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Jurisdictional scan of methane regulations

Evaluating methane regulations across major gas producing jurisdictions in North America

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Table 1: Methane regulations in top 10 gas producing states and provinces

Jurisdiction	Gas produced (million ft ³ - 2014)	Description of state / provincial methane regulations	Description of federal methane regulations
Texas	7,146,549	No comprehensive state level methane regulation in place	Environmental Protection Agency (EPA) methane regulation and Bureau of Land Management (BLM) methane regulation are in the process of being finalized in 2016
Pennsylvania	4,174,655	Governor Wolf and PA DEP Secretary John Quigley publically committed to regulate new and existing sources of methane across Pennsylvania. They announced a two-part package: (1) two general permits for new sources and compressor stations, and (2) a regulatory package that will apply to existing sources. Once finalized, PA could lead the nation by requiring quarterly LDAR at all facilities and by regulating emissions from liquids unloading and pigging operations.	EPA methane regulations and BLM methane regulation are in the process of being finalized in 2016
Alberta	3,720,000	In its 2015 announced Climate Leadership Plan, the Alberta government committed to decreasing methane emissions by 45% by 2025. This is to be achieved by a voluntary Joint Initiative for the first 5 years, followed by mandatory performance standards that become effective in 2020 and will act as a backstop.	No comprehensive federal methane regulation in place
Oklahoma	2,140,250	No comprehensive state level methane regulation in place	EPA methane regulation and BLM methane regulation are in the process of being finalized in 2016
Louisiana	1,942,642	No comprehensive state level methane regulation in place	EPA methane regulation and BLM methane regulation are in the process of being finalized in 2016
Wyoming	1,714,292	Wyoming has put in place nationally leading air emissions requirements (VOC focused but with large methane co-benefits) in portions of the state with poor	EPA methane regulation and BLM methane regulation are in the process of

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		air quality and is working toward expanding these requirements statewide.	being finalized in 2016
British Columbia	1,667,358	No comprehensive provincial level methane regulation in place	No comprehensive federal methane regulation in place
Colorado	1,546,193	Colorado became the first state in the U.S. to directly regulate methane emissions from its oil and gas industry in 2014. Additional information can be found at: https://www.colorado.gov/pacific/sites/default/files/AP_Regulation-3-6-7-FactSheet.pdf	EPA methane regulation and BLM methane regulation are in the process of being finalized in 2016
Arkansas	1,123,096	No comprehensive state level methane regulation in place	EPA methane regulation and BLM methane regulation are in the process of being finalized in 2016
New Mexico	1,091,914	No comprehensive state level methane regulation in place	EPA methane regulation and BLM methane regulation are in the process of being finalized in 2016

Summary of US Environmental Protection Agency (EPA) methane regulation:

- In early 2015, the Obama Administration announced a goal to reduce US oil and gas methane emissions 40-45% below 2012 levels by 2025. Multiple regulations have been proposed to help meet that goal including EPA’s recent proposal to directly regulate methane from new and modified oil and gas sources. That proposal includes standards for methane and VOC for certain new, modified and reconstructed equipment, processes and activities across the oil and natural gas source category, including: hydraulically fractured oil well completions, pneumatic pumps, fugitive emissions from well sites and compressor stations, and seal emissions from reciprocating and centrifugal compressors used in natural gas transmission and storage. In addition, EPA has proposed “control techniques guidelines” (CTGs) that will have the effect of requiring states to limit emissions from existing oil and gas facilities that emit VOCs and are located in areas that are out of compliance with national ground-level ozone standards. The CTGs closely parallel EPA’s proposed standards for methane, but – because they address VOC emissions – do not apply to facilities downstream of the processing segment. Under the Administration’s methane announcement, EPA is expected to finalize both the CTGs and the methane standards in 2016.

Summary of US Bureau of Land Management (BLM) methane regulation:

- The BLM also recently proposed regulations to limit flaring, venting, and fugitive emissions from new and existing sources on federal and tribal lands, including some sources – such as venting of natural gas at co-producing wells, and during liquids unloading operations – that are not covered by EPA’s proposed standards. BLM is expected to finalize these standards in 2016.

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Sources:

- Alberta Energy, Government of Alberta. *Natural Gas Facts*. Retrieved from: <http://www.energy.alberta.ca/NaturalGas/726.asp>
- Alberta Government. *Climate Leadership Plan – Reducing methane emissions*. Retrieved from: <http://www.alberta.ca/climate-methane-emissions.cfm>
- BC Government. *Natural Gas & Oil Statistics*. Retrieved from: <http://www2.gov.bc.ca/gov/content/industry/natural-gas-oil/statistics>
- Drew Nelson, Environmental Defense Fund. E-mail correspondence.
- U.S. Energy Information Administration. *Natural Gas Gross Withdrawals and Production*. Retrieved from: http://www.eia.gov/dnav/ng/ng_prod_sum_a_EPGO_FPD_mmcf_a.htm