

SECTION 6 – Erosion Control Requirements

This section is premised on the intent that the earth-disturbing activities that increase the rate of soil erosion and sediment pollution shall be managed to protect drainage ways and the municipal separate storm sewer system (MS4).

1. All soil and erosion control measures shall conform to the Ohio Department of Natural Resource's (ODNR) Rainwater and Land Development, Ohio's Standards for Storm water Management, Land Development, and Urban Stream Protection", (latest edition).
2. For operations larger than 1.0 acre the contractor or developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Ohio EPA. The contractor should provide a copy of the NOI and date submitted to Ohio EPA or a copy of Ohio EPA Director's approval letter.
3. A Storm Water Pollution Prevention Plan (SWP3) shall be included for any development. This plan must be made available at the project site at all times. The design of erosion control systems shall follow the requirements of Ohio EPA Item 207 of Ohio Department of Transportation Standard Specifications, and ODNR Rainwater and Land Development. Projects that contain 1.0 acre or more of earth disturbance are required to have an SWP3 approved by the Department of Water. The SWP3 shall be submitted prior to plan approval.
4. The SWP3 should contain the following:
 - a. **Vicinity Map** – Location map showing site in relation to surrounding area. Clearly indicate location of receiving streams/surface waters.
 - b. **Clearing and Grading Plan** – Indicate the limits and show the acreage of earth disturbing activity. Show borrow, spoil and topsoil stockpile areas. Include before and after contours with appropriate contour intervals. Delineate drainage watersheds indicating acreage of each.
 - c. **Project Description** – Briefly describe the nature, purpose and scope of the land disturbing activity. This may be self evident from the plan. Include the total area of the site and acreage of individual phases if applicable. Also include a narrative describing the overall sediment and erosion control scheme for the site.
 - d. **Soils Information** – Show locations of bedrock, unstable or highly erodible soils as determined by the Montgomery County soil survey and/or soil tests. Soil surveys are available from the Soil and Water Conservation District. Other soils information such as permeability, perched water table, etc., may be mentioned.
 - e. **Surface Water Locations** – Show locations of all lakes, ponds, surface drainage, patterns, wetlands, springs, etc., on or within 200 feet of the site. If storm waters will be discharging into a municipal separate storm sewer system (MS4) or into a storm water management structure such as a detention basin, which is off site, clearly indicate this on the plans.
 - f. **Site Development** – Show locations of all existing and proposed buildings, roads, utilities, parking facilities, etc.
 - g. **Schedule of Construction Activity** – Included in this should be a schedule for implementing temporary and permanent erosion and sediment control practices and storm water management facilities. The National Pollutant Discharge Elimination System (NPDES) permit requires that all sediment ponds and perimeter barriers be

- implemented within 7 days of first grubbing. All sediment control structures must remain functional until upland areas are stabilized.
- h. **Location of Practices** – Show locations of all erosion and sediment controls and storm water management practices. Water ponding facilities should be drawn to scale, with their volumes and area of the contributing watershed given.
 - i. **Detail Drawings** – All structural practices should be explained with detail drawings and specifications. Installation specifications may also be necessary to aid contractors. Included should be outlet structures for retention or detention facilities and any special modification to these structures to aid in improved sediment trapping capability.
 - j. **Land Stabilization Measures** – Provide specifications for temporary and permanent seeding, mulching, blanketing, etc., and also the installation schedule for each practice. The NPDES permit requires that all areas at final grade or where construction activity will cease for 21 days or longer be stabilized within 7 days of last activity. Velocity dissipation devices should be placed at the outfall of all detention or retention structures and along the length of any outfall channel as necessary to provide a non-erosive flow velocity from the structure to a watercourse. Erosion control blankets and matting should be used to stabilize channels where the flow velocity is greater than 3.5 ft/s, on steep slopes, on highly erosive soils and on areas slow to establish a vegetative cover.
 - k. **Special Notes for Critical Areas** – Include pertinent information regarding stream bank stabilization, riparian corridors, buffer areas, stream restoration plans and wetland areas.
 - l. **Maintenance and Inspections** – provide notes and information regarding maintenance of each practice to assure continued performance. The NPDES permit requires that sediment and erosion controls be inspected once every 7 days and within 24 hours of 0.5” or greater rainfall. A written log of these inspections must become part of the SWP3. This log should indicate the dates of the inspections, name of the inspector, weather conditions, observations, actions taken to correct any problems and the date the action was taken.
 - m. **Storm Water Runoff Considerations and Post-Construction Best Management Practice (BMP’s)** - Show the pre and post-construction coefficients including method used to calculate runoff. Include a narrative description describing post-construction storm water management BMPs such as detention basins, grassed filter strips or wetlands and show the location of all such storm water management facilities. Include vegetation to remain (trees, buffer areas, etc.). Refer to Section 5.6 of the Engineering Design Standards
 - n. **Location and Volume of Sediment Ponds** – These calculations should be shown for all temporary or permanent sediment traps/ponds and any retention/detention facilities to be used for this purpose. All ponds used for the purpose of trapping sediments must have a volume of 67 cubic yards per acre of total drainage area to the pond (not disturbed area). Although there is no stipulated standard, trapping efficiency should be at least 75%.
 - o. **Off-site Sediment Tracking** – Minimize vehicles tracking sediment off-site by installing gravel construction entrances. The contractor shall schedule street sweeping or other cleaning methods if off-site tracking becomes a concern.
4. If the developer decides to build structures within the development or opts to maintain permit responsibility on lots where structures are being built, a detail drawing of a typical subplot showing standard BMPs with notes specifying measures for critical areas that must be included in the SWP3.

5. Once a site reaches final stabilization, a permittee must file a Notice of Termination (NOT). A NOT is to be filed when all of the following criteria are met on all disturbed areas within the development for which the NOT has been filed:
 - a. A perennial, vegetative cover (or other comparable permanent stabilization practice) has grown to a 70% density throughout the entire disturbed area;
 - b. All temporary sediment and erosion controls have been removed and disposed of properly;
 - c. All trapped sediment has been permanently stabilized to prevent further erosion;
 - d. All construction activities have ceased.

The NOT is to be filed within 45 days of when a site reaches final stabilization.