

The Basics of Agricultural Erosion and Sedimentation Requirements



Areas lacking vegetation must be addressed

On November 19, 2010, additions and changes to long-standing PA Chapter 102 regulations addressing Erosion and Sediment (E&S) Control and Stormwater Management took effect.

All farms are required to develop and implement a written plan to reduce erosion when plowing and tilling (includes no-till cropping).

Chapter 102 always (since 1972) stated plowing and tilling needed a conservation plan; now Animal Heavy Use Areas (AHUAs) also must be covered by a conservation plan or Ag E&S plan.

AHUAs are defined as *"Barnyard, feedlot, loafing areas, exercise lot or other similar areas on agricultural operations where due to the concentration of animals it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods."*



Not good for animal or environmental health

A farmer must prevent pollution to a water body from AHUA runoff.

The written plan must address Animal Heavy Use Areas (AHUA).

Areas within 100 feet of a stream must maintain a minimum of 25% plant cover or crop residue, or additional BMPs will be required.

Fencing livestock out of streams is good for livestock health and good for local stream water quality. Streambank fencing is not required for pastures, but using fencing as a BMP is an option to meet some of the regulatory requirements in Ch. 102.

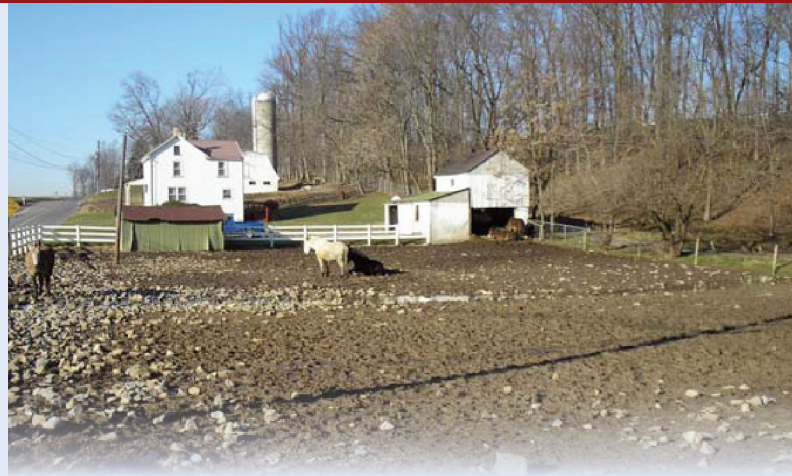
The National Pollution Discharge Elimination System (NPDES) permit for construction activities contains federal and state requirements for earth disturbance activities that disturb 1 acre or more. Activities like plowing and tilling do not require an NPDES permit, but agricultural construction which will disturb 1 acre or more (including but not limited to barn expansions, new animal housing, manure storage facilities, compost facilities) **does** require a permit. The permit covers runoff created during construction and stormwater generated after the construction activity is completed. A Post-Construction Stormwater Management Plan is required, along with an E&S Control Plan, as part of the permit. Be sure to allow for adequate time for completion of all permits when planning a construction project.



Agricultural construction activity affecting 1 acre or more may require a Stormwater Management Plan and an NPDES permit, the same as required for all other types of construction.



Newly constructed grass waterway



Animal Heavy Use Areas need Best Management Practices (BMPs).

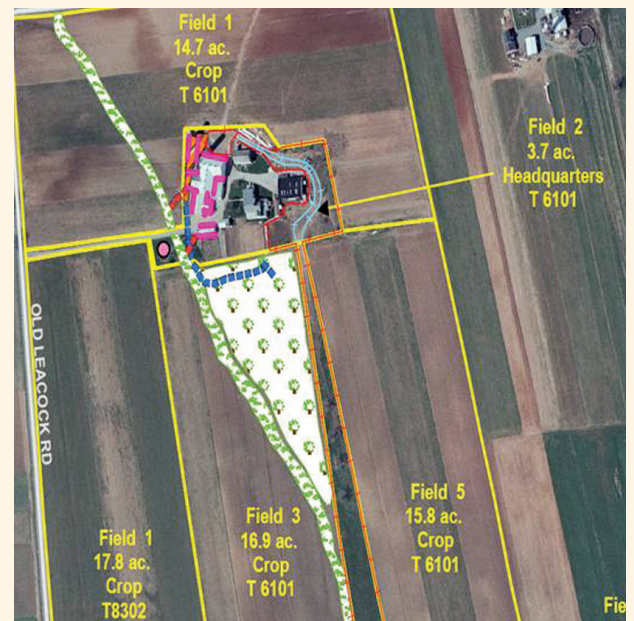
BMPs including but not limited to terraces, waterways and diversions are not required to have an NPDES permit if the BMP is installed as part of a conservation plan or Ag E&S plan.

Contact your County Conservation District, local USDA Natural Resources Conservation Service (NRCS) office, a qualified private consultant or your PA Department of Environmental Protection Regional office for more details.



Ag E&S Plan should include . . .

- ✓ Farm Owner(s)/Operator(s)
- ✓ Identify Farm and Tracts. Represent all farms and applicable lands operated with agricultural plowing and/ or tilling activities and Animal Heavy Use Areas disturbing more than 5,000 sq. ft.
- ✓ BMPs on cropland, hayland and/or pastures to limit soil loss to, at a minimum, the soil loss tolerance (T) rate over the planned crop rotation.
- ✓ Additional BMPs to minimize accelerated erosion and sedimentation for fields with less than 25% plant cover or crop residue cover and within 100 feet of a river, or perennial or intermittent stream.
- ✓ BMPs to minimize accelerated erosion and sedimentation from animal heavy use areas such as Heavy Use Area Protection, Critical Area Planting, Fencing, Wastewater Treatment Strip, Constructed Wetland, Use Exclusion, Animal Trails and Walkways, Diversions and Roof Runoff Structure and/or others.
- ✓ Description of BMPs, including animal heavy use area practices and procedures, tillage systems, schedules and crop rotations.
- ✓ Maps that show the location of features including:
 - ✓ surface waters and drainage patterns (topographic map)
 - ✓ field and property boundaries
 - ✓ buildings and farm structures
 - ✓ animal heavy use areas
 - ✓ roads and crossroads
 - ✓ existing and planned BMPs
 - ✓ soils map
- ✓ An implementation schedule describing when the planned BMPs will be implemented, installed, and operational.
- ✓ Operation and maintenance criteria describing how BMPs will be operated and maintained consistent with the current conditions and activities.



A Conservation Plan or an Ag E&S Plan used to meet Ch. 102 requirements must be available for review at the farm.