



Kevin Parsonage, Supervisor, Field Engineering & Technical Investigations B.C. Oil and Gas Commission 2950 Jutland Rd Victoria, B.C., V8T 5K2

30 November 2018

Re: BC Methane regulations

Dear Mr. Parsonage;

The Canadian Gas Association (CGA) and Canadian Energy Pipelines Association (CEPA) would like to thank you and your colleagues for providing our member companies with an update on B.C.'s upcoming regulations respecting the release of methane and the opportunity to provide comments on the draft methane regulations on behalf of our member companies. Given the uncertainty and potential impact of the federal Regulations Respecting Reductions in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector), and the B.C. government's desire to achieve equivalency, we encourage the B.C. Oil and Gas Commission (OGC) to ensure that regulators across jurisdictions work together to ensure viable pathways to compliance exist.

At this time, we understand that the natural gas transmission pipeline operations, which fall under OGC jurisdiction, will be subject to OGC regulations in place of the federal rules in the event that an equivalency agreement is reached. Furthermore, we understand the OGC is proposing that its methane requirements will apply to "facility permit holders" including "compressor stations", which would include OGC permitted compressor stations in transmission service. Currently, FortisBC and Pacific Northern Gas are the two transmission operators anticipated to be subject to the OGC methane regulations.

Our member companies are interested in continued discussions with the OGC regarding the potential for achieving the province's methane reduction goals with performance rather than prescriptive requirements, where a performance-based approach offers a more efficient and cost-effective means to achieving reduction performance. In order to best achieve this mutually beneficial outcome, CEPA and CGA have provided the appended recommendations and comments regarding the following:

- Proposed revisions to the consultation draft regulations (for which OGC has requested comments by November 30).
- · Recommendation for consideration in the planned OGC guidance document,

CEPA and CGA look forward to continued participation in the OGC's process for developing the regulations and guidance, including the upcoming discussions on methane related guidance documents tentatively scheduled for December 13, 2018.





Please do not hesitate to contact the undersigned if you have any questions or require clarification regarding any of the comments made above.

Sincerely,

Paul Cheliak Vice President

Canadian Gas Association

Kai Horsfield Manager, Regulatory and Policy Canadian Energy Pipeline Association

Cc: Marie Johnson, Specialist, Air Emissions

Sean Curry, Vice President, Operational Policy & Environment





Attachment 1

Recommended edits to the OGC November 13, 2018 consultation draft (draft amendments to the *Drilling and Production Regulation, B.C. Reg. 282/2010*):

Proposed edits are shown in bold text and the rationale for each proposed edit is provided in italicised text.

Leak detection and repay

41.1 (1) In this section:

- "comprehensive survey" means a survey to detect leaks using one or more of the following methods:
- (a) an organic vapour analyzer that is
 - (i) capable of detecting natural gas concentrations of 500 parts per million, and
 - (ii) operated in accordance with United States Environmental Protection Agency Method 21 Determination of Volatile Organic Compound Leaks;
- (b) a gas imaging camera that is
 - (i) capable under laboratory conditions of detecting, at a distance of 6 metres, pure methane emitted at a rate of 1 gram per hour, and
 - (ii) operated by individuals who are competent in the operation of the camera;
- (c) other means that are deemed acceptable by the OGC "

Rationale: Provide opportunity for the development and implementation of technological advancement in the field of leak detection.

- "41.1 (5) If a leak is detected at a facility during a survey required under this section, the facility permit holder who operates the facility must repair the leak
 - (a) within 30 days of detection,
 - (b) as soon as possible should a replacement part or service not be available within 30 days of detection, or
 - (c) if the repair requires the facility to be shut down, at the next turnaround for the facility."

Rationale: Proposed edit is intended to provide flexibility to the operator to comply with the intention of regulations should replacement parts or repair services not be available during the 30 day repair period. The availability of replacement parts or unforeseen circumstances on the availability and timing of third party service providers may be outside of the operators control.

The proposed guidance document from the OGC should outline acceptable documentation and expectations for the operator to document and support the timing of repairs should the leak repair not be completed within 30 days of detection.

Compressors

"52.04 (2) Subject to subsections (3) to (5), a facility permit holder who operates a facility that uses a type A compressor must ensure that the emissions of natural gas from the compressor **wet seals or rod packing** are

- (a) routed to hydrocarbon gas conservation equipment, or
- (b) flared in accordance with sections 43 to 45."

Rationale: Proposed edit to confirm that compressor emissions being referred to are from seals or rod packing. The additional proposal to limit this requirement to "wet" seals is intended to address our





member company concerns that there may be potential equipment limitations to meeting the OGC requirements for dry gas seal centrifugal units used in natural gas transmission service.

Currently there are 10 dry gas seal centrifugal compressor units installed at OGC regulated transmission compressor stations in B.C., of which, 3 to 4 are expected to operate under 450 hours per year.

OGC is proposing seal gas venting limits for existing and new centrifugal units. In some instances, notably for larger MW rated dry gas seal units, it may not be possible to meet the proposed thresholds based on the unit's specified (manufacturer) seal gas vent rates and/or normal operation of properly maintained units. Dry gas seal rates are proportional to operating pressures and shaft diameter, which means that the dry gas seal units in transmission service (larger diameters, higher pressures) will generally have higher dry gas seal venting rates. Additionally, current technologies to recover dry gas seal vented gas are still evolving and technologies to recover or flare gas from dry gas may require field testing to ensure

Safe and reliable operation.

Dry gas seal units are the industry standard for new centrifugal compressors used in transmission service and the U.S. EPA GasStar program recognizes dry gas seals as the lower methane emissions alternative over wet seals for new or upgraded centrifugal compressors. We continue to assess the OGC requirements in relation to dry gas seal units and are also in agreement that dry gas seal data should be collected as per 52.04 (7) (c).

"52.04 (7) (c) for each calendar year, the volume of natural gas emitted from the compressor **seals or rod packing** during a period of 15 minutes that is representative of the normal operating conditions of the compressor"

Rationale: Proposed edit for clarity.

Pneumatic devices

"52.05 (1) "pneumatic device" does not include a pneumatic pump or a pneumatic compressor starter or **pneumatic assist valve actuator."**

Rationale:

We understand the intended focus of this section to be pneumatic controller equipment where retrofit to low bleed or instrument air alternatives are feasible. Based on our understanding that pneumatic assist valve actuators are not the intended focus of this regulatory requirement, for clarity, we ask that these devices be identified as not included.

Pneumatically assisted valve actuators are typically used to actuate larger valves where it would be difficult to operate the valve manually. For transmission system operations, they can be installed on valves used to reconfigure yards, and to isolate stations or sections of transmission pipelines for maintenance, safety and/or operating reasons. Based on 2017 data¹, FortisBC and Pacific Natural Gas

¹ Based on data collected for the Canadian Energy Partnership for Environmental Innovation (CEPEI) annual inventory of GHG emissions from Canadian natural gas transmission and distribution companies.





(PNG) estimate that GHG emissions from these devices on their entire transmission pipeline system operations (total for both companies) was less than 1000 t CO_2e per year.

Some initial suggestions for planned OGC Guidance document

Our member companies look forward to further opportunity to consult on the planned OGC Guidance document. Some initial suggestions include:

- LDAR, clause 41.1 (2) frequency of comprehensive surveys should be prorated based on the run times of a facility operation in a calendar year. Should a facility not operate for a specified time in a year, the frequency of survey should be adjusted accordingly.
- LDAR, clause 41.1 (7) (b) (i)- allow the use of OGI equipment to measure leak rates.
- Tanks- clarify that this applies to vented emissions, as opposed to fugitive leakage from tank hatches, and provide guidance on acceptable quantification (e.g., engineering estimates).
 Address record keeping required for transmission storage tanks (not production-related and low to no vent volumes)
- Compressors- provide guidance that permits the "450 hours per year" threshold for transmission
 compressors to be calculated based on prior years' data (e.g., preceding calendar year, average
 of preceding three years, etc.). Peaking units are run intermittently to meet customer load, run
 times can vary from year to year, and run times for the current calendar year cannot be forecast
 with certainty.
- Pneumatic pumps- provide guidance on record keeping requirements for odourant pumps that operate intermittently on a year-round basis.
- Provide guidance on inclusion of OGC permitted compressor stations on transmission pipelines.