Minnesota Pollution Control Agency

Your Option D Registration Permit

Now that you have your Option D Registration Permit, it is important for you to know how to comply with it. This fact sheet is a reference for you to use whenever you have questions about how to comply with your Option D Registration Permit. (Also refer to Minn. R. 7007.1110 – 7007.1130.)

What are you required to do?

1. **Each month, record actual emissions for the previous 12 months.**

   To calculate your actual emissions, you will need to collect information on a monthly basis from your operations.

   Whatever data you used to apply for the permit must be used to demonstrate monthly that you qualify for your Option D permit.

   For example, if you used hours of operation to determine how much fuel was burned in your generator, each month you must record the hours of operation of the generator. If you used gallons of paint to determine Volatile Organic Compounds (VOC) emissions from a paint booth, each month you must keep records of the gallons of paint used, its density, and its VOC content.

   Remember, you do not need to calculate:

   - Emissions from insignificant activities.
   - Monthly Hazardous Air Pollutant (HAP) calculations if the HAP emissions are VOC emissions and actual VOC emissions are less than five tons per year.

   Some examples of the type of information and records you may need in order to calculate monthly actual emissions include:

   - The amount of each VOC- or HAP- containing material used or purchased each month. Use the method you indicated on Form RP-D1 of your permit application.
   - For each VOC- or HAP- containing material purchased or used at your facility, maintain a record of the material safety data sheets or a signed certification from the supplier stating what the maximum VOC or HAP content is.
   - The total amount of each fuel purchased or used each month.
   - The hours each emission unit was operated per month.

   Use the collected data to calculate and record the actual emissions for the current month. You must also calculate a 12-month rolling sum (current month's emissions plus the previous 11 months) each month. The calculations must be performed no later than the last day of the following month.

   Be sure to keep records of the calculations, including the date they were done. To remain eligible for an Option D Registration Permit, actual emissions during any 12 month rolling period may not exceed the Option D thresholds listed in Table 1.

   You may find it easier to set up a spreadsheet to do the calculations on a monthly basis. The Small Business Environmental Assistance Program (SBEAP) has developed spreadsheets to help track emissions that can be accessed at http://www.pca.state.mn.us/oxpg7d5. If your business has fewer than 100 employees, call SBEAP at 651-282-6143 or 800-657-3938 for more information.

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651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats

2. Reduced record keeping.

If your actual emissions are below the reduced record keeping levels in Table 1, you will only have to calculate your actual emissions on an annual basis. The calculations must be performed no later than April 1 of the following year. However, you will still need to track and document the data and material usage information that would be used to calculate your actual emissions. For example, you will need to track the volume of paints used, MSDSs of materials used, fuel usage or number of hours a unit is operating.

If your actual emissions exceed the reduced record keeping levels, you must begin to calculate your emissions on a monthly basis. Only if you can demonstrate for a consecutive two-year period that your emissions have returned and remained below the reduced record keeping levels, can you return to tracking emissions on an annual basis.

Table 1: Permit thresholds

Pollutant	Reduced Record Keeping (tons per year)	Option D Limits (tons per year)
Particulate Matter (PM)	25	50
Fine Particulate Matter (PM_{10})	25	50
Sulfur Dioxide (SO_2)	25	50
Nitrogen Oxides	25	50
VOC	25	50
Carbon Monoxide	25	50
Lead	0.05	0.5
Individual HAPs	2.5	5
Combined HAPs	6.25	12.5
Carbon Dioxide Equivalent (CO_2e)	25,000	50,000

3. Using control equipment to calculate actual emissions.

If you consider pollution control equipment when calculating the actual emissions, you must follow the operation and maintenance requirements described at the end of this fact sheet. This information may serve as a guide to developing a record keeping form that is useful to you.

See Minnesota Pollution Control Agency (MPCA) Registration Permit Form RP-D2, found on the MPCA Air Permit Forms website, for a list of control equipment that you may consider. You may also receive credit for unlisted control equipment if an MPCA approved performance test is done. See the fact sheet on State Performance Test Rules and/or Minn. R. 7007.1130, subp. 4.

4. Making changes at your facility.

You may add and remove any emission units at the facility as long as you stay below the Option D thresholds and comply with any additional rules that apply to you.

For example, if you add a boiler that is subject to New Source Performance Standard (NSPS) subp. Dc, you must comply with the applicable subp. Dc requirements. Be sure to add in the actual emissions resulting from any additional emission unit when you do your calculations.

The MPCA requires no notice from you of the changes at your facility unless it is specifically required by a rule. It is your responsibility to keep the records and calculations on site and to follow any other rules that apply as a result of the changes.

If you will be making a change to your facility, whereby your facility will no longer be eligible for your Option D Registration Permit, you may be required to obtain a new permit before beginning construction. See Minn. R. 7007.1110, subps. 10-13, for more information. For additional assistance, call the MPCA at 651-296-6300 or 800-657-3864, or if your business has fewer than 100 employees, the SBEAP at 651-282-6143 or 800-657-3938.

5. **Keep records for five years.**

   All records associated with your Option D Registration Permit must be kept for five years. You must keep all records on site for the current calendar year. For previous years, you have the option of keeping the records on site or at an office location.

6. **Submit an emissions inventory and pay emissions fees.**

   Once per year, you will need to submit an Emissions Inventory Report to the MPCA. This report will require you to report your actual emissions for the previous calendar year. We will send you an Emissions Inventory Report form in December. The Emission Inventory Report form is due back to the MPCA no later than April 1.

   You will also be assessed an annual Air Emissions fee for your Option D Registration Permit. This fee is based on tons of pollutants you report to the MPCA from the previous year (generally, the fee rate is around $30 per ton per pollutant). An invoice will be mailed to you in March and must be paid within 60 days of the invoice date.

The following requirements may or may not apply to you:

7. **If actual emissions of sulfur dioxide (SO_2) or particulate matter smaller than ten microns (PM_{10}) are more than five tons per year, keep stack information on site.**

   If actual emissions from the total facility exceed five tons per year of SO_2 or PM_{10}, the owner or operator must keep records of the following information:

   - The location of the emission points
   - The potential emissions in pounds per hour of SO_2 and PM_{10}
   - The height and diameter of the stack the emission units exhaust to
   - The exhaust gas flow rate and temperature

8. **If you use continuous emissions monitoring system (CEMS) data to calculate actual emissions, keep records.**

   If you use data from a CEMS data for the calculations, the following records must be kept:

   - The total operating hours of the CEMS and the monitored emission unit(s) for the previous 12 months
   - An explanation of how the emissions were calculated based on the CEMS data
   - Calculations must be based on the rated capacity of the fan, unless the CEMS provides data on the actual air flow rate

9. **Comply with any applicable NSPS requirements.**

   After your facility is issued a registration permit under Option D, if your facility is subject to one of the allowed NSPSs, you have to be sure that you follow all of the requirements of the applicable NSPSs (a list of the NSPSs can be found on Form RP-03).

   If you add any equipment that is subject to one of the allowed NSPSs while you hold a registration permit, you must also follow all of the requirements, which may include notifications to the MPCA and performance testing.

10. **Comply with applicable National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.**

    The U.S. Environmental Protection Agency (EPA) issues standards affecting certain industries or activities to help control emissions of hazardous air pollutants. These regulations, known as NESHAPs, may require a facility to obtain a Title V operating permit, even if they are not a major source of HAP emissions. If you are subject to a NESHAP that requires a Title V permit, you are no longer eligible for an Option D permit, even if you are an area (non-major) source.

    There are also NESHAPs that do not require area sources to obtain the Title V permit. Some examples include spray coating of metal or plastics, adding a degreaser that uses halogenated solvents, or adding a chromium

electroplating tank. These facilities can continue to operate with an Option D permit provided they do not need a Title V permit for other reasons. They must also comply with the provisions of the NESHAP, including any notifications and record keeping.

A list of NESHAPs can be found on the EPA website: http://www.epa.gov/ttn/atw/mactfnlalph.html.

If you have additional questions, you can contact the MPCA's SBEAP at 800-657-3938 or 651-282-6143 for more information.

Registration Permit Option D Requirements for All Facilities Using Control Equipment to Reduce Reported Actual Emissions

Daily requirements:

1. Record each monitored parameter once every 24 hours when in operation, unless otherwise specified.
2. Record any corrective actions taken as a result of daily checks.
3. Keep all records for five years. Store these at the plant site for the current calendar year. You may store records from previous years at an off-site office.

Control Device	Daily Requirements
Centrifugal collectors:	• Record pressure drop
Fabric filters (Baghouse): High temperature (T>250°F) and Medium temp. (180°F>T<250°F)	• Record pressure drop
Fabric filters: Low temperature (T<180°F)	• Record pressure drop; or • Record whether visible emissions are observed from filter outlet during the entire cleaning cycle (yes/no) and the time period of the observation *You can choose, unless specified by the MPCA.*
Scrubbers, spray towers:	• Record pressure drop • Record liquid flow rate
Venturi or Impingement Plate Scrubber:	• Record pressure drop • Record liquid flow rate
Condensation scrubber:	• Record pressure drop • Record steam supply rate or blowdown rate
Wet cyclone separators:	• Record pressure drop • Record water pressure
Mechanically aided separator:	• Record pressure drop
Electrostatic precipitators:	• Record the continuous readout of voltage and secondary current • If used, record the flow rate of conditioning agent
HEPA and other wall filters:	• Record condition of the filters including, but not limited to, alignment; saturation; and tears/holes
Thermal afterburner:	• Record combustion temperature or inlet and outlet temperatures at least once every 15 minutes
Catalytic afterburner:	• Record inlet and outlet temperatures at least once every 15 minutes. • Check catalyst bed reactivity as per manufacturer specification (not necessarily daily)
Flares:	• Record temperature indicating presence of flame at least once every 15 minutes

Monthly, quarterly, and annual requirements:

1. Record the date and activities performed for the monthly, quarterly, and annual checks.
2. Record any corrective actions taken as a result of the monthly, quarterly, or annual checks.
3. Keep all records for five years. Store these at the plant site for the current calendar year. You may store records from previous years at an off-site office.

Monthly (or as required by manufacturer's specifications)	• Check components subject to wear/plugging such as bearings, belts, hoses, fans, nozzles, orifices, and ducts
Quarterly (or as required by manufacturer's specifications)	• Inspect components not subject to wear including structural components, housing, ducts, and hoods
Annually (or as required by manufacturer's specifications)	• Thoroughly inspect all control equipment and structural components • Calibrate all instruments used to monitor control equipment • For control devices with inlet emissions captured by hood(s), maintain a record of fan rotation speed, fan power draw or face velocity of each hood, or other comparable airflow indicator

Requirements to be followed at all times

1. Maintain an inventory of spare parts that are subject to frequent replacement, as recommended by manufacturer of control equipment.
2. Train staff on how to operate/maintain control equipment and respond to indicators of malfunction.
3. Maintain records of control equipment parts replaced, repaired, or modified for the previous five years.
4. Operate the control equipment whenever the process equipment is operating.
5. If there is a shutdown or breakdown of control equipment that results in any increase of emissions of any regulated air pollutant and lasts more than one hour, report it by calling 651-296-6300. (Refer to Minn. R. 7019.1000 or the air quality fact sheet about shutdowns and breakdowns for more detail.)
6. Submit semi-annual reports if a deviation occurred during the reporting period. Examples of deviations for a baghouse could be a reading of a monitored parameter (such as pressure drop) that is outside the range recommended by the manufacturer or observation of visible emissions. To propose an alternative pressure drop range for fabric filters, you need to submit two years of compliant monitoring data with your request to the MPCA. Call the MPCA at 651-296-6300 or 800-657-3864 for more information.
7. For control devices where inlet emissions are captured by certified hoods, you must maintain at the facility the evaluation that shows the hood conforms to the design and operating practices recommended in "Industrial Ventilation - a Manual of Recommended Practice" by the American Conference of Governmental Industrial Hygienists.

Additional information

MPCA air quality permit fact sheets:
http://www.pca.state.mn.us/oxpg4ab

MPCA air quality permit forms:
http://www.pca.state.mn.us/nwqh472

MPCA air quality regulations:
http://www.pca.state.mn.us/mvri4a5