

## Legal update

### Alberta releases draft directives for reducing methane emissions from oil and gas operations

---

May 2018

Energy

Environmental

The Alberta Energy Regulator (AER) has issued two draft *Directives* that will require upstream oil and gas operators to reduce methane emissions from upstream oil and gas sites by 45% from 2014 levels by 2025. Draft versions of *Directive 017: Measurement Requirements for Oil and Gas Operations* and *Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting*, if finalized and brought into force, will address the primary sources of methane emissions from Alberta's upstream oil and gas industry: fugitive methane emissions from leaking or malfunctioning equipment and routine methane venting from pneumatic devices, glycol dehydrators, compressors, vessels and tanks.

The new requirements include applying emission design standards to new facilities and equipment, increased measurement and reporting and new leak detection and repair requirements. The new requirements, which are expected to be finalized and brought into force in fall 2018, will apply to upstream oil, gas and bitumen wells, oil and gas facilities, gas plants, pipeline installations, storage facilities and tank terminals.

The AER estimates the new requirements will cost industry \$780 million over the 2018 to 2025 implementation period.

---

#### Fugitive emissions management

Fugitive emissions management is based on a systematic program of detecting and repairing leaks and malfunctioning equipment. Operators will be required by June 1, 2018, to document a fugitive emissions management program that includes preventative maintenance practices, procedures for fugitive methane emission surveys and screenings, training programs, and procedures to track, manage and verify the status of equipment repairs.

Operators of gas plants, compressors, batteries and certain other facilities will have to conduct fugitive emission surveys either at least once every four months or annually, depending on the type of facility or equipment. The type of survey equipment and the scope of the surveys is prescribed in *Directive 060*.

Additionally, operators of oil and gas wells will have to undertake annual fugitive emission screenings at well sites commencing in 2020.

Repairs to equipment with fugitive emissions must be made within 24 hours if the methane emissions are causing an off-site odour, a pilot or ignitor on a flare stack has failed or if the emissions could cause safety issues. Otherwise, the equipment must be repaired within 30 days unless a major shutdown is required to complete the repair, the emissions have a hydrocarbon concentration of 10,000 ppm or less or the source is a surface casing vent flow.

## Vent gas management

Methane is currently vented to atmosphere by pneumatic devices (i.e., meters), compressor seals, glycol dehydrators and tank venting.

*Directive 060* will require operators to document a methane reduction retrofit compliance plan by June 1, 2019. It must contain a schedule to replace and retrofit existing equipment, allocate funding to reduce venting and be approved by an executive officer of the operator. The plan must be updated annually.

Upon draft *Directive 060* coming into force, each operator will have an overall vent gas limit at each existing and future oil and gas site, but excluding pneumatic devices, compressor seals and glycol dehydrators until January 1, 2023. As well, a defined vent gas limit for each new site will be in place when *Directive 060* is brought into force. Additionally, effective January 1, 2022, venting limits will be imposed on new and existing crude bitumen batteries and new pneumatic devices and centrifugal compressors. Effective January 1, 2023, venting limits will be extended to existing pneumatic devices, centrifugal and reciprocating compressors and glycol dehydrators.

## Measurement, testing, reporting and recordkeeping

*Directive 017* identifies when vent gas from a site must be quantified using continuous metering or periodic testing: A yet-to-be published AER manual will set out how to estimate vent gas and fugitive emissions.

Annual methane emissions reporting to the AER will be required.

Further, annual testing of compressor seals is required starting in 2019 or 2020, depending on the type of compressor.

Various fugitive methane emission records must be kept for four years and provided to the AER upon request.

## Carbon tax exemptions and federal equivalency

Operators in the upstream oil and gas industry are currently exempt from paying Alberta's carbon tax on fuels used in any activity integral to the drilling, completion, operation, work over or abandonment of oil and gas wells and the operation of upstream oil and gas facilities and pipelines. This exemption is to continue until January 1, 2023, the intent being to allow operators to allocate funding to fugitive methane emission reductions instead of paying the carbon tax.

The Government of Canada has also announced regulations for methane emission reductions in the upstream oil and gas sector. It has stated that the federal regulations will apply in each province unless a province can demonstrate that its policies will achieve methane emission reductions equivalent to the federal regulations. Alberta's proposed *Directives* were designed in consultation with Environment and Climate Change Canada. However, it remains to be seen if the federal government will deem Alberta's regulations to be equivalent to the federal regulations.

Alan Harvie

---

For further information, please contact the following lawyer:

> **Alan Harvie**

Calgary

+1 403.267.9411

[alan.harvie@nortonrosefulbright.com](mailto:alan.harvie@nortonrosefulbright.com)

Norton Rose Fulbright Canada LLP, Norton Rose Fulbright LLP, Norton Rose Fulbright Australia, Norton Rose Fulbright South Africa Inc and Norton Rose Fulbright US LLP are separate legal entities and all of them are members of Norton Rose Fulbright Verein, a Swiss Verein. Norton Rose Fulbright Verein helps coordinate the activities of the members but does not itself provide legal services to clients.

References to "Norton Rose Fulbright", "the law firm", and "legal practice" are to one or more of the Norton Rose Fulbright members or to one of their respective affiliates (together "Norton Rose Fulbright entity/entities"). No individual who is a member, partner, shareholder, director, employee or consultant of, in or to any Norton Rose Fulbright entity (whether or not such individual is described as a "partner") accepts or assumes responsibility, or has any liability, to any person in respect of this communication. Any reference to a partner or director is to a member, employee or consultant with equivalent standing and qualifications of the relevant Norton Rose Fulbright entity.

The purpose of this communication is to provide general information of a legal nature. It does not contain a full analysis of the law nor does it constitute an opinion of any Norton Rose Fulbright entity on the points of law discussed. You must take specific legal advice on any particular matter which concerns you. If you require any advice or further information, please speak to your usual contact at Norton Rose Fulbright.