1. Public Education and Outreach on Storm water impacts.

a. Collection and review of information on water quality impacts.

The first step in the process was to collect and review information on water quality impacts. This was completed in two phases. First general information on storm water impacts was reviewed from a variety of web sites including: DEC Storm water Management Design Manual Chapter 2, NYS Standards and Specifications for Erosion and Sediment Control, the Center for Watershed Protection, EPA’s Storm Water Fact Sheets and Outreach Material and the University of Michigan Storm water outreach materials.

Concurrently, storm water impact information specific to the Hudson Valley Community College campus was being collected by the Physical Plant department. Investigations were conducted to identify illicit discharges and to complete outfall mapping and system mapping. These elements are further detailed in item number 3 of this report.

The campus specific information was made available to the Coordinator of EHS for review and incorporation into the public education and outreach plan.

b. Target audiences identified.

Departments whose activities impact storm water runoff were identified based on inspections by the Coordinator of EHS and through discussion with key departmental staff and the Director of Physical Plant and Executive Manager of Physical Plant. As Physical Plant investigations of storm water impacts were completed, this information was also reviewed to identify additional campus groups that should be targeted for training and outreach.

The target audiences identified are:

i. Physical Plant Grounds
ii. Physical Plant Maintenance
iii. Special Events
iv. Faculty Staff Association – food service activities
v. Automotive
vi. Campus community in general was targeted for outreach and awareness

c. Public education and outreach plan drafted

Attached is a copy of the plan that has been drafted. This plan was completed and reviewed by the Storm Water Committee. This is considered a living document and will be updated as new efforts in education and outreach are identified.

d. Printed and webpage materials

Attached is a copy of the Storm Water Management brochure that has been developed for HVCC community. This will be disseminated at formal training classes and at other events or seminars where storm water education and outreach is being done over the next several years of the SWMP implementation.

A storm water web page has been established on the HVCC website http://www.hvcc.edu/admin/adminser/phyplant/ehs_stormwater.html. This is a living document. The page is designed so that as additional campus specific information is developed in an accessible format, and as campus projects are completed, the information will be added as sublinks under the main page. For examples as projects to correct illicit discharges are developed, a specific link to this information will be added. Student projects or other storm water initiatives of interest will also be reported to the community through a link from this web page.

2. Public Involvement and Participation

In order to foster campus community awareness and participation in storm water issues, HVCC has completed the following during year one of our permit:

a. Key interested groups identified

The Coordinator of EHS held discussions with departmental staff during site inspections to determine activities that impact storm water and where departments may be able to play a role in making improvements. In addition, the HVCC Safety Committee was solicited for suggestions on key campus personnel who may have an interest in participating in storm water projects. The Director and Executive Manager of Physical Plant were also solicited for suggestions.

As a result, the following groups were identified: Biology department,
Environmental Studies program, Civil Engineering and Construction Technology departments, Physical Plant, Faculty Student Association, Special Events. A mix of students, staff and faculty were contacted and their level of interest in stormwater issues determined to be positive. This resulted in the establishment of the membership of the Stormwater Committee as outlined item 2 (c) below.

b. Contact person published

The Coordinator of EHS is the designated stormwater management plan contact person for HVCC. This information has been included in our Stormwater Management brochure and the stormwater web page and will be included in all future stormwater materials.

c. Stormwater Committee

A stormwater committee was established with the following membership:

Matthew Burak, Student, Environmental Studies
Dan Capuano, Assistant Professor, Biology
Alycia Courter, Assistant for Financial Analysis, FSA
Bill Darling, Department Chair, Civil Construction and Eng Technology
Earther Quinones, Student, Environmental Studies
Karen Seward, Executive Manager, Physical Plant
Zach Yannone, Coordinator, Special Events Office
Patty Watt, Coordinator of Env. Health & Safety, Committee Chair

The Committee met twice during the June 2003 – June 2004 report period. During that time the Committee’s purpose and goals were finalized (see attached) and a meeting schedule established. The full committee will meet on at least a semi-annual basis, with additional subcommittee meetings of individual members working on specific issues. All activities will be reported out at the general meetings and minutes kept.

d. Establishment of a “Hot line”

The HVCC Physical Plant work order system has been established as the hot line for the reporting of any concerns regarding stormwater. This is in keeping with the well established campus procedures utilizing the Physical Plant work order system as the central clearinghouse for all matters related to the physical assets of the campus. The work order system is an internet based system accessible by all HVCC faculty and staff. The system is very user friendly and will accept information on a 24/7 basis and then track the work to completion. Training classes are given on a regular basis to increase awareness and use of the system.
In addition, the Physical Plant main phone line can be used as an alternative for reporting stormwater issues. This phone number, which is published along with the work order hot line in all stormwater materials, is manned continuously during normal working hours.

3. Illicit Discharge Detection and Elimination

a. Outfall Mapping: All outfalls on campus property have been identified mapped. The mapped system will be accessible through the HVCC stormwater web page. There are a total of twelve outfall locations. A monitoring program, as described in item 5(b) has been instituted to identify potential pollutants present at the outfalls.

b. Illicit Discharges: During environmental site assessments conducted by the Coordinator of EHS and an outside environmental consulting company, floor drain and sinks present in areas where hazardous materials, oils, degreasers, etc were noted for follow up investigation. This information was given to the Physical Plant Executive Manager who undertook a review of each building to identify illicit discharges. The first step was to review building drawings to track all connection details (sanitary, roof drains, floor/sink drains, etc). Wherever a potential connection to the storm system was identified, a further investigation was initiated.

In one building, dye testing was performed in two locations where the building drawings did not indicate where two sink drains discharge. Additional investigation in seven other areas concerning cooling tower drainage was conducted with the Senior HVAC technician who is knowledgeable on the system drainage. The building drawings also revealed three other areas of concern.

The potential illicit discharge areas are:

i. Amstuz Hall – acid waste line: need confirm discharge is to sanitary
ii. Lang Hall – former automotive shop floor drains may not have been sealed
iii. Cogan Hall – automotive oil/water separator discharging to storm
iv. Fitzgibbons Hall floor drain discharges to an underground containment tank, the integrity of which will be evaluated
v. Campus Center cooling tower mechanical room floor drain may potentially overflow to a nearby storm sewer grate
vi. Guenther Hall evaporative condenser discharges to roof drain which ties into storm system
vii. Cogen Plant cooling tower discharges to roof drain which ties into storm system
viii. Brahan Hall evaporative condenser discharges directly to soil
ix. McDonough cooling tower discharges water directly to soil

A program to correct all illicit discharges will be developed during the next reporting period, including a schedule of corrective action.

c. Public informed of illicit discharges: Information regarding the illicit discharges identified has been posted to the stormwater web page.

d. System Mapping: existing data on the main campus drainage system was reviewed by the Executive Manager in conjunction with outfall mapping. With the exception of two areas on the main campus under further investigation, the data has been mapped on a campus site plan that will be made available on the stormwater web page.

4. Construction Site Storm Water Runoff Control

HVCC has initiated control of erosion and sedimentation on construction projects by implementation of the following:

a. Passage of a Board of Trustees resolution: On May 27, 2004, the HVCC Board of Trustees passed a resolution authorizing the Director of Physical Plant to sign and submit all necessary documentation for compliance with the NPDES Phase II stormwater program. This resolution also requires all construction operators involved with construction projects and/or activities taking place on the campus which involve soil disturbances of one acre or more to implement measures pursuant to applicable State and local erosion and sediment control requirements to control pollutants in stormwater discharges during and after the construction period.

b. Established procedure to receive and consider information from the public

A web page for construction projects [http://webdev.hvcc.edu/about_college/construction/index.html](http://webdev.hvcc.edu/about_college/construction/index.html) has been developed and implemented.

On the web site the public can access information about each project. These web pages will also contain information on HVCC’s proposed stormwater best management practices implemented/proposed at each construction site. Each construction site web page will indicate construction drawings are available at the Physical Plant Department for review by appointment.

To solicit comments on construction plans, the web page also has a link to a form. Any comments received will be forwarded to the Physical Plant Department, who will contact the individual directly to address their
c. Construction site plan review

To minimize potential water quality impact on construction site, effective erosion and sedimentation control measures will be established and implemented prior to construction. Prior to construction, site plans will be reviewed by Physical Plant personnel or a contracted NYS engineering firm for consistency with the following erosion and sedimentation control requirements:

i. “New York Standards and Specifications for Erosion and Sedimentation Control”

ii. “New York State Stormwater Management Design Manual”

If site plans do not meet these requirements, HVCC will issue the architect/engineer a letter summarizing the deficiencies and requesting revised site plans. As indicated in the HVCC stormwater permit, a standard specification plan will be developed during year 2 of our permit that will be based on the documents mentioned above and will be incorporated into future site plan reviews.

d. Overall construction site waste management

A comprehensive list of all potential construction site wastes has been developed. This list will be used when developing a standard specification plan for construction projects during year 2 of the permit to ensure that these wastes are handled properly and in a manner that prevents stormwater impact.

5. Post Construction Storm Water Management

a. Assess existing conditions and identify appropriate management practices

In order to reduce post-construction stormwater runoff, through BMPs, HVCC is in the process of:

i. Setting measurable goals for reducing stormwater runoff (by June 2005)

ii. Monitoring stormwater outfalls for impaired water quality (starting by June 2004)

iii. Verifying that structural stormwater management controls have been installed to specification
iv. Developing BMPs to ensure the reduction of stormwater runoff, including, but not limited to:
   1. The inspection of post-construction areas for evidence of soil erosion and sedimentation
   2. The inventory of structural stormwater management controls
   3. The inspection of structural stormwater management controls
   4. The inspection of non-stormwater management controls
   5. Procedures for operations and maintenance of structural stormwater management measures (i.e., cleaning of catch basins, repair of grates)
   6. Providing training for key building maintenance personnel to implement post-construction BMPs.

b. Develop management practice inspection and maintenance programs

Monitoring of outfalls to establish water quality problems and potential pollutants was initiated during this reporting period. A BMP was developed outlining procedures to be followed and required documentation. The first monitoring session occurred in May of 2004 and will be conducted twice per year, once between March and August and once between September and February.

If potential stormwater pollutants are noted during monitoring, the following steps, as appropriate, will be taken:

   i. Review stormwater drainage basin to identify source of stormwater pollutants
   ii. Review applicable BMPs
   iii. Notify appropriate HVCC departments to correct the problem
   iv. If applicable notify applicable state or federal agencies if a reportable release has occurred.

To date one monitoring event indicated a potential problem at outfall #9 which takes runoff from Williams, Cogan and the Day Care parking lots and athletic fields. Additional monitoring will be conducted and the catch basin inspected. This area will continue to be monitored and additional steps taken as appropriate.

6. Pollution Prevention/Good Housekeeping

   a. Prevent discharge of pollutants from municipal operations

   During this reporting period a program was undertaken to review site specific departmental activities, identify impacts to stormwater and
implement corrective action by reviewing operation and maintenance procedures outlined in department BMPs. The inspections and review and update of procedures was conducted by the Coordinator of EHS and an outside environmental consultant.

The following groups & best management practices were evaluated and/or developed and will be incorporated into the training plan:

i. Physical Plant, Grounds department - BMPs for all of the following are in place:
   1. collection of motor oil, coolant, oil filters
   2. spill cleanup and disposal
   3. collection and storage of automotive batteries
   4. deicing material application, storage and handling
   5. street sweeping
   6. maintenance & mulching of vegetative cover
   7. catch basin maintenance
   8. vehicle washing
   9. fuel tank deliveries

ii. Automotive department – BMPs for all of the following are in place:
    1. collection of motor oil, coolant, oil filters
    2. spill cleanup and disposal
    3. collection and storage of automotive batteries

iii. Physical Plant, Maintenance department – BMPs for all of the following are in place:
    1. fuel tank deliveries
    2. transformer oil handling and disposal
    3. refrigerant waste oil handling and disposal
    4. waste solvent handling and disposal
    5. universal waste handling procedures
    6. maintenance of the Automotive/Grounds oil water separators

iv. Food service (Special events and permanent facilities) – contract staff are required to collect food grease, containerize and arrange for off site for recycling. Procedures are implemented through contract requirements with these groups.

v. Pesticide applicators – companies contracted to apply pesticides must be licensed. HVCC keeps records of applicators serving the campus. Companies are required to have IPM plans. Pesticides are required to be applied in accordance with state and federal
vi. General – best management practices are established campus wide for hazardous waste chemical management, disposal of off specification chemicals, and spill prevention and control (as per HVCC SPCC plan)

b. Campus spill response and prevention plans

Campus plans that address spill response and prevention were reviewed during this report period by the Coordinator of EHS. Updates to the plans were made where necessary. The following plans address spill response and/or prevention:

i. Hudson Valley Community College Emergency Preparedness Plan: updates to the role and responsibility of the Coordinator of EHS were submitted to include oversight of safety, health and environmental matters during emergencies involving a release to the environment and liaison with regulatory agencies

ii. Chemical Hygiene plans: chemical storage, management, handling and spill response sections were reviewed; no updates were necessary.

iii. Bloodborne Pathogen plans: proper handling, disposal and clean up of blood spills was reviewed. Clean up and disposal procedures for custodial staff was revised; storage of biomedical waste was evaluated and changes made to storage areas and location where appropriate.

iv. Mortuary Sciences Chemical Management Plan: a more comprehensive plan to address all issues concerning the purchase, storage, handling and disposal of formaldehyde-containing and other mortuary chemicals was developed and implemented.

v. Best Management Practices: petroleum storage, delivery procedures, spill control and response were reviewed and updated. Fluorescent light handling procedures were revised; chemical waste storage, chemical storage, and chemical spill response BMPs were revised.

c. Follow DEC NPS Management Practices Catalog

Upon completion of site inspections and review and revision of department best management practices and procedures, the NPS Management Practices Catalogs were consulted for guidance. In particular, the “Roadway and Right-of-Way Maintenance” and “Urban/Stormwater Runoff Management Practices” catalogues were used in reviewing and revising some of the above mentioned department BMPs.
d. Conduct employee pollution prevention training

As described in Items 1a, 1b and 6a above, information on water quality impacts due to operation practices were identified and staff responsible targeted. See above items for more details. Based on this information a training plan was drafted and reviewed by the Stormwater Committee. A copy of the training plan is attached.

Enclosures:

Attachment A - Stormwater Training Plan
Attachment B – Stormwater brochure