Lower Columbia College

Longview, Washington



Keeping our environment beautiful

Lower Columbia College Stormwater Management Plan Western Washington Phase II Municipal Stormwater Permit Campus Services Department

Stormwater Management Plan

Phase II Permit for Western Washington

Lower Columbia College

Longview, Washington 98632

Permit #WAR04-5211

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In accordance with
The State of Washington Water pollution Control Law
Chapter 90.48 Revised Code of Washington

The Federal Water Pollution Act (The Clean Water Act) Title 33 United States Code, Section 1251

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INTRODUCTION

On January 17, 2007 the Department of Ecology (Ecology) issued the National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for discharges from Small Municipal Separate Sewer (MS4) in Western Washington (Phase II Municipal Storm Water Permit). The permit became effective on February 16, 2007. The Phase II Permit automatically applies to cities and counties with populations less than 100,000 located within or partially within a federally designated urbanized area and that operate a municipal separate stormwater sewer system (MS4), which discharges to a "waterway" of Washington state (i.e., river, lake, steam, wetland, etc.). As a result of the City of Longview designation Lower Columbia College (LCC) is designated as a secondary Permittee with coverage under the Phase II Permit.

On February 16, 2007 the Department of Ecology (Ecology) received a notice of intent (NOI) from LCC for coverage under the Phase II Municipal Stormwater Permit for Western Washington. The Department of Ecology found the NOI complete and granted the College coverage as of October 7, 2008.

LCC's permit coverage number is WAR04-5211. The geographic extent of coverage for this permit consists of Lower Columbia College Campus, 1600 Maple Street, Longview, WA 98632. The boundaries of the campus are Maple Street to the South and 15th Avenue to the East

S6.D.1: PUBLIC EDUCATION AND OUTREACH

LCC shall educate the college community on stormwater issues. The college community consists of students, staff, faculty, visitors, service providers and contractors. Some elements must be initiated, while others are already in place and shall be maintained. The goal shall be to increase awareness of the link between on-campus activities and water quality in streams and lakes in Cowlitz County. Students and staff shall be provided with guidance on steps and specific actions that they can take to reduce their stormwater pollution potential.

This process shall be carried out through the Campus Services Department in cooperation with other campus groups to design and implement specific means of carrying out each of the elements, delegating as necessary. The required educational topics shall be covered through a variety of media and employ the following strategies:

A. Label Stormwater Drains

All storm drain inlets on campus shall be clearly and permanently labeled with the message "No Dumping Drains to River." The specific location of these storm drain inlets are indicated on the stormwater drainage map. All inlets are currently labeled. Any inlet having a label that is missing or no longer clearly visible shall be re-labeled within 90 days.

B. Educate students and staff on stormwater issues

Each year, information on the impact of stormwater discharges on receiving waters and the steps that can be taken to reduce pollutants in stormwater runoff shall be distributed. This information shall be distributed through a variety of media: handout (Cowlitz County Stormwater pollution guide), flyers, newsletters, pamphlets, newspaper articles, science seminars, lectures, web pages and course work. Different combinations of topics shall be addressed each year. The following topics shall be covered:

- How stormwater runoff affects surface water.
 LCC students and staff shall be educated on common pollutants, particularly those
 associated with commuting to campus. They shall also be educated on the potential
 impact of those pollutants on surface water. An emphasis shall be placed on the impact of
 everyday activities on water quality, and ways in which LCC community members can
 minimize their impact on surface water.
- Proper use and application of pesticides and fertilizers.
 LCC maintains a strict policy against herbicides and non-organic fertilizers. Students and staff shall be educated on the reasoning behind this policy, and they shall be encouraged to carry this ideology into their own homes.
- Benefits of using native and well-adapted vegetation.
- Alternative equipment washing practices including cars and trucks that minimize pollutants in stormwater. Students and staff shall be educated on equipment and vehicle washing practices that minimize discharge to the MS4s, which include: using a commercial car wash, using biodegradable soaps, using nozzles that shut off

automatically, limiting wastewater to the greatest extent practicable; washing in a designated pervious area, diverting wash water into the sanitary sewer system; and covering storm drains while washing vehicles.

- Benefits of alternative transportations choices.
 Commute Trip Reduction 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.
- Proper handling and disposal of wastes, including the location of hazardous waste
 collection facilities in the area. Students and staff shall be educated on proper
 identification and disposal of household hazardous waste, including locations of local
 used oil recyclers, used battery collection sites and household hazardous waste drop off
 sites.
- Benefits of litter control and proper disposal of pet waste.

S6.D.2: PUBLIC INVOLVEMENT AND PARTICIPATION

The college shall publish a public notice in the local newspaper soliciting public review of the SWMP. The latest updated version of the SWMP shall be made available to the public via posting to the LCC website. In addition, students and staff shall be involved in planning, data gathering and prevention activities. Science classes shall be encouraged to monitor the stormwater retention ponds.

S6.D.3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

LCC shall comply with local ordinances, rules, and regulations that govern non-stormwater discharges. LCC 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*:

- Non-stormwater discharges covered by another NPDES permit
- Discharges from emergency fire fighting activities
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Foundation drains
- Air conditioning condensation
- Irrigation water from agricultural sources that is commingled with urban stormwater
- Springs

B. The following sources are not allowed to discharge to the stormwater system, unless stated conditions are met:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water, unless the water is dechlorinated to 0.1 ppm or less, pH-adjusted if necessary, and controlled to prevent resuspension of sediments in the stormwater system.
- Discharges from lawn watering and other landscape irrigation runoff. These discharges are reduced through limited irrigation only during the summer months. Irrigation schedules and sprinkler patterns are monitored frequently to ensure landscaped areas are not overwatered.
- Street and sidewalk wash water, water used to control dust, and routing external building wash down that does not use detergents. Where moss accumulates, buildings and sidewalks are cleaned with a high pressure washer annually. Water is conserved to the maximum extent practicable, and no chemicals are used. The Grounds group shall conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. 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. The wastewater system shall be regularly inspected for integrity. At least one third (on average) of stormwater outfalls shall be inspected each year beginning no later than two years from the date of permit coverage. Inspections shall examine chemical and fecal coliform levels, and records shall be kept of inspections and follow-up activities.
- Develop and implement a spill response plan that includes coordination with a qualified spill responder. (Cowlitz Clean Sweep)
- The Grounds and the Maintenance Services groups shall be trained in the prevention of spills and illicit discharges. They shall be oriented in the proper handling of wastewater and the means for detecting--through visual inspection and testing –illicit discharges. A schedule for periodic inspections shall be established.

S6.D.4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

All construction sites on campus, greater than one acre, shall have controls in place to prevent pollution of stormwater. The standard set of construction specifications in Division 01, section 01500 "Temporary Facilities and Controls" specifies particular safeguards and procedures that all contractors shall be required to follow. College project managers shall be responsible for monitoring the site.

LCC shall develop a program to eliminate or reduce any runoff problems due to construction activity. Contractors and consultants shall be made aware of this program at the pre-construction meeting and they shall be held responsible for stormwater pollution that occurs due to their actions.

S6.D.5: POST-CONSTRUCTION RUNOFF CONTROL

LCC shall develop plans to control any potential runoff pollution due to construction activities. Increases in impervious surface are of particular concern. These plans shall be in place prior to construction. After construction, stormwater in the retention ponds shall be monitored to ascertain any change in quantity and quality of the water.

S6.D.6: POLLUTION PREVENTION AND GOOD HOUSEKEEPING

Pollution prevention and good housekeeping require the development and implementation of a solid plan, and students and staff must be trained to follow that plan. The goal of the plan is to lessen our contribution of pollutants to the maximum extent practicable, by identifying and targeting everyday activities that may affect stormwater.

A. O &M Plan

The Campus Services Department shall develop and implement an operation and maintenance (O&M) plan to minimize stormwater pollution (Appendix A). The O&M plan must include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities. Grounds and Maintenance shall keep records in order to track 1) performance of operational source control activities, 2) performance of scheduled inspections, 3) responses to spills and 4) other potential pollution incidents.

Operations, activities and/or types of facilities include:

• 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.

The O&M Plan shall establish a formal procedure for monitoring, maintaining, and repairing these systems. The O&M Plan shall include a timeline for inspection, a protocol for addressing maintenance issues, and a plan for record keeping. Further, it shall delegate these responsibilities to specific parties. These inspections shall be done at regular intervals, with records kept of all observations and actions.

The O&M Plans' emphasis shall be on prevention. It shall identify and implement means of minimizing the influx of debris into the MS4. Open ditches shall be visually inspected and cleared of debris as necessary. The waste from oil-water separators shall be removed regularly and disposed of properly.

The plan shall establish maintenance standards that are as protective or more protective of facility function as those specified in Chapter 4 Volume V of the 2005 Stormwater Management Manual for Western Washington.

• Roads and parking lots

The O&M Plan shall include an all-season BMP to reduce road and parking lot debris and other pollutants from entering the MS4. It shall include a schedule for the frequency of street and parking lot cleaning, and a protocol for appropriate disposal of waste collected during this process.

The O&M Plan must address procedure for de-icing these paved areas, as carried out by the Grounds group. The O&M Plan shall establish a formal procedure for applying de-icing materials, and the proper storage of these materials.

College vehicles.

The O&M Plan shall establish a procedure for pollution prevention and runoff reduction from activities including maintenance of the vehicles. The plan shall seek consistency of practices, to reduce the discharge of pollutants to the MS4 to the maximum extent practicable.

External building maintenance.

The Maintenance group performs external building maintenance by periodically washing the buildings and sidewalks as needed. The O&M Plan shall establish a formal protocol for cleaning and any other external building maintenance that may be required.

Grounds and open spaces.

The O&M Plan shall address the application of organic fertilizers and BMPs for landscape maintenance, vegetation disposal and trash management.

B. *Employee Training*

All employees whose construction, operations, or maintenance job functions may impact stormwater quality shall be educated in the following areas:

- The importance of protecting water quality Employees shall be trained on the recreational, educational, and ecological value of LCC's campus.
- The requirements of the Permittee Employees shall be trained on the contents of the SWMP and the steps that LCC must follow to comply with the permitting process.
- Operation and maintenance requirements Employees shall be trained on the contents of the O&M Plan and on steps for compliance with that plan.
- Inspection Procedures Employees shall be trained on the frequency and manner of inspections. They shall be given proper equipment to do their jobs, and they shall be trained in its use. Employees shall be trained to follow the schedules contained in the O&M Plan.
- Ways to perform their job activities to prevent or minimize impacts to water quality –
 Employees shall be trained in the impact of everyday activities on water quality and
 provided with alternatives that reduce impact.
- Procedures for reporting water quality concerns, including potential illicit discharges –
 Employees shall be given information on who they can contact to report illicit discharges and other water quality concern

Appendix A

Maintenance and Operation

Introduction

As part of the SWMP the maintenance department will be responsible for the M&O procedures and program as it relates to LCC. The maintenance department will take every opportunity to fine tune the current M&O program to achieve maximum results and compliance while improving efficiency and potentially addressing any budget constraints including the following:

- Purchase the necessary and additional new equipment to increase productivity and compliance.
- Request additional full-time equivalent employees (FTEs) as maintenance and operations demands increase.
- Maintain and enhance recording-keeping and scheduling capabilities.
- Streamline maintenance methods using Megamation to provide better coordination and use of limited resources.

Preventive Maintenance

- Conduct monthly inspections of catch basins, biofiltration swales, sand filter (below ground/enclosed) catch basin inserts, debris barriers e.g. trash racks), etc.
- Inspect and clean treatment BMPs, conveyance systems, and catch basin as needed and determine whether improvements are needed.
- Promptly repair any deteriorated threatening the structural integrity of the facilities. This includes replacement of clean-out gates, catch basin lids and rock in swales.
- Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to sewer system are prevented.
- Regularly (daily) remove trash, wood and other debris in a catch basin to ensure proper operation of catch basin.
- Clean catch basins when the depth of deposit reaches 60 percent of the sump depth as measured from the bottom of the basin to the invert of the lowest pipe into or out of the catch basin.
- Annually clean each catch basin.
- Post warning signs "No Dumping! "Drains to River," on all storm drains inlets where practical.
- Conduct monthly inspections and re-label warning signs when necessary.
- Inspect ditches regularly (daily), or as needed during heavy rain fall to identify sediment accumulation and localized erosion.
- Clean ditches on a regularly basis or as needed. Ditches should be kept free of rubbish and debris.
- Clean parking lots on a regular basis or as needed.
- Catch basin, ditches or parking lot cleaning debris should not be sweep and removed at the completion of the cleaning operations.

Appendix B

Best Management Practices

LCC's stormwater pollution prevention measures, also known as Best Management Practices or BMPs are required to ensure that run-off is not polluted by chemicals, oils, wash water, preventive maintenance, and dumping and sewage waste. The information listed below and fact sheet is designed to help the LCC community understand and implement proper work practices that protect the water quality by preventing illegal discharges of waste.

What You Can Do

Here are some ways that you can contribute to pollution prevention, protect water quality and good housekeeping around campus:

Outdoor activities

- Take note of nearby storm drains and take precautions to prevent any liquid or loose material from entering them. If necessary, plug or berm drains to prevent entry of contaminants.
- If your activity uses water, divert the runoff to a green or vegetated area.
- Sweep the area and pick up any loose material when your activity is completed, and don't wash anything down the drain.
- Prevent sediment from entering the drain by use of a fabric bag filter. Contact the Campus Services Department ahead of time if you think you may need the drain protected in some way.
- Never pour any liquids down outside drains, including beverages, liquid food wastes, grease, wash water or any other seemingly non-harmful liquid - remember, these are not natural to our waterways.

Trash Disposal

Dumpsters are a common source of pollutants, especially if they contain any liquid or semiliquid wastes. *Never place liquids into the regular trash or directly into a Dumpster!* Instead, follow these guidelines for disposal of liquid waste:

- Liquids that will not have an adverse affect on the county water treatment plant, such as: liquid food waste, sewage, boiler blow downs, sump pump drainage, should be discharged to drains inside buildings.
- Chemicals and other liquid products that can be toxic should be collected and containerized for proper disposal. Call the Safety and Security Manager at ext. 2270, or Campus Services at ext. 2260 for a pick up if you have chemical waste products.

Vehicle & Equipment Fueling and Repairs

- Stay with vehicles while fueling avoid overfilling or topping off
- Move leaking vehicles or equipment indoors or make emergency repairs
- Use a drip pan to catch temporary leaks until repairs can be fixed

Preventing and Cleaning Up Spills

Spills of chemical materials should be prevented outside of buildings as well as inside buildings. Follow these precautions when handling liquid chemicals:

- Keep the container closed tightly except when in use
- Use a funnel to pour liquids from one container to another
- Place trays under open containers
- Prevent dripping as liquids are poured
- Remain in attendance whenever using liquid materials outdoors
- If a spill does occur, respond immediately to clean it up, follow your department guidelines. If you need assistance, such as for spillage of vehicle fluid, call the Campus Services Department immediately. If after hours, call the Campus Safety and Security Office.
- Never wash spilled materials down a storm drain, sanitary sewer, or allow them to evaporate. If you observe improper dumping or discharge on campus property, immediately notify Campus Services and/or the Safety and Security Office.

Guide for Food Service Workers

It might not seem obvious, but storm water runoff is our most common cause of water pollution. Storm water pollution is caused by the daily activities of people everywhere and can lead to significant pollution of nearby lakes, streams and rivers. Rainwater and snowmelt runoff from parking lots, dock areas, roads and walkways can pick up fertilizers, dirt, pesticides, oil and grease, and other pollutants on the way to our rivers, lakes, and coastal waters.

Lower Columbia College has initiated a Stormwater Management Program to minimize pollutants entering the campus storm water system. This information sheet was developed especially for LCC Food Services workers, to let you know what you can do in your daily work activities to minimize pollutants from entering the storm drains around campus.

Please read and familiarize yourself with these guidelines.

Work guidelines for food service activities:

Food Grease

Food grease must be collected into a closed container and taken to the food grease tank outside the rear of the Student Center. The grease must be CAREFULLY POURED into the tank to PREVENT SPILLS. Close the tank opening after each addition of grease to prevent rain water from getting in the tank. Be certain the grate opening on the tank is not frozen and that the grease will pour through freely before you begin to pour grease. If grease drips or spills outside the container, it can become a pollutant by running into the storm drain. Therefore all spills and drips of grease must be cleaned up promptly.

Grease Spills

If grease is spilled outside the building, take immediate steps to clean it up and prevent it from reaching the storm drain grates near the loading dock. Grease spill clean-up supplies are kept in a box labeled, "Spill Clean-up Materials. Use this material to soak up or contain the spill. If additional supplies or assistance is needed, contact the Lower Columbia College Campus Services Department at 360-442-2260.

Liquid Wastes Other than Grease

Other liquid food wastes can be poured down drains inside the building where the drains are connected to the sanitary sewer system. Never pour liquids into a storm drain outside a building, or onto the ground or grass or into a dumpster. These liquids will mix with rain water and add to the pollution level in nearby lakes, streams and rivers.

Solid Food Wastes

To keep building drains clear, do not pour solid food into the drain. Liquids should be drained from the food as much as possible and then the solid waste disposed in the regular trash.

Catering and Concessions

Food, wash water, liquid food wastes, cooking water and grease must not be poured into nearby drains, pavement or ground outside any campus building. Grease must be collected in a covered container and transported back to the Campus Center grease collection tank. Other liquid and solid food wastes must be disposed as described in the above sections.

Reporting Spills

If there is a spill of oil, grease or other foreign substance to the storm drains, report this immediately to the Safety and Security Manager at 360-442-2270 or during off hours, to the onduty Security Officer, 360-442-2911.

Thanks for doing your part to keep our lakes and rivers clean!

Appendix C

Pollution Prevention Flyer

"STORM WATCH"

STORMWATER POLLUTION PREVENTION AND BEST MANAGEMENT PRACTICES (BMP'S)

Since the passage of the Clean Water Act in 1972, the quality of our Nation's waters has improved dramatically. However, despite this progress, degraded waterbodies such as streams, rivers, and lakes still exist with the leading source attributed to polluted stormwater runoff.

Lower Columbia College stormwater pollution prevention measures, also known as Best Management Practices or "BMP's," are required to ensure that run-off is not polluted by chemicals/oils, wash water, dumping and sewage wastes. This fact sheet is designed to help the LCC community understand and implement proper work practices that protect water quality by preventing illegal discharges of waste.

Here is how you can protect water quality:



BMP # 1: Good Housekeeping

Keep your work area neat and orderly – do not let scrap or waste accumulate Keep unused containers closed tightly
Use a drip pan temporarily – clean up drips and spills immediately

BMP # 2: Outdoor Materials Storage

Store materials out of rainfall – keep lids on all containers and label them correctly Avoid loading/unloading during poor weather or load/unload under a roof



BMP #3: Spill Response

NEVER hose or wash down a spill into the street, ditch or storm drain
Use a "dry" clean-up method like sweeping or spreading an absorbent
Protect storm drains – place an absorbent or blockage between the spill and drain
Dispose of clean-up wastes properly – ensure hazardous wastes go in proper container

BMP #4: Vehicle & Equipment Fueling and Repair

Stay with vehicles while fueling – avoid overfilling or "topping off" Move leaking vehicles and equipment indoors
Use a drip pan to catch temporary leaks until they can be fixed



BMP #5: Outdoor Maintenance

Use a drop cloth or tarp to catch dust & scraps Clean-up scrap, drips and residues by sweeping after each shift

BMP #6: Waste Management

NEVER use storm drains/ditches for waste disposal – avoid and report illegal dumping Close the lid or place a cover on all waste containers

Appendix D

Definitions and Acronyms

- **AKART** means all known, available, and reasonable methods of prevention, control and treatment.
- **All known, available and reasonable methods of prevention, control and treatment** refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.
- **Applicable TMDL** means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that the Permittee's application is received by Ecology, or prior to a modification of this Permit, whichever is later.
- **Beneficial Uses** means uses of waters of the states which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.
- **Best Management Practices** ("BMPs") are the schedules or activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Bypass means the diversions of stormwater from any portion of a stormwater treatment facility.

Clean Water Act: Legislation that provides statutory authority for the NPDES program; Public law 92-500; 33 U.S.C. 1251 et seq. Also known as the Federal Water Pollution Control Act.

Common plan of development or <u>sale</u> means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules, but still under a single plan. Examples include: phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g. a development where lots are sold to separate builders); a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; and projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility. If the project is part of a common plan of development or sale, the disturbed area of the entire plan shall be used in determining permit requirements.

Component or **Program Component** means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees of this permit.

Conveyance is the process of water moving from one place to another.

Co-permittee means an operator of a regulated small MS4 which is applying jointly with another applicant for coverage under this permit. A co-permittee is an owner or operator of a regulated small MS4 located within or adjacent to another regulated MS4. A co-permittee is only responsible for complying with the conditions of this permit relating to discharges from the MS4 the co-permittee owns or operates. See also 40 CFR 122.26(b)(1)

CWA means Clean Water act (formerly referred to as the Federal Water Pollution Control Act of Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.)

Detailed Implementation Plan means the formal implementation plan for a Total Maximum Daily Load (TMDL) or water quality clean-up plan.

DIP means Detailed Implementation Plan.

Director means the Director of the Washington State Department of Ecology, or an authorized representative.

Discharge for the purpose of this permit means, unless indicated otherwise, any discharge from a MS4 owned or operated by the permittee.

Entity means another governmental body, or public or private organization, such as another permittee, a conservation district, or volunteer organization.

Equivalent document means a technical stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of the Permit. The Department may conditionally approve manuals that do not include the Minimum Technical Requirements in Appendix 1; in general, the Best Management Practices (BMPs) included in those documents may be applied at new development and redevelopment sites, but the Minimum Technical Requirements in Appendix 1 must still be met.

40 CFR means title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

Erosion is the removal of soil particles by wind and water. Often the eroded debris (slit or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by activities such as farming, development, road building, and timber harvesting.

- **Flood** is a temporary rise in flow or stage of any watercourse or stormwater conveyance system that results in stormwater runoff exceeding its normal flow boundaries and inundating adjacent, normally dry areas.
- **Flood Control** is the specific regulations and practices that reduce or prevent the damage caused by stormwater runoff.
- **General Permit** means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.
- **Ground water** means water in a saturated zone or a stratum beneath the surface of the land or below a surface water body.
- **Heavy equipment maintenance or storage yard** means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored.
- **Hydraulically Near** means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7 Determining Construction Site Sediment Damage Potential for a more detailed definition.
- **Hyperchlorinated** means water that contains more than 10 mg/Liter chlorine. Disinfection of water mains and appurtenances requires a chlorine residual of 10 mg/L at the end of the disinfection period. This level is well above the Maximum Residual Disinfectant Level of an annual average of 4 mg/liter chlorine for potable water.
- **IDDE** means Illicit Discharge Detection and Elimination
- **Illicit connection** means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.
- **Illicit discharge** means 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.
- **Impermeable material** is a soil of material whose properties prevent movement of water through the material.
- **Impervious surface** is hard ground cover that prevents or retards the entry of water into the soil and increases runoff, such as asphalt, concrete, and rooftops.

- **Industrial activity** is any activity directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.
- **Infiltration** is the portion of rainfall or surface runoff that moves downward into the subsurface rock and soil.
- **Large Municipal Separate Storm Sewer System** means all municipal separate storm sewer systems located in an incorporated place with a population of 250,000 or more, a county with unincorporated urbanized areas with a population of 250,000 or more according to the 1990 decennial census by the Bureau of Census.
- **Low Density Residential Land Use** means, for the purpose of permit section S8 Monitoring, one unit per 1-5 acres.
- **Low Impact Development (LID)** means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.
- Major Municipal Separate Storm Sewer Outfall means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more).
- **Material Storage Facilities** means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.
- Maximum Extent Practicable (MEP) refers to paragraph 402(p) (3) (B) (iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MCM means Minimum Control Measures.

Medium Municipal Separate Storm Sewer System means municipal separate storm sewer systems located in an incorporated place with a population of more than 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of Census.

MEP means Maximum Extent Practicable.

MTRs means Minimum Technical Requirements.

- **Municipal Separate Storm Sewer System** (MS4) means 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 by a state, city, town, borough, county, parish, district, association, or other public body (created by or 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 waters of the United States.
 - ii) designed or used for collecting or conveying stormwater.
 - iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318 and 405 of the Federal Clean Water Act, for the discharge of pollutants to 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.
- **Non-point Source** is an unidentifiable source from a broad area, rather than from single, specific, identifiable points.
- **Notice of Intent** (NOI) means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200.
- Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity mean the application forms for coverage under the *Baseline General Permit for Stormwater Discharges Associated with Industrial Activities*.
- **Outfall** means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewer systems, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

Permittee unless otherwise noted, the term "Permittee" includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:

- i) A "Permittee" is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.
- ii) A "Co-Permittee" is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within adjacent to another regulated small MS4.
- iii) A "Secondary Permittee" is an operator of regulated small MS4 that is not a city, town or county.

Physically Interconnected means that one MS4 is connected to a second MS4 in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a MS4 belonging to another entity.

Point Source is a single, specific, identifiable location, such as municipal sewage treatment plants, manufacturing plants, or confined livestock feeding operations that may release pollutants to waters of the state.

Pollutant Generating Impervious Surfaces (PGIS) are surfaces considered to be significant sources of pollutants in stormwater runoff. Such surfaces include those that are subject to vehicular use, industrial activities, or storage of erodible or leachable materials that receive direct rainfall or run-on or blow-in of rainfall. Metal roofs are considered to be PGIS unless coated with an inert, non-leachable material. Roofs that are subject to venting of indoor pollutants from manufacturing, commercial or other operations or processes are also considered PGIS. A surface, whether paved or not, shall be considered PGIS if it is regularly used by motor vehicles. The following are considered regularly-used surfaces: roads, unvegetated road shoulders, bike lanes within the traveled lane of a roadway, driveways, parking lots, unfenced fire lines, vehicular equipment storage yards, and airport runways.

Process Wastewater means any water which, during manufacture or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by product, or waste product.

Qualified Personnel or Consultant means someone who has had professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee.

RCW means the Revised Code of Washington State.

- **Regulated Small Municipal Separate Storm Sewer System (MS4)** means a Municipal Separate Storm Sewer System which is automatically designated for inclusion in the Phase II stormwater permitting program by its location within an Urbanized Area, or by designation by the NPDES permitting authority and is not eligible for a waiver or exemption under S1.C.
- **Replaced impervious surfaces** means, for structures, the removal and replacement of any exterior impervious surfaces or foundation; or, for other impervious surfaces, the removal down to bare soil, or base course, and replacement. Exemptions and partial exemptions are defined in Appendix 1 of this Permit.
- **Runoff** is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "Stormwater."
- **Sanitary Sewer** is a system of drains and pipes that transport domestic, commercial and industrial sewage to a sewage treatment facility.
- **Shared Waterbodies** means all waterbodies, including downstream segments, lakes and estuaries that receive discharges from more than one permittee.
- **Secondary Permittee** is an operator of regulated small municipal separate storm sewer system which is not a city, town or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B.
- **Sediment/Erosion-Sensitive Feature** means an area subject to significant degradation due to the effect of construction runoff or areas requiring special protection to prevent erosion. See Appendix 6 Determining Construction Site Sediment Transport Potential for a more detailed definition.

Septic System is an on-site disposal system for sewage.

SESC Soil Erosion and Sediment Control.

- **Significant contributor** means a discharge contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration or receiving water quality or instream habitat conditions.
- **Small Municipal Separate Storm Sewer System or Small MS4** is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:
 - a) Owned or operated by a city, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer districts, flood control districts or drainage districts, or similar entity.

- b) Designed or used for collecting or conveying stormwater.
- c) Not a combined sewer system,
- d) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2
- e) Not defined as "large" or "medium" pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(l)(v).

Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares. Storm sewer systems in very discrete areas such as individual buildings do not require coverage under this Permit.

Small MS4s do *not* include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Management Manual for Western Washington means the 4-volume technical manual (Publication Nos. 99-11 through 15 for the 2001 version and Publication Nos. 05-10-029-033 for the 2005 version (The 2005 version replaces the 2001 version) prepared by Ecology for use by local governments that contains BMPs to prevent, control, or treat pollution in storm water.

Stormwater Management Program (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of the Permit and any additional actions necessary to meet the requirements of applicable.

Storm Drain is one of several types of inlets at ground level that accepts runoff and deposits it into a storm sewer.

Storm Sewer is a system of inlets, outlets, underground pipes and ditches that transport storm water runoff to a final destination.

- **Total Maximum Daily Load** (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic lift support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.
- Urbanized Area (UA) is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. For the year 2000 Census, the U.S. Census Bureau classified "urban" as all territory, population, and housing units located with an Urbanized Area (UA) or an Urban Cluster (UC). It delineated UA and UC boundaries to encompass densely settled territory, which consists of: core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC. The U.S. Census Bureau announced the "Census 2000 Urbanized Areas" on May 1, 2002. More information can be found at the U.S. Census Bureau website.
- **Urban runoff** is stormwater from urban areas, which tends to contain heavy concentrations of pollutants from urban activities.
- **Urban/higher density rural subbasins** means and subbasin or portion thereof that is within or proposed to be within the urban growth area (UGA), or any rural area subbasin or portion thereof fifty percent or more of which is comprised of lots smaller than 5 acres in size.
- **Vehicle Maintenance or Storage Facility** means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.
- **Watershed** is an area of land that catches rain and snow and drains to a common point, such as a nearby creek, stream, river or groundwater.
- Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographical boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.
- Water Quality Standards means Surface Water Quality Standards, Chapter 173-201A WAC, Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards, Chapter 173-204 WAC.