




# NPDES Industrial Stormwater Program

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The NPDES (National Pollutant Discharge Elimination System) **Industrial Stormwater Program** is federally mandated and covers a [wide variety of industrial activities](#) . General permits apply to numerous broad categories of industrial activities with potential stormwater discharges. Industries that are not eligible for any of the general permits are required to seek an individual permit. An alternative to a permit is a “no exposure certification,” which certifies the facility has no industrial materials or activities that are exposed to precipitation, and that secondary containment is provided. The NC NPDES industrial stormwater program includes approximately: 3100 certificates of coverage (COCs) under general permits, 150 individual permits, and 880 no exposure certifications.





- The term “Storm Water Discharges Associated with Industrial Activity,” defined in federal regulations 40 CFR 122.26(b)(14)(i)-(xi), determines which industrial facilities are potentially subject to the NPDES stormwater program. The definition uses either SIC (Standard Industrial Classification) codes or narrative descriptions to characterize the activities, *and requires a point source discharge*.
- A point source discharge is defined as any discernible, confined and discrete conveyance including, but not specifically limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the state.

### Stormwater General Permits

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+ NCG010000: Construction Activities for projects  
permitted on or after August 2, 2011. Expires 10/31/2019



# *Stormwater Program*

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- + NCG150000: Airports, Effective 9-1-2017, Expires 8-31-2022

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- + NCG160000: Asphalt Paving Mixtures, Blocks, Effective 10-1-2014, Expires 9-30-2019

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- + NCG170000: Textile Mill, Effective 8-1-2014, Expires 7-31-2019

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- + NCG180000: Furniture Manufacture, Effective 9-1-2014, Expires 8-31-2019

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- + NCG190000: Marinas and Shipbuilding, Effective 6-2-2015, Expires 5-31-2020

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- + NCG200000: Scrap Metal, Effective 2-2-2015, Expires 12-31-2019

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- + NCG210000: Timber Products, Effective 8-1-2018, Expires 7-31-2023

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- + NCG240000: Composting Operations, Effective 10-2-2017, Expires 9-30-2022



# *Stormwater Program*

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- Each permit requires the facility to develop a site-specific Stormwater Pollution Prevention Plan (SPPP) and conduct analytical and/or qualitative (visual) monitoring of stormwater discharges based on the facility's potential pollutant sources
- The SPPP must include items such as a narrative description of practices, detailed site map, spill prevention & response procedures, preventative maintenance & good housekeeping program, employee training, etc.
- There are also requirements for secondary containment of bulk storage of liquid materials, listing and reporting of significant spills, annual review and updates, and implementation
- Monitoring of stormwater discharges is semi-annually (Jan-June, July-Dec) provided that analytical results do not exceed associated benchmark values for the specified parameters
- Exceedances of benchmark values trigger tiered response actions such as an internal facility evaluation to identify possible causes, increased monitoring frequency to monthly, installation of structural stormwater controls, in-stream monitoring, etc.





- SPPP

- Helpful if well-organized and easy to follow (i.e. indexed, section tabs, binder)
- Contain all permit-required components including associated documents related to maintenance/good-housekeeping, annual employee training, releases of accumulated stormwater from secondary containment structures
- Amended whenever there is a change in design, construction, operation, site drainage, maintenance, etc.
- Updated annually regarding; any significant spills or notation that none have occurred, non-stormwater certification, effectiveness of BMPs, review and comparison of analytical monitoring data to benchmark values
- Implementation



- Secondary Containment

- Bulk storage of liquid materials: single above ground storage container with capacity of greater than 660 gallons OR multiple containers with total combined capacity of greater than 1,320 gallons (totes, drums, etc.)
- Storage in any amount of hazardous substances or water priority chemicals
- Spill containment for contents of largest tank plus sufficient freeboard for the 25-year, 24-hour storm event; double-walled tanks acceptable
- Drain valves must be kept closed AND locked, accumulated stormwater can be released if found to be uncontaminated by any material upon visual observation
- Document observations and releases in the SPPP



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- Monitoring Protocol/Sampling Location

- Monitoring performed during a measurable storm event – event resulting in an actual discharge from the outfall where previous storm event occurred at least 72 hours prior
- Stormwater Discharge Outfall (SDO) – point of departure from point source discharge from which stormwater flows directly or indirectly into waters of the state (i.e. end of pipe, ditch, etc. before leaving property or entering receiving stream)
  - If SDO is off property or inaccessible due to safety concerns, allow sample to be taken at last catch basin/drop inlet
- Samples shall be collected within the first 30 minutes of discharge
- Samples should not be taken directly from a stormwater retention pond



- Monitoring Records Review

- Helpful if in chronological order by sampling period
- Discharge Monitoring Report (DMR) should be filled out completely and signed by responsible official or their designee
- Lab reports with corresponding monitoring results should be included with associated DMRs to ensure proper testing methods and data transfer
- DMRs submitted within 30 days from receipt of lab report
  - Recommend proof of submission of DMRs to Central Files via Certified Mail
- Qualitative monitoring performed during required analytical monitoring events
  - Records not submitted unless requested



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### Stormwater Discharge Monitoring Report

for North Carolina Division of Energy, Mineral and Land Resources General Permit No. NCG030000

Date submitted \_\_\_\_\_

CERTIFICATE OF COVERAGE NO. NCG03 \_\_\_\_\_  
 FACILITY NAME \_\_\_\_\_  
 COUNTY \_\_\_\_\_  
 PERSON COLLECTING SAMPLES \_\_\_\_\_  
 LABORATORY \_\_\_\_\_ Lab Cert. # \_\_\_\_\_  
 Comments on sample collection or analysis:  
 \_\_\_\_\_

SAMPLE COLLECTION YEAR \_\_\_\_\_  
 SAMPLE PERIOD  Jan-June  July-Dec  
 or  Monthly<sup>1</sup> \_\_\_\_\_ (month)  
 DISCHARGING TO CLASS  ORW  HQW  Trout  PNA  
 Zero-flow  Water Supply  SA  
 Other \_\_\_\_\_

PLEASE REMEMBER TO SIGN ON PAGES 2 AND/OR 3 →

#### Part A: Stormwater Benchmarks and Monitoring Results

No discharge this period?<sup>2</sup>

| Outfall No.           | Date Sample Collected <sup>1</sup><br>(mo/dd/yr) | 24-hour rainfall amount,<br>Inches <sup>3</sup> | Total Suspended Solids           | pH,<br>Standard units | Total Copper | Total Lead | Total Zinc | Non-Polar O&G/<br>Total Petroleum<br>Hydrocarbons | Total Toxic<br>Organics <sup>5</sup> |
|-----------------------|--|---|----------------------------------|-----------------------|--------------|------------|------------|---|--------------------------------------|
| <i>Benchmarks</i>     | -  | -   | 100 mg/L or 50 mg/L <sup>4</sup> | 6.0 – 9.0             | 0.010 mg/L   | 0.075 mg/L | 0.126 mg/L | 15 mg/L   | 1 mg/L                               |
| <i>Parameter Code</i> | -  | 46529   | CO530                            | 00400                 | 01119        | 01051      | 01094      | 00552   | 78141                                |
|                       |  |   |                                  |                       |              |            |            |   |                                      |
|                       |  |   |                                  |                       |              |            |            |   |                                      |
|                       |  |   |                                  |                       |              |            |            |   |                                      |
|                       |  |   |                                  |                       |              |            |            |   |                                      |

<sup>1</sup> Monthly sampling (instead of semi-annual) must begin with the second consecutive benchmark exceedance for the same parameter at the same outfall.

<sup>2</sup> For sampling periods with no discharge at any single outfall, you must still submit this discharge monitoring report with a checkmark here.

<sup>3</sup> The total precipitation must be recorded using data from an on-site rain gauge. Unattended sites may be eligible for a waiver of the rain gauge requirement.

<sup>4</sup> See General Permit, Section B, Table 1 to identify the especially sensitive receiving water classifications where the more protective benchmark applies.

<sup>5</sup> Total Toxic Organics sampling is applicable only for those facilities which perform metal finishing operations, manufacture semiconductors, manufacture electronic crystals, or manufacture cathode ray tubes. For purposes of this permit the definition of Total Toxic Organics is that definition contained in the EPA Effluent Guidelines for the facility subject to the requirement to sample (for metal finishing use the definition as found in 40 CFR 433.11; for semiconductor manufacture use the definition as found in 40 CFR 469.12; for electronic crystal manufacture use the definition as found in 40 CFR 469.22; and for cathode ray tube manufacture use the definition found in 40 CFR 469.31).

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Facilities that incorporate a **solvent management plan** into the Stormwater Pollution Prevention Plan may so certify, and the requirement for TTO monitoring may be waived. The solvent management plan shall include a list of the total toxic organic compounds used and the other elements listed in the General Permit. For those facilities electing to employ the TTO monitoring waiver, the discharger shall sign the following certification statement:

"Based upon my inquiry of the person or persons directly responsible for managing compliance with the permit monitoring requirement for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics into the stormwater or areas which are exposed to rainfall or stormwater runoff has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the all the provisions of the solvent management plan included in the Stormwater Pollution Prevention Plan."

\_\_\_\_\_

Name (Print name)

\_\_\_\_\_

Title (Print title)

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

Note: **Results must be reported in numerical format.** Do not report Below Detection Limit, BDL, <PQL, Non-detect, ND, or other similar non-numerical format. When results are below the applicable limits, **they must be reported in the format, "<XX mg/L"**, where XX is the numerical value of the detection limit, reporting limit, etc. in mg/L.

Note: *If you report a sample value in excess of the benchmark, you must implement Tier 1, Tier 2, or Tier 3 responses. See General Permit text.*

### Part B: Vehicle Maintenance Area Monitoring Results: only for facilities averaging > 55 gal of new oil per month.

No discharge this period?<sup>2</sup>

| Outfall No.           | Date Sample Collected <sup>1</sup><br>(mo/dd/yr) | 24-hour rainfall amount,<br>Inches <sup>3</sup> | New Motor Oil or<br>Hydraulic Oil Usage | Non-Polar O&G/ Total<br>Petroleum Hydrocarbons | Total Suspended<br>Solids        |
|-----------------------|--|---|---|--|----------------------------------|
| <i>Benchmarks</i>     | -  | -   | -                                       | 15 mg/L  | 100 mg/L or 50 mg/L <sup>4</sup> |
| <i>Parameter Code</i> | -  | 46529   | NCOIL                                   | 00552  | CO530                            |
|                       |  |   |   |  |                                  |
|                       |  |   |   |  |                                  |
|                       |  |   |   |  |                                  |
|                       |  |   |   |  |                                  |

Footnotes from Part A also apply to Part B

Note: *If you report a sample value in excess of the benchmark, you must implement Tier 1, Tier 2, or Tier 3 responses. See General Permit text.*

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**FOR PART A AND PART B MONITORING RESULTS:**

- A BENCHMARK EXCEEDANCE TRIGGERS **TIER 1 REQUIREMENTS**. SEE PERMIT PART II SECTION B.
  - 2 EXCEEDANCES IN A ROW FOR THE SAME PARAMETER AT THE SAME OUTFALL TRIGGER **TIER 2 REQUIREMENTS**. SEE PERMIT PART II SECTION B.
  - **TIER 3:** HAS YOUR FACILITY HAD 4 OR MORE BENCHMARK EXCEEDENCES FOR THE SAME PARAMETER AT ANY ONE OUTFALL? YES  NO
- IF YES, HAVE YOU CONTACTED THE DEMLR REGIONAL OFFICE? YES  NO

REGIONAL OFFICE CONTACT NAME: \_\_\_\_\_

**Mail an original copy of this DMR, including all "No Discharge" reports, within 30 days of receipt of the lab results (or at end of monitoring period in the case of "No Discharge" reports) to:**

Division of Water Quality  
Attn: DWQ Central Files  
1617 Mail Service Center  
Raleigh, North Carolina 27699-1617

**YOU MUST SIGN THIS CERTIFICATION FOR ANY INFORMATION REPORTED:**

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

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### Stormwater Discharge Outfall (SDO) Qualitative Monitoring Report

For guidance on filling out this form, please visit <https://dec.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/stormwater-permits/nodes-industrial-cw#tab-4>

Permit No.: N/C/ / / / / / / / or Certificate of Coverage No.: N/C/G/ / / / / / / / / /  
Facility Name: \_\_\_\_\_  
County: \_\_\_\_\_ Phone No. \_\_\_\_\_  
Inspector: \_\_\_\_\_  
Date of Inspection: \_\_\_\_\_  
Time of Inspection: \_\_\_\_\_  
  
Total Event Precipitation (inches): \_\_\_\_\_

All permits require qualitative monitoring to be performed during a “measurable storm event.”  
  
A “measurable storm event” is a storm event that results in an actual discharge from the permitted site outfall. The previous measurable storm event must have been at least 72 hours prior. The 72-hour storm interval does not apply if the permittee is able to document that a shorter interval is representative for local storm events during the sampling period, and the permittee obtains approval from the local DEMLR Regional Office.

By this signature, I certify that this report is accurate and complete to the best of my knowledge:

\_\_\_\_\_  
(Signature of Permittee or Designee)

1. Outfall Description:  
Outfall No. \_\_\_\_\_ Structure (pipe, ditch, etc.): \_\_\_\_\_  
Receiving Stream: \_\_\_\_\_  
Describe the industrial activities that occur within the outfall drainage area: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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2. **Color:** Describe the color of the discharge using basic colors (red, brown, blue, etc.) and tint (light, medium, dark) as descriptors: \_\_\_\_\_  
\_\_\_\_\_

3. **Odor:** Describe any distinct odors that the discharge may have (i.e., smells strongly of oil, weak chlorine odor, etc.): \_\_\_\_\_  
\_\_\_\_\_

4. **Clarity:** Choose the number which best describes the clarity of the discharge, where 1 is clear and 5 is very cloudy:

1    2    3    4    5

5. **Floating Solids:** Choose the number which best describes the amount of floating solids in the stormwater discharge, where 1 is no solids and 5 is the surface covered with floating solids:

1    2    3    4    5

6. **Suspended Solids:** Choose the number which best describes the amount of suspended solids in the stormwater discharge, where 1 is no solids and 5 is extremely muddy:

1    2    3    4    5

7. Is there any foam in the stormwater discharge?  Yes     No. \_\_\_\_\_

8. Is there an oil sheen in the stormwater discharge?  Yes     No. \_\_\_\_\_

9. Is there evidence of erosion or deposition at the outfall?  Yes     No. \_\_\_\_\_

10. **Other Obvious Indicators of Stormwater Pollution:**

List and describe \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note:** Low clarity, high solids, and/or the presence of foam, oil sheen, or erosion/deposition may be indicative of pollutant exposure. These conditions warrant further investigation.







- Contact Information

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