



## Fact Sheet and Rationale For the Reissued NPDES General Permit for Stormwater Discharges from Construction Activities

*On November 2, 2012 this document was updated to reflect revisions made the NPDES General Permit for Stormwater discharges from Construction Activities as a result of comments received during public notice.*

### **Introduction:**

This fact sheet describes the South Carolina Department of Health and Environmental Control's (DHEC or Department) basis and procedures for reissuance of a National Pollutant Discharge Elimination System Permit (SCR100000) for discharge of stormwater from Large and Small Construction Activities, CGP or permit.

DHEC has been delegated authority by EPA to implement the NPDES program within the state of South Carolina, including on Indian Lands. DHEC issued the first NPDES general permit covering stormwater discharges on September 11, 1992. The permit was subsequently reissued in 1998 and 2006.

The 2006 NPDES General Permit for Stormwater Discharges from Large and Small Construction Activities (2006 CGP) expires August 31, 2011. However, the permit continues in effect in accordance with section 4.1 of the permit and under South Carolina Regulation 61-9, Water Pollution Control Permits, item 122.6, and will do so until this proposed permit becomes effective, with any appropriate changes based on public participation.

### **Background:**

Since 1990, EPA has issued a series of rules regulating the discharges of storm water runoff from construction activities and other sources under the NPDES program. The first rule, which was promulgated by EPA in November of 1990, is known as the "Phase I" rule. This rule contained requirements for operators of certain categories of industrial activities to obtain NPDES permit coverage for their discharges. One of the categories listed (commonly referred to as "large" construction activities) encompass construction activity as described below:

*Construction activity including clearing, grading, and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;*

On December 8, 1999, EPA issued a second rule, commonly referred to as the "Phase II" rule, which lowered the acreage threshold for construction activities who's stormwater discharges

require coverage under an NPDES permit. These rules became effective on March 10, 2003 and cover “small” construction activities including:

- Construction activities, statewide, including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres
- In coastal counties, construction activities including clearing, grading, and excavating that result in any land disturbance less than five acres when the activity is located within one-half (1/2) mile of a receiving water body (but not for single-family homes which are not part of a subdivision development).
- Land disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

The regulations cited above have been promulgated into South Carolina Regulation 61-9 (Water Pollution Control Permits) under §122.26(b)(14)(x) and §122.26(c)(1).

On December 1, 2009, EPA promulgated its latest regulations addressing stormwater discharges from construction activities. Contained in this rulemaking, known as the Construction and Development Rule or “C&D rule” are effluent limitation guidelines (ELGs) and new source performance standards for the stormwater discharges from construction sites. The rule contained a numeric effluent limit of 280 NTUs that would be applicable to stormwater discharges resulting from a rainfall event less than the local 2-year, 24-hour storm event that are discharged from construction sites disturbing 10 acres or more. In addition it contains a set of non-numeric effluent limits that must be included in a site’s Stormwater Pollution Prevention Plan (SWPPP) to reduce sediment and other pollutants commonly found in stormwater discharges from construction activities. *Non-numeric effluent limits are discussed in great detail later in this document.*

The 280 NTU numeric ELG from the C&D rule was the subject of a lawsuit brought against EPA by the National Association of Home Builders and other groups. As a result of the lawsuit, it was determined that EPA had misinterpreted data used to calculate the ELG. EPA has issued a stay of the numeric effluent limit and is in the process of revising the limit. More information on this can be found at:

<http://water.epa.gov/scitech/wastetech/guide/construction/index.cfm>

### **Permit Basis:**

This permit is based on requirements in the Federal Clean Water Act, 33 U.S. Code §§ 1251 et seq., and the South Carolina Pollution Control Act, S.C. Code Sections 48-1-10 et seq., that discharges of pollutants apply for and receive permits for the discharges. Additional requirements are established in South Carolina Regulation 61-9, Water Pollution Control Permits, especially S.C. R.61-9.122.26 Storm Water Discharges; South Carolina Regulation 72-300, Standards for Stormwater Management and Sediment Reduction; and, coastal zone citation.

### **Activities Covered by the Permit:**

This permit authorizes discharges of stormwater from construction activities including clearing, grading, filling, demolition, excavating and other land disturbing activities that result in the land disturbance of:

- One acre or more, statewide
- Less than one acre when the activity is located within one-half (1/2) mile of a receiving water body (but not for single-family homes which are not part of a subdivision development)
- Land disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre
- Other land disturbance activities designated by DHEC as needing a stormwater permit under §122.26(a)(1)(v) or §122.26(b)(15)(ii) of Regulation 61-9.

Sediment generated by construction activity has the potential to cause impacts to Waters of the State and adjacent properties. These impacts can result in impairment of the receiving waters that can threaten aquatic species, limit navigation, and increase the cost of treatment for drinking water plants and industry. The CGP outlines requirements for the proper design, installation, and maintenance of sediment and erosion control Best Management Practices (BMPs) to control stormwater discharges from construction activities.

### **Obtaining Coverage under the Permit:**

The CGP outlines requirements that owners or operators of construction activity must follow in order to obtain authorization to discharge their site's construction stormwater. Section 2.1 of the permit contains procedures for the submittal of a Notice of Intent (NOI) and outlines information required to be submitted with the NOI.

*New Projects:* Construction sites that whose land disturbance activities are granted coverage after the effective date of this CGP must submit an NOI and be authorized to discharge by the Department prior to the initiation of construction activity. If a site is located in an area of the state with a Municipal Separate Storm Sewer System (MS4) or local government delegated by DHEC to review stormwater management and sediment and erosion/ control plans, then that entity must first review and grant approval of the SWPPP prior to the NOI being submitted to DHEC.

*Permitted Ongoing Projects:* Construction sites that were granted coverage under the 2006 CGP are automatically granted coverage to discharge under the new permit. Unless specifically requested by the Department, these sites are **not** required to submit a new NOI. The SWPPP for these sites must be updated consistent with requirements found in Section 3.1.1.F. If the owner/ operator (entity to whom permit coverage was granted) of a construction site has changed since coverage was granted, then a new NOI must be submitted. NPDES permit coverage is issued to a "discharger" and not to the site itself. As defined in R.61-9.122.2(b) a discharger is any person, corporation, government agency, etc. who discharges any treated or untreated or untreated sewage, industrial

wastes or other wastes, including stormwater, into Waters of the State. For the purpose of this permit, an owner or operator of a construction site is a discharger.

*New Owner/ Operator of Ongoing Projects:* If the owner/ operator changes after DHEC grants coverage under the CGP, the new owner/ operator must submit a new NOI.

On May 19, 2010 the Governor approved a bill known as the Permit Extension Joint Resolution of 2010 (H.4445), which suspends the running of the time periods of state and local development approvals, including coverages under the CGP, which are current and valid at any point during the period beginning January 1, 2008 and ending December 31, 2012. For sites that received initial coverage under the 2006 CGP, this bill guarantees the operator to whom NPDES coverage was granted the right to a permit. However, in order to maintain compliance with the reissued permit, operators of these sites must update their SWPPPs.

### **Major Changes to the Construction General Permit: (Revised)**

The CGP has undergone a massive restructuring of how the requirements of the permit are presented, altering the look and flow of this permit drastically from the 2006 CGP. The majority of the content in the proposed permit has been taken directly from what can be found within the 2006 CGP. However, there are sections that contain new content or are themselves sections unique to this proposed permit. To help aid in the understanding and implementation of this permit, the most important of this new content has been singled out and explained below.

- **Categories of Operators (Section 2.2)** - The new permit proposes revisions to the categorization of operators who have day-to-day operational control over construction activities at a specific construction site. Each category is specified by the operator's ownership, responsibilities and/or development of a construction site. These categories include **Primary Permittees, Secondary Permittees** and **Contractors**.

**Primary Permittees** take on the same roles and responsibilities as a Permittee under the 2006 CGP and have the option of employing contractors to conduct land-disturbing activities under their general permit coverage. The initial owner, operator or developer(s) of a construction project seeking new coverage under the CGP will be typical examples of a Primary Permittee.

**Secondary Permittees** are owners/builders seeking individual control of a portion or portions of a construction site, independent of the Primary Permittee, but still using the same SWPPP approved when initial coverage was granted. These permittees will be required to submit an Individual Lot Notice of Intent to obtain their permit coverage before conducting any land-disturbing activities. Secondary Permittees would be individual lot(s) owners within a residential subdivision

**Contractors** are very similar to the Co-permittees under the 2006 CGP. These operators are employed by either the Primary or Secondary Permittee and have confirmed their understanding and promise to maintain compliance with the approved SWPPP by completing a Contractor Certification Form.

- **Notice of Intent and Other Required Information (Section 2.3)** - Another revised section to note for changes would be the sections outlining specific requirements

for each type of Permittee seeking coverage under the CGP. This includes itemized lists of information that must be provided on Notice of Intents, Review Fees, supporting documentation (e.g., SWPPPs) and submission deadlines. Revisions have also been made in this section to address Permitted Ongoing Projects covered initially under the 2006 CGP and a Review Time Table has been added to better convey the allotted review time for the Department to address authorizations to discharge from the receipt of a completed Notice of Intent.

- **Comprehensive SWPPPs (Section 3.1.1.G)** - When construction activities require coverage under the CGP, a Comprehensive SWPPP (C-SWPPP) must be developed and submitted for approval before coverage may be granted. The C-SWPPP must address all applicable requirements found in *Section 3.2*.

The Department is currently working on a standard C-SWPPP template as a guidance document and will be made available prior to the effective date of the CGP.

- **On-site SWPPPs (Section 3.1.1.H)** - The On-site SWPPP (OS-SWPPP) is derived from the approved C-SWPPP and is **NOT** an additional document that must be submitted with a Notice of Intent. This SWPPP will be a version of the C-SWPPP minus the engineering reports, which are not necessary to implement the approved erosion prevention and sediment control plan. The OS-SWPPP will also need to include all the additional documents listed in *Section 3.1.1.H.V* (Coverage Approval Letter, Local Approvals, Contractor Certifications, Record Logs, etc.).

The requirement of the OS-SWPPPs was included to aid in the implementation of the approved construction plan, maintain consistencies between what was approved and what was implemented in the field, track construction progress, and to help improve and reduce the time required for department reviews.

- **S.C. Regulation 72-300 (Section 3.2.6, 3.2.7, 3.2.8, 3.2.9)** - In compliance with §122.43(c) of R.61-9, this permit incorporates applicable requirements for construction sites from S. C. Regulation 72-300 (South Carolina Stormwater Management and Sediment Reduction Regulations). Most construction sites subject to the NPDES stormwater program are also subject to R.72-300. In order to simplify permitting, the 2006 CGP and now this permit have incorporated requirements from R.72-300. In particular, this permit contains provisions for sediment basin sizing and post-construction water quality and quantity control.
- **Buffer Zone Management Requirements (Section 3.2.4.C)** - The requirement of a 30-foot buffer zone that must be provided around Surface Waters **during construction** was included in this permit to address a portion of the Non-Numeric Effluent Limitations listed within the “C&D Rule”. In addition to this requirement, a second buffer zone requirement was added to extend the width of the buffer zone to 45 feet for all construction activities adjacent to Sensitive Waters.

In the event that these proposed buffers are infeasible, the proposed permit offers multiple compliance alternatives that may allow for the reduction or elimination of the required buffer zone. Exemptions from this requirement have also been included.

- **Water Surface Outlets (Section 3.2.6.A.II.e)** - Another major addition directly related to the C&D Rule is the requirement for the use of water surface outlets from all

basins and impoundments. Each surface outlet must be capable of discharging from the surface of the impounded stormwater from an elevation equal to the 10 -YR Water Surface Elevation within the basin or impoundment, unless infeasible. **This requirement is not applicable to sediment traps.**

- **Non-Numeric Effluent Limitations (Section 3.2.10)** - Even though these effluent limitations are addressed throughout the proposed permit, a new section was added to ensure that all requirements for Non-Numeric Effluent Limitations listed under the C&D Rule were included and explained in detail, when necessary. Each effluent limitation is listed within this new section and those effluent limitations that may have been too vague were expanded upon and examples of BMPs and techniques were provided as guidance on how to attain compliance with these new requirements.

Examples of the new requirements associated with the Non-Numeric Effluent Limitations are the control of stormwater volume and velocity within the site and at each outlet, minimization of soil exposure during construction, minimization of the disturbance of steep slopes, provide and maintain natural buffers during construction, maximize infiltration and the minimization of polluted stormwater discharges.

Many of the Non-Numeric Limitations are being addressed, to some extent, within the 2006 CGP, but in order to accurately ensure the implementation and compliance of these rules, the development of site-specific SWPPPs will be required to be more detailed and organized than previously required.

The bulk of the Major Changes (i.e., Buffer Zone Management, Water Surface Outlets, Phased Plans) were a direct result to the implementation of the Non-Numeric Effluent Limitations and were included within this permit to assure compliance with the C&D Rule.

- **Phased Plans (Section 3.2.9.B)** - Phased Erosion Prevention and Sediment Control (EPSC) Plans will now be required for all construction sites with greater than 5 acres of disturbance. For projects less than 10 acres in disturbance will be required to submit, at a minimum, a 2-Phased EPSC Plan that includes an Initial Land Disturbance and Stabilization phases. For projects with disturbances greater than or equal to 10 acres will be required to submit, at a minimum, a 3-Phased EPSC Plan that includes an Initial Land Disturbance, Construction, and Stabilization Phase.

Each phase will be required to be identified on at least one (1) separate construction plan sheet and contain a phase specific construction sequence.

Phase plan requirements were added to the new permit to address certain aspects of the C&D Rule and to better convey the transitions of BMPS as a construction site progresses from initial disturbance into final stabilization and beyond.

- **Porous Baffle Requirements (Section 3.2.6.A.II.(c).v)** - All sediment basins and sediment traps will now be required to be designed and constructed with a series of porous baffles, creating chambers, between stormwater inlets and outlets of each structure. The use of properly installed porous baffles will reduce velocities, turbulence and will also improve sediment trapping efficiencies.

The use of porous baffles in conjunction with surface outlets will drastically improve the sediment trapping capabilities of these commonly used BMPs and will aid construction sites in their effort to remain in compliance with this proposed permit and the requirements outlined by the C&D Rule.

- **Pre-Construction Conferences (Section 4.1)** - Each construction site will now be required to hold a pre-construction conference prior to commencing any land-disturbing activities at a construction site. The preparer of the SWPPP or the Primary/Secondary Permittee must hold these conferences. The purpose of these conference is to review and explain the OS-SWPPP to all those (contractors, subcontractors, etc.), and to ensure they are aware of the coverage requirements prior to disturbance.
- **Inspection Frequencies (Section 4.2.B)** - This permit removes the option to inspect construction sites once every 14 calendar days and within 24-hours of the end of a rainfall event that exceeds 0.5 inches. Construction sites must now be inspected, at a minimum, of once every 7-calendar days. In addition, the Department strongly recommends that BMPs be inspected after rainfall events.
- **Rain Gauge - (Section 4.2.D)** - Each construction site will now be required to either keep an on-site rain gauge or use a certified weather station within a 25-mile radius to record any significant rainfall events, 0.5 inches or greater. These records will assist in the determinations of why off-site impacts or BMP failures may have occurred. Each recorded storm event will need to be maintained in a Rain Log within the On-site SWPPP.
- **Monthly Reports (Section 4.2.G)** - Under the 2006 CGP, all construction sites 10 acres or more are required to submit monthly reports. Unfortunately, due to economic circumstances, maintaining records and enforcing this requirement has become infeasible. For this reason, the monthly report requirement has been replaced in the CGP with a clause stating that monthly reports may be require to be submitted to DHEC on a case-by-case basis.
- **Notice of Termination (Section 5.2.C.VII)** - For sites where an MS4 or other local review authority reviewed and approved the SWPPP, the permittee is required to obtain a letter from that review authority stating that the site meets one of the criteria for termination outlined in Section 5.1.A of the 2001 CGP, prior to submitting the NOT to DHEC.
- **DOT Requirements - DOT General Permit for Construction Activities** - Due to the nature and frequency of the majority of DOT projects, it was deemed necessary that a new general permit be pursued to cover all DOT construction projects. The Department made this decision in order to reduce the complexity of the CGP and to better convey the requirements of DOT construction projects.
- **Definitions (Appendix A)**- The definitions appendix from the 2006 CGP has been expanded and will be hyperlinked within the final draft of the CGP to improve the understanding and resourcefulness of the new permit. Over 100 terms have been

identified and defined in this appendix, all of which can be found in at least one instance of the CGP.

- **SC BMP Handbook Reference** - A reference was made to the SC DHEC Stormwater BMP Handbook to improved and maintain continuity between all publications that DHEC makes available for improving the quality, assuring compliance, and overall creations of successful Stormwater Pollution Prevention Plans (SWPPPs). This reference requires that the design, inspection, and maintenance of BMPs be, at a minimum, consistent with the requirements and recommendations contained in the current edition of the BMP Handbook. Plans to update this handbook are currently being discussed.