

New edition of the Pipeline Rules

The Province of Alberta, as part of the Pipeline Act, has released a new version of the Pipeline Rules. (Alberta Regulation # 125/2023)

The Effective date is November 15, 2023. The Alberta Energy regulator (AER) administers the Pipeline Act, which is the enabling legislation that allows for the licensing of oil and gas pipelines in Alberta. The Pipeline Rules include technical requirements such as pipeline design, construction, operation, discontinuation, abandonment, and removal of pipelines.

The main changes to the Pipeline rules include:

- allowing the use of temporary surface pipelines for water conveyance in support of the [Water Conservation Policy for Upstream Oil and Gas Operations](#) (Part 1);
- aligning with standard *CSA Z662: Oil and gas pipeline systems* concerning the Safety and Loss Management System and integrity management program (sections 14 and 15);
- clarifying requirements for minimum cover for existing or abandoned pipelines (section 29);
- removing duplicate requirements for pressure control and overpressure protection at pipeline tie-ins in cases where pressure control is managed elsewhere (section 31);
- reorganizing requirements for ground disturbance and including trenchless excavation techniques (Part 4);
- providing a limited exemption for release reporting of specific on-installation releases (low volume, low risk and not an indicator of pipeline integrity) (section 67);
- reorganizing requirements and updating the pipeline removal process to be consistent with current discontinuation and abandonment processes (notification after the activity is completed) (Part 9);
- allowing licensees up to 24 months (rather than twelve) to discontinue, abandon, or resume a pipeline managed under an integrity management program; and
- allowing for some system-wide abandonments without disconnecting tie-ins.

In conjunction with the release of the Pipeline Rules, there are new editions released of the AER Directive 077: Pipeline, Directive 056: Energy Development Applications and Schedules, Manual 005: Pipeline Inspections and Manual 012: Energy Development Applications and Schedules.

Please do not hesitate to reach out to Crimson for assistance in navigating through the new regulation. Crimson has comprehensive knowledge of regulatory compliance in these areas and offer our assistance with your organizations Regulatory Compliance requirements.





Generator Projects

In today's economy of low natural gas prices and high electricity prices, clients are moving toward installing natural gas driven generators or turbines to drive their oil and gas operations. This strategy makes good business sense; however, clients need to understand the regulatory implications of these projects. We work with the Alberta Energy Regulator (AER) to ensure that every project meets all of the regulatory requirements across the board. Did you know that any site generating over 1MW of electricity triggers a full approval under EPEA as a power plant and an AUC Thermal Power Plant approval under AUC Rule 007? To learn more about projects generating more than 1 MW of electricity you can request our [Oil and Gas Generator Projects Brochure](#) and our [Non Oil and Gas Generator Project Brochure](#).

AUC Interim Rule 007 information requirements

All applications for new power plants and hydro developments that produce renewable electricity will continue to be processed but will not be approved for the duration of the pause period (August 3, 2023 to February 29, 2024) that was enacted through an order-in-council. Subject to certain exceptions for small power plants, isolated generating units and micro-generation, no approvals will be issued for the duration of this pause period. The AUC is introducing new, interim information requirements relating to agricultural land (soils, hydrology, earthworks, agricultural activities), viewscales, reclamation security (amount calculation, reclamation security, etc.), and land use planning as part of the regulatory review process of new power plant applications, including wind, solar, thermal, hydroelectric and other power plants. All applications submitted after August 3, 2023 will be required to satisfy the existing requirements in Rule 007 along with the additional interim information requirements.

Applicants for existing power plants applications filed prior to August 3, 2023 may be required to respond to these interim information requirements. Applicants who prefer not to continue developing the record of their existing application(s) while the pause period is ongoing may request that the AUC place their application(s) in abeyance until the pause period expires. The regulation does not affect amendment applications, letters of enquiry, time extensions, approval transfers or final project updates for previously approved projects.





CSA Standards available at no cost

CSA Standards are now available through the AER at no cost (previously \$798.00). The CSA Group has developed and maintained an internationally recognized portfolio of petroleum and natural gas standards that address requirements for the design, construction, operation, and maintenance of pipelines, as well as underground storage and liquefied natural gas. These standards also cover subjects such as emergency preparedness and response, damage prevention, well design, process safety management, land use planning, and offshore structures. Visit the [AER website](#) to download CSA technical standards at no cost.

AER update to Directive 60

AER's Directive 60 (Upstream Petroleum Industry Flaring, Incinerating, and Venting) implemented new requirements to reduce the volume of solutions gas routinely flared, incinerated, and vented, while ensuring compliance with Alberta Ambient Air Quality Objectives and Guidelines. The AER recommends, but does not require, the elimination of all routine venting. The overall vent gas limit at a site is to be set at 15.0 10³ m³ of vent gas per month or 9.0 10³ kg of methane per month (this is the total of all routine and non-routine vent gas). Vent gas from pneumatic devices, compressor seals, and glycol dehydrators were excluded from this overall vent gas limit until January 1, 2023.

The new methane requirements apply to AER regulated:

- *Upstream oil, gas and bitumen wells,*
- *Oil and gas facilities,*
- *Gas plants,*
- *Pipeline installations,*
- *Storage facilities, and*
- *Tank terminals (i.e., production and injection wells, batteries, and central processing facilities within thermal in-situ oil sands schemes).*





AER Updates

These new requirements will dramatically increase the amount of information companies will have to track and manage on a monthly and annual basis, to ensure compliance with the limits and emissions reduction requirements.

1. *Pneumatic Devices:*

For pneumatic devices installed after January 1, 2022, vent gas must be controlled from at least 90% of the instruments installed in a calendar year. Level controllers that actuate between 0 and 15 minutes must use a relay to reduce or minimize venting or actuation frequency must be adjusted to greater than 15 minutes. Pneumatic pumps that operate more than 750 hours per calendar year must not emit vent gas. Other pneumatic instruments must have a steady-state vent gas rate less than 0.17m³/hr. Effective January 1, 2023, any level controllers or pneumatic instruments installed before January 1, 2022 must be retrofitted with a low vent alternative (to meet the above parameters).

2. *Compressor Seals:*

Vent gas limits apply to vent gas from seals of a reciprocating or centrifugal compressor that is rated 75 kW or more and is pressurized for at least 450 hours per calendar year. Such compressor seals must be tested at least every 9000 hours that it is pressurized. Effective January 1, 2023, vent gas from reciprocating compressor seals must be limited to less than 0.83 m³/hr/throw. With respect to centrifugal compressor seals installed after January 1, 2022, the vent gas rate must be limited to less than 3.40 m³/hr/compressor. Those installed before January 1, 2022 must limit vent gas to less than 10.20 m³/hr/compressor.



3. *Glycol Dehydrators:*

Glycol dehydrators installed after January 1, 2022 must emit less than 68kg methane/day. Effective January 1, 2023, the average methane emissions rate from the glycol dehydrator fleet (which consists of operating glycol dehydrators installed before January 1, 2022) must be less than 136 kg methane/day in the calendar year.

Aside from these equipment-specific limits, the overall vent gas limit on a site basis is what is applicable to methane emissions. While the AER requires preparation of a Methane Reduction Retrofit Compliance Plan (MRRCP), there are no prescriptive requirements to adopt certain technology designed to reduce and prevent leaks of methane.

In addition to developing a MRRCP, operators must document a Fugitive Emissions Management Program (FEMP) designed to reduce fugitive emissions. The mandatory elements of a FEMP are set out in Appendix 12 of Directive 60 and further direction (including best practices) is provided by Manual 016: How to Develop a Fugitive Emissions Management Program. It should be noted that the AER will consider “innovative and science-based” alternative programs to the FEMP prescribed by Directive 60. These could incorporate the use of unmanned aerial vehicles, vehicle-mounted sensors and continuous monitoring devices.

Under Directive 60, there are some monitoring and reporting requirements. Depending on the facility or equipment type, an operator must conduct fugitive emissions surveys either once or 3 times a year. A survey must look at equipment components; pneumatic devices; tank-top equipment; surface casing vents and the area around the wellbore; equipment used to destroy vent gas; and equipment used to conserve vent gas (using the methodologies specified in Directive 60).

Where fugitive emissions surveys are not required, an annual fugitive emissions screening must be conducted by the operator at all well-sites.

