

November 30, 2018

Sean Curry  
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British Columbia Oil and Gas Commission  
PO Box 9331 Stn Prov Govt  
Victoria, British Columbia V8W 9N3

via e-mail to [Sean.Curry@bcogc.ca](mailto:Sean.Curry@bcogc.ca)

Dear Mr. Curry:

**Re: BC Consultation Draft Methane Regulations**

The Canadian Association of Petroleum Producers (CAPP) and its members appreciate the opportunity to provide comments on the draft amendments to the *Drilling and Production Regulations*. These amendments are intended to achieve methane emissions reductions from the upstream oil and natural gas sector, consistent with the Government of British Columbia's policy commitment and are effectively the Draft Methane Regulations.

CAPP members are committed to meeting the Government of BC's methane emissions reduction target of 45% by 2025, relative to 2014 levels. We believe that the proposed regulation will accomplish this goal in a way which is made for BC while being equivalent to the outcomes of the federal regulation.<sup>1</sup> The Draft Methane Regulations account for the unique nature of BC operations with appropriate and achievable limits on tank venting, centrifugal compressors, glycol dehydrators, and reciprocating compressors. While there is still room for refinement, this approach comes close to striking the right balance between the cost to our industry and actions necessary to meet the target.

We believe that the limits applied in the Oil and Gas Commission's (OGC) Draft Methane Regulations generally recognize the typically high cost of retrofitting equipment and appropriately apply more stringent standards to new builds. The limits also reflect unique operations and equipment types by setting BC specific emissions limits that will achieve the same objectives as the federal regulation, without necessarily setting the same standards. The approach also rightly focuses on areas of increasing production in recognition that mature and less viable assets represent a small and declining proportion of overall emissions. Furthermore, we strongly support the use of a fleet average approach to emissions limits to meet the provincial target while providing the necessary flexibility to operators with diverse operations to implement cost-effective methane emissions reduction measures.

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<sup>1</sup> *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)* Canada Gazette Part II Volume 152 (2018).

### ***Leak Detection and Repair (LDAR) and Reviewing Regulatory Effectiveness***

In regard to LDAR, we remain strongly supportive of a risk-based, adaptive approach. Following these principles, LDAR frequency should be highest for facilities with the highest equipment counts and/or the highest potential for leaks. We acknowledge that the LDAR requirements as set out in the Draft Methane Regulations are for the purpose of defining appropriate methane emissions reduction for fugitive emissions management in BC. At the same time, alternative LDAR technologies and practices are currently being assessed and approved in other jurisdictions. For this reason, we encourage the OGC to align its regulatory language with the federal regulation<sup>2</sup> or draft Alberta directive<sup>3</sup> which both enable the use of alternative LDAR programs.

Alternative LDAR is a rapidly developing field and other jurisdictions, such as Colorado, have already approved new alternative technologies as equivalent to EPA Method 21 and the use of OGI cameras.<sup>4</sup> The BC methane regulations should provide an opportunity for the use of commercially available, and potentially cost-saving, technology if it has been approved for use in another jurisdiction. Importantly, this approach is fundamentally aligned with the Minister of Jobs, Trade, and Technology's mandate to "establish BC as the preferred location for new and emerging technologies".<sup>5</sup>

The encouragement of science-based alternatives to achieve comparable emissions reduction, drives continued industry innovation for new and more cost-effective approaches. We believe that alternative LDAR programs will help enable a prosperous upstream oil and natural gas industry.

Important research on LDAR is currently underway in Alberta and BC and under the Draft Methane Regulation, the BC OGC will collect substantial operator information through regular survey reporting. As this data builds to offer a more robust view of leak frequency and leak size, we believe there will be an opportunity for the OGC to conduct a review of the proposed LDAR regulatory requirements as part of a comprehensive review of the province's approach to methane emissions reductions. We suggest a review similar to the one proposed in Alberta,<sup>6</sup> which would look at the efficiency and effectiveness of the regulation in achieving the emission reduction goal and would consider incorporating new practices, processes, and control technologies into the regulation.

We request that the OGC provide a clear written commitment to complete this type of review in 2022. By 2022 substantial Canadian research on LDAR will have been completed and the OGC will have received over two years of LDAR reported data. A risk-based approach to LDAR must evolve as

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<sup>2</sup> *Ibid* at Sections 29(1)(b) and 35(1)

<sup>3</sup> *Draft Directive 060, Upstream Petroleum Industry Flaring, Incinerating and Venting* at 8.10.6

<sup>4</sup> See *Alternative AIMM approval letters* at < <https://www.colorado.gov/pacific/cdphe/AIMM> >

<sup>5</sup> See *First innovation commissioner to champion BC's tech sector*, at < [https://archive.news.gov.bc.ca/releases/news\\_releases\\_2017-2021/2018JTT0004-000146.htm](https://archive.news.gov.bc.ca/releases/news_releases_2017-2021/2018JTT0004-000146.htm) >

<sup>6</sup> *Ibid* at 1.8

our understanding of the frequency, size, and associated risk of leaks also evolves. The cost effectiveness of LDAR as a means of methane emissions reductions is poorly understood, but as that becomes clearer, there will be an increased need to refine regulations and efficiently target provincial methane emissions.

### ***Pneumatics at Large Compressor Stations***

Following OGC's approach to cost effective methane emissions reductions and regulation, we also request that OGC reconsider the requirement under Section 52.05(3) that mandates that all large compressor stations have zero emission pneumatic devices by 2022. This requirement, to retrofit existing facilities with instrument air, will be a significant cost to impacted operators and contradicts the general approach taken in the Draft Methane Regulations of focusing on new builds rather than existing infrastructure. In place of this requirement we suggest a mandated switch to low-bleed pneumatics which will provide a substantial cost savings to operators while still achieving significant emissions reductions.

Overall, CAPP is supportive of BC's tailored approach to methane emissions reductions. We believe it will hit the methane emissions reduction targets set by both the federal government and the province. CAPP members remain committed to achieving a 45% reduction in methane emissions by 2025 in a manner that continually pursues the lowest cost abatement opportunities. Appended to this letter are more detailed comments regarding the Draft Methane Regulations, which includes further suggestions to increase clarity, ensure consistency, and facilitate implementation. If you have any questions regarding the above or appended table, please contact Don McCrimmon at (403) 267-1174 and [don.mccrimmon@capp.ca](mailto:don.mccrimmon@capp.ca).

Sincerely,



Brad Herald  
Vice President, Western Canadian Operations

## Appendix A. Detailed CAPP Comments - BC Consultation Draft Methane Regulations

Section(s)	Regulatory language	Suggestion	Rationale
Sections 41.1, 52(1), 52(2), 52.03(3), 52.04(6)(a), 52.04(7), 52.05(5), 52.06, 52.08(3), 52.09, 52.10	The Draft Methane Regulation does not specify the timing of implementation for these sections.	Specify, either in each section or for the whole regulation that regulatory changes do not come into effect until a specific and appropriate date.	In the absence of a “coming into effect date” any operator could be found out of compliance with these sections at the time that the regulation is amended. Clear and consistent language on timing will facilitate smooth regulatory implementation.
52.11	No coming into effect date is given for limiting emissions from surface casing vent flows.	Specify that this section does not come into effect until 18 months after the regulation is formally amended.	As written, any operator with a well with emissions above the limit could be in non-compliance at the time the regulation is amended. An extended deadline beyond January 1, 2020 is appropriate to address surface casing vent flows because they may require winter access.
41.1(b)(i)	Specific requirements for gas imaging cameras.	Move the standard for cameras into guidance and carefully review the appropriate standard in consultation with camera manufacturers, third-party testers, and operators.	The proposed camera standard is very specific and does not appear to be guaranteed by leading manufacturers. Furthermore, new research states that the proposed standard may be beyond the capability of current technology and asserts that “it is not clear if a higher sensitivity would lead to increased practical emission mitigation.” <sup>7</sup>
41.1(7)(b)(i)	Any leaks that are detected and, for each leak detected, (i) “the rate of the leak”.	Remove the requirement to measure the rate of the leak.	This provision reflects an additional cost for data collection in order to identify large leaks. We expect that these types of questions are more appropriately addressed through the BC OGC-led

<sup>7</sup> Ravikumar, A., *et al.*, “‘Good versus Good Enough?’ Empirical Tests of Methane Leak Detection Sensitivity of a Commercial Infrared Camera”, *Environmental Science and Technology* (2018) 52, p. 2368-2374 at 2373.

			Methane Emissions Research Consortium.
52.03	Tank vent limits are referred to in the draft language as “emissions of natural gas from tanks”.	Specify that “emissions of natural gas from tanks” refers only to vents and is distinct from leaks.	Clear guidance here will avoid unnecessary confusion and ensure that limits are appropriately only to vents.
52.12(a)	The draft requires the measurement of “actual” volumes of emissions from all sources.	Allow for engineering estimates where measurement is impractical.	Many emissions cannot be measured, or the amount of emissions is very small and does not affect overall attainment of the regulatory intent. These should be estimated.