

The New Blue Book

*“NYS Standards and Specifications for Erosion and
Sediment Control”*

Dated July 2016

October 2016

CDRPC Workshop



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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)



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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



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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.



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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.”



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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)



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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.)



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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)



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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)



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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)



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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)



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New York State
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water

**New York State
Standards and Specifications
for Erosion and Sediment Control**

August 2005



New York State
Department of Environmental Conservation

George E. Pataki, Governor

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.....



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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



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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).***



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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.***



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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



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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



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Concrete Truck Washout



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Site Pollution Prevention



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New Runoff Control Standard Section 3

- Flow Diffuser



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Flow Diffuser



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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



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Anchored Stabilization Matting



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Armored Slope/Channel Stabilization



Combines Former Riprap Slope Protection and Streambank Protection Standards



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Fertilizer Application



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Lime Application



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Loose Stabilization Blankets



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Soil Restoration



Incorporates NYSSWMM Table 5.3 as Table 4.6



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Vegetated Rock Gabions



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New Sediment Control Standards

Section 5

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



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Buffer Filter Strip



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Coffer Dam Structures



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Compost Filter Sock



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Dewatering Device



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



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Geotextile Filter Bag



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Sediment Dike



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Modified/Updated E&S Standards

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



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More

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



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Deleted Standards

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



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Next Steps

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



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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>



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Questions

- Contact Information

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