

# Kentucky Erosion Prevention and Sediment Control Guide

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

## Groundwater Protection

Construction site development often involves the storage or use of products that can contaminate groundwater. Groundwater Protection Plans (GPPs) are required for any operation that applies pesticides or fertilizers for commercial purposes, applies pesticides or fertilizers to maintain public rights-of-way, or stores or handles bulk quantities (i.e., 55 gallons or 100 lbs) of pesticides or fertilizers for commercial purposes.

The storage, handling, and use of pesticides or fertilizers at construction sites must be conducted in accordance with a GPP. For small construction sites, this can be accomplished under a Generic GPP, which is a GPP that can be applied to similar activities conducted at different locations. A template for preparing GPPs can be found on the KYDOW Web pages at [eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWGPP.aspx](http://eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWGPP.aspx).

GPPs are documents that describe and establish a series of practices designed to prevent groundwater pollution. In general, GPPs should be in place before beginning to store, handle, or use pesticides, fertilizers, or other products that could contaminate groundwater. The plans should contain the following:

- General information regarding the facility and its operation, including the name of the facility, the address of the facility, and the name of the person responsible for implementing the plan.
- Identification of all pesticide and fertilizer storage, handling, and application activities.
- Identification of all practices chosen to protect groundwater from pollution, such as storing products indoors, under a roof, or other protected place (see the Material Delivery, Storage, and Use fact sheet in this section); following manufacturer's directions for handling and applying products, reporting of spills, and so on
- An implementation schedule for the practices selected for the plan.
- A description of and implementation schedule for employee training necessary to ensure implementation of the plan.
- An inspection schedule requiring regular inspections as needed to ensure that all practices established are in place and properly functioning.
- A certification by the person responsible for implementing the plan or a duly authorized representative that the plan complies with the requirements of Kentucky laws and

regulations, and that the person responsible for implementing the plan has reviewed the terms of the plan and will implement its provisions.

More information on Groundwater Protection Plans can be found at [eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWGPP.aspx](http://eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWGPP.aspx). The groundwater protection practices chosen for a GPP can include but are not limited to equipment design, operational procedures, preventive maintenance techniques, construction techniques, personnel training, spill response capabilities, alternative materials or processes, implementation of new technology, modification of facility or equipment, spill prevention control and countermeasure plans, hazardous waste contingency plans, runoff or infiltration control systems, and siting considerations.

The nature of the pollutant and the hydrogeologic characteristics at or near the location of the activity must be considered in selecting practices to protect groundwater for the activities identified in the plan.

At a minimum, the plan must require that:

- Loading and unloading areas have spill prevention and control procedures and operation procedures designed to prevent groundwater pollution. Spill containment and cleanup equipment must be readily accessible.
- Any person using existing floor drains must evaluate those floor drains to determine if they discharge to an on-site sewage disposal system, to a closed-loop collection or recovery system, or to a waste treatment system permitted under the KPDES.
- If drains are identified that do not discharge to an on-site sewage disposal system, a closed-loop collection or recovery system, or a waste treatment system permitted under the KPDES, that person must terminate the discharge or connect it to an on-site sewage disposal system, a closed-loop collection or recovery system, or a waste treatment system permitted under the KPDES. No person may install a floor drain unless it is connected to an on-site sewage disposal system, closed-loop collection or recovery system, or a waste treatment system permitted under the KPDES.
- Any person using a tank or sump must prepare and implement good housekeeping practices, operating procedures, operator training, and spill response procedures. In addition, any person using a tank or sump must consider leak control devices, secondary containment, integrity testing, mechanical inspections, and overflow protection devices. Additional containment is not required for sumps and tanks that are used solely to provide secondary containment.
- Any person who constructs a new surface impoundment, lagoon, pit, or ditch that will contain a pollutant must evaluate the site's hydrogeology and must design and operate it to minimize discharges to soil. However, soils may be used to construct liners under appropriate conditions. All necessary and appropriate measures must be taken to prevent groundwater pollution. The person must consider the use of liners, secondary containment, leak detection devices, and other appropriate and effective control systems. Additional containment is not required for new surface impoundments, lagoons, pits, and ditches that are used solely to provide secondary containment.