Sampling for Industrial and Mining Facilities

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Who Needs to Sample?

- Standard Industrial Classification (SIC) Code
- The department may direct any facility covered by the General Mining or General Industrial permits to conduct stormwater sampling
Who Needs to Sample?

Mining General Permit

- Asphalt Paving and Roofing Materials – SIC 2951
- Glass, Clay, Cement, Concrete, and Gypsum Products – SIC 3271-3275
- Coal Mines and Coal Mining Related Facilities – SIC 1221-1241
- Oil and Gas Extraction – SIC 1311, 1321, 1381-1382
- Non-Metallic Mineral Mining and Dressing – SIC 1411, 1422-1429, 1442, 1446 1481, 1499
Who Needs to Sample?

Industrial General Permit

- **Wood and Paper Products** – SIC 2421, 2491, 2426, 2431-2433, 2435-2439, 2451, 2452, 2493, 2499, 2631
- **Chemical and Related Products** – SIC 2873-2879, 2812-2819, 2841-2844, 2821-2824
- **Asphalt Paving and Roofing Materials** – SIC 2952
- **Structural Clay Products Manufacturers** – SIC 3251-3259
- **Primary Metal Industries** – SIC 3312-3317, 3321-3325, 3351-3357, 3363-3369
- **Miscellaneous Metal Ores** – SIC 1094
- **Hazardous Waste Treatment, Storage and Disposal**
- **Landfills and Land Application**
- **Automobile Salvage Yards** – SIC 5015
- **Scrap Recycling Facilities** – SIC 5093
- **Steam Electric Generating Facilities**
- **Coal Pile Runoff (Stormwater Discharge from Coal Storage Piles)**
- **Air Transportation (Regional and Primary Commercial Airports and Air Force Bases)**
- **Food and Related Products** – SIC 2041-2048, 2074-2079
- **Fabricated Metal Products** – SIC 3411-3499, 3911-3915
When do you Sample?

- 1 Sample per year
- Samples must be representative of the discharge.
- Must be from a storm event that is greater than 0.1 inches.
- Or from a snowmelt event which generates runoff.

Stormwater outfall at Klindt Point in The Dalles, Oregon, February 2009.
Discharges from holding ponds or impoundments with 24 hours retention capability, sampling can be done at any time.

Discharges without impoundments shall be taken within 30 minutes of the start of discharge.

If not practicable grab a sample ASAP and explain on the DMR why a sample could not be obtained.
Where do you Sample?

- Point(s) specified on your SWPPP
- If multiple points may be identified as identical in your SWPPP.
- A representative sample may be taken for identical points.
What do you need to Record?

- Date
- Duration (Hours)
- Rainfall Amount (Inches)
- Days since the last 0.1-in storm event
- Estimated size of the drainage area
- Estimated quantity of discharge

Date: 3/11/2015

Rain Gauge from Weathershack.com March 2015
How do you Sample?

- Get Sampling Kit
- Can be obtained from your Lab
- Sampling requirements are found on the department website.
# How do you Sample?

<table>
<thead>
<tr>
<th>SAMPLING POLICIES</th>
<th>STATE CERTIFIED LABS</th>
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<tbody>
<tr>
<td>Company policies</td>
<td><strong>NDDoH Lab</strong> – PO Box 5520 Bismarck, ND 58506</td>
</tr>
<tr>
<td>Lab Requirements</td>
<td><strong>MVTL</strong> – 2616 E Broadway Ave, Bismarck, ND 58501</td>
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<tr>
<td>• Test only on certain days for some parameters.</td>
<td><strong>Astro-Chem</strong> – 4102 2\textsuperscript{nd} Ave W, Williston, ND 58801</td>
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<tr>
<td>• Sample bottles may be pre-acidified</td>
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<tr>
<td>State procedure</td>
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How Do you Sample?

NDDoH Standard Sampling Procedure

- Rinse sample bucket/cup 3X
- Rinse sample container 3X
  - Not rinsing pre-acidified or e coli container
- Take the sample
- Add any required additives
- Close samples and seal if applicable
- Mark samples
  - Name or initials
  - Time and timezone
  - Location
- Place into cooler
What do you do with the Sample?

- Fill out the Sample ID Sheet as specified by the lab
  - Call the lab with any questions
- Place the cooler into the box
- Place the Sample ID Sheet on top of the cooler
- Mail the package
Fill out the appropriate Discharge Monitoring Report

- DMR’s can be found on the department’s website

Mail in the signed DMR
What do you do if you have exceedances?

- Review your Best Management Practices (BMPs)
  - Field Inspection
  - Fix/refresh/replace any deficient BMPs
- Review your facility
  - Identify where the pollutants are originating
  - Implement BMPs that may reduce the amount of pollutants
Questions?

STORMWATER@ND.GOV