limit of 0.17 m³ of hydrocarbon gas per hour for pneumatic controllers Conservation of hydrocarbon gas for re-use on site or for sale, replacement with non-emitting or low-bleed for pneumatic controllers, or operate using a gas other than hydrocarbon gas for pneumatic pumps Coming into force date: January 1, 2023
Other equipment For facilities that produce and/or receive more than 60,000 m ³ of hydrocarbon gas per year	<ul style="list-style-type: none"> Minimize emissions from pipes, hatches that are not required to be open and sampling systems or pressure relief devices at the facility Coming into force date: January 1, 2020

For more information, please visit the [*Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds \(Upstream Oil and Gas Sector\)*](#) web page or contact us at:

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