



## A GUIDE TO COMPLETING YOUR ANNUAL AIR POLLUTION EMISSIONS REPORT

Each year, the Puget Sound Clean Air Agency (Agency) requires facilities to report the type and quantity of airborne pollutants emitted during the previous calendar year. We've developed this guide to help you complete your emission report. If you have additional questions, please contact the permit engineer for your facility (identified in the email sent to your facility).

### WHO HAS TO FILE AN EMISSION REPORT?

Emission reports are required from each facility whose **total emissions of air pollutants** during the previous calendar year are greater than or equal to the thresholds in Sections 5.05(b) or 7.09(a) of Regulation I. These thresholds are also summarized in the email sent to you.

A list of the pollutants classified as Hazardous Air Pollutants (HAPs), Toxic Air Pollutants (TACs), and Volatile Organic Compounds (VOCs) is provided to you by the agency and is titled "Chemicals Table Emissions Report." The spreadsheet sent to you includes a table of chemicals and their CAS numbers; this is in the "Chemicals-Reference" tab. **Please note: the Agency's Chemicals table has been updated to be consistent with the recent update to WAC 173-460-150. Some chemicals changed and new chemicals were added to the list.**

You are responsible for reporting the total emissions for all air pollutants whose annual emissions meet or exceeded the thresholds. For these air pollutants, **you must report emissions from the entire facility** except for emissions from activities described in the section titled "WHICH EMISSIONS DO I NOT HAVE TO INCLUDE IN MY EMISSION REPORT?" (See below). If, after reviewing this section, you find that you need to report emissions from a process that does not fit under an existing "process segment" or "emission point", please create a new "process segment" or "emission point".

### WHAT METHOD DO I USE TO CALCULATE MY EMISSIONS?

If an Order of Approval from the Agency specifies a method for calculating actual emissions from your facility, you must use that method. **You must include a method code for each emission value you submit to the agency.**

Method Code	Description
1	Emission Test
2	Material Balance
3	EPA Emission Factor
4	Engineering Judgment

If a method for calculating actual emissions has not been specified in an Order of Approval, please keep the following in mind when selecting the method:

1. The method used must reflect the best available methods and data, and must produce an accurate representation of the types and quantities of air pollutants released at the facility. An example is using emission factors based on representative process source tests or continuous emission monitors.

2. The method used must reflect “full disclosure” about all aspects of the applicable emitting process. In other words, no portion of the process may be omitted from the calculation and the calculation must reflect actual operating characteristics of the process and materials.
3. Standard calculations for mass balance, emission factor application, and engineering calculations and models must comply with the following requirements:
  - (i) Mass balance calculations must account for all routes of consumption, losses, and all accumulations sufficiently to characterize air pollutant releases. Mass balance calculations are acceptable when no adequate emission factors are available or when a more accurate estimate will be obtained by using a mass balance than by using available emission factors.
  - (ii) Proposed emission factors must have been generated under similar conditions for similar facilities or equipment as those to which the emission factors will be applied, to the extent technologically feasible. For purposes of this section, if EPA has published an emission factor for an air pollutant that is applicable to the emitting process at your facility, and if you use published emissions factors to estimate the emissions at your facility, you must use the most recently published emission factor in your estimates. You will need to quantify the effects of all air pollution control equipment or process conditions that are adjusted to control air emissions for each air pollutant affected by the equipment or conditions. Make sure you have sufficient documentation to justify the control’s effectiveness under actual operating conditions.
  - (iii) Engineering calculations and emission estimation models must be based on sufficient data about the emission characteristics of the specific air pollutant at all relevant conditions.
4. EPA, with input and sponsorship from industry, has developed preferred and alternative methods for estimating emissions from several categories of emission sources.

The Emission Inventory Improvement Program (EIIP) website includes information for sources like:

- Boilers
- Hot Mix Asphalt Plants
- Equipment Leaks
- Wastewater Collection and Treatment
- Semiconductors
- Surface Coating Operations
- Paint and Ink Manufacturing
- Secondary Metal Processing
- Oil and Gas Field Production and Processing
- Plastics Products Manufacturing
- Stone Mining and Quarrying Operations
- Printing, Packaging, and Graphic Arts Operations
- Chemical Manufacturing

EIIP methods are recommended to standardize emission calculations nationwide. If you are unable to obtain these documents, you may contact the engineer assigned to you (identified in the email sent to your facility).

#### **HOW DETAILED DO MY REPORTS OF AIR EMISSIONS HAVE TO BE?**

For air pollutants that exceed the thresholds discussed earlier, you must report how much of each air pollutant you emitted (in pounds) from each process segment.

If your facility emits a pollutant that is not specifically listed by name, please use the applicable catch-all classification (e.g., “other HAP”, “other VOC”) listed in the table to ensure that all emissions are accounted for.

To assist you in preparing this year's emission report, the Agency provides the pollutants reported in the previous year for your facility. You are responsible for reporting emissions of **all air pollutants that exceed the emission reporting thresholds, even those that were not reported previously**. For example:

An existing facility begins operating a boiler. Prior to the installation of the boiler, the facility did not report NOx or CO emissions because these emissions did not exceed the reporting thresholds. However, after the installing of the boiler, emissions of NOx and CO do exceed the thresholds. The facility is now responsible for reporting NOx and CO emissions even though NOx and CO were not reported in the past.

#### **WHAT IS A “PROCESS SEGMENT” OR AN “EMISSION POINT”?**

Emission points and process segments are a way of grouping emissions for similar units. A single “emission point” may have several process segments. One example of this is emissions from natural gas and oil combustion from boilers at a facility. In this case the “emission point” is the group of boilers that burn these two fuels. Process segment 1 includes the emissions from natural gas combustion and process segment 2 includes the emissions from diesel combustion.

Your emission report provides details about each emission point and process segment. If you have a piece of equipment or activity that requires reporting but does not fit under an existing process segment or emission point, **please create a new process segment or emission point**.

#### **WHAT IS A “PROCESS QUANTITY”?**

The process quantity listed on your emission report for each emission point/process segment is the amount of raw material used, or the activity level (such as hours per year), associated with that segment for the calendar year. For a surface coating operation, it may be the gallons of topcoat applied. For a boiler, it may be cubic feet of gas used. The data you provided last year is included for reference.

Please **check the units** used for reporting process quantities. Using incorrect units is a common error and causes confusion when process data is used in later calculations. One common error is the use of “M” to signify 1000, in units like Mgal of coating usage. If you choose to use the unit “Mgal”, please make sure that you correctly convert the units. For example, 20,000 gal is equal to 20 Mgal.

#### **HOW DO I REPORT MIXTURES OR CATEGORIES OF POLLUTANTS?**

If your facility has emissions from any mixture or substance group, **report the emissions of the components by their individual CAS numbers**. The best sources for these component ingredients are Material Safety Data Sheets (MSDSs) or technical support documents from manufacturers. For example, cellosolve (CAS #110-80-5) or methyl cellosolve (CAS #109-86-4) should be listed by their individual CAS numbers and not by their category of glycol ethers. If your facility has emissions of any **metal compounds**, report your total emissions of the compound using the identification number provided in the spreadsheet sent to you or refer to the List of Chemicals on our website.

#### **HOW DO I REPORT EMISSIONS OF A NEW AIR POLLUTANT?**

If an emission point/process segment is emitting an air pollutant that you have not previously reported, record the pollutant's CAS number and chemical name and the quantity of emissions on the blank lines provided for that point/segment. If you need more space, add new lines to the spreadsheet or, if submitting a written form, attach additional pages and list the applicable emission point/process segment, a description of the pollutant, and its quantities. If emissions do not fit under an existing point/segment, please create a new point/segment.

**WHAT DO I REPORT FOR A FACILITY LOCATION THAT IS NOW CLOSED OR THAT OPENED PART WAY THROUGH THE YEAR?**

You must report emission estimates for a facility that is presently closed if the emissions for the facility exceeded the emission thresholds while the facility was operating.

If you moved to a new location in the reporting year, you must report the reporting year emissions for the new location if the emissions for the part of the year that the facility was operating exceeded the emission thresholds.

**HOW CAN I CORRECT AN ERROR IN LAST YEAR'S REPORT?**

If you have determined that last year's data was reported incorrectly, please mark up the previous year's data on the appropriate page for the emission point/process segment to reflect the correct data. Include a brief explanation in an attachment that explains the reason for your changes.

If the report you receive does not reflect the information you provided last year, please contact the engineer assigned to you or contact Betsy Wheelock at 206-689-4080.

**WHAT RECORDS DO I NEED TO KEEP?**

We recommend, and for Operating Permit and Synthetic Minor sources we require, that you maintain documentation that provides a comprehensive and detailed description of the methods used to quantify emissions of air pollutants. Please also retain any documentation needed to replicate the emission estimates you reported.

**WHAT DO I DO IF I AM NOT ABLE TO SUBMIT THE EMISSION REPORT ON TIME?**

Per Agency Regulation I, 5.05 (b), your emission report for the reporting year is due on or before June 30 of the following year (e.g. 2019 reporting year emissions are due June 30, 2020). Please make every effort to submit your report by the due date. However, if you are unable to meet this date, please send an email to [EmissionReporting@pscleanair.gov](mailto:EmissionReporting@pscleanair.gov) stating your intent to submit a report and the anticipated submittal date.

**WHICH EMISSIONS DO I NOT HAVE TO INCLUDE IN MY EMISSION REPORT?**

You may omit emissions from any of the following activities in your annual emission report:

- Office and administrative use of products including ink, marking pens, ink pads, glue, correction fluid, and correction fluid thinner;
- Use of products for routine janitorial or facility grounds maintenance;
- Use of products for architectural coating, i.e. painting building structures;
- Use of products for minor maintenance and repair of process and industrial equipment, including lubricants and sealants;
- Use of products for the purpose of maintaining motor vehicles operated by the facility;
- Use of process water or non-contact cooling water that is drawn from municipal water supplies or from other local ground or surface water sources but is not drawn from activities at the facility;
- Emissions from mobile sources; or
- Any other activity for which the facility has demonstrated, in writing, that the potential air pollutant emissions are insignificant. The Agency must approve this exclusion.