DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

FACT SHEET

GENERAL PERMIT NCG120000
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE STORMWATER

Permit No. NCG120000 Date: August 2, 2018

1. TYPES OF DISCHARGES COVERED

a. Industrial Activities Covered by this General Permit

Coverage under this general permit is applicable to all owners or operators of stormwater point source discharges associated with establishments primarily engaged in activities classified as the wholesale trade of:

- **Activities categorized as landfills,** including **construction and demolition debris landfills, which are permitted by the North Carolina Division of Water Management under the provisions and requirements of North Carolina General Statute 130A-294.**

Coverage is also applicable to point source discharges **from like industrial activities** deemed by the Division of Energy, Mineral, and Land Resources (DEMLR) to be similar to these operations in the process, or the discharges, or the exposure of raw materials, intermediate products, by-products, products, or waste products.

b. Types of Operations Covered

The **landfills** category includes facilities primarily engaged in receiving and disposing of waste and debris, including municipal solid waste, industrial waste, construction and demolition waste, land-clearing waste, scrap tires, medical waste, compost and septage. The operations of a landfill can include receiving solid waste, staging, size reduction, separation, placing, compaction, excavation, loading, hauling, filling, covering, leachate management, vehicle maintenance, vehicle fueling, and vehicle and equipment cleaning.

Nearly all landfills and much of the material that is deposited in landfills are exposed to stormwater. Stormwater can either run off the facility to surface waters or infiltrate through the landfill, and contaminate groundwater with leachate. In addition, landfill activities often include large scale excavation, grading, and importation of soil or other cover material, which provides significant erosion potential.

c. Characteristics of Discharged Stormwater

Stormwater discharged from a landfill can contain many different types of pollutants, depending on the materials deposited and the degree to which best management practices are implemented. Runoff from landfills can contain solids and floatables, pathogens, nutrients, and other pollutants. High sediment loading is common due to the large scale movement of soil and the potential for erosion. The vehicles and equipment can also contribute oils, lubricants, and other fluids.

The draft renewal permit maintains the requirement for qualitative and analytical monitoring of all stormwater discharges associated with this industrial activity, including stormwater discharges from *on-site vehicle and equipment maintenance activities* (VMA). These parameters continue to be useful as the standard stormwater pollution indicators for VMA from this industrial sector.

d. Geographic Area(s) Covered by this General Permit

Discharges covered by this general permit are located at any place within the political boundary of the State of North Carolina. Discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the U.S. Environmental Protection Agency and are not covered by this general permit.

e. Receiving Waters

Receiving waters include all surface waters of North Carolina or municipal separate storm sewer systems conveying stormwater to surface waters.

2. PROPOSED DISCHARGE CONTROLS AND LIMITATIONS

a. Erosion and Sediment Control Plan

As in previous versions of this permit, permittees must submit an Erosion and Sediment Control plan to the Division of Energy, Mineral, and Land Resources or an approved local program. The plan must conform to the requirements of NC G.S. 113A-54.1 and the rules adopted by the North Carolina Sedimentation Control Commission. The permittee must then implement the plan as approved and maintain a signed copy of the plan on site at all times.

b. Secondary Containment Requirements

As in previous versions of this permit, secondary containment is required for bulk storage of liquid materials including petroleum products, storage in any amount of water priority chemicals pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act, and storage in any amount of hazardous substances. Permittees are required to maintain a table or summary of all such tanks, stored materials, and their

associated secondary containment areas. At a minimum, visual observations of any stormwater that accumulates in secondary containment areas are required, and records must be kept of the individual observing the stormwater, a description of the stormwater, and the date and time of the release of the stormwater.

c. Stormwater Discharge Analytical Monitoring

As in previous versions of this permit, permittees must perform analytical monitoring on stormwater discharges, respond to exceedances of numerical benchmark values, keep records of the monitoring results and permittee's response actions, and report the monitoring results to DEMLR.

d. Stormwater Discharges from Vehicle Maintenance Areas

As in previous versions of this General Permit, permittees must perform analytical monitoring on stormwater discharges from vehicle maintenance areas (VMA). This renewal permit maintains benchmark concentrations for stormwater discharges from VMA to provide facilities with a tool with which to assess the effectiveness of best management practices (BMPs).

e. Qualitative Monitoring of Stormwater Discharges

As in previous versions of this General Permit, the permittee must perform qualitative monitoring at all stormwater outfalls. All permittees are subject to this permit requirement.

f. Numerical Benchmark and Tiered Responses

As in previous versions of this General Permit, the permittee must respond to benchmark exceedances with increased monitoring, increased management actions, increased record keeping, and/or the installation of stormwater BMPs in a tiered program. Exceedance of a numerical benchmark is not considered a violation of the permit conditions, although failure to respond as per the Tiered response structure is considered to be a violation. In that context, the benchmark value is not a numerical "permit limit", but rather could be viewed as a management action level value. Four (4) benchmark exceedances require the permittee to notify the DEMLR Regional Office, and may prompt additional requirements under the provisions of Tier Three.

3. MONITORING AND REPORTING REQUIREMENTS

This permit specifies monitoring and reporting requirements for both quantitative and qualitative assessment of the stormwater discharges and operational inspections of the entire facility. Specific pollutant parameters and the frequency of the sampling are based on the types of materials used, stored, and transferred at these sites, and on the potential for contamination of the stormwater runoff from these facilities. Qualitative parameters are consistent with other general permits in the NPDES stormwater program.

The draft renewal permit proposes specific monitoring requirements for the following parameters: **chemical oxygen demand (COD), fecal coliform, and total suspended solids (TSS).** In addition, qualifying discharges from vehicle maintenance areas will be analyzed for **pH, non-polar oil and grease** [by EPA Method 1664 (SGT-HEM)], and **TSS**, based on the amount of motor oil/hydraulic oil usage (more than 55 gallons of new motor oil and/or hydraulic oil per month when averaged over the calendar year). The rationale for retaining these parameters in the renewal permit is their utility as stormwater pollution indicators for vehicle maintenance areas.

The draft renewal permit retains the term "**measurable storm event**." The measurable storm event is an event that results in an actual discharge, rather than an event with a rainfall measuring 0.1 inches or more. To qualify as a measurable storm event, the previous storm event must have been at least 72 hours prior. In 2011, the NCG140000 Ready-Mixed Concrete General Permit was the first general permit to implement this new storm event definition, and other general permits have since followed suit. The proposed draft also maintains the requirement to separate semi-annual sampling events by a minimum of 60 days.

As before, the renewal permit specifies qualitative (visual) monitoring of each stormwater outfall for the purpose of evaluating the effectiveness of the BMPs, assessing new sources of stormwater pollution, and prompting the permittee's response to pollution. Permittee's are required to perform semi-annual qualitative monitoring under the proposed renewal permit. Qualitative monitoring parameters include color, odor, clarity, floating and suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. Qualitative monitoring should be performed during any analytic sampling event.

The draft permit maintains specific direction to the permittee about how to respond to qualitative monitoring. If qualitative monitoring indicates that existing stormwater BMPs are ineffective, or that significant stormwater contamination is present, the permittee must investigate potential causes, evaluate the feasibility of corrective actions, and implement those corrective actions within 60 days. A written record of the permittee's investigation, evaluation, and response actions must be kept on site.

4. COMPLIANCE SCHEDULE

The compliance schedule in Part III, Section A still advises that the permittee comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

> **Existing Facilities already operating but applying for permit coverage for the first time:** Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this general permit, shall be accomplished within 12 months of the effective date of the issuance of the **Certificate of Coverage**.
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> **New Facilities applying for coverage for the first time and existing facilities previous permitted and applying for renewal under this General Permit:** All requirements, conditions, limitations, and controls contained in this permit become effective immediately upon issuance of the Certificate of Coverage.

5. SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

This draft general permit does not propose any special conditions that will have a significant impact on the discharge. However, the proposed draft does add Special Conditions in Part II, Section D. that address electronic reporting requirements mandated by the federal NPDES Electronic Reporting Rule. When the agency's electronic reporting system is able to accept NPDES stormwater permit monitoring data, the permittee must report discharge monitoring data electronically using NC Division of Water Resources' Electronic Discharge Monitoring Report (eDMR) internet application. NC DEMLR will notify permittees when eDMR is ready to accept data.

6. BASIS FOR CONTROLS AND LIMITATIONS

a. Stormwater Discharges

> The conditions of this general permit have been designed using best professional judgment to achieve water quality protection through compliance with the technology-based standards of the Clean Water Act (Best Available Technology [BAT] and Best Conventional Pollutant Control Technology [BCT]). Where the Director determines that a water quality violation is occurring and water quality-based controls or effluent limitations are required to protect the receiving waters, coverage under the general permit shall be terminated and an individual permit will be required. Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors discussed below in this fact sheet for controlling pollutants in stormwater discharges associated with the activities as described in Item 1 (Types of Discharge Covered), this permit retains a set of requirements for developing and implementing stormwater pollution prevention

plans, and specific requirements for monitoring and reporting on stormwater discharges.

The permit conditions reflect the Environmental Protection Agency's (EPA) and North Carolina's pollution prevention approach to stormwater permitting. The quality of the stormwater discharge associated with an industrial activity will depend on the availability of pollutant sources. This renewal permit still reflects the Division's position that implementation of Best Management Practices (BMPs) and traditional stormwater management practices which control the source of pollutants meets the definition of BAT and BCT. The permit conditions are not numeric effluent limitations, but rather are designed to be flexible requirements for developing and implementing site specific plans to minimize and control pollutants in the stormwater discharges associated with the industrial activity.

Title 40 Code of Federal Regulations (CFR) Part 122.44(k)(2) authorizes the use of BMPs in lieu of numeric effluent limitations in NPDES permits when the agency finds numeric effluent limitations to be infeasible. The agency may also impose BMP requirements which are "reasonably necessary" to carry out the purposes of the Act under the authority of 40 CFR 122.44(k)(3). The conditions of the renewal permit are retained under the authority of both of these regulatory provisions. The pollution prevention requirements (BMP requirements) in this permit operate as limitations on effluent discharges that reflect the application of BAT/BCT. The basis is that the BMPs identified require the use of source control technologies which, in the context of these general permits, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities covered by this stormwater general permit must fully implement the Sedimentation and Erosion Control Plan received from the Division of Energy, Mineral, and Land Resources or an approved local program pursuant to the requirements of NC G.S. 113A-54.1 and in conformity with the rules adopted by the Sedimentation and Erosion Control Commission.

Covered facilities must also fully implement the permit for a sanitary landfill from the NC Division of Waste Management, pursuant to the requirements of NC G.S. 130A-294 and in conformity with the rules adopted in 15A North Carolina Administrative Code, Subchapter 13B Section .0500. Deviation from the landfill permit, or approved amendment or revision of the landfill permit, shall constitute a violation of the terms and conditions of this general permit. A signed copy of the landfill permit shall be maintained on the site at all times.

The EPA and NPDES States have, on a case-by-case basis, imposed BMP requirements in NPDES permits. The EPA has also continued to review and evaluate case studies involving the use of BMPs and the use of pollution prevention measures associated with spill prevention and containment measures for oil. The development of the NPDES permit application requirements for stormwater discharges associated with industrial activity resulted from the evaluation and

identification of the potential contaminants and the resultant water quality impacts of stormwater discharges from industrial sites. Public comments received during the rule making provided additional insight regarding stormwater risk assessment, as well as appropriate pollution prevention and control measures and strategies. During that time EPA again reviewed stormwater control practices and measures. These experiences have shown the Division that pollution prevention measures such as BMPs can be appropriately used and that permits containing BMP requirements can effectively reduce pollutant discharges in a cost-effective manner. BMP requirements are imposed in general permits in lieu of numeric effluent limitations pursuant to 40 CFR 122.44(k)(2).

There has been no significant change to this rationale since the previous General Permit NCG120000.

b. Stormwater Benchmarks

The **"Non-polar O&G" [by EPA Method 1664 (SGT-HEM)] benchmark** of **15.0 mg/l** is consistent with other States' benchmarks and/or limits for total petroleum hydrocarbons (TPH) and reflects a value normally only associated with significant oil contamination. Specifying the EPA Method 1664 with the silica gel treatment step (SGT-HEM) in the permit ensures a cost-effective way to estimate TPH (as opposed to gas chromatographic analysis).

The standard **total suspended solids (TSS) benchmark** of **100 mg/l** is based on the median concentration derived from the National Urban Runoff Program (NURP) study in 1983 and serves as a benchmark in most other industrial stormwater permits with TSS monitoring. The lower TSS benchmark for ORW, HQW, trout, and primary nursery area (PNA) waters of **50 mg/l** reflects half that standard value and was set to flag potential problems in discharges to waters with much lower water quality standards for TSS concentrations (20 mg/l for HQW and ORW; 10 mg/l for trout and PNA waters).

The proposed **pH benchmark** range of between 6.0 and 9.0 standard units for discharges from vehicle maintenance areas is based on N.C. Water Quality Standards in 15A NCAC 02B .0211 and is consistent with other renewed stormwater general permits.

The **fecal coliform benchmark** is set at 1000 count per 100ml. The N.C. Water Quality Standard (for all Class C waters, based on human health) establishes that fecal coliforms shall not exceed a geometric mean of 200/100ml (MF count) based upon at least five consecutive samples examined during any 30-day period, nor exceed 400/100ml in more than 20 percent of the samples examined during such period. The SPU does not consider these in-stream values practical for a stormwater benchmark.

The **COD benchmark** is set at 120 mg/L, consistent with all other stormwater General Permits employing COD. COD is one measure of the organic pollutants in stormwater,

and is generally found at levels three to six times the BOD_5 levels in domestic wastewaters. NC DWQ has selected a multiplier of 4 in comparison to BOD. There has been no change to this benchmark value since the 2007 permit.

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

There are no requested variances or alternatives to required standards. Facilities requesting variances to required standards will not be covered under this General Permit but will instead be required to seek coverage under an individual permit.

8. THE ADMINISTRATIVE RECORD

The administrative record, including application, draft permits, fact sheet, public notice, comments received, and additional information is available by writing to:

Stormwater Program
Division of Energy, Mineral, and Land Resources (DEMLR)
1612 Mail Service Center
Raleigh, North Carolina 27699-1612

The above documents are available for review and copying at:

Archdale Building, 9th Floor
DEMLR Stormwater Program
512 N. Salisbury Street
Raleigh, North Carolina

between the hours of 8:00 AM and 5:00 PM Monday through Friday. Copies will be provided at a charge of 10 cents per page.

9. STATE CONTACT

Additional information about the draft permit may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting: **Corey Anen** at (919) 707-3649.

10. SCHEDULE OF PERMIT ISSUANCE

Draft Permit Public Notice – **Statewide Notice to publish September 4, 2018;**
Draft available on-line by September 4, 2018;
Comment Period Ends October 5, 2018

Permit Scheduled to Issue – **No later than October 15, 2018;**
Effective November 1, 2018

11. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Division of Energy, Mineral, and Land Resources proposes to issue an NPDES General Permit for the above described stormwater discharges subject to the outlined effluent limitations, management practices, and special conditions. These determinations are open to comment from the public.

Interested persons are invited to submit written comments on the permit applications or on the Division of Energy, Mineral, and Land Resources' proposed determinations to the following address:

Stormwater Program
Division of Energy, Mineral, and Land Resources
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
Attn: **Corey Anen**

All comments received within thirty (30) days following the date of public notice are considered in the formulation of final determinations.

b. Public Meeting

The Director of the Division of Energy, Mineral, and Land Resources may hold a public meeting if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a meeting will be circulated in newspapers in the geographical area of the discharge and to those on the Division of Energy, Mineral, and Land Resources' mailing list at least thirty (30) days prior to the meeting.

c. Appeal Hearing

An applicant whose permit is denied, or is granted subject to conditions he deems unacceptable, shall have the right to a hearing before the Commission upon making written demand to the Office of Administrative Hearing (OAH) within 30 days following issuance or denial of the permit.

d. Issuance of a Permit When no Hearing is Held

If no public meeting or appeal hearing is held, after review of the comments received, and if the Division of Energy, Mineral, and Land Resources determinations are substantially unchanged, the permit will be issued and become effective on the first day of the month following the issuance date. This will be the final action of the Division of Energy, Mineral, and Land Resources.

If a public meeting or appeal hearing is not held, but there have been substantial changes, public notice of the Division of Energy, Mineral, and Land Resources revised determinations will be made. Following a 30-day comment period, the permit will be issued and will become effective on the first day of the month following the issuance date. This will be the final action of the Division of Energy, Mineral, and Land Resources unless a public meeting or appeal hearing is granted.