

# Erosion and Sedimentation Control - SWPPP - Technical Requirements

## Section 312500-1

**1.1 Outline:** Division of Engineering and Contract Administration Projects under the jurisdiction of KPDES shall use the following outline as a guide when preparing a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should be organized, detailed, and with enough background information for reviewing authorities to easily evaluate. It should include the following:

### **A. Specifications**

**See Guide Specifications in Section 312500-2**

### **B. Narrative (include in the Specifications)**

1. Project Description
  - a. Purpose of the Project
  - b. Area to be disturbed
  - c. Location (city, county, road, waterway, etc.)
2. Site description before and after the Project
  - a. Topography
  - b. Principal drainage way
  - c. Land cover condition, slopes
  - d. % of impervious area
  - e. Increase in runoff based on a 25-yr, 24-hr storm event
3. Soils descriptions

### **C. Notice of Intent (NOI)**

Coverage under the General Permit is automatic and only requires the submittal of a Notice of Intent (NOI). The KPDES General Permit is available at:

<http://water.ky.gov/permitting/Pages/WastewaterDischarge.aspx>

### **D. SWPPP Vicinity Map (scale of 1"=300' or smaller; can be USGS quad map)**

1. Limits of disturbed area
2. Limits of impacted watershed
3. Route of Stormwater discharge
4. Appropriate landforms, roads, streams, etc. to identify relationship to site

### **E. SWPPP Site Topographic Plan – existing (scale 1"=60' or larger)**

1. Contour lines showing storm water routes and collection points
2. Trees and other natural features that will be preserved
3. Buildings, pavement, other site features that will remain
4. One or more permanent benchmarks (locations, elevations, descriptions)
5. Adjacent property owners

**F. SWPPP Site Development Plan – (scale 1”=60’ or larger)**

1. Buildings, pavement, other site features
2. Revised finish grades
3. Access roads, haul roads, construction entrances
4. Stockpile areas for building materials, chemicals
5. Equipment staging areas
6. Special processing areas

**G. Best Management Practices for Construction Activities (BMP) Plan (same scale as Site Development Plan)**

1. Show all temporary and permanent BMP features
  - a. BMP’s during construction
  - b. BMP’s left in place after construction (with maintenance schedules)
2. Enlarged details, sections, diagrams, etc. (These can be original details, or appropriate reproductions from the Kentucky Best Management Practices for Construction Activities Manual or other recognized professional field manuals. *If reproduced from other sources, adapt the detail and text as required to the specific site conditions for this Project.*)
3. Site grading as required to define routes of stormwater flow
4. Timeline
  - a. Begin and end dates for construction, if known (if not, then duration of contract)
  - b. Sequence of all construction-related BMP’s, by week or day
  - c. Vegetation schedule
  - d. Winter shut-downs, or other anticipated breaks in the schedule
  - e. Notification of preconstruction conference to review BMP’s

**H. Operations and Maintenance Plan (OMP)**

1. List of all BMP’s
2. Review schedule
3. Maintenance Schedule
4. Performance requirements for each BMP
5. Removal Schedule

**I. Calculations**

Provide calculations appropriate based on the intensity of anticipated design storms for the site and how it relates to each BMP. This could include flow-rates, velocities, detention volumes, etc. Simple sites and/or simplified BMP options may not require calculations.

**J. Names, addresses, and phone numbers** for the following parties, if known at the time of the preparation of the SWPPP. If this data is not known, include fill-in-the-blanks segments to be completed by the Contractor:

1. Designer of the SWPPP
2. Daily site contact for the Contractor
3. Emergency personnel for the Contractor

**K. Continuing Education:**

1. The Architect-Engineer shall include the following general note on the SWPPP:

**All personnel actively involved in this project, whether associated with the Architect-Engineer or the Contractor shall be notified of this SWPPP and shall be given the opportunity to review the Division of Engineering and Contract Administration's SWPPP Manual (this document) and the Contract Document requirements for the SWPPP.**

2. The Contractor, before beginning work, shall formally review the SWPPP with his site management staff, including the site superintendent, key foremen, safety officers, designated workmen, etc., as well as with any subsequent replacements. Failure to understand the details of the SWPPP will not be accepted as an excuse for violations.

**1.2 Submittals:** The Design consultant shall assist the Contractor in filing the **Notice of Intent (NOI)**. The NOI is to be submitted to the Kentucky Division of Water forty eight (48) hours in advance of any site disturbance.

The Contractor shall prepare a detailed schedule outlining the sequence of major activities. Activities to be included in the schedule are:

- Installation of erosion control measures
- Earth disturbing activities
- Stabilization activities
- Removal of erosion control measures

The Design consultant shall assist the contractor in filing the **Notice of Termination (NOT)**. The NOT is to be submitted to the Kentucky Division of Water upon completion of final site stabilization and removal of all erosion and sediment controls.

**2.1.3 Quality Assurance:**

- The SWPPP is to be designed and stamped by a Civil Engineer of Landscape Architect..
- Required routine inspections are to be included in the Special Inspections.
- The SWPPP shall comply with KYR10: General KPDES Permit for Storm Water Point Source Discharge Construction Activities.
- If applicable, documents in Section 312500-1 are to be reviewed and approved by the Municipal Separate Storm Sewer System (MS4) having jurisdiction.

**2.1.4 Project Narrative:** The Project Narrative should include the following:

- A written project description including purpose of the Project, city and county.
- Site area and area proposed to be disturbed during the construction Project.

- Pre- and post-construction runoff coefficients.
- Latitude and longitude of the Project site.
- Soil information for the Project site including type, description, depth and erosion potential.
- Description of the site for both pre- and post-construction.
- Receiving waterway and method of drainage to the receiving waterway.
- Description of on-site drainage system proposed including retention if applicable.
- Description of any critical areas on- or off-site that could be significantly impacted from lack of sediment and /or good housekeeping controls.
- List of materials and/or substances that are expected to be present on-site during construction.