



Air Quality Permit Application Emission Inventory Requirements

Applicants must submit emission inventories that satisfy all applicable rules. If the applicant does not provide the necessary emission inventories which are sufficiently documented the application will be determined incomplete or denied. Prior to preparing any emission inventory, or any application materials, it is strongly recommended that the applicant request a meeting or teleconference with DEQ to discuss the applicant’s responsibilities. Applicants should contact DEQ’s Air Quality Permit Hotline (1-877-573-7648) to schedule a meeting to discuss application requirements. Applicants are also encouraged to call the hotline to ask question as they prepare the application.

What Emission Inventories Must be Submitted?

The type of inventories that must be submitted is dependent on the type of project that is being proposed and on the type of permit that is required (i.e. new facility, modified facility, etc.). The following table lists the types of emissions inventories that need to be submitted for each application type. **DEQ has developed application templates for each type of emission inventory listed in the table. Applicants must use the templates, document all calculations, and follow all instructions.**

All emissions inventories must be submitted with thorough documentation. The emission inventories will be subjected to technical review. Prepare your application with sufficient documentation so that the public and DEQ can verify the validity of the emission estimates. Follow the instructions provided on all forms; **do not proceed until you have read the instructions provided on all forms.**

Types of Emission Inventories that Must be Submitted

Application Type	Type of Emission Inventory That Must be Submitted (Follow the Links)					
	Facility Wide PTE Inventory	Proposed Modification at a Minor Facility Inventory	Proposed Modification at a Major Facility Inventory (Non-PSD)	Ambient Impact Assessment Inventory	Toxic Air Pollutant Inventory	Hazardous Air Pollutant Inventory
New Facility Construction (non-PSD)	X			X	X	X
Proposed Modification to an Existing Minor Facility	X ¹	X		X	X	X
Proposed Minor Modification to an Existing Major Facility	X ¹		X	X	X	X
Tier I Operating Permit (New & Renewal)	X					X
Tier II Operating Permit (New & Renewal)	X			X		X

1) Under certain circumstances an existing facility wide PTE inventory may not need to be submitted. Contact DEQ to determine if one must be submitted, under all circumstances the applicant must prove what the existing facility classification is.

Emission Inventory Instructions:

1. Use the same emission unit name throughout the application (i.e. in air pollution control equipment forms and for modeling purposes).
2. On the application, **show in detail all calculations** used to develop the PTE summary and include:
 - Electronic copies of any spreadsheets used to estimate emissions. If a spreadsheet is used submit an electronic copy of the spreadsheet (i.e. Excel File).
 - Documentation of all calculations conducted by hand (i.e. show all calculations).
 - Clear statements on all assumptions relied upon in estimating emissions.
 - Documentation of the emissions factors used to estimate emissions. If the emissions factor documentation is readily available to DEQ, such as an EPA AP-42 emissions factor, a simple reference to the emissions factor suffices. If the emissions factor documentation is not readily available to DEQ, the applicant must submit the documentation with the application; ask DEQ if you are uncertain. **Applications without sufficient documentation are incomplete.** Documentation may consist of manufacturer guarantees, research conducted by trade organizations, published emission factors, and source test results. **If there are multiple factors for a given operation, note why the factor used is the most representative.**
 - Copies of manufacturer guarantees upon which emission inventories are based.
 - The best available emission information (see [DEQ's Guidance on Emission Data Hierarchy](#)).
 - If source tests are used as the basis for emissions estimates the source test report must be submitted. If the source test report is on file with DEQ provide the date of the source test was submitted along with the name of the facility and the emission unit that was tested. Source data from similar emissions units may be considered reliable provided it is clearly described why the sources are similar. Similar sources are those that the applicant has shown serve a similar function, use similar raw materials, and have similar processing rates.

Compliance Buffer Component

Air quality permits often include emission rate limits equivalent to estimated emissions included in the application; these are the rates which the applicant has shown demonstrate compliance. If the source exceeds the permitted emission rate limit it is operating in violation of its permit. In estimating emissions that are used to demonstrate compliance it may be wise for the facility to request a compliance buffer component of up to 120% of what would have otherwise been estimated (i.e. increase emissions by a factor of 1.2).

If a compliance buffer component is requested all compliance demonstrations provided by the applicant (i.e. modeling, toxic air pollutant assessments, etc.) must include the buffer.