

# Submission Checklist for Directive 060: Alternative FEMP Proposals

**December 2019**

Section 8.10.6 of *Directive 060* states that we will consider innovative and science-based alternatives to the fugitive emissions management program prescribed in this directive. These alternative program proposals must be submitted to the AER for review and approved before deviating from the prescribed requirements.

We cannot begin the proposal review process without the following information. This is the minimum information to be included in a proposal for an alternative fugitive emission management program under *Directive 060*. It is divided into three sections: general information that should be provided for all programs followed by more specific information required for either a pilot or full-scale program. Identify any sensitive or proprietary information.

## All Programs

### General Alternative Program Details

- submitter contact information and identification of all participants
- proposal type (pilot or full scale)
- the area of program coverage; provide a map showing the program area boundaries
- list of all facilities and wells included in the program, along with associated facility IDs

### Technology Details

- List technologies selected, describe their commercial availability and technical maturity, and list how often each technology will be used (i.e., daily, weekly, monthly, etc.).
- Summarize the laboratory, controlled, and field-level testing completed to date for each alternative technology to be used. Include any available performance data, such as probability of detection curves.
- Describe any performance limitations of the selected technologies (e.g., sensitivities to cloud cover, precipitation, snow cover, wind speed, extreme cold).
- Describe work practices or methods that will be used to mitigate any performance limitations. Examples could include limiting implementation to certain temperature ranges.
- Describe how individuals using technologies are trained to ensure their competence.

### Performance Data

- Summarize the data that will be available once the program is implemented; submitters are to validate emissions reductions, operational viability, cost reductions, and technology performance.
- List data collection methodologies and tools that will be used.
- Describe how sources of fugitive emissions will be tracked for repair.

### Baseline Fugitive Emissions Assessment

- Provide calculations and results of the baseline fugitive emission estimate. This should be based on facility types and counts and best available emission factor data. *Manual 015* provides guidance on fugitive emission volume estimations.

### Fugitive Emissions Reduction Assessment (Standard Method)

- Explain the volume of reduction that would be achieved by completing surveys with a portable analyzer or optical gas imaging camera used in accordance with table 4 of *Directive 060*, using the following reduction % estimates:
  - Annual Surveys (once a year) – 40% emission reduction
  - Triannual Surveys (three times a year) – 70% emission reduction

Alternative emission reduction estimates may be used in the assessment, but they should be justified with supporting data that are collected or verified by a third party.

- If applicable, include details on any additional control measures being incorporated into the proposal. Examples may include the following:
  - continuous or regional monitors that are being used to verify/validate emission reductions
  - additional preventative maintenance practices that will be implemented to provide greater confidence in ongoing detection and emission reduction

### Pilot Program

We recognize that some of information needed to complete a comprehensive program performance evaluation may not be available at time of proposal. In these cases, the proposal should include detailed information on how performance data will be collected during the pilot to determine the emission reductions achieved during implementation of the pilot.

- Identify unavailable data preventing a full program performance evaluation.

- Describe why the information is not currently available and how it will be collected during the pilot program.
- Provide an assessment that demonstrates the pilot is expected to achieve comparable reductions as the fugitive requirements in section 8.10 of *Directive 060*.

### **Full Scale Program**

Demonstrate that the proposed alternative program is capable of achieving emission reductions that are comparable to the emission reductions achieved by the fugitive emission requirements in section 8.10 of *Directive 060*. The evaluation could be completed using the following:

- Excel, Access, or other database software capable of doing calculations;
- computer simulations; or
- other methods of estimation based on sound science and engineering.

We recommend using a comprehensive model to support full-scale program proposals.