

Elements of the Storm Water Management Plan

Storm Water Pollution Prevention
Plan
(SWPPP)

Small Construction Site Storm Water Management

Rodney Hendrick
Water Quality Specialist
LSU Ag Center

Plan Requirements

- Plan should be complete prior to initiating construction activities.
- Shall provide for compliance with terms of SWPPP
- The plan shall be signed and maintained on site.
- A notice must be posted near the main entrance of site.

The Notice Must Contain:

- The LPDES permit number (LAR 2000) and the effective date of the permit (March 1, 2003)
- Name and phone number of a local contact
- Brief description of the project
- Location of the SWPPP if inactive or not on site

The SWPPP Must be Made Available to:

- State Administrative Authority (LDEQ)
- Local officials with authority on sediment and erosion plans
- Storm water management plans, local government, or operator of local municipal separate storm sewer systems (MS4's)

LDEQ May Require Modifications to the Plan

- Modifications shall be made 7 calendar days of receipt of notice

Plans Must be Kept Current as Required by:

- Change in design, operation, or maintenance that may have significant effect on discharge
- Inspections indicating measures are not effective
- To identify new contractors or subcontractors that will implement part of the SWPPP

Plan Contents

- 1. Site Description
 - a. Description of nature of construction
 - b. Intended sequence of activities
 - c. Estimates of total area of site and total area to be disturbed
 - d. Estimate of the run off coefficient of site pre and post construction and data describing soil quality and run off from site
 - e. Maps-General location maps

Plan Contents (cont'd)

e. Maps

- site map showing slopes and drainage patterns, areas to be disturbed and areas not to be disturbed, location of structural and non structural controls in SWPPP
 - areas for stabilization
 - locations of off-site material
 - barrow or equipment storage areas
 - locations for storm water discharge from site

Plan Contents (cont'd)

- f. Location and description of any industrial discharge other than construction
- g. Name of receiving water(s) and extent of wetlands or other special aquatic sites that will receive discharges.
- h. Copy of permit requirements (copy of permit)
- i. Information on threatened or endangered species or habitat
- j. Documentation of National Historic Preservation Act

Plan Contents (cont'd)

- 2. Controls
 - Description of control measures (BMP's) to be used
 - Describe control measures for each activity
 - Timing during construction for each measure, which permittee is responsible for each measure
 - Perimeter controls to be installed as soon as clearing for measures is completed (not after full site clearing)
 - Perimeter controls to be maintained until final stabilizations is complete

Minimum Components for Control Measures

- Sediment Control
 1. Short and long term goals and criteria
 - a. Sediment controls to be designed to retain sediment on site
 - b. Measures to be properly selected, installed, and maintained
 - c. Sediments escaping site must be removed from off site areas

Minimum Components for Control Measures (cont'd)

- d. Sediment traps to be cleaned when half full
- e. Litter and chemicals shall be prevented from becoming a pollutant
- f. Offsite material storage for the project are to be included in SWPPP

Minimum Components for Control Measures (cont'd)

- 2. Stabilization Practices
 - The SWPPP shall include a description and schedule of implementing interim and permanent stabilization practices.
 - Existing vegetation to be preserved where possible.
 - Disturbed areas to be stabilized
 - Impervious surfaces should not be used for stabilization

Minimum Components for Control Measures (cont'd)

- Records shall be kept on dates for major grading activities, when construction temporarily or permit cease on any portion of site and when stabilization measures begin.
- Stabilization must begin no later than 14 days after construction has ceased on any portion of the site (temporarily or permanent). Unless activities will resume in 21 days or less.
- There are snow, frozen ground and drought exceptions

Minimum Components for Control Measures (cont'd)

- 3. Structural practices shall be described and shown on site maps.

Storm Water Management

- Describe measures to be installed during construction to control storm water discharge after construction
- May require separate section 404 permit
- Only responsible for installation and maintenance until final stabilization site
- Post-construction storm water BMP's that discharge pollutants may require LPDES permit

Storm Water Management (cont'd)

- Post-construction storm water management practices may include: storm water detention and retention structures, wet ponds, vegetated swales, infiltration areas, and sequential systems.
- Practice selection shall be explained if post-construction flows exceed pre-construction flows

Storm Water Management (cont'd)

- Velocity dissipation device may be required to prevent erosion and maintain natural function in receiving water.

Other Controls

- 1. No solid materials shall be discharged unless authorized by a section 404 permit.
- 2. Off-site vehicle tracking of sediment and generation of dust shall be minimized.
- 3. The SWPPP shall demonstrate compliance with local waste and sewer system requirements.

Other Controls (cont'd)

- 4. Description of construction and waste materials to be stored on site and control measures
- 5. Description of pollutant sources other than construction, including dedicated concrete and asphalt plants and control measure
- 6. Description measures to protect listed endangered or threatened species and their habitat.

Approved State or Local Plan

- Plans must include local or state approval procedures and requirements.
- Plans must be updated to meet changes in requirements approved by local or state officials following written notice.

Maintenance

- Shall provide timely maintenance of control measures to assure proper operation. Maintenance needs identified by inspection shall be accomplished before next anticipated storm event or as soon as possible.

Inspections

- Every 14 days, before every anticipated storm event and within 24 hours of every 0.5 inch rain event

Non-Storm Water Discharges

- Non-storm water discharges must be identified