General Contractor Policy Stormwater Management and Erosion & Sediment Control

This Policy establishes procedures for the implementation of erosion and sedimentation controls on all projects conducted at Hudson Valley Community College in accordance with the College's Separate Storm Sewer System (MS4) Phase II Permit and the stormwater management requirements of the National Pollutant Discharge Elimination System (NPDES) regulations, administered by New York State through the State Pollutant Discharge Elimination System (SPDES) regulations.

1. General Provisions

1.1. Purpose

The purpose of this Policy is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the College community and to achieve the following objectives:

- 1.1.1. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised:
- 1.1.2. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised;
- 1.1.3. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- 1.1.4. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- 1.1.5. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- 1.1.6. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

2. Applicability

- 2.1. These requirements shall be applicable to all land development activities as defined in paragraph 4.1 of this Policy.
- 2.2. The College's designated Stormwater Management Officer shall accept and review all stormwater pollution prevention plans. The Stormwater Management Officer may (1) review the plans, or (2) engage the services of a registered professional engineer to review the plans, specifications and related documents to ensure the plans conform to the requirements of this Policy
- 2.3. All land development activities subject to review and approval by the College's Board of

Trustees shall be reviewed subject to the standards contained in this Policy

2.4. All land development activities not subject to review as stated in section 2.3 shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Stormwater Management Officer who shall approve the SWPPP if it complies with the requirements of this Policy.

3. Exemptions

The following activities may be exempt from review under this Policy:

- 3.1. Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.
- 3.2. Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.
- 3.3. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- 3.4. Emergency activity immediately necessary to protect life, property or natural resources.

4. Stormwater Control

4.1. **Definitions**

The terms used in this Policy or in documents prepared or reviewed under this Policy shall have the meaning as set forth below:

- 4.1.1. **The College** Hudson Valley Community College, or its designated representative, who has filed an application for a land development activity and has undertaken land development activities.
- 4.1.2. **Building** any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.
- 4.1.3. **Channel** a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.
- 4.1.4. **Clearing** any activity that removes the vegetative surface cover.
- 4.1.5. **Contractor:** Anyone not employed by the College and permitted to do construction, maintenance or renovation work for the College.
- 4.1.6. **NYSDEC** the New York State Department of Environmental Conservation
- 4.1.7. **Design Manual** the *New York State Stormwater Management Design Manual*, most recent version including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.
- 4.1.8. **Developer** for purposes of this Policy the developer is HVCC
- 4.1.9. **Erosion Control Manual** the most recent version of the "New York Standards and Specifications for Erosion and Sediment Control" manual, commonly known as the "Blue Book".
- 4.1.10. **Grading** excavation or fill of material, including the resulting conditions thereof.
- 4.1.11. **Impervious Cover** those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snow melt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).
- 4.1.12. Industrial Stormwater Permit a State Pollutant Discharge Elimination System

- permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.
- 4.1.13. **Infiltration** the process of percolating stormwater into the subsoil.
- 4.1.14. **Jurisdictional Wetland** an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.
- 4.1.15. **Land Development Activity -** construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one acre or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.
- 4.1.16. **Landowner** the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.
- 4.1.17. **Maintenance Agreement** a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
- 4.1.18. **Nonpoint Source Pollution** pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.
- 4.1.19. **Phasing** clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.
- 4.1.20. **Pollutant of Concern** sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the land development activity.
- 4.1.21. **Project -** land development activity
- 4.1.22. **Qualified professional** a landscape architect, certified stormwater professional or professional engineer.
- 4.1.23. **Recharge** the replenishment of underground water reserves.
- 4.1.24. **Sediment Control** measures that prevent eroded sediment from leaving the site.
- 4.1.25. **Sensitive Areas -** cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.
- 4.1.26. **SPDES General Permit for Construction Activities GP-02-01** A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.
- 4.1.27. **SPDES** General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02 A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges

- from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards
- 4.1.28. **Stabilization** the use of practices that prevent exposed soil from eroding.
- 4.1.29. **Stop Work Order** an order issued which requires that all construction activity on a site be stopped.
- 4.1.30. **Stormwater -** rainwater, surface runoff, snowmelt and drainage
- 4.1.31. **Stormwater Hotspot** a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.
- 4.1.32. **Stormwater Management** the use of structural or non-structural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.
- 4.1.33. **Stormwater Management Facility -** one or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.
- 4.1.34. **Stormwater Management Officer -** an employee or officer of the College or a qualified professional designated by the College. The Stormwater Management Officer will accept and review stormwater pollution prevention plans, forward the approved plans to the College's architect and/or project planners and inspect stormwater management practices
- 4.1.35. **Stormwater Management Practices (SMPs)** measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.
- 4.1.36. **Stormwater Pollution Prevention Plan (SWPPP) -** a plan for controlling stormwater runoff and pollutants from a site during and after construction activities.
- 4.1.37. **Stormwater Runoff** flow on the surface of the ground, resulting from precipitation
- 4.1.38. **Surface Waters of the State of New York -** lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.
- 4.1.39. **Watercourse** a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.
- 4.1.40. **Waterway** a channel that directs surface runoff to a watercourse or to the public storm drain.

4.2. Stormwater Pollution Prevention Plans (SWPPP) Requirements:

- 4.2.1. No project work will commence until the College has received, reviewed and approved the Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications in this Policy.
- 4.2.2. Content of SWPPP. All SWPPPs shall provide the following background information and erosion and sediment controls:
 - 4.2.2.1.Background information about the scope of the project, including location, type and size of project.
 - 4.2.2.2.Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);
 - 4.2.2.3.Site map should be at a scale no smaller than 1"=100' (e.g. 1"=500" is smaller than 1"=100")
 - 4.2.2.4.Description of the soil(s) present at the site;
 - 4.2.2.5.Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
 - 4.2.2.6.Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
 - 4.2.2.7.Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill -prevention and response;
 - 4.2.2.8. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
 - 4.2.2.9.A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
 - 4.2.2.10. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
 - 4.2.2.11. Temporary practices that will be converted to permanent control measures;
 - 4.2.2.12. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;

- 4.2.2.13. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
- 4.2.2.14. Name(s) of the receiving water(s);
- 4.2.2.15. Delineation of SWPPP implementation responsibilities for each part of the site;
- 4.2.2.16. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
- 4.2.2.17. Any existing data that describes the stormwater runoff at the site.
- 4.2.3. Land development activities as defined in paragraph 4.1 and meeting Condition "A", "B" or "C" below shall also include water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in paragraph 4.2.4 below as applicable:
 - 4.2.3.1. Condition A Stormwater runoff from land development activities discharging a pollutant of concern to either impaired water identified on the NYSDEC 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment. Note: there are currently no bodies of water surrounding the HVCC campus that are listed in 303(d).
 - 4.2.3.2.<u>Condition B</u> Stormwater runoff from land development activities disturbing five (5) or more acres.
 - 4.2.3.3. <u>Condition C</u> Stormwater runoff from land development activity disturbing between one (1) and five (5) acres of land during the course of the project.
- 4.2.4. SWPPP Requirements for Condition A, B and C:
 - 4.2.4.1.All information in paragraph 4.2.2.
 - 4.2.4.2.Description of each post-construction stormwater management practice;
 - 4.2.4.3.Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
 - 4.2.4.4.Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms;
 - 4.2.4.5.Comparison of post-development stormwater runoff conditions with predevelopment conditions;
 - 4.2.4.6.Dimensions, material specifications and installation details for each postconstruction stormwater management practice;
 - 4.2.4.7. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice;
 - 4.2.4.8.Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property;
 - 4.2.4.9.Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with paragraph 6 of this Policy;
 - 4.2.4.10. For Condition A, the SWPPP shall be prepared by a qualified professional or

professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this Policy

4.3. Other Environmental Permits

The College will be responsible for assuring that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

4.4. Contractor Certification

- 4.4.1. Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity: "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."
- 4.4.2. The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
- 4.4.3. The certification statement(s) shall become part of the SWPPP for the land development activity.
- 4.5. A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

5. Performance and Design Criteria for Stormwater Management and Erosion and Sediment Control

All land development activities shall be subject to the following performance and design criteria:

5.1. Technical Standards

For the purpose of this Policy, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this Policy:

- 5.1.1. The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual).
- 5.1.2. New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

Note to Contractor: The New York State technical guidance documents may be ordered from NYSDEC. An order form as well as downloadable versions of the Manuals are available on the Internet at:

http://www.dec.state.ny.us/website/dow/toolbox/escstandards/index.html http://www.dec.state.ny.us/website/dow/toolbox/swmanual/

5.2. Equivalence to Technical Standards

Where stormwater management practices are not in accordance with technical standards, the contractor must demonstrate equivalence to the technical standards set forth in paragraph 5 and the SWPPP shall be prepared by a qualified professional.

5.3. Water Quality Standards

Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

6. Maintenance, Inspection and Repair of Stormwater Facilities

6.1. Maintenance and Inspection During Construction

- 6.1.1. The contractor and all subcontractors shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the contractor or subcontractors to achieve compliance with the conditions of this Policy. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.
- 6.1.2. For land development activities as defined in paragraph 4.1 and meeting Condition A, B or C in Paragraph B. 2.2.2, the College shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. Inspection reports shall be maintained in a site log book.

6.2. Maintenance after Construction

The contract will provide the College with the following documents to ensure permanent stormwater management practices installed in accordance with this Policy are operated and maintained to achieve the goals of this Policy. The contractor will provide proper operation and maintenance documents including, as a minimum, the following:

- 6.2.1. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed and used by the College to achieve the goals of this Policy.
- 6.2.2. Written procedures for operation and maintenance and training of College maintenance personnel.
- 6.2.3. Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Paragraph B. 3.3. The qualified professional shall inspect and certify that the SMPs have been installed in accordance with the design documents and appears to be functioning as designed.

7. Administration and Enforcement

7.1. Construction Inspection

7.1.1. Erosion and Sediment Control Inspection

The College's Stormwater Management Officer may require such inspections as necessary to determine compliance with this Policy and may either approve that portion of the work completed or notify the contractor wherein the work fails to comply with the requirements of this Policy and the stormwater pollution prevention plan (SWPPP) as approved. To establish the inspection schedule, the contractor shall notify the College's

Stormwater Management Officer or his/her designee at least 48 hours before any of the following:

- 7.1.1.Start of construction
- 7.1.1.2.Installation of sediment and erosion control measures
- 7.1.1.3. Completion of site clearing
- 7.1.1.4.Completion of rough grading
- 7.1.1.5. Completion of final grading
- 7.1.1.6.Close of the construction season
- 7.1.1.7. Completion of final landscaping
- 7.1.1.8. Successful establishment of landscaping in public areas.

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. The College will have the option to stop work , except for site stabilization until any violations are corrected and all work previously completed has received approval by the Stormwater Management Officer or his/her designee.

7.1.2. Stormwater Management Practice Inspections

The College's Stormwater Management Officer is responsible for conducting inspections of stormwater management practices (SMPs). Upon completion of construction, "as built" plans for any stormwater management practices located on-site must be submitted to the College's Stormwater Management Officer after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

7.2. Inspection of Stormwater Facilities After Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

8. Performance Guarantee

8.1. Construction Completion Guarantee

In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the College in its approval of the Stormwater Pollution Prevention Plan, the College may require the contractor to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the College as the beneficiary. The security shall be in an amount to be

determined by the College based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the College, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the College. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

9. Enforcement and Penalties

9.1. Stop Work Orders

The College may issue a stop work order for violations of this Policy. Persons receiving a stop work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop work order. The stop work order shall be in effect until the College confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this local law.

9.2. Violations

Any land development activity that is commenced or is conducted contrary to this Policy must be abated in a manner provided by this Policy.

9.3. Restoration of lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the College may take necessary corrective action, the cost of which shall become a lien upon the contractor until paid.