## Kentucky Erosion Prevention and Sediment Control Guide

A guide to preventing erosion and controlling sediment from construction activities in Kentucky

## Federal and State KPDES Stormwater Permit Requirements

EPA regulations at 40 CFR 122.26(b)(14)(x) and 122.26(b)(15) require NPDES stormwater discharge permit coverage for discharges from construction activities that disturb one or more acres. These nationwide regulations are implemented by general NPDES permits, which are issued by EPA and authorized State agencies such as the Kentucky Division of Water, which issues KPDES permits.

The KDOW KPDES Construction General Permit was developed to satisfy federal stormwater permitting requirements. KPDES Construction General Permit (KYR10) meets all federal permit requirements and most of the requirements of local governments in Kentucky, though some local governments have additional requirements that must also be addressed by the applicant. See below for a summary of the KPDES Construction General Permit requirements.

The KPDES Construction General Permit (KYR10) covers all stormwater discharges associated with construction activity that disturbs one acre of more or is part of a larger common plan of development. A copy of this permit can be downloaded from <u>eec.ky.gov/Environmental-</u>

Protection/Water/PermitCert/KPDES/Documents/KYR10PermitPage.pdf.

The permit requires all construction activity in Kentucky disturbing one acre or more to:

- Develop a Stormwater Pollution Prevention Plan
- Submit a signed Notice of Intent (NOI) form to Kentucky Division of Water a minimum of 7 days before the proposed date for commencement of construction activities and shall receive authority to discharge. Authorization to discharge under the terms of the general permit shall be effective upon the receipt of written notification by the DOW.
- Applicants shall use the web-based NOI submission system that allows the applicant to complete and submit the NOI form online. Applicants can access this system at the following web address: <u>dep.gateway.ky.gov/eForms/default.aspx?FormID=48</u>
- Submit a copy of the NOI to the municipal operator of any municipal separate storm sewer system (MS4) the site discharges into.
- Continue to implement the plan during construction activity, including inspections every 7 days, or every 14 days and after each rain event of one-half inch or more. For KYTC projects, verify their requirements in the current Specifications Book at

transportation.ky.gov/Construction/StdSpecsWSupplSpecs/2019%20Standard%20Spec %20with%20Supplemental%20Spec%20July%202019.pdf

Submit a signed Notice of Termination (NOT) form to Kentucky Division of Water after the site has achieved final stabilization. Applicants shall use the web based NOT submission system that allows the applicant to complete and submit the NOT form online. Applicants can access this system at the following link:
<u>dep.gateway.ky.gov/eForms/Main/Forms.aspx?FormId=49</u>

The Stormwater Pollution Prevention Plan (SWPPP) must be developed in accordance with good engineering practices. The SWPPP must identify expected sources of pollution and describe how they will be controlled. The SWPPP must be completed prior to construction, signed, and kept readily available onsite. SWPPPs required by this permit are considered reports that shall be made available to the public, upon written request, in accordance with Section 308(b) of the Clean Water Act (CWA). Deficient plans may require modification upon notification by the Kentucky Division of Water or local regulatory authority.

## **Construction site SWPPP requirements**

The Stormwater Pollution Prevention Plan (SWPPP) shall contain a site description that identifies sources of pollution associated with construction activities; and a description of the erosion prevention measures, sediment controls measures, and other site management practices. All stormwater controls shall be developed and implemented in accordance with sound practices and shall be developed specific to the site. The goal of these devices should be 80% removal of total suspended solids that exceed predevelopment levels. For a common plan of development, a comprehensive SWPPP shall be prepared that addresses all construction activities within the common plan of development. Each individual site operator shall be a signatory of the SWPPP and shall not conduct activities that are not consistent with the SWPPP.

The SWPPP must include, at a minimum, the following:

*Site Description*: The SWPPP shall identify sources of pollution to stormwater discharges associated with construction activities on site and include a clear description of the nature of the construction activity, the order of major soil disturbing activities, a site map, and other information. The site map shall indicate drainage patterns and show approximate slopes after grading, areas of disturbance, the location of control measures, surface waters or wetlands, karst features, and stormwater discharge locations.

**Sediment and Erosion Control Measures**: The SWPPP must include a clear description of what sediment and erosion control measures will be used and when they will be implemented. The following control measures shall be used as a minimum:

- Soil Stabilization Practices Existing vegetation shall be preserved where possible. All disturbed areas of the site shall be stabilized. Stabilization shall begin within 14 days on areas of the site where construction activities have permanently or temporarily (for 21 days or more) ceased. When snow cover causes delays, stabilization shall begin as soon as possible. Stabilization practices include seeding, mulching, placing sod, planting trees or shrubs, and using geotextile fabrics and other appropriate measures.
- Perimeter Structural Practices Silt fences of other equivalent structural practices shall be used on all side and down slope borders of the site. For common drainage locations that serve more than ten (10) disturbed acres at one time, a sediment basin must be used if possible. Structural practices include protecting drain inlets and outlets and using silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, pip slope drains, reinforced soil retaining systems, gabions, sediment basins and other appropriate measures.
- Stormwater Management Devices Management devices shall be installed during construction to control the pollutants in stormwater discharges that will occur after construction has been completed. Velocity dissipation devices shall be placed at discharge locations and along outfall channels as necessary to provide non-erosive flow. The goal should be 80% removal of Total Suspended Solids that exceed predevelopment levels. If this goal is not met, the permittee shall provide justification for refusing each device based on site conditions.

*Other Control Measures*: No solid materials, including building materials, shall be discharged to waters of the Commonwealth, except as authorized by a Section 404 permit. Off-site vehicle sediment tracking, and dust generation shall be minimized. Waste disposal methods and sanitary sewer or septic systems shall comply with applicable state or local regulations.

- Waste Management Prompt collection and management of trash and sanitary waste including maintaining waste container lids closed overnight. For those waste containers without lids, a tarp or similar covering may be used.
- Wash Waters Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge. Concrete washout wastewater must be managed by an appropriate control for removal off-site.
- Fuels, Oils, and Other Substances Segregate stormwater and other wastewaters from construction materials, chemicals, and lubricants.

*Other State or Local Plans*: The SWPPP shall include any requirements specified in sediment and erosion control plans, stormwater management plans or permits that have been approved by other state or local officials.

*Maintenance*: The SWPPP shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

**Inspections**: Qualified personnel shall inspect all stormwater control measures and drainage features at least once every seven days, or every fourteen days and within 24 hours of the end of a storm that is 0.5 inch or greater. KYTC projects should complete inspections weekly and after every rain event of 0.5 inch or greater. Discharge locations shall be inspected to ensure that velocity dissipaters prevent significant impacts to receiving waters. Vehicle exits shall be inspected for evidence of offsite sediment tracking. Disturbed areas and material storage areas that are exposed to precipitation shall be inspected for evidence of pollutants entering the drainage system. A signed report summarizing the scope of the inspection, major observations, and any corrective actions taken shall be made and readily available as part of the SWPPP. Further information about site inspection requirements can be found in KYR10 part 2.2.7.

*Non-storm water discharges*: The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures for any non-storm water component of a discharge as listed in <u>KYR10</u>.

**Contractors and Subcontractors:** The SWPPP shall clearly state the contractor or subcontractors that will implement each control measure identified in the SWPPP. All contractors and subcontractors identified in the SWPPP must sign a copy of the certification statement below before conducting any professional service at the site: "I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination Systems (NPDES) permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification." The certification must include the name and title of the person providing the signature, the name, address, and telephone number of the contracted firm, the address, or other identifying description of the site and the date the certification is made. All certification statements must be included in the SWPPP.

See <u>KYR10</u> part 2.2. for further details.

## Resources

EPA Local Ordinances for Construction Site Stormwater Control

KPDES KYR10 Permit