

SCEK Project Profile

Project Name:	Sampling of Pneumatic Devices at Oil and Gas Sites and Development of Emission Factors for those Devices
Project Number:	EI-2014-03
Proponent:	The Prasino Group
SCEK Funding Envelope:	Environmental Impacts (Greenhouse Gas)
Timeframe:	June 28, 2013 to November 30, 2013

Project objectives

The objective of this project is to sample pneumatic devices at oil and gas sites and to develop emission factors for these devices in support of compliance reporting in British Columbia.

Project background

An agreement between the Canadian Association of Petroleum Producers (CAPP) and the Ministry of Environment’s Climate Action Secretariat (CAS) would allow for an alternative method for monitoring and reporting Greenhouse Gas (GHG) emissions from pneumatic instrumentation and pumps in BC. This method would be based on sampling of a statistically-valid field sample of pneumatic devices and pumps to determine emission factors that can be applied to industry’s fleet for the purpose of complying with reporting requirements.

In support of this effort The Prasino Group, through its subsidiary Cap-Op Energy, will use its existing 2,000+ samples gathered from devices across Western Canada to seed the field work that is required to generate a statistically relevant sample across the relevant industry devices/models. As such, this proposal provides a path forward for the design, coordination, analysis and reporting associated with establishing appropriate emission factors by device type.

Given the number of samples required to ensure a statistically relevant sample size and the need for 80% of the samples to be in BC, this proposal is provided with both a low (1,200 devices) and high (1,400 devices) estimate of sampling requirements, as may be needed.

Project approach

The project will involve the following three phases:

1. Project design and coordination—designing the sampling program and analytics methodology that meet the project objectives, and coordinating with industry for gathering samples.
2. Field sampling—gathering the required field data and completing the initial analytics to ensure that sample sizes are sufficient for defining emission factors for each device type.
3. Analysis, Reporting and Workshop—completing the analysis and reporting required to establish the emission factors for each of the device types and sharing the results with the project stakeholders.

Project deliverables

The major deliverables from this project include the following:

1. Sampling Program Report—describing the results of Phase 1 and include the design of the sampling program and analytics methodology that meets the objectives of CAPP, CAS and WCI. The Sampling Program Report must be accepted by the Project Steering Committee prior to commencement of field work.
2. Field Sampling Report describing the results of the sampling—the field data collected and the analytics to ensure the sample sizes are sufficient for defining emission factors for each device type.
3. Emission Factors Workshop—reviewing the project findings with the Project Steering Committee, and guests invited by the Project Steering Committee.
4. Final Emission Factors Report—describing the research analyses and listing the emission factors for each device type.