Provided through Department of Environmental Quality.

Storm water pollution prevention plan contents

The SWPPP shall include the following items:

1. Site and activity description. Each SWPPP shall provide the following information:

a. A description of the nature of the construction activity, including the function of the project (e.g., low density residential, shopping mall, highway, etc.);

b. The intended sequence and timing of activities that disturb soils at the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation).

c. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities including off-site borrow and fill areas;

d. A description of any other potential pollution sources, such as vehicle fueling, storage of fertilizers or chemicals, sanitary waste facilities, etc.

e. Identification of the nearest receiving waters at or near the construction site that will receive discharges from disturbed areas of the project;

f. The location and description on any discharge associated with industrial activity other than construction at the site. This includes storm water discharges from dedicated asphalt plants and dedicated concrete plants that are covered by this permit.

g. A site map indicating:

(1) Directions of storm water flow and approximate slopes anticipated after major grading activities;

(2) Areas of soil disturbance and areas of the site which will not be disturbed;

(3) Locations of major structural and nonstructural controls identified in the SWPPP, including those that will be permanent controls that will remain after construction activities have been completed;

(4) Locations where stabilization practices are expected to occur;

(5) Surface water bodies (including wetlands);

(6) Locations where storm water discharges to a surface water;

(7) Locations of off-site material, waste, borrow or equipment storage areas covered by the plan;

(8) Locations of other potential pollution sources , such as vehicle fueling, storage of chemicals, sanitary waste facilities, etc.; and

(9) Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.

2. Controls to reduce pollutants. The SWPPP shall include a description of all pollution control measures that will be implemented as part of the construction activity to control pollutants in storm water discharges. For each major activity identified in the project description, the SWPPP shall clearly describe appropriate control measures, the general sequencing during the construction process in which the measures will be implemented, and which operator is responsible for the control measure's implementation.

a. Erosion and sediment controls.

(1) Stabilization practices. The SWPPP shall include a description of interim and permanent stabilization practices for the site. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include, but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, riprap, gabions, facines, biologs and other appropriate measures. Use of impervious surfaces for stabilization should be avoided.

(a) A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be maintained and included in the SWPPP.

(b) Except as provided in Part II D 2 a (1) (c), (d) and (e), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.

(c) Where the initiation of stabilization measures by the seventh day after construction activity temporary or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable.

(d) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 30 days, temporary stabilization measures do not have to be initiated on that portion of the site.

(e) In drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within seven days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures shall be initiated as soon as practicable.

(2) Structural practices. The SWPPP shall include a description of structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include, but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be located on upland soils to the degree attainable. The department encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.

(a) Sediment basins: For common drainage locations that serve an area with three or more acres disturbed at one time, a temporary (or permanent) sediment basin providing 3,618 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. The 3,618 cubic feet of storage area per acre drained does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is attainable, the permittee may consider factors such as site soils, slope, available area on site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls shall be used where site limitations would preclude a safe design.

(b) For drainage locations which serve three or more acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(c) For drainage locations serving less than three acres, smaller sediment basins or sediment traps or both should be used. At a minimum, silt fences, vegetative buffer strips or equivalent sediment controls are required for all downslope boundaries, and for those side slope boundaries deemed appropriate as dictated by individual site conditions, of the construction area unless a sediment basin providing storage for 3,618 cubic feet of storage per acre drained is provided.

b. Management practices.

(1) All control measures must be properly selected, installed, and maintained in accordance with manufacturer specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations as soon as practicable.

(2) If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

(3) Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source in storm water discharges.

c. Storm water management.

(1) The SWPPP shall include a description of all post-construction storm water management measures that will be installed during the construction process to control pollutants in storm water discharges after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. Such measures must be designed and installed in accordance with applicable local and/or state requirements.

(2) Such measures may include, but are not limited to: storm water detention structures (including dry ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; storm water wetlands; sand filters; bioretention systems; water quality structures; and sequential systems (which combine several practices). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed predevelopment levels.

(3) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a nonerosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

d. Other controls.

(1) The SWPPP shall describe measures to prevent the discharge of solid materials, including building materials, garbage, and debris to surface waters of the state, except as authorized by a Clean Water Act § 404 permit.

(2) Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a public road surface, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner.

(3) The SWPPP shall ensure and demonstrate compliance with applicable state or local waste disposal, sanitary sewer or septic system regulations.

(4) The SWPPP shall include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The plan shall also include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to storm water, and for spill prevention and response.

(5) The SWPPP shall include a description of pollutant sources from areas other than construction (including storm water discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

e. Applicable state or local programs.

The SWPPP shall be consistent with all applicable state or local requirements for soil and erosion control and storm water management including updates to the SWPPP as necessary to reflect any revisions to applicable state or local requirements for soil and erosion control.

3. Maintenance of controls.

a. The SWPPP must include a description and schedule of procedures to maintain in good and effective operating conditions vegetation, erosion and sediment control measures and other protective measures during construction identified in the site plan. If site inspections required by Part II D 4 identify BMPs that are not operating effectively, maintenance shall be performed before the next anticipated storm event, or as soon as practicable to maintain the continued effectiveness of storm water controls.

b. If existing BMPs need to be modified or if additional BMPs are necessary for any reason, implementation shall be completed before the next anticipated storm event. If implementation before the next anticipated storm event is impracticable, the situation shall be documented in the SWPPP and alternative BMPs shall be implemented as soon as practicable.

c. Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 25%.

4. Inspections. Inspections by qualified personnel must be conducted of all areas of the site disturbed by construction activity, and areas used for storage of materials that are exposed to storm water. "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed professional engineer, responsible land disturber (RLD), or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality, and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

a. Inspections shall be conducted at least once every 14 calendar days and within 48 hours of the end of any runoff producing storm event. Where areas have been finally or temporarily stabilized or runoff is unlikely due to winter conditions (e.g., the site is covered with snow or ice, or frozen ground exists) such inspections shall be conducted at least once every month.

b. Inspectors must look for evidence of, or the potential for, pollutants entering the storm water conveyance system. Erosion and sediment control measures identified in the SWPPP shall be observed to ensure proper operation. Discharge locations where accessible shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

c. Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may limit the access of inspection personnel to the areas described in Part II D 4 b. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected on the same frequencies as other construction projects, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 miles above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described above. The conditions of the controls along each inspected 0.25-mile segment may be considered as representative of the condition of controls along that reach extending from the end of the 0.25-mile segment to either the end of the next 0.25-mile segment, or to the end of the project, whichever occurs first. Inspection locations must be listed in the report required by Part II D 4 e.

d. Based on the results of the inspection, the site and activity description identified in the plan in accordance with Part II D 1 of this permit and pollution prevention measures identified in the SWPPP in accordance with Part II D 2 of this permit shall be revised as appropriate within seven calendar days following the inspection.

e. A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the dates of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in accordance with Part II D 4 d of the permit shall be made and retained as part of the SWPPP in accordance with Part III B of this permit. Major observations should include:

(1) The location(s) of discharges of sediment or other pollutants from the site;

(2) Location(s) of BMPs that need to be maintained;

(3) Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;

(4) Location(s) where additional BMPs are needed that did not exist at the time of inspection; and

(5) Corrective action required including any changes to the SWPPP that are necessary and implementation dates.

The reports shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part III K of this permit.

5. Nonstorm water discharge management. The SWPPP shall identify all allowable sources of nonstorm water discharges listed in Part I D 2 of this permit that are combined with storm water discharges from the construction activity at the site, except for flows from fire fighting activities. The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures for the nonstorm water components of the discharge.