

SEDIMENT AND EROSION CONTROL REQUIREMENTS FOR FARMING OPERATIONS

The processes used by farmers to produce the food and fiber needed by our nation involve earth disturbance to varying degrees depending on the type of tillage, planting techniques, and cultivation. Under Chapter 102 – Erosion Control regulations, persons involved with earth disturbance are required to implement Best Management Practices (BMPs) as part of an Erosion and Sediment Control plan to minimize accelerated erosion and soil loss. The implementation of BMPs are especially important to farmers since their use protects the soil resource and keeps water clean.

A Conservation Catalog for Pennsylvania, available from local County Conservation Districts, features soil-saving BMPs for the conservation of Pennsylvania's natural resources. The BMPs include contour farming, contour strip cropping, cover crops, grassed waterways, terraces and diversions, as well as other common farming practices. The catalog is a cooperative effort of the USDA, NRCS, Pennsylvania State University, Pennsylvania Department of Agriculture, Pennsylvania Department of Environmental Protection, Pennsylvania Association of Conservation Districts, Pennsylvania Chesapeake Bay Education Office, Penn State Cooperative Extension, and The Chesapeake Bay Program. It explains how each practice works, gives tips on installing and managing practices, and suggests how the practices may be combined with others for soil and water conservation systems.

Conservation districts were formed to help farmers plan, develop, and implement conservation plans that include an erosion and sediment control component for their farms. Technical assistance is also available from the Natural Resources Conservation Service (NRCS) to assist in developing the plan. The plan includes best management practices (BMPs) to minimize the potential for accelerated erosion and sediment from agricultural plowing and tilling, and a schedule for implementation of the BMPs. Implementation and maintenance of BMPs ensure that erosion rates do not exceed the soil loss tolerance, commonly called "T".. Additional information about "T" and technical details of BMPs can be found in the NRCS **Pennsylvania Soil and Water Conservation Technical Guide**. The plan also includes computations to show that storm water runoff from the farm for a 10-year frequency storm

will not cause erosion in on-farm or off-farm waterways or channels. The plan should be available at all times and updated as needed to guide the person(s) responsible for the overall operations of the farm.

A conservation plan consists of a conservation plan map, a soils map, and a narrative. The conservation plan map shows the farm boundaries, field boundaries, use of each field, acres in each field, permanent conservation measures installed and/or planned, and the scale of the map. The soils map indicates the kinds and boundaries of soils. The conservation plan narrative includes names, units and amounts, and locations of each of the conservation practices installed or to be installed. Implementation of the conservation plan means that the various BMPs be installed in a timely fashion.

Continual management and maintenance of BMPs are essential for proper functioning. Structural practices are designed for a specific storm frequency and may suffer damage when larger storms occur. Structural practices which require earth moving and stabilization should be frequently checked to assure that vegetation and other types of stabilization are adequate to protect the structure and to assure that it will continue to function properly. Other best management practices such as stripcropping, contour farming and grass buffers require attention annually to assure the boundaries are maintained and adequate vegetation is maintained. Practices which are performed annually such as cover crops, conservation tillage, crop residue management and crop rotations, must be carried out according to the conservation plan. These practices require detailed attention to assure they are carried out when and to the extent specified. Tillage and residue management are two specific examples that require this attention.

Prior to the installation of structural conservation practices, detailed designs and construction drawings for the practices are prepared. Details of interim erosion control measures used during the installation of structural measures are included in the construction drawings.

For additional information and assistance, contact your County Conservation District. Their phone number can be found in your local telephone book.

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SAMPLE CONSERVATION PLAN MAP

John Smith, Owner

Bill Jones, Operator

Sketch, Approximate Scale, 1"=400'

