The New Blue Book

“NYS Standards and Specifications for Erosion and Sediment Control”
Dated July 2016

October 2016
CDRPC Workshop

Blue Book Update Overview

• Reorganization of standard to reflect recommended planning/design considerations for developing an ESC Plan (i.e. erosion control which includes runoff control and soil stabilization practices, then sediment control).
• Addition of design considerations for the different types of construction projects
• Inclusion of standards and specifications to address EPA’s ELGs (e.g. Concrete Truck Washout, Site Pollution Prevention, Soil Restoration, Buffer Filter Strip, and Dewatering Device) – Required by regulation
• Addition of new standards/specifications to address changes in technology (i.e. Buffer Filter Strip, Compost Filter Sock, Dewatering Device, Geotextile Filter Bag, Sediment Dike, Anchored Stabilization Matting, Loose Stabilization Blankets, Flow Diffuser)
Blue Book Update Overview, cont’d.

• Deletion of out dated or no longer used practices/standards
• Clarification of the design criteria for the majority of the standards based on current studies and field testing (i.e. Silt Fence, Sediment Basin, Sediment Trap, etc.)
• Deletion of all references on the use of invasive species for the establishment of vegetative cover

Construction General Permit Updates - EPA’s ELGs

• Part I.B added to Construction General Permit (GP-0-15-002) to incorporate EPA’s final ELGs.
• Requires owner to select, design, install, implement and maintain erosion and sediment controls (“ESC”) in accordance with Blue Book or demonstrate equivalence
• Control measures in the Blue Book have been determined to be technologically available and economically achievable and practicable.
• ESCs documented in the Stormwater Pollution Prevention Plan (SWPPP) must be installed and implemented to achieve the effluent limits contained in Part I.B.
Erosion and Sediment Control Requirements
Part I.B.1.a.

- Minimize soil erosion through application of runoff control and soils stabilization (See Sections 3 and 4)
- Control stormwater discharges to minimize channel and stream bank erosion (See Sections 3 and 4)
- Minimize amount of soil exposed (See Section 2)
  “Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.”

Erosion and Sediment Control Requirements
Part I.B.1.a., cont’d.

- Minimize disturbance of steep slopes (See Section 2)
- Minimize sediment discharges from site (See Sections 4 and 5)
- Provide and maintain natural buffers (See Sections 2 and 5)
- Minimize soil compaction (See Section 4)
- Unless infeasible, preserve sufficient amount of topsoil for soil restoration (See Section 4)
Soil Stabilization
Part I.B.1.b.

- In areas where soil disturbance activity has *temporarily* or permanently ceased, application of soil stabilization measures must be initiated by the end of next business day and completed within 14 days from date current soil disturbance activity ceased.
  
  “Temporarily Ceased” means that an existing disturbed area will not be disturbed again within 14 calendar days of previous soil disturbance.”

- For sites directly discharging to 303(d) in Appendix E or located in watershed listed in Appendix C, soil stabilization measures must be completed within 7 days – Required by EPA’s Construction GP
  
  (Reminder: Includes heightened inspection frequency by Qualified Inspector)

- See Section 4 (Mulching, Temporary and Permanent Construction Area Seeding, etc.)

Dewatering
Part I.B.1.c.

- Discharges from dewatering devices, including discharges from dewatering of trenches and excavations, must be managed by appropriate control measures.

- See Section 5 (Examples include: Geotextile Filter Bag, Sediment Tank)
Pollution Prevention Measures  
Part I.B.1.d.

- Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Soaps, detergents and solvents cannot be used.
- Minimize the exposure of building materials, building products, construction wastes, trash, landscaping materials, fertilizers, pesticides, herbicides, sanitary waste and other materials present on site to precipitation and to stormwater.
- Prevent the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- See Section 2 (Construction Road Stabilization, Site Pollution Prevention)

Prohibited Discharges  
Part I.B.1.e.

- Wastewater from washout of concrete
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials
- Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance
- Soaps or solvents used in vehicle and equipment washing
- Toxic or hazardous substances from a spill or other release
- See Section 2 (Concrete Truck Washout, Site Pollution Prevention)
Surface Outlets
Part I.B.1.f.

• When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.
• See Section 5 (Dewatering Device, Sediment Basin)

In summary: adherence to the Blue Book standards in the selection, design, installation, implementation and maintenance of E&S practices is deemed to meet ELG’s.....
Standards Re-organization

- Introduction – Section 1
- EC Planning & Site Management – Section 2
- EC Part 1: Runoff Control – Section 3
- EC Part 2: Soil Stabilization – Section 4
- Sediment Control – Section 5
- Appendices A through I

General Note

- Performing activities within or adjacent to wetlands, streams and waterbodies may require permits from the New York State NYSDEC pursuant to Article 15 (Protection of Waters), Article 24 (Freshwater Wetlands) and Article 25 (Tidal Wetlands) of the Environmental Conservation Law (ECL).
General Note, cont’d.

• Project owners should contact NYSDEC’s Regional Division of Environmental Permits early in the site planning process to discuss the requirements for meeting permit issuance standards. Following the New York State Standards and Specifications for Erosion and Sediment Control may not ensure compliance with the above referenced sections of the ECL.

New EC Planning & Site Management
Section 2

• Detailed Planning Discussion
• Defines 13 Specific Construction Activities and their ESC Plan Needs
• Provides a Detailed 7 Step ESC Plan Design Process
• Lists Detailed Construction Sequencing
• Contains Revised Standards Matrix
• Contains 8 Site Management Standards
New Site Management Standards
Section 2

• Concrete Truck Washout
• Site Pollution Prevention
• Winter Stabilization

Standards from previous version:
- Construction Road Stabilization
- Dust Control
- Protecting Vegetation During Construction
- Stabilized Construction Access
- Temporary Access Waterway Crossing

Concrete Truck Washout
Site Pollution Prevention

New Runoff Control Standard
Section 3

• Flow Diffuser
Flow Diffuser

New Soil Stabilization Standards
Section 4

- Anchored Stabilization Matting
- Armored Slope/Channel Protection
- Fertilizer Application
- Lime Application
- Loose Stabilization Blankets
- Soil Restoration
- Vegetated Rock Gabions
Anchored Stabilization Matting

Armored Slope/Channel Stabilization

Combines former Riprap Slope Protection and Streambank Protection Standards
Fertilizer Application

Lime Application
Loose Stabilization Blankets

Compost and Other Materials Need Stable Slope

Soil Restoration

Incorporates NYSSWMM Table 5.3 as Table 4.6
Vegetated Rock Gabions

New Sediment Control Standards
Section 5

- Buffer Filter Strip
- Coffer Dam Structures
- Compost Filter Sock
- Dewatering Device
- Geotextile Filter Bag
- Sediment Dike
Buffer Filter Strip

Coffer Dam Structures
Compost Filter Sock

Diameters 8” to 32”
Maximum Slope 2:1
Compost Must Meet Standards

Dewatering Device

Dewater in 2 to 7 days Depending on Soil
Orifice Sized to Provide Detention Time
Figure 5.3 Skimmer Orifice Design Chart
Geotextile Filter Bag

Sediment Dike
Modified/Updated E&S Standards

• Stabilized Construction Access
• Check Dam
• Construction Ditch
• Flow Spreader
• Diversion
• Mulching
• Permanent Construction Area Planting
• Recreation Area Seeding

More ......

• Temporary Construction Area Seeding
• Sediment Basin
• Sediment Traps
• Silt Fence
• Storm Drain Inlet Protection
• Appendices A - I
Deleted Standards

- Debris Basin
- Riprap Slope Protection
- Structural Streambank Protection
- Grass Outlet Sediment Trap
- Catch Basin Sediment Trap
- Riprap Outlet Sediment Trap

Next Steps

- Encourage use/informal transition period
- Update to reflect any changes identified
- Modify Construction General Permit
Stormwater Webpages

Technical Standards, FAQ’s

http://www.dec.ny.gov/chemical/8694.html

General Permit, Forms

http://www.dec.ny.gov/chemical/43133.html

Questions

• Contact Information
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