Industrial Stormwater Sampling

Frequently Asked Questions

Forms

Where are the stormwater monitoring report forms on the Minnesota Pollution Control Agency (MPCA) website?

Go to the Industrial Stormwater Permit Information Access page: http://cf.pca.state.mn.us/water/stormwater/isw/search.cfm.

- Type in the facility's Permit ID number or facility name. Click on the "search" button.
- Once the results have loaded, click on the ID number to view the "Facility Information Menu".

How do I fill out a stormwater monitoring report form?

Write in the date the sample was collected. Provide sampling results in the "value" column. Provide a brief explanation if the sample wasn't collected within the first 30 minutes of the runoff event. Have the facility owner/operator sign and date the form, then submit it. Unsigned forms will be returned.

If a sample couldn't be collected during the calendar quarter, provide a brief explanation on the form, sign and date the form and submit it.

Where do I submit a stormwater monitoring report form?

Send the form to the MPCA at the address listed on the form.

Email: iswprogram.pca@state.mn.us

Or mail:

Stormwater Monitoring Reports Minnesota Pollution Control Agency 520 Lafayette Rd N St Paul, MN 55155-4194

How many monitoring forms do I submit for each calendar quarter?

A minimum of one form per quarter is required, either for the sample or to report that no samples were taken. A monitoring form must be submitted any time a sample is collected or if no sample is collected during a required sampling quarter, with a "no flow" explanation.

Do I submit anything else with the stormwater monitoring report form?

No, submit only the form. Be sure to make a copy for your files first.

When do I submit the monitoring forms?

The forms must be postmarked no later than the 21st of the month following the calendar quarter. If you did not collect a sample, you must wait for the calendar quarter to be over before mailing in the form. "No sample" forms sent in early will be returned.

What happens to an incomplete stormwater monitoring report form?

It will be mailed back. If you have questions, call the Stormwater Hotline at 651-757-2119 or 800-657-3804 (non-metro only).

There was no flow to sample, so I couldn't collect a sample during the last calendar quarter. Do I still have to send in a monitoring report form?

Yes, you must send in a monitoring report form for each calendar quarter, either to provide the sample results or to report that no samples were taken.

Note that "I forgot to sample" or "I didn't know I had to sample" are not valid "no flow" explanations and could result in enforcement actions and penalties.

Sampling requirements and waivers

How do I pick a benchmark monitoring location?

Common monitoring locations include storm drains, parking lot (sheet flow) runoff areas, ditches and other low spots. Make sure the selected locations:

- · are located on the facility property, not in the street or right-of-way
- · receive stormwater runoff from industrial activities and materials
- are between the final Best Management Practice (BMP) and the place or places where stormwater runoff leaves the property
- · are not subject to stormwater run-on from off-site sources
- result in a sample that is most likely to contain the pollutants the facility is required to monitor

A minimum of one benchmark monitoring location per facility is required. However, one location may not be sufficient. If the facility has more than one area of industrial materials or activities that comes in contact with stormwater, more than one monitoring location is needed.

More information on benchmark monitoring locations is in MPCA stormwater fact sheet #wq-strm3-29, "Benchmark and effluent monitoring location diagrams for all sectors."

How often do I sample?

Conduct benchmark sampling at least once per calendar quarter. You must wait 72 hours between measurable runoff events. Sampling requirements begin the first full calendar quarter after receiving permit coverage.

What do I have the sample analyzed for?

The parameters to have the sample analyzed for depend on the facility's industrial sector, and are listed in Part VII of the permit, *Sector-Specific Requirements* (pages 30-136).

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How do I find a Minnesota Department of Health-certified lab?

Visit the Minnesota Department of Health website at www.health.state.mn.us/divs/phl/accreditation/index.html, and click on the "accredited labs" link on the left. Or call 651-201-5324 or email health.mnelap@state.mn.us.

How do I collect a sample in the winter months?

Facilities are required to collect samples once per calendar quarter, so collecting a sample from rain runoff in October or November will ensure you have sampled in the last calendar quarter of the year (Oct-Dec). Also, runoff from snow melt or winter/spring thaw counts as a runoff event. For the first calendar quarter of the year (Jan-Mar), collect a sample from a winter thaw in January or February or from the spring thaw in March.

When the ground is frozen, rain, snow melt or thaw conditions can result in stormwater flow even at facilities that have a high rate of natural infiltration.

How do I know whether I have exceeded my benchmark monitoring values?

After samples have been collected from four calendar quarters, calculate the average value for each parameter and compare it with the benchmark value. If the average values exceed the benchmarks for one or more parameters, modify BMPs and update the Stormwater Pollution Prevention Plan (SWPPP) to reduce the pollutants in facility stormwater. Continue sampling quarterly and adjust BMPs and the SWPPP as needed until the average of the four most recent samples is below benchmark values.

Once the four-quarter average values are below the benchmark values, the facility is done sampling for the life of the 2015-2020 permit.

How do I average "non-detects" from the lab report?

For averaging purposes, use a value of zero for any individual sample parameter result that is less than the method detection limit. This is often noted on lab reports as "ND."

For results that fall between the method detection level and the quantitation limit (meaning there was a confirmed detection, but it was below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit. This is often noted on lab reports with a "less-than" sign before the quantitation limit. For example, for a result listed as <0.05 mg/L in the lab report, use 0.025 mg/L for averaging purposes.

How do I change monitoring locations?

Any change in monitoring locations will reset the monitoring calendar. Any monitoring results already submitted cannot be used to calculate averages. Putting extra attention into choosing good monitoring locations from the start may save time and money in the long run.

A new location may be chosen provided the new location is one of the following:

- · more representative of facility activities
- in a safer location
- physically easier to collect samples from

If monitoring results exceed benchmark values at a monitoring location that will be changed, request permission from the MPCA before changing the monitoring location. If the change is approved by the MPCA, the facility may begin benchmark monitoring at the new location.

If monitoring results do not exceed benchmark values at the monitoring location, the location can be changed without getting prior approval. However, it will reset the monitoring calendar and you must notify the MPCA of the change. Use the industrial stormwater Change Form. Also, update your Stormwater Pollution Prevention Plan and facility map with the changes.

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How do I know if I qualify for a monitoring waiver?

General benchmark monitoring waiver: If the facility has an engineered pond or infiltration system designed to the standards of *Appendix C* of the permit (pages 144-147), it may qualify for the benchmark monitoring waiver. See page 26 of the permit for more information.

Run-on demonstration waiver: If the facility can demonstrate that drainage onto the site from upgradient sources (run-on) may have significantly contributed to or caused a benchmark value exceedance, the facility may qualify for the run-on demonstration waiver. See pages 26-27 of the permit for more information.

Natural background pollutant waiver: If the facility has a benchmark parameter that exceeds a benchmark value and can demonstrate that the exceedance is due to the presence of that pollutant in the natural background, the facility may qualify for the natural background pollutant waiver. See page 27 of the permit for more information. Note that pollutants from former site operations or run-on are not natural background.

How do I know whether I have to conduct effluent monitoring?

An estimated four percent of permitted facilities have effluent limit monitoring requirements; that means most facilities do not. The following facility types must conduct effluent monitoring:

- · Sector A: Discharges from wet decking storage areas
- · Sector C: Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC code 2874)
- · Sector D: Runoff from asphalt emulsion facilities
- Sector E: Runoff from material storage piles at cement manufacturing facilities
- Sector K: Runoff from hazardous waste landfills
- Sector L: Runoff from non-hazardous waste landfills
- · Sector O: Runoff from coal storage piles at steam electric generating facilities
- Sector S: Runoff from existing and new primary airports with 1,000 or more annual jet departures that discharge wastewater associated with airfield pavement deicing that contains urea commingled with stormwater

How do I know whether I've exceeded effluent monitoring limits?

See Part VII of the permit, Sector-Specific Requirements (pages 30-136) for effluent limits. Any effluent sample value that is over the permit limit is a violation.

More information

More information is available on the MPCA industrial stormwater webpages at http://www.pca.state.mn.us/industrialstormwater, or by calling the stormwater hotline at 651-757-2119 or 800-657-3804 (non-metro).

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