

Ordinance #05-0

Erosion Prevention and Sediment Control Ordinance

County of Boyd

Section I. Introduction / Purpose

The Clean Water Act (CWA), EPA, and KYDOW established Phase II regulations and mandated Erosion Protection and Sediment Control (EPSC) procedures for land disturbance activity and site work construction in the Commonwealth of Kentucky.

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers, ditches, sinkholes, and drywells. Streets and roads with sediment deposits are slick and hazardous to the public. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat.

As a result, the purpose of this local regulation is to safeguard persons, protect property, and prevent damage to the environment in Boyd County. This ordinance will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in the County of Boyd.

Section II. Definitions

Best Management Practice (BMP)	A measure that is implemented to protect water quality and reduce the potential for pollution associated with storm water runoff.
Blue Line Streams	Streams that are represented on the United States Department of the Interior Geological Survey 1:24,000 quadrangle maps.
Certified Contractor	A person who has received EPSC training and is certified by the Boyd County Public Services Department or Kentucky Division of Water to inspect and maintain erosion and sediment control practices.
Channel	A natural or constructed/manmade watercourse with definite bed and banks to confine and conduct continuously or periodically flowing water. Channel flow is that water which is flowing within the limits of the defined channel.
Clean Water Act (CWA)	Federal Regulation that prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit.

Clearing	Any activity that removes the vegetative surface cover.
Critical Area	A site difficult to stabilize due to exposed subsoil, steep slope, extent of exposure, or other conditions.
Detention	The temporary delay of storm runoff prior to discharge into receiving waters.
Developer	Any individual, firm, corporation, association, partnership, or trust involved in commencing proceedings to affect development of land for him or others.
Drainage Basin	A part of the surface of the earth that is occupied by and provides surface water runoff into a storm water management system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.
Drainage Way	Any channel that conveys surface runoff throughout the site.
Drainage/Dry Well	A bored, drilled, driven, dug, or naturally occurring shaft or hole with a depth greater than the largest surface dimension; used to drain surface fluid, primarily storm water runoff, into a subsurface formation.
Ephemeral Stream	A stream or part of a stream that flows only in direct response to precipitation or snowmelt. Its channel is above the water table at all times.
Erosion	The wearing away of land surface by the action of wind, water, gravity, ice, or any combination of those forces.
Erosion Prevention and Sediment Control Plan (EPSC)	A set of plans prepared by or under the direction of a qualified professional in the State of Kentucky indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.
Excavation	Any portion of land surface or area from which earth has been removed or will be removed; the depth below original ground surface to remaining surface.
Existing Grade	The slope or elevation of existing ground surface prior to cutting or filling.

Fill	Portion of land surface or area to which soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.
Finished Grade	The final slope or elevation of the ground surface after cutting or filling.
Flood Plain	The relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water which has been or may be covered temporarily by floodwater. For purposes of this manual, the flood plain is defined as the 100-year floodplain having a one percent chance of being equaled or exceeded in any given year.
Grading	Any stripping, cutting, filling or stockpiling of earth or land, including the land in its cut or filled condition, to create new grades.
Impervious Surface	A term applied to any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.
KYDOW General Permit	An agreement between the regulating authority (KYDOW) and the Permittee which specifies conservation practices that shall be implemented in the construction of activities specified in the terms and conditions of the general permit.
Land Disturbance	The purposeful act of clearing, grubbing, excavating or grading; disrupting ground surface by or for construction activities, including construction access/roads, staging, and storage sites producing significant areas of exposed soil and soil piles.
National Pollutant Discharge Elimination System (NPDES)	EPA's program to control the discharge of pollutants to waters of the United States. NPDES is a part of the Federal CWA, which requires point and non-point source dischargers to obtain permits. These permits are referred to as NPDES permits.
Notice of Intent (NOI)	A formal notice to the KYDOW that a construction project seeking coverage under a General Permit is about to begin.
Notice of Termination (NOT)	A formal notice to KYDOW that construction project is complete and seeking release for the EPSC and the State General Permit.
Perimeter Control	A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.
Permitting Agency	The Boyd County's Public Services Department, or other County Department deemed appropriate, responsible for review and approval permits and EPSC plans.

Permit Phasing	Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.
Permittee	Shall mean the “Person, Company, Contractor or Developer, who is responsible for the Land Disturbing Activity”.
Public Storm Drain	Drain system provided and maintained by the Boyd County Fiscal Court, that is designed to help maintain storm water runoff and also provides inlets for water to travel to holding areas attempting to remove excessive water from streets and other areas.
Sediment	Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, or gravity as a product of erosion.
Sediment Control	Measures that prevent eroded sediment from leaving the site.
Site	A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation subject to erosion of sedimentation as a result of cutting, filling, grading, or other disturbance of the soil.
Site Development Permit	A permit issued by the Boyd Public Services Department for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading.
Site Waste Control	The requirements set forth in this ordinance are also intended to control or eliminate waste from construction site operators that may cause adverse impacts to water quality.
Stabilization	The use of practices that prevent exposed soil from eroding.
Start of Construction	The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.
Storm Water Management Plan (SWMP)	A plan which is based on hydrologic and hydraulic calculations to determine flood stage and required improvement to minimize impacts by development.
Storm Water Pollution Prevention Plan (SWPPP)	A plan required by storm water regulations or permits that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the storm water, and a description of measures or practices to control these pollutants. This is synonymous with the term “BMP Plan” used in the KYDOW General Permit.

Temporary Protection	Short-term stabilization of erosive or sediment producing areas.
Vegetative Protection	Stabilization of erosive or sediment producing areas by covering the soil with any of the following materials: permanent seeding for long-term vegetative cover, short-term seeding for temporary vegetative cover, sodding, producing areas covered with a turf of perennial sod-forming grass, tree planting, or other planting.
Watercourse	Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water designated as part of the storm water conveyance system.
Waterway	A channel that directs surface runoff to a watercourse or to the public storm drain.

Section III. Permits

A) Permits through the Boyd County Fiscal Court are required for all site construction projects and/or land disturbances. Depending on the amount of land disturbance, various levels of permits are required. Design requirements and Erosion Prevention and Sediment Control Plans shall be prepared in accordance with Section V and VI of this ordinance. Criteria for permit levels and submittal requirements are as follows:

1) Level 1 Permit:

- Site construction disturbs less than one acre of soil and is not a part of a larger development;
- Increased impervious area is less than 3,400 square feet;
- Ground slopes are less than 6%;
- Submit Level 1 Permit application accompanied by a plot plan that shows general erosion protection and sediment control notations and practices.

2) Level 2 Permit:

- Site construction disturbs less than one acre of soil and is not a part of a larger development;
- Increased impervious area is greater than 3,400 square feet;
- Ground slopes are less than 6%;
- Submit Level 2 Permit application accompanied by a detailed Grading/Erosion Prevention and Sediment Control Plan with details.

3) Level 3 Permit:

- Site construction disturbs one (1) acre or greater of soil;
- Submit Level 3 Permit application accompanied by a detailed Grading/Erosion Prevention and Sediment Control Plan and a SWPP Plan prepared by a qualified professional; submit KYDOW Notice of Intent (NOI). Copies of all state applications, plans, and NOI's must be submitted to the Boyd County Fiscal Court.

- 4) **Level 4 Permit (General Permit for Utility Companies):**
- Operations disturb less than one acre
 - Submit Level 4 Permit application
 - Permit renewed every 3-years.
- B) Contractor shall coordinate with the KYDOW and the US Army Corps of Engineers to determine whether permits are required from those agencies before construction begins.
- C) No permit through the Boyd County Fiscal Court is required for the following activities:
- 1) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
 - 2) Existing nursery and agricultural operations conducted as a permitted main or accessory use. However, permitting through regional, state, and federal agencies may be required.
- D) Each permit application shall bear the name(s), telephone information, electronic contact information (if available), and address(s) of the owner and/or developer of the site, contractor for the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm and shall be accompanied by a permit fee.
- E) Each permit application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the EPSC Plan and that a certified contractor be responsible for implementing and maintaining all aspects of that plan.

Section IV. Review and Issuance

- A) The Boyd County Fiscal Court's Department of Public Services will review each permit application to determine its conformance with the provisions of this ordinance. Acceptance indicates that minimum requirements or intent are met and does not imply a guarantee of performance. Based on the review of the permit application, the Permitting Agency, will:
- 1) Accept the permit application submittal;
 - 2) Accept the permit application submittal subject to such reasonable conditions as may be necessary to meet the requirements/intent of the objectives of this ordinance, and issue the permit subject to these conditions; or
 - 3) Deny the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.

- B) The Department of Public Services or any other County Department reserves the right to inspect the site prior to any construction activity in furtherance of the review process.
- C) The Department of Public Services acceptance of the permit is for general compliance with local requirements and the KYDOW permit. The designer and/or engineer is ultimately responsible for the details of design of the EPSC plan, with the property owner/developer being responsible for implementation.
- D) The County will not issue a Building Permit until the required Site Permit Application accepted and the permit issued.

Section V. Erosion Prevention and Sediment Control Plan

- A) The Erosion Prevention and Sediment Control (EPSC) Plan shall include the following:
 - 1) A natural resources map identifying soil types, forest cover, topography, and other natural features of concern. This map should be to scale equivalent to balance of submittal.
 - 2) A schedule of events for the construction of the development site, including stripping and clearing, rough grading, construction of utilities, infrastructure, final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary EPSC measures, and establishment of permanent vegetation.
 - 3) All EPSC measures necessary shall be shown on the plan by location and referred to by a legend for all phases of construction. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season. Multiple EPSC plan sheets may be necessary to best convey requirements for each phase.
 - 4) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and type and quantity of mulching for both temporary and permanent vegetative control measures.
 - 5) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
 - 6) The proposed plan to control site waste, including a delineation of contractor staging areas for equipment and fuel storage, site materials and temporary facilities.
- B. Modifications to the plan shall be processed and accepted or denied in the same manner as Section IV of this ordinance and may be authorized by the Department of Public Services by written authorization to the permittee, and shall include:

- 1) Major amendments of the EPSC plan require an qualified professional's signature and shall be submitted to the Department of Public Services for acceptance.
- 2) Field modifications of a minor nature shall require a qualified professional's signature and shall be noted and dated on the EPSC record drawings and available for review and acceptance by the Department of Public Services.

Section VI. Design Requirements

- A) Any permitted land disturbance operation shall meet the design criteria set forth in the most recent version of the Boyd County's Storm Water Manual, and shall be adequate to prevent erosion and control sediment from the site to the satisfaction of the Department of Public Services. Cut and fill slopes shall be *no greater than 3:1*, except as approved by the Department of Public Services to meet other community or environmental objectives.
- B) Clearing and grading of natural resources, such as forests and wetlands, and other natural features of concern shall not be permitted, except when in compliance with all sections of this ordinance as well as any regional, state and federal regulation. Clearing techniques that retain natural vegetation, drainage patterns, and buffers along streams as described by the Storm Water Manual, shall be used to the satisfaction of the Department of Public Services.
- C) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- D) Phasing shall be required on all sites disturbing greater than 50 acres, with the size of each phase to be established at plan review and as approved by the Department of Public Services.
- E) Erosion Prevention BMP requirements:
 - 1) Soil stabilization shall be completed within fourteen days of final grade work. If an area is left inactive for twenty-one days or more the area shall have temporary stabilization.
 - 2) If seeding or other vegetative erosion prevention methods are used, vegetation shall become established within three weeks. If a satisfactory stand of vegetation is not established the Department of Public Services may require the site to be reseeded or a non-vegetative option employed.
 - 3) Special techniques such as rip rap, turf reinforcement, armoring, and other methods that meet the design criteria outlined in the Storm Water Manual on steep slopes or in drainage ways shall be used to ensure stabilization.
 - 4) Soil stockpiles must be stabilized or covered and/or have sediment control measures in place to control sediment movement. Stock-piles shall have temporary vegetation established if it is going to be left for 21 days or more.

- 5) During the winter months, at the close of the construction season, when no construction is going on the entire site must be stabilized, using a heavy mulch layer or other methods that do not require germination to control sediment and prevent erosion.
- 6) Minimize clearing and grading to the smallest possible area. Preserve existing vegetation and trees to the maximum extent possible.
- 7) Areas to be left undisturbed during construction shall be clearly noted and delineated on the plans.
- 8) Vegetative buffer strips in combination with other perimeter controls shall be used for the protection of adjacent properties, watercourses, and rights of way.
- 9) Measures shall be implemented to control sedimentation deposits into drainage structures and features, receiving water bodies, natural karst features, roads, right-of-ways, and adjacent properties.

F) Sediment Control BMP requirements:

- 1) Dust control techniques shall be employed to prevent the blowing of dust by air movements during land disturbance, demolition, and other construction activities.
- 2) Diversion of upland runoff past disturbed slopes shall be implemented when necessary.
- 3) Settling basins, sediment traps, tanks and/or perimeter controls shall be implemented as required by the Storm Water Manual to control sediment.
- 4) Effective debris and trash management shall be required. At a minimum the following shall be met:
 - a) Implementing waste management practices and disposal of wastes including a designated waste collection area on site that does not drain directly to a waterway, ensuring storage containers have lids, regular scheduled waste collection (daily, weekly, etc.) to prevent overfilling, cleaning up spills immediately and disposal of construction site waste at authorized landfills or disposal areas. Concrete trucks must wash out on the job site and the run-off not allowed to drain onto public streets or into the storm water collection system.
 - b) Disposal plan for hazardous materials that may be utilized during construction in accordance with local and state solid waste regulatory agencies.

G) Waterway, watercourse, ephemeral stream, and public storm drain protection requirements shall include the following:

- 1) A temporary stream crossing installed and approved by the Kentucky Division of Water and the Department of Public Services if a watercourse will be crossed regularly during construction.
- 2) Stabilization of the watercourse channel before, during, and after any in-channel

work.

- 3) Design of all on-site storm water conveyance channels in accordance with criteria outlined in the Storm Water Manual.
 - 4) Stabilization adequate to prevent erosion located at the inlets and outlets of all pipes and paved channels.
- H) Construction site access requirements designed to minimize the deposit of sediment or other materials on public streets and rights of way shall include:
- 1) Continuous access via a stabilized rock entrance, constructed in accordance with the County's Storm Water Manual.
 - 2) A tire wash rack may also be required by the Department of Public Services.

Section VII. Inspection

- A) Plans accepted by the Department of Public Services for grading, stripping, excavating, and filling work shall be maintained on site throughout the duration of the work. After EPSC measures have been installed, contact the Department of Public Services and request a Pre-construction Inspection.
- B) Upon completion of the Pre-construction Inspection and approval of EPSC measures, the permit will be issued and site construction may commence.
- C) The Department of Public Services designated agent shall make inspections as deemed necessary to ensure the EPSC measures are being properly implemented and maintained during construction. If minimum requirements for the EPSC are not met, the permittee shall be notified and enforcement actions shall be taken.
- D) The permittee or his/her agent shall make regular inspections of all control measures to determine the overall effectiveness of the EPSC plan and the need for additional control measures. The frequency of these inspections shall be once every seven (7) calendar days and before and after storm events of a half-inch (1/2") of precipitation or more. All inspections shall be documented in written form and kept on the construction site. Reports should be available for the Department of Public Services or State Inspectors to review upon request during a site inspection.
- E) The Department of Public Services designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under sub-section D above.

Section VIII. Enforcement

A) Stop-Work Order; Revocation of Permit

In the event that any person holding a site development permit pursuant to this ordinance violates the terms of the permit or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of the public near the development site or vicinity so as to be materially detrimental to the public welfare or injurious to property or improvements in the vicinity, the Department of Public Services may suspend or revoke the site development permit.

B) Violation and Penalties

No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation the person, partnership, or corporation shall be punished by a fine of not more than \$ 1,000 for each offense.

(Note for each day that the prohibited action is continued, it shall constitute a separate offense) In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration.

Section IX. Separability

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.



Bill F. Scott
Boyd County Judge Executive

Attest:



Angie Durham
Fiscal Court Clerk

1st Reading March 8, 2005
2nd Reading April 19, 2005