Pneumatic Pump Alternatives for Cold Weather

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The key question that this proposal will solve is the applicability of non venting solutions to pneumatic pump emissions in upstream oil and gas in Northern BC/Alberta operations. Currently the most common alternative is a "Solar Chemical Pump" — which relies upon solar panels and battery bank to power a motor to inject chemicals. The reliance upon solar power has issues at northern latitudes due to lack of sunlight as well as areas of high tree cover, which further reduces available sunlight, can potentially compromise the operations of solar systems.

Policy Issue

Improving air emissions inventories through improved emissions factors and reporting methodologies.

Knowledge Gap

Use & Environmental Impact of Amines (e.g., CCS, sour gas processing).

 a review of available emission factors to determine rates of release of amines (identify sector sources, are emission factors available, what is the quality of the emission factors, consider any levels of uncertainty and gaps);

- a review of available human health and environmental studies on amines and their degradation products;
- a review of available studies on the degradation rates, persistence, and fate of amines and their products in the environment (including gap identification);
- an investigation of what AAAQO exist for amines and their degradation products in other jurisdictions.

Also, any gaps identified through this work could form the basis of future PTAC studies.

2016 Final Report

Best Practices