

Alt-FEMP Executive Summary

Company	Program start	Program end	# of sites
Pine Cliff Energy Ltd.	July 12, 2023	December 31, 2024	214

Once an alternative fugitive emissions management program is approved, AER staff draft this executive summary. This is a summary only, published to help interested stakeholders understand what has been approved. These summaries are found on our website, www.aer.ca > Protecting What Matters > Holding Industry Accountable > Industry Performance > Methane Performance > [Alternative Fugitive Emission Management Program Approvals](#). For additional information on these approvals, contact methane.reduction@aer.ca.

Summary

Pine Cliff Energy Ltd. (Pine Cliff) is implementing a pilot alternative fugitive emissions management program (alt-FEMP). Pine Cliff is a conventional upstream oil and gas producer with 239 facilities in two areas in Alberta (218 in the Greater Three Hills region and 21 in the Medicine Hat region).

A representative control region encompassing 25 facilities (11% of total facilities) was omitted from the alt-FEMP. In the control region, Pine Cliff will conduct optical gas imaging (OGI) surveys in accordance with *Directive 060*, providing data that will be compared with the performance data from the selected alternative program.

The alt-FEMP will use two methods: unmanned aerial vehicles (UAVs) equipped with OGI cameras and close-range follow-up quantitative optical gas imaging (QOGI) surveys. The UAV-OGI surveys will be performed at the frequency required by *Directive 060*, and the close-range follow-up surveys will be done on any detected leaks using regulatory-approved equipment and methods. The pilot will be conducted over the 2023 and 2024 compliance years.

The two-year alt-FEMP methodology is as follows:

Step 1	Screen	Conduct site-level UAV-OGI screening at all 239 Pine Cliff sites at the scheduled frequency as per table 4 of <i>Directive 060</i> . The screening technologies will capture both vented and fugitive emissions. Screening campaigns will occur more than three months apart.
Step 2	Survey	All emissions will be followed up on with an on the ground OGI survey. Any fugitive emissions will be identified and tagged.
Step 3	Repair	All identified and tagged fugitive emissions will be repaired according to <i>Directive 060</i> timelines.