

Stormwater Sampling

Introduction:

Operators of industrial facilities that discharge stormwater are required to collect and analyze stormwater discharge samples as part of their National Pollutant Discharge Elimination System (NPDES) permit applications. Parameters, frequency, benchmarks, monitoring periods, and reporting methods vary by state and are often determined by the facility's industrial activity. James Environmental Management, Inc. provides customized stormwater sample kits and reporting services for customers to remain compliant with specific regulations.

Discussion Points:

- Facilities Required to Conduct Stormwater Sampling
- Contents of Sample Kit
- Taking the Samples
- Packaging and Shipping



Discussion:

Industrial activities at your site are often classified by a Standard Industrial Code (SIC Code). The Industrial Stormwater General Permit requires that your facility conduct sampling of stormwater discharges on a regular schedule which will be listed in the permit for your state.

All supplies and instructions needed to perform the tests are included in the sample kit that you will receive from the laboratory. It is important that you plan for the sampling event ahead of time because the opportunity to sample during the storm may come with little advanced notice depending on the state in which your facility is located. The National Weather Service is a good source of information for upcoming storms. The samples for the test must be collected within the first 30 minutes of the start of discharge. The person who will be performing the sampling should be at the facility before the storm begins so they can setup to take the sample and document the time of the discharge. If it is not possible to take the sample within the first 30 minutes of the start of discharge, the sample must be collected as soon as possible and an explanation of this occurrence must be documented. When taking the sample be careful to grab a clean sample and avoid stirring up sediment, and do not take samples from standing water. The Discharge Monitoring Report (DMR) form includes the required parameters for your facility.

As always, stay safe out there!

April 27, 2020



Instructions for Taking a Stormwater Sample

1. Confirm the designated “Sample Point” as shown on the *Site Plan Drawing* found in your *Storm Water Pollution Prevention Plan (SWPPP)*.

2. Inventory materials for the Sampling Kit. Materials include as a minimum:

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|  Latex Gloves |  Plastic Scoop |  Freezer Pack |
|  Sample Bottles |  Chain of Custody Form |  Plastic Bags for Forms |
|  Wrapping Material |  Shipping Label |  Cooler |

3. Prior to projected rain event ensure that the rain gauge is empty.

4. The latex gloves should be worn at all times to protect your hands and prevent contamination of the sample. There are sample bottles that contain a small amount of fluid.

**CAUTION: Some sample bottles contain acid preservatives. Do not remove the preservatives from the bottles. Exercise all safety precautions to prevent acid from getting on your body. Should you get acid on you, immediately flush with water for a minimum of 15 minutes and seek first aid assistance.*

Collect the sample with the scoop and pour into sample bottles. Fill all sample bottles to the top with water from the “Sample Point” outfall. Do NOT scrape the bottom of the sampling location when collecting samples. After filling the bottles make sure the lids are on the bottles tightly. One of the bottles will be full already, this is called a “Temperature Blank” which is used by the laboratory to measure the temperature of the samples when received.

5. Fill out the labels completely by the person taking the samples; record the date, time, and amount of rainfall in rain gauge.

6. Wrap the sample bottles with the wrapping material supplied in the kit and place the bottles in the cooler (enclosed in the sample kit) and immediately pack with enough ice to nearly fill the cooler. Do not allow the samples to sit uncooled.

7. Complete and sign the Chain of Custody form provided by the laboratory and enclose it in a plastic bag (enclosed in the sample kit) and place inside the cooler. Close the cooler and tape the lid closed. An example of the Chain of Custody is provided in the Appendix C of your SWPPP.

8. Attach the pre-paid shipping label included in the kit, to the top of the cooler, and ship to the laboratory. The return shipping is included in the price of the kit.

* If you take the samples on Friday, place the bottles in the refrigerator and ship the cooler with samples on Monday. If you have any questions, contact James Environmental.