

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. NCG190000

Date: May 19, 2009

**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 activities classified as establishments primarily engaged in operating Marinas [standard industrial classification (SIC) 4493] with vehicle maintenance activities, and Ship and Boat Building and Repairing [SIC 373]; and like activities deemed by DWQ to be similar in the process and/or the exposure of raw materials, products, by-products, or waste materials.

The following activities are specifically excluded from coverage under this General Permit: All discharges at the facility containing waste streams including, but not limited to, bilge and ballast water, cooling water, sanitary wastes, power and hand washing, blasting, sanding, and fish cleaning stations.

*(Note: Exclusion of wastewater discharges (ex. wash water) is a clarification in the Permitted Activities section (Part I, Section B); this permit has never authorized wastewater discharges.)*

*b. Types of Operations Covered*

Excerpted from 1999 Fact Sheet for NCG190000:

The Ship Building and Repairing facilities covered by this permit includes establishments primarily engaged in building and repairing ships, barges, and lighters, whether self-propelled or towed by other craft. This industry also includes the conversion and alteration of ships and the manufacture of off-shore oil and gas welling drilling and production platforms (whether or not self-propelled). Specifically excluded from coverage under this permit are establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, and electrical wire installation.

The Marina facilities covered by this permit includes establishments primarily engaged in operating marinas which include vehicle maintenance (including rehabilitation, mechanical repairs, painting, fueling, and lubrication) and equipment cleaning activities. These establishments rent boat slips and store boats, and generally perform a range of other services including cleaning and incidental boat repair.

Excerpted from March 1992 NPDES Stormwater Program Q&A Document by EPA:

Facilities classified as 4493 that are not involved in equipment cleaning or vehicle maintenance activities (including vehicle rehabilitation, mechanical repairs, painting, and lubrication) are not intended to be covered under 40 CFR Section 122.26(b)(14)(viii) of the stormwater permit application regulations. The retail sale of fuel alone at marinas, without any other vehicle maintenance or equipment cleaning operations, is not considered to be grounds for coverage under the stormwater regulations.

Marina facilities that are “primarily engaged” in the retail sale of fuel and lubricating oils are best classified as SIC code 5541 – marine service stations – and are not covered under 40 CFR Section 122.26(b)(14)(viii) of the stormwater permit application regulations. These facilities may also sell other merchandise or perform minor repair work.

Facilities “primarily engaged” in the operation of sports and recreation services such as boat rental, canoe rental, and party fishing, are best classified under SIC code 7999 – miscellaneous recreational facilities – and are not covered under 40 CFR Section 122.26(b)(14)(viii).

*c. Characteristics of Discharged Stormwater*

The previous permit included analytical monitoring requirements. Data was submitted during the previous permit term that was reviewed during the drafting of the renewal permit. Parameters monitored included pH, Oil and Grease (O&G) and Total Suspended Solids (TSS). It also included recording New Motor Oil Usage.

The decision to retain analytical parameters from the previous permit was based on their continued usefulness as stormwater pollution indicators for this activity—especially within the revised monitoring scheme and tiered responses introduced by this renewal permit. In addition, this action was consistent with the other most recently renewed general permits, issued in July 2008. The data submitted also showed numerous facilities with values above current benchmarks for one or more of the parameters. See Appendix A for summary of data.

DWQ is proposing to introduce additional analytical monitoring for certain metals (Copper\*, Aluminum\*, Iron\*, Lead\*, and Zinc\*) in this general permit (\*total recoverable). Regional office staff inspections, as well as a 2008 marina study done by DWQ, have identified a pattern of problems with metals in stormwater discharges at many of the facilities under this general permit. The metals that were identified to be most prominent, and far above current benchmarks, include Copper, Aluminum, Iron, Lead, and Zinc. In addition, EPA’s 2008 Multi-Sector General Permit (MSGP) requires the covered industries to monitor for all the above mentioned metals with the exception of Copper. See Appendix A for summary of data.

In addition, DWQ is proposing a new response obligation based on qualitative monitoring results for all this general permit. If there are indications of failure to maintain an adequate SPPP and/or water quality standard violations, a facility can be directed to seek coverage under an individual permit that could include additional analytical monitoring. This revision should help address facilities where regional inspections have observed problems (for example, sites that have boat washing facilities (wastewater) that drain directly to stormwater outfalls); generally bolster the importance of the permittee’s response to qualitative indicators of stormwater pollution; and provide DWQ recourse in situations of chronic inattention to apparent problems.

*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. 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.

Consistent with other general permits issued since 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) maintenance activities may change during the period the facility is not monitoring, and (3) periodic monitoring ensures the facility maintains vigilance in stormwater management (of vehicle maintenance areas in the case of marinas). 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.

Stormwater must be controlled by the development and implementation of a Stormwater Pollution Prevention Plan (SPPP or Plan). The Plan requirements were updated in these renewals to include: (a) indication in the Site Plan of whether receiving waters are impaired, and (b) a revised schedule for stormwater facility inspections during the calendar year that mirror analytical monitoring requirements (when applicable). The following are specific requirements of the Plan:

1. Site Plan. The site plan shall provide a description of the physical facility and the potential pollutant sources which may be expected to contribute to contamination of stormwater discharges. The site plan shall contain the following:
  - (a) 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 water(s) to which the stormwater outfall(s) discharges, 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 point(s) of discharge. The general location map (or alternatively the site map) shall identify whether each receiving water is **impaired** (on the state’s 303(d) list of impaired waters) or is located in a **watershed for which a TMDL has been established**, and what the parameter(s) of concern are.

- (b) 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 which could be expected to be present in the stormwater discharge from each outfall.
- (c) 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, all drainage features and structures, drainage areas for each outfall, direction of flow in each drainage area, industrial activities occurring in each drainage area, buildings, existing BMPs, and impervious surfaces. The site map shall include a distance legend and must indicate the percentage of each drainage area that is impervious.

In addition, the following industrial activity areas must also be identified on the site map: fueling, engine maintenance and repair, vessel maintenance and repair, washing, painting, sanding, blasting, welding, and metal fabrication.

- (d) A list of significant spills or leaks of pollutants that have occurred at the facility during the three (3) previous years and any corrective actions taken to mitigate spill impacts.
- (e) Certification 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. The permittee shall re-certify annually that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges.

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

- (a) 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 stormwater. 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, the stormwater management plan shall document the feasibility of diverting stormwater runoff away from areas of potential contamination.
- (b) 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), and 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 years.

- (c) **BMP Summary.** A listing of site structural and non-structural Best Management Practices (BMP) 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 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.
3. **Spill Prevention and Response Plan.** The Spill Prevention and Response Plan (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel (or the team) 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.
  4. **Solvent Management Plan.** The Solvent Management Plan shall be incorporated as a separate chapter into the Stormwater Pollution Prevention Plan (SPPP). The Solvent Management Plan shall include an annually updated and quantified inventory of the solvents present on site during the previous three years; a narrative description of the in-plant locations and uses of the solvents, the method of disposal including quantities disposed on-site and off-site; and the management procedures and engineering measures for assuring that solvents do not spill or leak into stormwater. If solvents are not stored or used onsite, then the owner must certify that in the SPPP. DWQ may at its discretion require submittal, review, and approval of the Solvent Management Plan. The discharger shall include the following signed certification statement on each discharge monitoring report: "Based upon my inquiry of the person or persons directly responsible for managing compliance with the permit requirement for managing solvents, I certify that to the best of my knowledge and belief, no leak, spill, or dumping of concentrated solvents into the stormwater or onto 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 all the provisions of the Solvent Management Plan included in the Stormwater Pollution Prevention Plan."
- The Solvent Management Plan is being added due to extensive and intensive maintenance using solvents. During the 2008 DWQ Marina study, it was also observed that storage, containment, and overall management of solvents is highly variable. The study shows that 31% of the facilities visited had operations that used solvents onsite.
5. **Preventative Maintenance and Good Housekeeping Program.** A preventative maintenance and good housekeeping program shall be developed. The program shall list all stormwater control systems, 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. 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 in writing and maintained in the SPPP.

6. **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. Facility personnel (or team) responsible for implementing the training shall be identified, and their annual training shall be documented by the signature of each employee trained. Additional required training items include: used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, fueling procedures, sanding, painting and blasting procedures, and used battery management.
7. **Responsible Party.** The Stormwater Pollution Prevention Plan shall identify a specific position(s) responsible for the overall coordination, development, implementation, and revision to the Plan. Responsibilities for all components of the Plan shall be documented and position assignments provided.
8. **Plan Amendment.** The permittee shall amend the Plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to surface waters. **All aspects of the Stormwater Pollution Prevention Plan shall be reviewed and updated on an annual basis.** The annual update shall include an updated list of significant spills or leaks of pollutants for the previous three years, or the notation that no spills have occurred. The annual update shall include written re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. Each annual update shall include a documented re-evaluation of the effectiveness of the BMPs listed in the BMP Summary of the Stormwater Management Plan.

The Director may notify the permittee when the Plan 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 Plan 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.

9. **Facility Inspections.** Inspections of the facility and all stormwater systems shall occur as part of the Preventative Maintenance and Good Housekeeping Program 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 of the year (July to December), with at least 60 days separating inspection dates (unless performed more frequently than semi-annually). These facility inspections are different from, and in addition to, the stormwater discharge characteristic monitoring required in Part II of this permit.
10. **Implementation.** The permittee shall implement the Plan. Implementation of the Plan 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 years and made available to the Director or the Director's authorized representative immediately upon request.

### 3. MONITORING AND REPORTING REQUIREMENTS

This general 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 facility activities and the potential for contamination of the stormwater runoff at these facilities. This permit has specific monitoring requirements for the following parameters: Total Rainfall, pH, Oil and Grease (O&G), Total Suspended Solids (TSS), Copper\*, Aluminum\*, Iron\*, Lead\*, and Zinc\* (\*total recoverable). The rationale for retaining previous parameters in this renewal permit was based on their continued usefulness as stormwater pollution indicators for activities at these industries within the revised monitoring scheme. The rationale for adding the new parameters in this renewal permit was based on their inclusion in the 2008 EPA Multi-Sector General Permit (MSGP); and based on high values found in samples collected in a 2008 marina study by DWQ. Regarding the parameters monitored in the initial (1994) NCG190000 (Marinas) General Permit (MBAS and Lead) that were removed in a past renewal (1999): MBAS was not reintroduced, while Lead was included based on the DWQ marina study and the 2008 EPA MSGP.

Total Flow and Event Duration parameters have been removed from this renewal permit. Instead, this permit clarifies that the SPPP site map should include the percentage of each drainage area that is impervious, which provides information necessary should flow ever need to be estimated. (This 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 still requires the permittee to record all information necessary to estimate flow for a given monitoring event.

In addition to analytical monitoring, this 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. In this proposed renewal permit, qualitative monitoring must now be performed during a representative storm event and at the same time as the analytical monitoring. The permittee now must also use a standard form provided by DWQ to record results. In addition, the permittee must now also submit an annual report of monitoring results to the Regional Offices.

This general permit has a revised “response action” commitment based on qualitative monitoring. If the permittee identifies that BMPs are ineffective or there is evidence of stormwater contamination problems, the permittee must document the potential causes and corrective actions, and include this information in the SPPP. If the permittee repeatedly fails to respond to problems, or stormwater discharges cause or contribute to a water quality standard violation, DWQ may require more frequent qualitative monitoring, increased stormwater management actions, or application for coverage under an individual permit.

*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, inspections and 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. A log of the sampling results and activities taken to implement BMPs associated with the vehicle maintenance activities shall be maintained and incorporated into the Plan.
- d. 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 regardless of representative outfall status.
- e. For purposes of stormwater sampling, all samples shall be collected from a discharge resulting from a representative storm event. Whether the stormwater runoff is from a typical discharge outlet (pipe/ditch), or controlled by a detention pond, a grab sample of the discharge 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.
- f. The renewal permit outlines a tiered response to exceedences of benchmark values (where monitoring is applicable). These tiers require increased monitoring, increased management actions, increased record keeping, and/or installation of stormwater BMPs.
- g. The renewal permit outlines a response commitment based on the permittee's determination that qualitative monitoring results indicate ineffectiveness of BMPs or other stormwater contamination problems.

**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 the general permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of the 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 the 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 the 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 proposed special conditions in this 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), 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 reflect 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 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 this renewal permit still 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 the 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 includes 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 application, 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 2.5 cents per page.

**9. STATE CONTACT**

Additional information about the draft and final permit may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting: **Sarah Young** at (919) 807-6303.

**10. SCHEDULE OF PERMIT ISSUANCE**

Draft Permit to Public Notice – **Notice published May 26, 2009;**  
**Draft available on-line May 26, 2009**

Permit Issue Date – **July 10, 2009** (*Scheduled*);  
 Permit Effective Date – **September 1, 2009** (*Scheduled*)

**11. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS**

*a. Comment Period*

The Division of Water Quality proposed to issue the 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 applications 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: Sarah Young

All comments received within 30 days following the date of public notice were considered in the formulation of final determinations.

*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 would be circulated in newspapers in the geographical area of the discharge and to those on the Division of Water Quality mailing list at least 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 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 on the first day of the month following the issuance date. 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 on the first day of the month following the issuance date. This will be the final action of the Division of Water Quality unless a public meeting or appeal hearing is granted.

### Appendix A: Analytical Data

Summary of DMR Data for NCG190000

No. of Facilities Submitting Data: 45	pH	O&G	Lead	MBAS	TSS
	minimum: 2.2	BDL	BDL	BDL	BDL
Date Range: 1995-2008	maximum: 10.0	92.0	104.0	2.04	4280
	average: 7.2	10.0	33.9	0.39	139
# of samples:	156	147	24	22	160
benchmark	6 to 9	30	30	0.5	100

BDL - below detectable limit

                     - above current benchmark

All are mg/L except Lead, which is ug/L

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Metal	N <sup>a</sup>	Mean (µg/L) ± 1 SE			Surface Water Acute Std <sup>b</sup>
Copper	20	114,485	±	67,227	4.8 µg/L
Iron	20	31,524	±	17,283	--
Zinc	20	18,150	±	9,628	90 µg/L
Aluminum	20	14,470	±	7,417	--
Lead	19	817	±	414	210 µg/L
Nickel	15	201	±	124	74 µg/L
Chromium	15	109	±	48	570 µg/L <sup>c</sup>
Arsenic	17	55.67	±	15.81	69 µg/L
Cadmium	16	33.13	±	17.95	40 µg/L
Mercury	2	1.04	±	0.76	1.8 µg/L <sup>d</sup>

Mean metal concentration (µg/L) of water discharging from boat pressure washing and hand washing activities ± 1 standard error. (Appendix 2)

N<sup>a</sup> = number of samples analyzed that were above the detection minimums.

<sup>b</sup> At 100 mg/L hardness

<sup>c</sup> Freshwater

<sup>d</sup> As MeHg