

STORMWATER MANAGEMENT PLAN

PHASE 1 MUNICIPAL STORMWATER GENERAL PERMIT

Permit # WAR04-4201

Tacoma Community College

6501 South 19th Street

Tacoma, Washington 98466-6100

Rev. December 2012

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Campus Description

The Tacoma Community College campus is located within the City of Tacoma on the north east corner of Mildred street and South 19th street. The campus is located within the Leach Creek Drainage Basin, as defined by the City of Tacoma (See Vicinity map included as figure A-1). The western portion of the campus is developed and consists of multiple buildings housing various programs for the college. The majority of the eastern portion of the site remains undeveloped forest and recreational areas including a track, baseball field and trails.

Stormwater Management Plan (SWMP)

S6.A Permit Requirements for Secondary Permittees

- 1 Develop and implement a Stormwater Management Program designed to reduce discharges of pollutants from regulated small MS4's to the maximum extent practicable and to protect water quality.
- 2 Develop written documentation of the SWMP organized according to program components in S6.D and update annually.
- 3 Submit written updated SWMP with required Annual Stormwater Report to Washington State Department of Ecology (DOE).

S6.D Stormwater Management Program for Secondary Permittees

S6.D.1 Public Education and Outreach

This section outlines the process TCC shall follow in order to meet the requirements for public education and outreach. Many of the educational strategies outlined below are currently in place while a few will need to be implemented. The goal of this requirement is to educate the public and increase awareness to onsite activities and water quality of Puget Sound. Appointed staff shall educate faculty, staff, visitors and students on stormwater issues, through a variety of media including labeling storm drain inlets and newspaper articles, to increase awareness on the public's role in water stewardship.

1 Label Storm Drain inlets

- a. All storm Drain Inlets shall be clearly and permanently labeled with the message "Dump no Waste" and indicate the point of discharge as "Drains to Puget Sound"
- b. Any Label that is no longer clearly visible shall be relabeled within 90 days.

2 Distribute Educational Information

Training

TCC Shall distribute information on the impact of stormwater discharges on receiving waters and the steps that can be taken to reduce pollutants in stormwater runoff. This information shall be distributed through articles published in the college newspaper and be made available to faculty, staff, visitors and students. Different combinations of topics will be addressed each year and before the expiration date of the permit all of the relevant topics shall be covered:

a. How stormwater runoff affects surface water.

TCC appointed staff shall be educated on common pollutants, particularly those associated with commuting to work and working on campus. They shall also be educated on the potential impact of these pollutants on surface water. An emphasis shall be placed on the everyday activities on water quality, and ways in which TCC staff members and students can minimize their impact on surface water shall be recommended

b. Proper use and application of pesticides and fertilizers.

TCC maintains a policy limiting the use of herbicides and overuse of fertilizers. The individuals dispensing chemicals onsite are State Licensed. These individuals are trained in the proper use of chemicals and their affect on the environment. The outreach program should promote this ideology and the practices associated to the staff and students for use in their homes.

- c. **Benefits of using well-adapted vegetation**
- d. **Alternative equipment washing practices, including cars and trucks that minimize pollutants in stormwater.** The Maintenance area, located in the north east corner of the site includes a vehicle wash bay for campus vehicles. This wash bay is equipped with an oil water separator to remove oils, grease and other chemicals from the water before the water is discharged.
- e. **Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of wastes, including the location of hazardous waste collection facilities in the area.**
 Staff and students using the site have been educated on available alternative transportation programs. The campus houses a Pierce Transit Center that provides transportation to and from the site and has a CTR (Commute Trip Reduction) program in place, which is a State mandated program aimed to reduce the number of people who drive to the campus alone. CTR Program shall spread information on the nature of these programs, and it shall encourage participation in them. The goal shall be to sustain high participation in the programs, thereby reducing campus traffic and the resulting pollution. Appointed staff shall be educated on proper identification and disposal of household hazardous waste, including locations of local oil recyclers, used battery collection sites and household hazardous waste drop off sites. The staff shall promote these practices to other staff and students for implementation.
- f. **Hazards associated with illicit connections.**
- g. **Benefits of litter control and proper disposal of pet waste.**
 Pets are not permitted on the main campus. The EPA identifies non-human waste as a significant source of nonpoint pollution.
 Pet owners that use the campus trails have pet waste bags made available to them by TCC.

S6.D.2 Public involvement and participation

TCC will make the public aware of the program content and status of implementation via public notice. TCC shall publish a public notice on its website and solicit public review of the SWMP and make the latest updated version of the SWMP available to the public on the Portal.

S6.D.3 Illicit Discharge Detection and Elimination

TCC shall establish and enforce a policy that prevents illicit discharge to the maximum extent practicable. TCC shall comply with local ordinances, rules and regulations that govern non-stormwater discharges. TCC shall develop, adopt and enforce appropriate procedures prohibiting illicit discharges and illegal dumping. These procedures shall address at the minimum: illicit connections, non-stormwater discharges and spilling, dumping, or otherwise improperly disposing of hazardous materials, pet waste and litter.

- a. **The following sources may be discharged to the stormwater system:**
 1. Non-stormwater discharges covered by another NPDES permit
 2. Discharges from emergency firefighting activities
 3. Diverted stream flows
 4. Rising ground waters
 5. Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20))
 6. Foundation drains
 7. Air conditioning condensation
 8. Irrigation water from agricultural sources that is comingled with urban stormwater
 9. Springs
 10. Water from crawl space pumps
 11. Footing drains
 12. Flows from riparian habitats and wetlands

- b. **The following sources are not allowed to discharge into the stormwater system, unless stated conditions are met:**
 - 1. **Discharges from lawn watering and other landscape irrigation runoff.** These discharges are reduced through limited irrigation only during summer months. Irrigation schedules and sprinkler patterns are monitored frequently to ensure landscaped areas are not overwatered.
 - 2. **Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents.** Where moss accumulates, buildings and sidewalks are cleaned with a high pressure washer. A street sweeper is used to clean roadways and walkways. Water is conserved to the maximum extent practicable and no chemicals are used.
- c. **Facilities will complete a map of the storm sewer system that shows storm drain outfalls, delineates the area contributing to each outfall and marks the receiving waters.**
- d. **Annually, TCC shall inspect one third known outfalls for illicit discharges.** Illicit discharge is wastewater that enters the stormwater system without being treated and it occurs as a result of improper connections in the wastewater system. Records shall be kept of inspections and follow up activities (See Figure A-3 in Appendix A).
- e. **Develop and implement a spill response plan that includes coordination with a qualified spill responder.** TCC has and will maintain in ready condition, onsite spill kits, and has agreements for coordination with 2 qualified spill responders.
- f. **Facilities staff will be trained in the prevention of spills and illicit discharges.** Facilities staff shall be trained as needed regarding proper best management practices for preventing spills and illicit discharges and the importance of protecting water quality by a variety of means, including training by an outside entity competent in the subject matter.
Facilities staff training will cover the requirements of the permit and O & M plan, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality and procedures for reporting water quality concerns, including potential illicit discharges.

S6.D.4 Construction Site Stormwater Runoff Control

TCC shall ensure that all construction projects comply with the National Pollutant Discharge Elimination System (NPDES) and Local ordinances, rules and regulations.

It is anticipated that all construction activities that disturb one or more acres of land and require a Construction Stormwater General Permit will be undertaken by the Contractor and will comply with all relevant ordinances, rules and regulations of the local jurisdiction (the city of Tacoma).

Contract documents shall address the contractor's responsibility to obtain and comply with the Construction Stormwater General Permit. TCC Project Managers will monitor compliance with the Construction Stormwater General Permit for the projects and promptly notify the contractor of any deficiencies and will coordinate with ecology and/or the local jurisdiction to provide access for inspection of the construction site.

S6.D.5 Post-Construction Stormwater Management for New Development and Redevelopment

TCC shall ensure that completed projects comply with the NPDES and Local ordinances, rules and regulations. TCC will comply with applicable regulations governing Post-Construction Stormwater pollution prevention.

S6.D.6 Pollution Prevention and Good Housekeeping for Municipal Operations

TCC shall develop and implement an operational and maintenance plan to minimize stormwater pollution. Pollution prevention and good housekeeping require development and implementation of an O & M plan. Employees must be trained to follow that plan. The goal is to lessen the contribution of pollutants to LEACH CREEK to the maximum extent practicable by identifying and targeting activities that can affect the quality of stormwater leaving the site.

a. *Stormwater Collection and Conveyance Systems*

Stormwater collection and conveyance systems, including catch basins, stormwater sewer pipes, open channels, culverts, structural stormwater controls and structural runoff treatment and/or flow control facilities will be inspected annually and maintained as needed. TCC Grounds Staff are responsible for scheduling inspection and maintenance. Maintenance includes cleaning out debris, pumping sediment and replacing oil collection pillows as needed, as well as any necessary repairs. Sediment has been sampled and is not typically a regulated waste under WAC-173-303 unless visibly contaminated with oil or other contaminants. Oil collection pillows will be disposed of as a dangerous waste, per WAC 173-303. See Appendix D for excerpts of the 2005 Stormwater Management Manual for Western Washington, Volume V, Chapter 4.6 for additional inspection and maintenance details.

Stormwater Conveyances (shown on the stormwater map in appendix A) include:
roof drain lines, storm pipes connecting catch basins, storm catch basins
biofiltration swales, detention ponds, detention tanks, storm filter vaults

TCC Staff will check stormwater treatment and flow control facilities following a 24 hour storm event with a 10 year or greater recurrence interval.

b. *Roads and Parking Lots*

The Grounds snow removal plan is incorporated by reference. De-icer is stored in a covered building at shops and is applied primarily on walking surfaces when the temperature is below freezing. Sand is applied to both driving and walking surfaces to increase traction in snowing weather. Sand is cleaned up with a street sweeper as soon as practical. Grounds cleans parking lots and roads routinely to remove trash, litter and debris. Debris is cleaned manually and with the street sweeper. Trash and litter is disposed with the landfill waste.

c. *Vehicle Fleet*

TCC maintains a fleet of official vehicles and they are washed and maintained in the facilities maintenance yard. Vehicles are stored in a variety of locations on campus. Vehicles are only washed in the designated wash bay which drains to an oil water separator to remove oils, grease and other chemicals from the runoff before the water is discharged. TCC maintains a supply of absorbent to clean up any inadvertent spills. Vehicle repair takes place inside the maintenance building and spills are promptly cleaned up.

d. *External Building Maintenance*

TCC Facilities is responsible for most exterior building maintenance. Pressure washing is done during summer months to limit the impact on the stormwater system. TCC Custodial staff clean exterior windows and building entrances at ground level and TCC Maintenance clean windows requiring the use of a lift for access. These activities are not expected to impact the stormwater system.

e. *Parks and Open Space*

TCC Maintains the exterior areas of campus. Fertilizer and other soil treatments are judiciously applied to limit runoff. Trash cans are readily available outside, and litter is picked up daily. Grass clippings and vegetative debris are informally composted. Woody debris is primarily disposed offsite.

f. *Material Storage Areas, Heavy Equipment Storage Areas and Maintenance Areas*

Heavy Equipment is typically stored under cover, indoors and should not impact the stormwater system. The maintenance areas are under cover and should not impact the stormwater. Most materials are stored under cover, however stockpiles of sand, bark and gravel are stored in exterior bunkers. The stockpiles are routinely checked to ensure that they are not impacted by storms.

G3 SPILL RESPONSE PLAN

Use the spill kits located in bay 1 of bldg 21 to contain, clean up any small amounts pollutants, oil, antifreeze, hydraulic oil prior to pollutant entry into the storm sewer. Use containment pillows and/or booms to prevent pollutants from entering the storm sewer. If it appears likely that pollutants may enter or if they have entered the storm sewer which would constitute a threat to human health, welfare and/or environment, TCC Shall:

- a. Notify Take further appropriate action to correct or minimize the threat to human health, welfare and/or environment and
- b. Notify the Ecology regional office by phone, the City of Tacoma by phone and other appropriate spill response authorities immediately but in no case later that 24 hours from obtaining that knowledge and
- c. Immediately report spills or discharges which might cause bacterial contamination of shellfish, such as broken sewer lines to the Ecology regional office by phone, the City of Tacoma by phone and to the Department of Health, Shellfish Program and
- d. Immediately report spills or discharges of oils or hazardous materials to the Ecology regional office and to the Washington Emergency Management Division and
- e. Maintain records of spill response by tcc staff and all other responders.

Department of Ecology

South West Regional Office, 24 hour number 360-407-6300

City of Tacoma

EMERGENCY 591-5595

Larry Dunn, Source Control, cell 253-312-2425

Public Works, Source Control 253-5022277

Department of Health, Shellfish Program

24 hour number 360-236-3330

Washington Emergency Management Division

1-800-258-5990

Qualified Spill Responders

Ventilation Power Cleaning (VPC)

3914 Leary Way N.W. Seattle, WA 98107

Ron Christenson cell 206-391-6636, 206-634-2750

Certified Cleaning Services, Inc. (CCS)

Tacoma, WA 98445

Dave Johnson cell 253-377-5590, 253-536-5500, 1-800-290-3008

O & M Recordkeeping

Facilities shall keep records for the following:

- a. Preventative maintenance and repairs to stormwater systems on the Scheduled inspections recorded in the CMMS system
- b. Spill response
- c. Other potential pollution incidents.

Acronyms and Definitions

Best Management Practices (BMP): are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singularly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington state.

CWA: Clean Water Act, Formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.

Ecology: Washington State Department of Ecology

EPA: Environmental Protection Agency

Facilities: Tacoma Community College staff responsible for maintain the buildings and infrastructure on campus.

Grounds: Tacoma Community College staff responsible for maintain the grounds, walking, driving/parking areas and infrastructure on campus.

Illicit Discharge: Any Discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (i) owned or operated owned by a state, city, town, borough, county, parish, district, association, or other public body (created pursuant to state law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to the waters of the United States.
- (ii) Designated or used for collecting or conveying Stormwater.

- (iii) Which is not a combined sewer; and (iv) which is not part of a Publically Owned Treatment Works (POTW) as defined at 40 CFR 122.2. The Tacoma Community College Stormwater system operates as an MS4.

National Pollutant Discharge Elimination System (NPDES): The national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Point Source: Pollution that can be traced back to a single origin or source.

Secondary Permittee: An operator of a regulated small MS4 that is not a city, town or county. Tacoma Community College is a Secondary Permittee.

Small Municipal Separate Storm Sewer System (Small MS4): An MS4 that is not defined as “large” or “medium” pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v). Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publically owned hospitals, prison complexes, highways and other thoroughfares. The Tacoma Community College is a small MS4.

TCC: Tacoma Community College

WSDA: Washington State Department of Agriculture

APPENDIX A

EXHIBITS

- A-1 VICINITY MAP
- A-2 STORMWATER SYSTEM MAP
- A-3 VISUAL INSPECTION FORM
- A-4 CATCH BASIN STENCIL DETAIL
- A-5 PARKING LOT "K" (old lot "b") RETENTION SYSTEM DRAWING

APPENDIX B

SOURCES

Environmental Protection Agency National Pollutants Discharge Elimination System Office of Wastewater Management. (<http://cfpub.epa.gov/npdes/>)

Washington State Department of Agriculture. (<http://agr.wa.gov/>)

Washington State Department of Ecology. (<http://www.ecy.wa.gov/>)

APPENDIX C

TCC CONTACT LIST

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Grounds Maintenance
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Location Building 22
Phone: 253-566-4487
Email: mmiller@tacomacc.edu

Building Maintenance
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