

 Air Quality Improvement Planning Value Stream	EI Report Supporting Documentation Guidance	
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Applicability	ADEQ air permit holders using SLEIS (or CAERS) to submit annual EI reports	

1.0 PURPOSE, SCOPE, AND APPLICABILITY

The purpose of this guidance document is to help point source facilities provide appropriate supporting documentation for annual emission inventory (EI) reports using the State and Local EI System (SLEIS) or Combined Air Emissions Reporting System (CAERS). This guidance applies to all emissions estimate calculation methods in SLEIS and CAERS *other than* Continuous Emissions Monitoring Systems (CEMS) readings and published, constant EPA emissions factors (EF). For all other calculation methods, ADEQ may require documentation. If ADEQ staff cannot determine how the inventory preparer arrived at a particular estimate, ADEQ may reach out to the facility to obtain the missing details. Thus, thorough use of this guidance before submitting an EI report can reduce the number of questions that reporters receive from ADEQ each year, if any.

Applicable Calculation Methods (both pre- and post-control)

- Manufacturer's specifications/vendor EF/trade group EF
- Stack test EFs
- Site-specific EFs
- Other non-EPA EFs
- Engineering judgement/material balance
- EPA speciation profile
- Non-default parametric EPA EFs

This document assumes the user has previous knowledge of preparing and/or submitting SLEIS or CAERS reports. Therefore, those processes are not addressed generally.

2.0 PROCEDURES

This document is organized by calculation method. Each method has specific documentation needs. Documentation may be submitted as report attachments, comments within the report, or both.

Some facilities will have already submitted the relevant documentation in previous years' reports. In that case, if the old documentation is still current (the calculation methodology and any non-default input values have not changed), then the facility may clearly indicate when and where they last provided that documentation, rather than providing a new copy each year. The reference should be specific enough to facilitate ADEQ staff retrieval of the documentation from our records.

Please note that any information provided in SLEIS or CAERS becomes a matter of public record, including attachments and comments. If the needed documentation should be held confidential, it must be submitted separately and clearly marked as confidential.

2.1 Manufacturer's specifications/vendor EF/trade group EF

The facility should share the manufacturer, vendor, or trade group document(s) listing the EF and showing why it is sound as applied. This may include engine certification reports, specification or

substance sheets, sales materials, or published reference materials. If the facility lacks the rights to copy the material for public distribution, please submit them as confidential.

2.2 Stack test EF

The facility should share the stack test report(s) which show the results used to derive the applicable EF(s) and their soundness (e.g., describing operational details during the test and showing that the test passed any applicable validity requirements). If the units of measure shown in the test results do not match those of the EF used in the EI report, please provide the conversion details.

2.3 Site-specific EF

For *each* different type of site-specific EF used, the facility should provide a sample calculation showing how the EF was derived. The input values in the corresponding calculations for any other EFs following the same approach should also be provided. Ultimately, ADEQ staff should be able to reproduce the derivation of all site-specific EFs.

2.4 Other non-EPA EF

If modeling software like TANKS or LandGEM was used to develop the EF, the facility should provide the complete model outputs and, if possible, inputs. If the EF was derived from a publication, laboratory report, technical support document (e.g. for a permit), or similar, the facility should provide that primary source.

2.5 Engineering judgement/material balance

As in section 2.3 above, the facility should provide at least one sample calculation for each type of emissions estimation approach. Unlike section 2.3, the facility need not show all input values for other instances of the calculations; there is no expectation that ADEQ will be able to reproduce every estimate. However, the facility may already have a calculation workbook which contains all of the applicable details, in which case that workbook would be ideal documentation if the facility is willing to share it with ADEQ and/or the public.

2.6 USEPA speciation profile

For any values the facility has estimated using the EPA's particulate matter (PM) augmentation tool or SPECIATE tool, the relevant inputs and outputs should be provided. If the facility did not run the EPA tool directly, but instead received the speciation details from ADEQ staff in a prior reporting year, the facility should indicate that, including the first year in which the speciation was included.

2.7 Non-default parametric EPA EFs

If a parametric equation from AP-42 is used to develop an EF using facility-specific values (for example sulfur content or natural gas heating value) instead of the default parameter values provided in the AP-42 (if any), the facility should indicate what value was used for each parameter, along with some explanation of those choices. As in section 2.5 above, a single sample for each parametric equation will suffice, though the facility is welcome to provide more.