

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WATER QUALITY

FACT SHEET

GENERAL PERMIT
 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
 PERMIT TO DISCHARGE STORMWATER

Permit No. NCG080000

Date: August 31, 2012

1. TYPES OF DISCHARGES COVERED

a. Industrial Activities Covered by this General Permit

All owners or operators of stormwater point source discharges associated with activities that have Vehicle Maintenance Areas (including vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication and equipment cleaning operation areas) associated with activities classified as Rail Transportation [Standard Industrial Classification (SIC) 40], Local and Suburban Transit and Interurban Highway Passenger Transportation [SIC 41], Motor Freight Transportation and Warehousing [SIC 42], except Public Warehousing and Storage [SIC 4221-4225], Postal Service [SIC 43], Petroleum Bulk Stations and Terminals [SIC 5171] with total petroleum storage capacity of less than 1 million gallons.

On a case-by-case basis, the State may require other industrial activities to be permitted under this general permit that are not categorically required to be permitted. These other activities may include stormwater discharges from oil water separators, secondary containments structures at petroleum storage facilities, and/or vehicle maintenance areas at any facilities other than those listed above.

The following activities are specifically excluded from coverage under this General Permit: vehicle maintenance areas at activities classified as Water Transportation (SIC 44) and Transportation by Air (SIC 45) and wash water from steam cleaning operations or other equipment cleaning operations.

b. Types of Operations Covered

SIC Major Group 40 includes establishments furnishing transportation by line-haul railroad, and switching and terminal establishments. Railways serving a single municipality, contiguous municipalities, or a municipality and its suburban areas are classified in Major Group 41.

SIC Major Group 41 includes establishments primarily engaged in furnishing local and suburban passenger transportation, such as those providing passenger transportation within a single municipality, contiguous municipalities, or a municipality and its suburban areas, by bus, rail, or subway, either separately or in combination, and establishments engaged in furnishing transportation to local scenic features. Also included are establishments primarily engaged in furnishing highway passenger transportation and establishments furnishing highway passenger terminal and maintenance facilities. Intercity bus lines are included in this group.

SIC Major Group 42 includes establishments furnishing local or long-distance trucking or transfer services, or those engaged in the storage of furniture and other household goods, or commercial goods of any nature. Specifically excluded from coverage under this General Permit are the Sub groups 4221 – 4225, which are establishments primarily engaged in public warehousing and storage.

SIC group 43 includes all establishments of the United States Postal Service.

SIC 5171 includes establishments primarily engaged in the wholesale distribution of crude petroleum and petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

For SIC 40, 41, 42, 43, and SIC 5171, the industrial activity which is required to have a NPDES stormwater permit is the area(s) at these facilities associated with vehicle maintenance or equipment cleaning operations [or area(s) where these activities have taken place in the past and significant materials remain and are exposed to stormwater]. The point source discharges of stormwater runoff associated with the areas where vehicle maintenance or equipment cleaning takes place are required to be permitted regardless of material or material handling equipment exposure to stormwater. Establishments in these groups frequently conduct some aspects of the vehicle maintenance operations outside.

Other operations which are covered by this General Permit are those activities which are not categorically required to have stormwater discharge permits, but which have been designated on a case-by-case basis by the Division of Water Quality to require a NPDES permit for their stormwater discharge. Activities in categories of point sources discharge of stormwater from oil water separators, secondary containment structures at petroleum storage facilities, and/or vehicle maintenance areas at any facilities.

Pollutant parameters of particular concern in these activities can be broadly be categorized as Petroleum Products, Solvents, Paints, Antifreezes, Acids and Alkalies, Heavy Metals, Detergents, and Suspended Solids Agents. Some or all of these materials are expected to be in stormwater runoff from facilities conducting vehicle maintenance activities.

c. Characteristics of Discharged Stormwater

Data submitted to the U.S. Environmental Protection Agency (EPA) during the group stormwater permit application process included quantitative analyses of grab samples for the

following pollutants in stormwater runoff from Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities (Sectors 16 & 17): Total Suspended Solids (TSS), pH, Oil and Grease, Biochemical Oxygen Demand (BOD₅), Chemical Oxygen Demand (COD), Total Kjeldahl Nitrogen (TKN), Nitrate plus Nitrite Nitrogen, and Total Phosphorus. Analysis of this data indicated that pollutant parameters of particular concern in this industry are pH, Total Suspended Solids, and Oil and Grease.

Data submitted in response to the previous NCG080000 permit term covered: TSS, pH, and O&G. Analysis of data submitted by 264 permittees indicated that all parameters had average or maximum reported values that exceeded current benchmark concentrations¹. The decision to retain the parameters from the previous permit was based in part on this assessment, but also on their continued usefulness as stormwater pollution indicators for these industry types—especially within the revised monitoring scheme and tiered responses introduced by this renewal permit. A tabular explanation of the data analysis is presented in the Appendix.

d. Geographic Areas 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 US 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. DISCHARGE CONTROLS AND LIMITATIONS

The renewal permit incorporates **benchmark concentrations** to provide facilities a tool with which to assess the effectiveness of best management practices (BMPs). These benchmark concentrations are not effluent limits, but provide guidelines for the facility’s Stormwater Pollution Prevention Plan (SPPP or Plan). Exceedences of benchmark values require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater BMPs in a tiered program.

In previous versions of this general permit, cut-off concentrations were used to minimize the required analytical monitoring. The arithmetic mean of all monitoring data collected during the term of the permit was calculated for each parameter and compared to the cut-off concentration. If the mean was less than the permitted cut-off concentration, then the facility was allowed to discontinue analytical monitoring for that parameter at that outfall until the final year of the permit.

¹ See **Stormwater Permitting Unit (SPU) Benchmark Rationale Document** (August 10, 2007).

The Division revised that strategy on the basis that (1) so few data points over the term of the permit were insufficient to provide confidence in an average concentration and justify discontinuation of monitoring, (2) industrial processes or activities may change during the period the facility is not monitoring, and (3) periodic monitoring ensures the facility maintains vigilance in stormwater management. The renewal permit institutes semi-annual monitoring throughout the permit term and introduces a tiered approach to specify actions the permittee must take in response to results above benchmark concentrations.

The permittee shall **develop and implement** a Stormwater Pollution Prevention Plan (SPPP). The SPPP shall be maintained on site unless exempted from this requirement by the Division. The SPPP is public information in accordance with Part III, Standard Conditions, Section E, paragraph 3 of this permit. The SPPP shall include, at a minimum, the following items:

a. Site Overview

The Site Overview shall provide a description of the physical facility and the potential pollutant sources that may be expected to contribute to contamination of stormwater discharges. The Site Overview shall contain the following:

1. A general **location map** (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters; the name of the receiving waters to which the stormwater outfalls discharge, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters; and accurate latitude and longitude of the points of stormwater discharge associated with industrial activity. The general location map (or alternatively the site map) shall identify whether any receiving waters are **impaired** (on the state's 303(d) list of impaired waters) or if the site is located in a **watershed for which a TMDL has been established**, and what the parameters of concern are.
2. A **narrative description** of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. A **narrative description** of the potential pollutants that could be expected to be present in the stormwater discharge from each outfall.
3. A **site map** drawn at a scale sufficient to clearly depict: the site property boundary; the stormwater discharge outfalls; all on-site and adjacent surface waters and wetlands; industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, and haul roads); site topography and finished grade; all drainage features and structures; drainage area boundaries and total contributing area for each outfall; direction of flow in each drainage area; industrial activities occurring in each drainage area; buildings; stormwater Best Management Practices (BMPs); and impervious surfaces. The site map must indicate the percentage of each drainage area that is impervious, and the site map must include a graphic scale indication and north arrow.

4. A **list of significant spills or leaks** of pollutants during the previous three (3) years and any corrective actions taken to mitigate spill impacts.
5. Certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. **The permittee shall re-certify annually that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges.** The certification statement will be signed in accordance with the requirements found in Part III, Standard Conditions, Section B, Paragraph 5.

b. Stormwater Management Strategy

The Stormwater Management Strategy shall contain a narrative description of the materials management practices employed which control or minimize the stormwater exposure of significant materials, including structural and nonstructural measures. The Stormwater Management Strategy, at a minimum, shall incorporate the following:

1. **Feasibility Study.** A review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to rainfall and run-on flows. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, this review shall document the feasibility of diverting the stormwater run-on away from areas of potential contamination.
2. **Secondary Containment Requirements and Records.** Secondary containment is required for: bulk storage of liquid materials; storage in any amount of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage in any amount of hazardous substances, in order to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism). Any stormwater that accumulates in the containment area shall be at a minimum visually observed for color, foam, outfall staining, visible sheens and dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by any material. Records documenting the individual making the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five (5) years.
3. **BMP Summary.** A listing of site structural and non-structural Best Management Practices (BMPs) shall be provided. The installation and implementation of BMPs shall be based on the assessment of the potential for sources to contribute significant quantities of pollutants to stormwater discharges and on data collected through monitoring of stormwater discharges. The BMP Summary shall include a written record of the specific

rationale for installation and implementation of the selected site BMPs. The BMP Summary shall be reviewed and updated annually.

4. **Locomotive Sanding Areas** (applicable to Rail Transportation only). The plan must describe measures that prevent or minimize contamination of the stormwater runoff from areas used for locomotive sanding. The facility shall consider covering sanding areas, minimizing stormwater runoff/runoff, appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater, or other equivalent measures.

5. **Vehicle and Equipment Cleaning Areas.** The plan must describe measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle and equipment cleaning. The facility shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all wash waters drain to the sanitary sewer system (i.e., not the stormwater drainage system, unless permitted by another NPDES general or individual permit), collecting the stormwater runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. If sanitary sewer is not available to the facility and cleaning operations take place outdoors, the cleaning operations shall take place on grassed or graveled areas to prevent point source discharges of the wash water into the storm drains or surface waters. Where cleaning operations cannot be performed as described above and when operations are performed in the vicinity of a storm drainage collection system, the drain shall be covered with a portable drain cover during cleaning activities. Any excess ponded water shall be removed and properly handled by pump to a sanitary sewer system prior to removing the drain cover. Detergents used outdoors shall be biodegradable and the pH adjusted to be in the range of 6 to 9 standard units. The point source discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized by this permit and must be covered under a separate NPDES general or individual permit or discharged to a sanitary sewer in accordance with applicable industrial wastewater pretreatment requirements.

6. **Remote Fueling Operations.** If remote fueling (or other vehicle maintenance activities) are conducted at off site locations but coordinated from the permitted facility, the plan shall include a component that describes the stormwater management practices and BMPs used to prevent and/or minimize the contamination of stormwater from such activities.

c. Spill Prevention and Response Procedures.

The Spill Prevention and Response Procedures (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP and signed and dated by each individual acknowledging their responsibilities for the plan. A responsible person shall be on-site at all times during facility operations that have the potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific.

Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP.

d. Preventative Maintenance and Good Housekeeping Program.

A preventative maintenance and good housekeeping program shall be developed and implemented. The program shall address all stormwater control systems (if applicable), stormwater discharge outfalls, all on-site and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural BMPs. The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution where not already addressed under another element of the SPPP. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Timely compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded and maintained in the SPPP.

d. Employee Training.

Training programs shall be developed and training provided at a minimum on an annual basis for facility personnel with responsibilities for: spill response and cleanup, preventative maintenance activities, and for any of the facility's operations that have the potential to contaminate stormwater runoff. The facility personnel responsible for implementing the training shall be identified, and their annual training shall be documented by the signature of each employee trained.

e. Responsible Party.

The SPPP shall identify a specific position or positions responsible for the overall coordination, development, implementation, and revision of the SPPP. Responsibilities for all components of the SPPP shall be documented and position assignments provided.

f. SPPP Amendment and Annual Update.

The permittee shall amend the SPPP whenever there is a change in design, construction, operation, site drainage, maintenance, or configuration of the physical features which may have a significant effect on the potential for the discharge of pollutants to surface waters. **All aspects of the SPPP shall be reviewed and updated on an annual basis.** The annual update shall include:

1. an *updated list of significant spills or leaks* of pollutants for the previous three (3) years, or the notation that no spills have occurred (element of the **Site Overview**);

2. a written *re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges* (element of the **Site Overview**);
3. a documented re-evaluation of the effectiveness of the on-site stormwater BMPs (*BMP Summary* element of the **Stormwater Management Strategy**).
4. a *review and comparison of sample analytical data* to benchmark values (if applicable) over the past year, including a discussion about Tiered Response status. The permittee shall use the Division’s Annual Summary Data Monitoring Report (DMR) form, available from the Stormwater Permitting Unit’s website (See ‘Monitoring Forms’ here: <http://portal.ncdenr.org/web/wq/ws/su/npdcssw>).

The Director may notify the permittee when the SPPP does not meet one or more of the minimum requirements of the permit. Within 30 days of such notice, the permittee shall submit a time schedule to the Director for modifying the SPPP to meet minimum requirements. The permittee shall provide certification in writing (in accordance with Part III, Standard Conditions, Section B, Paragraph 5) to the Director that the changes have been made.

g. Facility Inspection Program.

Inspections of the facility and all stormwater systems shall occur at a minimum on a semi-annual schedule, once during the first half of the year (January to June) and once during the second half (July to December), with at least 60-days separating inspection dates (unless performed more frequently). The inspection and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection and a narrative description of the facility's stormwater control systems, plant equipment and systems. Records of these inspections shall be incorporated into the Stormwater Pollution Prevention Plan. These facility inspections are different from, and in addition to, the stormwater discharge characteristic monitoring required in Part II of this permit.

h. SPPP Implementation.

The permittee shall implement the Stormwater Pollution Prevention Plan and all appropriate BMPs to prevent contaminants from entering surface waters via stormwater. Implementation of the SPPP shall include documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees, including the log of the sampling data and of actions taken to implement BMPs associated with the industrial activities, including vehicle maintenance activities. Such documentation shall be kept on-site for a period of five (5) years and made available to the Director or the Director’s authorized representative immediately upon request.

3. MONITORING AND REPORTING REQUIREMENTS

The permit specifies monitoring and reporting requirements for both quantitative and qualitative assessment of the stormwater discharge and operational inspections of the entire facility. Specific pollutant parameters for which sampling must be performed and the frequency of the sampling are based upon the types of materials used and produced in the manufacturing processes and the potential for contamination of the stormwater runoff at these facilities. The permit has specific monitoring requirements for the following parameters: pH, Total Suspended Solids, Oil and Grease, and Total Rainfall. The rationale for retaining these parameters in the renewal permit was based in part on data submitted by permittees, but also on their continued usefulness as stormwater pollution indicators for these industry types within the revised monitoring scheme. Other parameters monitored in the initial general permit for this category of industry were removed in a past renewal and were not reintroduced.

Total Flow and Event Duration parameters have been removed in the renewal permit. Instead, the permit clarifies that the SPPP site map include the percentage of each drainage area that is impervious, which provides information necessary should flow ever need to be estimated. (The permit still requires total rainfall amount be recorded). While flow monitoring is required for NPDES wastewater dischargers under 40 CFR §122.44 to “assure compliance with permit limitations,” effluent limits are not applicable to this general permit. The rationale for removing Total Flow is that (1) flow does not demonstrate compliance with any permit condition, (2) DWQ is not using the stormwater discharge flow monitoring data for anything, (3) many permittees were reporting erroneous values because of a lack of understanding about how to calculate stormwater discharge flow, and (4) the permit continues to require the permittee to record all information necessary to estimate flow for a given monitoring event.

In addition to analytical monitoring, the renewal permit specifies qualitative (visual) monitoring of each stormwater outfall for the purpose of evaluating the effectiveness of the Stormwater Pollution Prevention Plan and assessing new sources of stormwater pollution. Qualitative monitoring parameters include color, odor, clarity, floating and suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. There is one change to qualitative monitoring requirements in this renewal permit: qualitative monitoring must now be performed at the same time as the analytical monitoring (which must be during a representative storm event).

Additional monitoring and reporting requirements include:

- a. The Stormwater Pollution Prevention Plan shall be reviewed and updated on an annual basis. Implementation of the plan shall include documentation of all sampling, measurements, Tier 1 and Tier 2 actions, activities taken to implement BMPs, inspections, maintenance activities, and training provided to employees. Such documentation shall be kept on-site for a period of five years and made available to DWQ immediately upon request. If DWQ determines that a Plan does not meet requirements of the permit, the permittee must give DWQ a time schedule for modifying the Plan and certify that the Plan has been so modified.

- b. Self-inspections of the facility and all stormwater systems shall occur at a minimum on a semi-annual schedule. The inspections and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection, and a narrative description of the facility's stormwater control system, plant equipment and systems. Records of these inspections shall be incorporated into the Plan.
- c. Sample collection and qualitative monitoring shall be performed at all stormwater discharge outfall locations. A facility with multiple discharge locations which are substantially identical may petition DWQ to allow sampling of a reduced number of outfalls. Visual observations shall be recorded for all outfall locations.
- d. For purposes of stormwater sampling, all samples shall be collected from a discharge resulting from a representative storm event. If the stormwater runoff is controlled by a detention pond, a grab sample of the discharge from the pond shall be collected within the first 30 minutes of discharge. Previously, if the detention pond discharged only in response to a storm event exceeding a ten-year design storm, no analytical monitoring was required; however, that provision has been removed from this renewal permit. The removal was based on the fact that most permittees misunderstood the provision, and that semi-annual sampling was appropriate for the reasons previously noted.
- e. The renewal permit outlines a tiered response to exceedences of benchmark values. These tiers require increased monitoring, increased management actions, increased record keeping, and/or installation of stormwater BMPs.

4. COMPLIANCE SCHEDULE

Permittees covered by this General Permit shall comply with the monitoring, controls, and limitations specified for stormwater discharges in accordance with the following schedule:

Existing facilities already operating, but applying for coverage under this general permit for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the initial Certificate of Coverage issued pursuant to this general permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit, shall be accomplished within 12 months of the effective date of the initial Certificate of Coverage.

New facilities applying for permit coverage for the first time and existing facilities previously 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. The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

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

There are no special conditions in the general permit.

6. BASIS FOR CONTROLS AND LIMITATIONS

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), the 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 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 general 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 draft 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 this general permit, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities covered by this stormwater general permit must prepare, retain, implement, and (at a minimum of annually) update a stormwater pollution prevention plan. The term "pollution prevention" distinguishes this source reduction approach from traditional pollution control measures that typically rely on end-of-pipe treatment to remove pollutants in the discharges. The

plan requirements are based primarily on traditional stormwater management, pollution prevention and BMP concepts, providing a flexible basis for developing site-specific measures to minimize and control the amounts of pollutants that would otherwise contaminate the stormwater runoff.

The pollution prevention approach adopted in the stormwater pollution prevention plans in the renewal permit focuses on two major objectives: 1) to identify sources of pollution potentially affecting the quality of stormwater discharges associated with industrial activity from the facility; and 2) to describe and ensure that practices are implemented to minimize and control pollutants in stormwater discharges associated with industrial activity from the facility and to ensure compliance with the terms and conditions of this permit.

The Division believes that it is not appropriate, at this time, to require a single set of effluent limitations or a single design or operational standard for all facilities which discharge stormwater associated with industrial activity. This permit instead establishes a framework for the development and implementation of site-specific stormwater pollution prevention plans. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the industrial activities that are addressed by this permit, while ensuring procedures to prevent stormwater pollution at a given facility are appropriate given the processes employed, engineering aspects, functions, costs of controls, location, and age of facility (as discussed in 40 CFR 125.3). This approach allows flexibility to establish controls which can appropriately address different sources of pollutants at different facilities.

In 1979, EPA completed a technical survey of industry best management practices (BMPs) which was based on a review of practices used by industry to control the non-routine discharge of pollutants from non-continuous sources including runoff, drainage from raw material storage areas, spills, leaks, and sludge or waste disposal. This review included analysis and assessment of published articles and reports, technical bulletins, and discussions with industry representatives through telephone contacts, written questionnaires and site visits.

The technical survey identified two classes of pollution control measures. The first class of controls are those management practices which are generally considered to be essential to the development of an effective and efficient BMP program, low in cost, and applicable to broad categories of industries and substances. These controls include the following: developing a Spill Control Committee and implementing spill reporting, material inventorying and compatibility reviews, employee training, visual inspections, preventative maintenance programs, good housekeeping, and addressing security issues. These practices are broadly applicable to all industries and can be implemented by each facility independent of the category of industry, ancillary sources, specific chemicals used at different sites, and/or plant site locations. The survey concluded that these controls should be minimum requirements for any effective BMP program.

The second class of controls are management practices which provide for a second line of defense against the release of pollutants. These controls include prevention measures, containment measures, mitigation and cleanup measures and treatment methods. The types of

chemicals, industrial operations and various ancillary sources specify the controls applicable to an individual facility.

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 being appropriately imposed in general permits in lieu of numeric effluent limitations pursuant to 40 CFR 122.44(k)(2).

There has been no change to this rationale since the previous general permit.

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

There are no requested variances or alternatives to required standards.

8. THE ADMINISTRATIVE RECORD

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

Stormwater Permitting Unit
 Division of Water Quality
 1617 Mail Service Center
 Raleigh, North Carolina 27699-1617

The above documents are available for review and copying at:

Archdale Building
 9th Floor
 Surface Water Protection Section
 Stormwater Permitting Unit
 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 concerning the permit application may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting: **Mike Randall** at 919-807-6374.

10. SCHEDULE OF PERMIT ISSUANCE

Draft Permit to Public Notice – Notice September 4, 2012;
 Draft available on-line September 4, 2012
 Permit Issue Date – October 19, 2012 (*Scheduled*);
 Effective November 1, 2012 (*Scheduled*)

11. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Division of Water Quality proposed 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 were open to comment from the public.

Interested persons were invited to submit written comments on the permit application or on the Division of Water Quality's proposed determinations to the following address:

Stormwater Permitting Unit
 Division of Water Quality
 1617 Mail Service Center
 Raleigh, North Carolina 27699-1617
 Attn: **Mike Randall**

All comments received within thirty days following the date of public notice were considered in the formulation of final determinations. The public comment period was also extended to September 14, 2007.

b. Public Meeting

The Director of the Division of Water Quality 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 Water Quality mailing list at least thirty days prior to the meeting. The Division did not receive any requests for a public hearing on the draft permit.

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 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 Water Quality determinations are substantially unchanged, the permit will be issued and become effective immediately. This will be the final action of the Division of Water Quality.

If a public meeting or appeal hearing is not held, but there have been substantial changes, public notice of the Division of Water Quality revised determinations will be made. Following a 30-day comment period, the permit will be issued and will become effective immediately. This will be the final action of the Division of Water Quality unless a public meeting or appeal hearing is granted.

APPENDIX
Data Analysis Summary

Summary of NCG080000 DMR data from Julie's 4/12/07 Filemaker database.

All monitoring data submitted as BDL or equivalent was deleted. Data preceded by the < sign was halved.

Data	Total	Units on DMR	Benchmark
Count of Event Precip.	853		
Max of Event Precip.	39271	inches	
Min of Event Precip.	0.01	inches	
Average of Event Precip.	323.93	inches	
Count of Event Duration	842		
Max of Event Duration	39145	minutes	
Min of Event Duration	0.114583333	minutes	
Average of Event Duration	338.29	minutes	
Count of Adj. New Oil Usage	55		
Max of Adj. New Oil Usage	850	gallons	
Min of Adj. New Oil Usage	10	gallons	
Average of Adj. New Oil Usage	62	gallons	
Count of Total Flow Adj.	654		
Max of Total Flow Adj.	6663854.9	MG	
Min of Total Flow Adj.	0.00000005	MG	
Average of Total Flow Adj.	22482.20	MG	
Count of Adj. pH	649		
Max of Adj. pH	9.7	s.u.	between 6 and 9
Min of Adj. pH	2	s.u.	between 6 and 9
Average* of Adj. pH	6.61	s.u.	between 6 and 9
Count of Adj. TSS	631		
Max of Adj. TSS	3900	mg/l	100 mg/l
Min of Adj. TSS	0.5	mg/l	100 mg/l
Average of Adj. TSS	166.81	mg/l	100 mg/l
Count of Adj. Oil and Grease	611		
Max of Adj. Oil and Grease	750	mg/l	30 mg/l
Min of Adj. Oil and Grease	0.0009	mg/l	30 mg/l
Average of Adj. Oil and Grease	10.80	mg/l	30 mg/l

FYI 264 permittees submitted data out of the 490 that were permitted as of 7/11/07, but only those using 55 Gallons averaged per month are required to monitor.

*pH would be more accurately assessed as a geometric mean; however, pH will remain in the permit regardless of that value.