Construction Stormwater

Federal NPDES General Permit NCG010000 for Construction Activities

- Applies to land disturbance of one acre or greater with point source discharges of stormwater (i.e. skimmer basin, silt fence outlet, storm drain outlet, etc.)
- Coverage issued in conjunction with approval of E&SC Plan
NCG010000 Permit Conditions “the basics”

- Onsite rain gauge
- Self Monitoring/Self Inspection
- Ground stabilization
- Surface withdrawal
- Compliance with E&SC Plan
- Maintenance of measures

- Onsite rain gauge
• **Self Monitoring/Self Inspection**

![Self Monitoring/Self Inspection Image](image-url)
Ground Stabilization
- Soil stabilization shall be achieved on any area of a site where land-disturbing activities have temporarily or permanently ceased according to the following schedule:

<table>
<thead>
<tr>
<th>Site Area Description</th>
<th>Stabilization</th>
<th>Timeframe Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perimeter dikes, swales, ditches and slopes</td>
<td>7 days</td>
<td>None</td>
</tr>
<tr>
<td>High Quality Water (HQW) Zones</td>
<td>7 days</td>
<td>None</td>
</tr>
<tr>
<td>Slopes steeper than 3:1</td>
<td>7 days</td>
<td>If slopes are 10’ or less in length and are not steeper than 2:1, 14 days are allowed.</td>
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<tr>
<td>Slopes 3:1 or flatter</td>
<td>14 days</td>
<td>7 days for slopes greater than 50’ in length.</td>
</tr>
<tr>
<td>All other areas with slopes flatter than 4:1</td>
<td>14 days</td>
<td>None, except for perimeters and HQW Zones.</td>
</tr>
</tbody>
</table>

Definitions within NCG010000 Permit:
- Ground cover - Any vegetative growth or other material which, when applied to the soil surface, renders the soil surface stable against accelerated erosion.
- Soil Stabilization - The use of vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.
- Temporary Stabilization - When the establishment of ground cover over all disturbed areas (such as mulching, RECP, vegetation, or other material) renders the surface stable against accelerated erosion. Stabilization shall be achieved with the establishment of a uniform and evenly-distributed (i.e., without large bare areas) ground cover with a cover density of at least 80%.
- Permanent Stabilization - When all soil disturbing activity is completed and exposed soils have been stabilized with a vegetative cover with a density of at least 80% or covered with a structural stabilization method. Permanent perennial vegetation may include the use of sod, shrubs and ground cover plants mixed with mulching, aggregate or other landscaping techniques. Structural methods include concrete, asphalt, retaining wall or other stabilization techniques.
Surface withdrawal

Outlet structures shall be utilized that withdraw water from the surface. (unless drainage area is less than 1 acre)
• Compliance with the approved E&SC Plan
• Maintenance of BMPs and control measures
• Proper operation and maintenance
NCG010000 Permit Conditions “the not-so basics”

- Section II.B., item 1) a) – Equipment Operation and Maintenance
  
  Equipment utilized during the construction activity on a site must be operated and maintained in such a manner as to prevent the potential or actual pollution of the surface or ground waters of the state. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be discharged onto the ground or into surface waters. Spent fluids shall be cleaned up and disposed of in a manner so as not to enter the waters, surface or ground, of the state and in accordance with applicable state and federal regulations.

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- Section II.B., item 1) b) – Material Handling
  
  Herbicide, pesticide, and fertilizer usage during the construction activity shall be consistent with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and shall be in accordance with label restrictions.
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“the not-so basics”

- Section II.B., item 1) c) – Building Material Waste Handling
  - i) All wastes composed of building materials shall be disposed of in accordance with North Carolina General Statutes, Chapter 130A, Article 9 – Solid Waste Management, and rules governing the disposal of solid waste.
  - ii) Locate all areas dedicated for management of land clearing and demolition debris, construction and domestic waste, and hazardous or toxic waste. This location shall be at least 50 feet away from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available.
  - iii) Dumping of paint and other liquid building material wastes in storm drains is prohibited.
  - iv) Litter and Sanitary Waste – The permittee shall control the management and disposal of litter and sanitary waste from the site.

- Location of Stock Piles
  - Locate earthen-material stock pile areas at least 50 feet away from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available.
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- Section II.B., item 1) e) – Handling of Concrete
  - i) Concrete materials onsite, including excess concrete, must be controlled and managed to avoid contact with surface waters, wetlands or buffers. No concrete or cement slurry shall be discharged from the site. (discharges from onsite concrete plants require coverage under a separate NPDES permit – NCG14000)
  - ii) Any hardened concrete residue will be disposed of, or recycled on site, in accordance with local and state solid waste regulations.
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- Section IV, item 3) – Bypassing of Stormwater Control Facilities
  a) Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation or as part of a planned action specified in the approved Erosion and Sedimentation Control Permit. These bypasses are not subject to the provisions of Paragraphs b. and c. of this section.
  b) Notice
    i) Anticipated bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass, including an evaluation of the anticipated quality and effect of the bypass.
    ii) Unanticipated bypass – The permittee shall submit notice to the Division contact within 24 hours of the occurrence of an unanticipated bypass.
  c) Prohibition of Bypass. Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
    i) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
    ii) There were no feasible alternatives to the bypass, such as the use of auxiliary control facilities, retention of stormwater or maintenance during normal periods of equipment downtime or dry weather. This condition is not satisfied if adequate backup controls should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    iii) The permittee submitted notices as required under Paragraph B. of this section.
  d) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Paragraph c. of this section.

Bypass – The intentional diversion of stormwater from any portion of a stormwater control facility.
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- Section V, item 1) – Time of compliance
  - Erosion and sedimentation control measures shall be maintained, and self-monitoring shall continue, after the completion of construction and development until the establishment of permanent ground cover sufficient to restrain erosion...
  - Coverage under the permit shall end when a Sedimentation Inspection Report (now a Sedimentation/Construction Stormwater Inspection Report) is issued documenting the final stabilization of the site with adequate permanent ground cover.

Questions?

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