# NPDES 1200-C Construction Storm Water Discharge Permit

**Background** 

In November 1990, the Environmental Protection Agency (EPA) adopted regulations requiring National Pollutant Discharge Elimination System (NPDES) permits for storm water discharges associated construction activities. In Oregon, the Department of Environmental Quality (DEQ) is responsible for administering the storm water permit program.

In certain areas DEQ has agreements with municipalities, counties, or other local jurisdictions to administer this

program for DEQ.

The following questions and answers are meant to give the reader an overview of the requirements. Since the regulations are very complex, please contact your local DEQ office for information specific to your situation.

# Who needs a permit?

The EPA storm water regulations state that certain storm water discharges "associated with industrial activity" need permits. Construction activities are considered industrial activities. This definition is complex and sometimes confusing. In general, you may need an NPDES permit if you are involved in construction activities; including clearing, grading and excavation activities that disturb five or more acres of land. Also included are activities that disturb a total of five or more acres if part of a larger common plan of development. On December 1, 2002, the disturbance of one acre or more will be covered by this permit. Also included will be activities that disturb a total of one or more acres if part of a larger common plan of development Construction activities include clearing, grading, excavation, and stockpiling activities.

Two waivers from this permit can apply at projects of one to five acres where the operator certifies that a site has a rainfall erosivity factor less than five or when an approved total maximum daily load or equivalent analysis determines that allocations for construction activities for the pollutants of concern are not needed to protect water

quality. [40 CRF 122.26 (b)(15)(i)(A)(B)]

This permit does not authorize in-water or riparian work. These activities are regulated by the Oregon Division of State Lands, US Army Corps of Engineers, and/or the DEQ Section 401 certification program.

## What does a permit require?

Construction projects must have a DEQ approved erosion control plan prior to any on-site activities.

# **Erosion and Sediment Control Requirements**

The ESCP shall, at a minimum, include the following elements.

a. Site Description A description of the following:

 Nature of the construction activity, including a proposed timetable for major activities.

- ii. Estimates of the total area of the permitted site and the area of the site that is expected to undergo clearing, grading and/or excavation.
- iii. Nature of the fill material to be used, the insitu soils, and the erosion potential of such soils.
- Names of the receiving water(s) for storm water runoff.

- b. Site Map Indicating the following: (Note: In order to provide all the required information, a general location map in addition to the site map is required.)
  - i. Areas of total development

ii. Drainage patterns

- iii. Areas of total soil disturbance (including, but not limited to, showing cut and fill areas and pre and post development elevation contours)
- iv. Areas used for the storage of soils or wastes
- Areas where vegetative practices are to be implemented. Include type of vegetation seed mix.
- vi. Location of all erosion and sediment control measures or structures
- vii. Location of impervious structures after construction is completed. Include buildings, roads, parking lots, outdoor storage areas, etc., if any.

viii. Springs, wetlands and other surface waters located on-site

- ix. Boundaries of the 100-year flood plain if determined
- x. Location of storm drainage outfalls to receiving water(s) if applicable
- xi. Location of drinking water wells and underground injection controls
- xii. Details of sediment and erosion controls
- xiii. Details of detention ponds, storm drain piping, inflow and outflow details
- c. <u>Required Controls and Practices</u> The following controls and practices are required:
  - Each site shall have graveled, paved, or constructed entrances, exits and parking areas, prior to beginning any other work, to reduce the tracking of sediment onto public or private roads.
  - ii. All unpaved roads located on-site shall be graveled. Other effective erosion and sediment control measures either on the road or down gradient may be used in place of graveling.
  - iii. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on-site until dripping has been reduced to minimize spillage on roads.
  - A description of procedures that describe controls to prevent the discharge of all wash water from concrete trucks.
  - A description of procedures for correct installation or use of all erosion and sediment control measures.
  - vi. A description of procedures for prompt maintenance or repair of erosion and sediment control measures utilized onsite (refer to 1200-C Permit Sch. A.4).
- d. <u>Additional Controls and Practices</u> Additional controls and practices shall be devel-



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Last Updated: 3/30/01 By: Dennis Jurries oped that are appropriate for the site. At a minimum the following shall be considered:

i. A description of clearing and grading practices, including a schedule of implementation, that will minimize the area of exposed soil throughout the life of the project. Whenever practicable, clearing and grading shall be done in a phased manner to prevent exposed inactive areas from becoming a source of erosion.

ii. A description of vegetative erosion control practices, including a schedule of implementation, designed to preserve existing vegetation where practicable and re-vegetate open areas when practicable after grading or construction.

In developing vegetative erosion control practices, at a minimum the following shall be considered: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, and protection of trees with protective construction fences.

iii. A description of additional erosion control practices, including a schedule of implementation, designed to protect exposed areas and prevent soil from being eroded by storm water.

In developing additional erosion control practices, at a minimum the following shall be considered: mulching with straw or other vegetation, use of erosion control blankets, and application of soil tackifiers.

iv. A description of sediment control practices, including a schedule of implementation, that will be used to divert flows from exposed soil, store flows to allow for sedimentation, filter flows, or otherwise reduce soil laden runoff. All temporary sediment control practices shall not be removed until permanent vegetation or other cover of exposed areas is established.

In developing sediment control practices, at a minimum the following shall be considered: use of silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drains, pipe slope drains, rock outlet protection, sediment traps, and temporary or permanent sedimentation basins.

v. A description of erosion and sediment control practices that will be used to prevent stockpiles from becoming a source of erosion. Stockpiles located away from the construction activity but still under the control of the permittee shall also be protected to prevent significant amounts of sediment from discharging to surface waters. At the end of each workday the soil stockpiles must be stabilized or covered.

In developing these practices, at a minimum the following shall be considered: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of silt fences around stockpiles.

vi. A description of the best management practices that will be used to prevent or minimize storm water from being exposed to pollutants from spills, cleaning and maintenance activities, and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, left-over paints, solvents, and glues from construction operations. The reuse and recycling of construction wastes should be promoted.

In developing these practices, at a minimum the following shall be considered: written spill prevention and response procedures; employee training on spill prevention and proper disposal procedures; regular maintenance schedule for vehicles and machinery; and covered storage areas for waste and supplies.

Maintenance Requirements The following maintenance activities shall be implemented.

a. Significant amounts of sediment that leave the site shall be cleaned up within 24 hours and placed back on the site or properly disposed. Any in-stream clean up of sediment shall be performed according to Oregon Division of State Lands' required timeframe.

b. Under no conditions shall sediment intentionally be washed into storm sewers or drainageways unless it is captured by a BMP before entering receiving waters.

c. For a filter fence, the trapped sediment shall be removed before it reaches one third of the above ground fence height.

d. For catch basin protection, cleaning must occur when design capacity has been reduced by fifty percent.

e. For a sediment basin, removal of trapped sediments shall occur when design capacity has been reduced by fifty percent.

f. All erosion and sediment controls not in the direct path of work shall be installed before any land disturbance.

g. If fertilizers are used to establish vegetation, the application rates shall follow manufacturer's guidelines and the application shall be done in such a way to minimize nutrient-laden runoff to receiving waters.

h. If construction activities cease for thirty (30) days or more, the entire site must be stabilized, using vegetation or a heavy mulch layer, temporary seeding, or another method that does not require germination to control erosion.

i. Any use of toxic or other hazardous materials shall include proper storage, application, and disposal.

j. The permittee shall manage abandoned hazardous wastes, used oils, contaminated soils or other toxic substances discovered during construction activities in a manner approved by the Department.

k. If a storm water treatment system for construction activities is employed, an operation and maintenance plan shall be submitted to the Department for approval.

## MINIMUM MONITORING REQUIREMENTS

## All Sites

A person with knowledge and experience in construction storm water controls and management practices shall conduct the inspections. The ESCP shall identify the person(s) and/or title of the personnel that will conduct the inspections and provide a contact phone number for such person(s).

#### Active Sites

Frequency of inspections shall be daily during storm water runoff or snowmelt runoff and at least once every seven (7) calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

#### **Inactive Sites**

During inactive periods of greater than seven (7) consecutive calendar days, inspections shall only be required once every two (2) weeks.

Prior to discontinuing activities at the site, any exposed area shall be stabilized to prevent erosion. Stabilization may occur by applying appropriate cover (mulch, erosion control



blanket, soil tackifier, etc.) or establishing adequate

vegetative cover,

When a site is inaccessible due to adverse weather conditions, inspections shall not be required. Adverse weather condition shall be recorded on the inspection sheet.

Prior to leaving an inactive site or in anticipation of site inaccessibility, existing erosion and sediment control measures shall be inspected to ensure that they are in working order. Any necessary maintenance or repair shall be made prior to leaving the site.

#### Written Records

All visual inspections must document the following information:

- Inspection date, inspector's name, weather conditions, and rainfall amount for past 24 hours (inches). (Rainfall information can be obtained from the nearest weather recording station.)
- b. List observations of all BMPs: erosion and sediment controls, chemical and waste controls, locations where vehicles enter and exit the site, status of areas that employ temporary or final stabilization control, soil stockpile area, and nonstormwater controls.
- c. At representative discharge location(s) from the construction site conduct observation and document the quality of the discharge for any turbidity, color, sheen. or floating materials. If possible, in the receiving stream, observe and record color and turbidity or clarity upstream and downstream within 30 feet of the discharge from the site. For example, a sheen or floating material could be noted as present/absent, if observation is yes, it could indicate concern about a possible spill and/or leakage from vehicles or materials storage. For turbidity and color an observation would describe any apparent color and the clarity of the discharge, and any apparent difference in comparison with the receiving stream.
- d. If significant amounts of sediment are leaving the property, briefly explain the corrective measures taken to reduce the discharge and/or clean it up and describe efforts to prevent future releases. The ESCP shall be amended accordingly.
- e. If a site is inaccessible due to inclement weather the inspection shall include observations at a relevant discharge point or downstream location, if practical.

All inspection records for an active site shall be kept onsite or be maintained with the permittee, and shall made available to the Department, its Agent, or local municipality upon request.

A written record of inspections for an inactive site shall be maintained with the permittee and made available to the Department, its Agent, or local municipality upon request.

Retention of all inspection records shall be for a period of one year from project completion.

# How much does a permit cost?

As of February 12, 2002, the DEQ application fee for the storm water general permits is \$670. You will also be billed an annual compliance fee of \$330 for each subsequent year to maintain the permit. Local agencies holding administration agreements with DEQ may charge more for the permit. A typical fee structure is based upon acreage.

# What is the application procedure?

All industries requiring a storm water permit must apply immediately. Contact your local DEQ office to obtain an application, http://www.deq.state.or.us/hub/regions/regions. htm. If you have specific questions, the Portland, Salem, Medford, Pendleton and Bend offices have storm water staff that can better assist you.

Required Actions Prior to Termination of the Permit The following actions shall be completed before permit coverage is terminated.

- There is no potential for discharge of a significant amount of construction related sediment to surface waters.
- b. All elements of the ESCP have been completed.
- c. Construction materials, waste, and temporary erosion and sediment controls have been re-moved and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls.
- d. All disturbed areas of the site must be stabilized.
- e. Submittal of DEQ Notice of Termination Form.

#### For Further Assistance

To obtain further information on storm water permits, please contact the DEQ regional office nearest you. Locaand phone numbers can be found at http://www.deq.state.or.us/hub/ regions/regions.htm. If you have specific questions, the Portland, Salem, Medford, Pendleton and Bend offices have storm water staff that can better assist you. If you need help determining what office you should contact, please call DEQ headquarters toll-free, inside Oregon, at 1-800-452-4011, or (503) 229-5630. People with hearing impairments may call DEQ's TTY at (503) *229-6993*.

# Accessibility information

The publication is available in alternate (e.g. large print or Braille) upon request. To request an alternate format, please contact DEQ Public Affairs at (503) 229-5766 or at the tollfree number, inside Oregon, 1-800-452-4011. People with hearing impairments may call DEQ's TTY at (503) 229-6993.

