



Tips from the Help Desk

Questions & Answers from the Source Registration (SR) Help Desk for some common problems and unusual situations

Contents

CTRL+Click the questions below to go to the answers.

Tips on Avoiding Common Errors

Facility Name Change

Facility Closure or Fee Review Requests

Fuel Usage

Lead emissions

Emergency Generators

Stack height

Report on All Units

Call the SR Help Desk before you submit a 2nd package . . . why?

Remember to SUBMIT !

What Units Must Be Reported (or not)

Reminder: Complete SR = report on all units, including idle units

Do you need to report small portable heating units in Source Registration ?

Do you report temporary emission units?

Are there any emissions units you don't need to report in your Source Registration?

What units fall under the "insignificant activity" class at 310 CMR 7 Appendix C(5)(i)17 for HVAC ?

How To Report on Special Cases

What are combined units and when can fuel burning equipment be combined as one emission unit?

How do you enter data for Combined Units ?

How do you enter in the forms unusual exhausts, such as short vertical vents?

Low NOx burners – are they control devices?

How should Ovens be reported?

How should Dryers be reported?

How should Flares be reported?

How do I report emissions from the fuel use of a thermal oxidizer?

What do you enter into the basis fields for restrictions if you don't have a permit?

Is a "Fireye" flame monitor a monitor that must be recorded on the forms?

Which SCC's should be used for residential boilers/water heaters at commercial/institutional facilities ?

Which SCC's should not be used on an AP1?

Reporting on Tanks

When does a tank need to be reported?

What do you enter for Q7.d Temperature on the AP4 tank form?

Is there a de minimis concentration of organic matter below which an AP4 is not required for a tank?

When must you calculate emissions from tanks ?

Tips on Avoiding Common Errors

Facility Name Change

If your facility's name or address has changed, you need to contact the data manager in your [MassDEP Regional Office](#) before you start work on your forms (or you will have to start the forms over again to include the name change).

Facility Closure or Fee Review Requests

If a facility has closed, changed status relative to a permit, or wishes to request a review of its compliance fee, you must contact your [MassDEP Regional Office Data Manager](#). You may note these facts in your Source Registration, but you **must** also contact the Data Manager for your request to be processed.

Fuel Usage

When entering the amount of fuel burned (or other throughput) be sure to check the units of measure displayed in the unit's field to avoid time-consuming errors. NOTE that sometimes throughput must be reported in units of 1000 gallons rather than gallons, or million cubic feet rather than cubic feet.

Lead (Pb) emissions

If your facility emits lead to the air, you need to report this using the "Other" pollutant column on the form for the unit that emits the lead.

Emergency Generators

Owners/operators of a facility with emergency generators must report their 300-hour use restriction on the AP1 form in field B.1.h for each generator (or any other restriction under a permit). The 300-hour restriction is found in 310 CMR 7.02(8)i.2, or 7.03(10)(a) or 7.26(42)d.1 (see <http://www.mass.gov/dep/air/laws/regulati.htm#apc>).

NEW Also, for emergency generators, make sure your response is "YES" to A.9.a: *If engine, is this an emergency generator?*

Stack height

On the Stack form, please note that the height of a stack should be given from the ground.

Report on All Units

You must report on all emission units at the facility, including those that are idle.

Call the SR Help Desk before you submit a 2nd package . . . why?

If you need to submit a 2nd package this year for any reason (e.g., to add something or correct an error), consult with us first by e-mailing air.quality@state.ma.us or calling the SR Help Desk. The reason is that we want to make sure your first submittal wrote correctly to the database before you try to open a new package. *This ensures your data prefills correctly and that the total emissions are calculated correctly.*

This is important because we did have some problems with packages failing to write to the database in prior years. We want to be sure any problems are fixed before you submit a second time.

Remember to SUBMIT!

Some filers do not realize there is a separate Submit step that follows the signature. They fail to take that last step and are late. Please remember to continue until you have a receipt for your submittal to ensure you have filed.

What Units Must Be Reported (or not)

Reminder: Complete SR = report on all units, including idle units

Please remember that a complete SR submittal includes a report on **ALL** emission units at a facility, *including those that are idle*. Note that if you fail to report on an idle unit for 2 years, you could also trigger requirements for a new plan approval (see 310 CMR 7.02 (3)(m)).

If a unit has been permanently removed but it is still listed on the Overview form as part of your facility, then you must complete the form for that unit one last time, entering a decommission date. That tells MassDEP that the unit is permanently removed/disabled and will keep it from appearing on the list of equipment at your facility in future Source Registrations.

Similarly, if your entire facility is idle, you still must file a Source Registration when it is due.

Do you need to report small portable heating units in Source Registration?

No – small portable heating units, defined as those which have fuel tanks with less than 10 gallons capacity, need not be reported on Source Registrations.

Do you report temporary emission units?

Yes, in some cases. If an emission unit is a temporary or mobile unit (such as a temporary emergency generator or a temporary boiler mounted on a trailer) but is of a type that would be reported on if it were fixed and permanent, then it must be included in your Source Registration *IF it operated for 120 days or more during the Year of Record*. Note that if the temporary unit is very similar to other units at the facility, you should consider reporting it with one of the existing units on that unit's form (they would become a combined unit).

The only exception is a unit used for construction equipment – that is, a generator used only to power construction equipment does not need to be reported in Source Registration. Note, however, that a temporary generator used to replace or augment an existing unit at the facility (that is, it is used to power the facility's equipment) during construction would need to be reported.

Are there any emissions units you don't need to report in your Source Registration?

No, with a very few exceptions. In general all emissions units must be reported on in each Source Registration. As stated in 310 CMR 7.12 (3)(a)(1), the only emissions units that you do not need to report are those listed as "Insignificant Activities" under 310 CMR 7 Appendix C(5)(i), excerpted on the next page.

What units fall under the "insignificant activity" class at 310 CMR 7 Appendix C(5)(i)17 for HVAC ?

"Insignificant activities" not required to be reported in Source Registration include: "ventilating systems used exclusively for heating and cooling buildings, for the comfort of people living or working within the building serviced by said system, which EPA has determined need not be contained in an operating permit." This exclusion from Source Registration applies only to those heating/cooling units on which EPA has made a determination in an operating permit – that is, the only units excluded under this provision are those at facilities subject to the operating permit program.

310 CMR 7 Appendix C(5)(i)

(i) Insignificant Activities. Notwithstanding 310 CMR 7.00: Appendix C(5)(h) any emission unit(s) that is part of the following activities is exempt from the requirements of 310 CMR 7.00: Appendix C:

1. Open burning conducted in accordance with the requirements of 310 CMR 7.07(2), 7.07(3)(a) and 7.07(3)(e);
2. Office activities and the equipment and implements used therein, such as typewriters, printers, and pens;
3. Interior maintenance activities and the equipment and supplies used therein, such as janitorial cleaning products and air fresheners; this does not include any cleaning of production equipment or activities regulated by 310 CMR 7.18;
4. Bathroom and locker room ventilation and maintenance;
5. Copying and duplication activities for internal use and for support of office activities at the facility;
6. The activities not regulated by 310 CMR 7.18 in maintenance shops, such as welding, gluing, soldering;
7. First aid or emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation;
8. Laundry operations that service uniforms or other clothing used at the facility that are not regulated by 310 CMR 7.18;
9. Architectural maintenance activities conducted to take care of the buildings and structures at the facility, including repainting, reroofing, and sandblasting;
10. Exterior maintenance activities conducted to take care of the grounds of the facility, including parking lots and lawn maintenance;
11. Food preparation to service facility cafeterias and dining rooms;
12. The use of portable space heaters which reasonably can be carried and relocated by an employee;
13. Liquid petroleum gas (LPG) or petroleum fuels used to power the facility's mobile equipment and not otherwise regulated by the Department;
14. Emergency vents not subject to the accidental release regulations.
15. surface coating and painting processes which exclusively use non-refillable aerosol cans;
16. vacuum cleaning systems used exclusively for commercial or residential housekeeping;
17. ventilating systems used exclusively for heating and cooling buildings, for the comfort of people living or working within the building serviced by said system, which EPA has determined need not be contained in an operating permit;
18. ventilating and exhaust systems for laboratory hoods used:
 - a. by academic institutions for academic purposes.
 - b. by hospitals and medical care facilities used for medical care purposes and medical research only.
 - c. by laboratories which perform laboratory scale activities as defined by OSHA.
 - d. by facilities for quality assurance and quality control testing and sampling activities.
19. surface coating and printing processes used exclusively for educational purposes in educational institution excluding those emission units regulated by 310 CMR 7.18; and
20. kilns or ventilating hoods for art or ceramic curricula at colleges, primary or secondary schools.

How To Report on Special Cases

What are combined units and when can fuel burning equipment be combined as one emission unit?

Fuel burning units can be combined as one emission unit and reported on one AP1 or AP2 form. This is to make it easier to report large numbers of small units. The number of units in a combined unit must be entered in the “combined units” field on the AP1/2.

Combustion units may be combined subject to certain restrictions below.

Restrictions on Combined Units: Each individual unit within a combined unit must:

1. be of the same general type (not necessarily identical)
2. use the same fuel(s)
3. be subject to the same regulatory restrictions
4. be below the following maximum input thresholds:

Distillate oil -- 10 MMBtu / hour or 72 gal / hour;

Residual oil – 10 MMBtu / hour or 64 gal / hour;

Natural gas – 10 MMBtu / hour or 100 Therms / hour;

Solid fuel – 3 MMBtu / hour;

Used oil fuel – 3 MMBtu / hour or 19 gal / hour;

Landfill gas – 3 MMBtu / hour or 6,000 cf / hour

5. **Revised** AND the total heat input of all units in the combined unit does not exceed 40 mmbtu/hour.

How do you enter data for Combined Units?

When entering data for combined units use these guidelines:

- Make/Model No – use the most common make/model or enter “combined”.

- Installation Date – enter the install date for the oldest of the individual units.
- Permit Date – enter the most recent permit number and date for the units.
- Max capacity / potential – enter the sum of the maximum capacities of all of the individual units as the maximum capacity for the combined unit.
- Decommission date – do not decommission until the last individual unit is gone; if you need to add or subtract units from the combined unit, then increase or decrease the value in the Combined Units field to reflect the change and explain in the Notes field.
- Section C: NOTES: on the form where units are combined, list the following info associated with each of the individual units: make/model no., installation date, max capacity, permit no & date, decommission date, and any issues or oddities about these combined unit, as well as, the locations of the individual units if they are not in the same building at the facility.

How do you enter in the forms unusual exhausts, such as short vertical vents?

Some units exhaust vertically, but have housings shorter than 10 ft above the roof of the building (e.g., ventilation exhausts that may be 3-5 ft tall. This type of release point does not require a Stack form – it is considered to be a Non-Stack release point. Select on the form *Non-Stack Release Point: vertical stack/vent less than 10ft*. Then describe the release point briefly in the Notes field.

Low NOx burners – are they control devices?

No – they are part of your equipment and should not be logged as separate control devices. If you have low NOx burners you should use emission factors that take into account their lower emissions. You should also mention in the notes that the unit incorporates low NOx burners.

You can find such emission factors in EPA's emission factor database at: <http://www3.epa.gov/ttnchie1/>

How should Ovens be reported?

An oven should be reported on 1 form only. Use an AP1 for an oven that has no emissions other than those from fuel combustion (such as an oven used for driving off water).

Use an AP2 where there are emissions from the material being baked (such as where solvents are being baked off). On an AP2, the combustion emissions will be reported as one material throughput (segment) and emissions from the material being baked as another segment. Remember to use an SCC for combustion for the fuel segment.

If you need to have ovens that are currently AP1's recoded to AP2's, please contact the [SR Help Desk](#) before you begin entering data – we can change the forms for you. *If you have already reported an oven on an AP1, you do NOT need to make any changes – it will be accepted this year.*

How should Dryers be reported?

A dryer should be reported on 1 form only. Use an AP1 for a dryer that has no emissions other than those from the fuel combustion (such as for a dryer that produces only water vapor).

However, if the dryer is combined in a unit with a spray or print operation, use an AP2 to ensure that the %VOC is reported (this field is only on an AP2). As with an oven, the combustion emissions will be reported as one material throughput (segment) and emissions from the material being dried as another segment. Remember to use an SCC for combustion for the fuel segment. If there is a spray or print process, but is reported as a separate emissions unit (a separate AP2) then you can use an AP1 because you will be reporting only the fuel combustion (again, be sure to use a combustion SCC on the AP1).

If you need to have dryers that are currently AP1's recoded to AP2's, please contact the [SR Help Desk](#) before you begin entering data – we can change the forms for you. *If you have already reported a dryer on an AP1, you do NOT need to make any changes – it will be accepted this year.*

How should Flares be reported?

Where a flare is a control device on a process emission unit it should be reported in the control device portion of the AP2 for the unit whose emissions it is controlling.

In the past, many flares were reported as incinerators (AP3s) – we are trying to ensure that all control flares are now reported on AP2 forms. If you have a control flare that is reported on an AP3 form, please do the following: (1) report the flare on the AP2 that it controls, (2) reference in the Notes field on the AP2 that you are reporting the flare on the AP2 rather than the AP3, and (3) enter a decommission date in the AP3 (this will cause it to be removed from future SR packages) and enter 0 for all throughputs and emissions on the AP3.

Alternatively, you can e-mail air.quality@state.ma.us requesting that the AP3 be decommissioned by the SR Help Desk, in which case you will not need to include the form in your package.

EXCEPTION: Flares on landfills should be reported on an AP1. Again, if you need a unit recoded, contact the SR Help Desk before you start entering data.

How do I report emissions from the fuel use of a thermal oxidizer?

If you have a thermal oxidizer on an emission unit that emits VOCs, you also need to report the emissions from the combustion of natural gas. To do this, add another segment or "raw material" to the AP-2 form for the unit in order to report emissions from natural gas combustion. After you check "Add Raw Material" and validate, another Section B will be generated on which you can enter the natural gas combustion emissions. You will need to enter a natural gas combustion SCC

and look up the emission factors for natural gas combustion and calculate the emissions yourself.

You can identify combustion SCC from the “Category” field in the [list of valid SCC’s](#) posted on the SR Web Page.

What do you enter into the basis fields for restrictions if you don’t have a permit?

If a unit has a restriction that is based on a regulatory limit rather than a permit condition, then select the regulatory citation from the drop down list (e.g., 310 CMR 7.X(XX)). All emissions or throughput restrictions will have a basis. See link to regulations: [310 CMR 7.00 et. seq.: Air Pollution Control](#)

Is a “Fireeye” flame monitor a monitor that must be recorded on the forms?

No – a Fireeye is a brand of flame monitor. Flame monitors in general do not need to be reported on an AP1.

Which SCC’s should be used for residential boilers/water heaters at commercial/institutional facilities ?

Use SCC 10300503 for distillate oil and 10300603 for Natural Gas.

Which SCC’s should not be used on an AP1?

The AP1 form is for combustion, and the auto calculation feature relies on the use of combustion SCC’s as the basis for selecting emission factors. SCC’s that are not for combustion should not be used on an AP1 with auto calculation. A new validation feature of the forms will prevent a user from trying to auto calculate emissions using a non-combustion SCC (i.e., one that does not have EPA emissions factors associated with it). If you use a non-combustion SCC on an AP1, you must do your own emissions calculations.

Reporting on Tanks

When does a tank need to be reported?

You must file an AP-4 form for each below- or above-ground storage container that is 500 gallons or larger and stores liquid organic material. Tanks can be combined if the combined capacity does not exceed 50,000 gallons, they are the same construction, and store the same material(s). Do not combine above ground with below ground tanks – use separate AP4 forms for each type. Note that if a single tank is 40,000 gallons or larger, you may need to report emissions for the tank – see question below. Tanks containing wastewater with organic material and waste organic material that will be disposed of off-site need not be reported in Source Registration.

What do you enter for Q7.d Temperature on the AP4 tank form?

This field is intended to capture the temperature at which the material is stored. If *underground*, a default value of 55°F may be used if the tank is not heated or cooled. If *above ground*, a default of 48°F may be used if the tank is not heated or cooled. If the tank is *inside a building*, then the temperature at which the building is kept should be given. If the tank is *heated or cooled*, the temperature of the contents should be given.

Is there a *de minimis* concentration of organic matter below which an AP4 is not required for a tank?

No – however the objective of the AP4 is to gather data on tanks storing liquid organic material (i.e. fuel or materials or products). It is not intended to capture wastewater that may contain some organic material. So a waste oil tank must be reported where that oil will be a feed stock or fuel, but a waste oil or waste water tank which contains some oil that will be disposed of off-site need not be reported.

When must you calculate emissions from tanks?

Emissions need to be calculated for *above ground* storage tanks with a capacity equal to or greater than 40,000 gallons containing liquid organic material having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, and for any storage tank with a capacity equal to or greater than 1 million gallons. Emissions calculations are not required for any other type/size of tank.

Emissions for such tanks must be reported on an AP2 form. They may be added as additional materials/throughputs (segments) to an existing AP2 that reports emissions for the tank loading equipment, or they may be reported on a separate AP2. Emissions for all tanks may be reported on one AP2 – separate segments/forms for each tank are not required (although you may separate them if you wish for clarity). Report emissions for standing/breathing loss separate from drawdown (that is, make them 2 separate segments).

Actual working loss emissions for such tanks are calculated based on the actual loading/unloading of the tanks (not apportioned rack throughput). The potential emissions are calculated by assuming the total unloading rack potential throughput through each tank, and then summing these. The potential emissions from drawdown should be reported as equal to actual drawdown emissions.

If you used TANKS-[EPA's Emission Estimation Tool's Software](#): Be sure to provide the Tanks' model parameters used in the AP2 Notes or as an attachment.