

Chapter 7: Erosion Prevention and Sediment Control (EPSC) Inspections

7.1 Introduction

Erosion Prevention and Sediment Controls (EPSCs) must be properly installed on a construction site in accordance with the TDEC Tennessee Erosion and Sediment Control Handbook. This chapter is meant to serve as a set of guidelines for the inspection of the EPSC s and the procedures which shall be followed to obtain compliance with the requirements set forth in the Montgomery County Storm Water Management and Control Regulations.

7.2 General Inspection Notes

All EPSCs must be properly installed in accordance with the TDEC Tennessee Erosion and Sediment Control Handbook and as stipulated in the approved project plans submitted to the Montgomery County Building and Codes Department. It is the developers, builders and contractor's responsibility to ensure that storm water controls are adequate for their sites and that their sites are prepared for any storm event. EPSC design and proper installation is the responsibility of the developers, builders and contractors responsible for each site. Failures in EPSC must be repaired immediately. ***If necessary, crews will be sent in on foot to perform cleanup and repairs by hand to limit environmental damage.*** Adverse weather, poor site conditions and ignorance of proper procedures will not be tolerated as excuses for not keeping site EPSC in a manner that prevents discharge of pollution.

Random inspections shall be conducted by the Inspector after each rain occurrence of at least one-half (0.5) inches of rain in a 24 hour period of time on sites designated as being environmentally sensitive. The random inspections shall be conducted at the earliest possible time, weather conditions permitting. Sites near wetlands, rivers, creeks, streams, detention ponds, or detention basins may be given priority during the random inspection process.

Unannounced inspections may occur at any time and are at the discretion of the Storm Water Inspector. The Storm Water Coordinator reserves the right to mandate the inspection of certain properties at his/her discretion.

Inspections may occur as a result of complaints received by the Storm Water Coordinator from the public at large. Every attempt will be made to ensure the Complainant's information is kept confidential. Inspections resulting from incoming complaints will be properly documented with the Complainant being notified of the inspection results, if so requested.

7.3 Inspection Priorities

Inspections shall be scheduled and conducted with the following priorities:

1. Complaints regarding lack of EPSCs or lack of EPSC maintenance

2. Inspections of disturbed areas near waterways, creeks, streams, detention basins or detention ponds
3. EPSC inspection prior to any earth disturbance or grading
4. After final grading
5. After seeding
6. After final stabilization and landscaping, prior to removal of sediment control measures
7. Random follow-up inspections of installed BMPs

7.4 Maintenance of EPSCs

All EPSCs must be properly maintained to allow them to function as designed. Maintenance measures include, but are not limited to:

1. Removal of all sediment buildup from behind the EPSC prior to the buildup reaching 33% of the height of the EPSC.
2. Repair of any defects in the EPSC including rips, tears, or other forms of deterioration to the EPSC.
3. Repair of any supporting or staking materials used to hold the EPSC in place, upright or in any other manner which assists the EPSC in functioning properly.
4. Removal of any debris which may have accumulated in inlet structures which may have been protected by EPSC. This includes routine cleaning of inlet structures which use EPSC to prevent sediment from entering the Municipal Storm Sewer System or the removal of sediment that may have entered the Municipal Storm Sewer System as a result of failure of the EPSC or lack of EPSCs.
5. Temporary or permanent seeding must be properly maintained in accordance with the TDEC Tennessee Erosion and Sediment Control Handbook, and the policies outlined in this manual.
6. Removal of any construction debris on the site that is not properly contained in a controlled manner. Any dumpsters located on a job-site must be properly covered when not in use or during inclement weather.
7. Removal of any sediment, mud, dirt, etc. on the roadway, street, or sidewalk. Road and sidewalks should be swept daily to limit buildup of sediments in the storm sewer system.

8. Proper placement of concrete washout areas and maintenance of said washout areas to prevent filling of these areas beyond their functional level.

7.5 Inspection Deficiency Notification

The Inspector will notify the responsible parties (usually, the Storm Water Contact listed on the Grading Permit or property owner) of any deficiencies found on a site. This notice will be sent certified mail and may also be delivered in person, by phone or by email. Notifications made in person, by phone or email will be recorded, along with the time, date and name of the person notified, in the notes section of the inspection form. The notification shall include the nature of the discrepancy and may include minimum measures required to correct the deficiency. The levels of notification of deficiencies are:

Written Notice: This level of notification is used to delineate minor problems that are easily corrected. There is generally no follow-up inspection required, unless the developer, contractor or builder has ignored such communications in the past.

Notice of Violation (NOV): These notifications are used to communicate serious site deficiencies, and will include a request for action within a set time period. The developer, contractor or builder should contact the Storm Water Coordinator upon receipt of an NOV and provide a plan for correcting the site deficiencies within a reasonable time frame. If the developer, contractor or builder does not contact the Storm Water Coordinator, it is assumed that the NOV has been accepted and that the deficiencies will be corrected within the time limits stated in the NOV.

7.6 Development and Post-Development Building Site Documentation Requirements

Following the policies in this section will satisfy the TDEC requirements for documentation at development and construction sites. Failure to be in compliance will result in issuance of County Notices of Violation and possible State citations.

- 1.) Each site must have a valid Notice of Coverage **posted** on site (the NOI is not acceptable). Each subcontractor/builder must post a copy of the developer's/main contractor's NOC on each individual work site (if separate from the main coverage site). After the Notice of Termination is granted to the developer/main contractor, each individual contractor/builder on that site must submit a NOI and post a valid NOC on the construction site. Copies of all NOI, NOC and NOT forms submitted and issued must be submitted to the Storm Water Coordinator.
- 2.) Storm water controls must be inspected by someone with EPSC Level 1 certification at least twice a week, no less than 72 hours apart and documented on the TDEC Inspection form (records are to be kept on site). The name, address and contact information of the inspector must be submitted to the Storm Water Coordinator.

- 3.) A Storm water control inspection must be preformed and documented on the TDEC Inspection form immediately before and after a rain event of .25” or greater (records are to be kept on site).
- 4.) A properly installed, functional rain gage must be located on site. Precipitation data is to be recorded daily and after each rain event (records are to be kept on site)
- 5.) Each site must have a valid Storm Water Pollution Prevention Plan (SWPPP), a copy of which must be submitted to the Storm Water Coordinator and a copy kept on site.
- 6.) Changes to any required documentation must be submitted to the Storm Water Coordinator at the same time the changes are submitted to TDEC.

The SWPPP, storm water controls inspection forms, a copy of the NOC, and rain fall records must be kept on site in a marked, water-proof structure that can be easily located. It will be satisfactory if up-to-date copies are kept on site if vandalism is a problem. The NOC must also be waterproofed and posted in a prominent location. Montgomery County Building and Codes Department must be notified of the location of the records and posted NOC. Builders and developers are responsible for providing a copy of all NOI, NOC and NOT permits issued to them by the state to the Storm Water Coordinator.

7.7 General Inspection Checklist

EPSCs

Are EPSC measures installed correctly?

Are the installed EPSCs sufficient to properly limit erosion?

Are the installed EPSCs sufficient to properly prevent sedimentation from being deposited off site?

Are storm sewer inlet protection measures in place and effective?

Are EPSCs being properly maintained?

BMPs

Are BMPs installed correctly?

Are BMPs being maintained correctly?

Are the BMPs adequate to properly limit erosion and prevent sedimentation from being deposited off site?

Trash and Debris

Is trash and and/or garbage being properly disposed of (in a closed or covered container)?

Is construction debris not scattered around the site, and being stored properly for removal or recycling?

Is any trash and debris being washed or blown off the site?

Construction Entrance

Is the construction entrance properly sized for the project?

Is the construction entrance clean (not clogged with mud and debris that can be tracked off site)?

Is the construction entrance stone of the proper size for site conditions?

Is the construction entrance stone being carried off site by traffic?

Materials Storage

Are building materials being stored correctly?

Are materials that have a risk of environmental damage being stored properly?

Is there a spill response plan?

Is there spill cleanup equipment and materials on site?

Concrete Handling

Are the concrete truck washout station(s) installed correctly?

Are the washout stations installed in areas that are convenient for use?

Is the number of washout stations adequate for the project?

Are the washout stations being maintained properly?

Equipment Maintenance

Is equipment maintenance and fueling being performed in specially designated areas that limit the chance of spill environmental damage and of spilled material leaving the site?

Is there evidence of spills of equipment fuels, lubricants or hydraulic fluids on the site that have not been cleaned up?

Is there a spill response plan?

Is there spill cleanup equipment and materials on site?

Environmentally Sensitive Areas

Are environmentally sensitive areas and water quality buffer zones properly delineated?

Is there evidence that construction activity is encroaching into these areas?

Is runoff or wind carrying sediment, trash or construction debris close to or into these areas?

Are proper precautions being observed in areas with impaired or high quality streams?

Stabilization of Bare Areas

Is there evidence of rill or gully erosion not being addressed?

Have stabilization measures been started within seven (7) days where construction is temporarily ceased or permanently ended?

Have permanent stabilization measures been started within fifteen (15) days of final grading?

Has fertilizer been properly incorporated into the soil?

Is the seed dispersion rate adequate for proper stabilization?

Is the applied mulch thick enough for stabilization?

Are erosion control mats and other stabilization methods properly installed and maintained?

Is the vegetation adequate to prevent erosion?

Is the contractor following the designed stabilization plan?

Site Cleanliness

Are streets in the vicinity of the construction site being swept and kept free of mud, gravel and construction debris?

7.8 Post Rain Event Inspections of Critical Sites

Critical sites are so designated because they have a high potential for pollution releases to the MS4, and are designated by the Montgomery County Storm Water Coordinator. A construction or development site can be designated as critical if:

- The site is near environmentally sensitive areas, pristine waters or impaired waters
- The site has a history of pollutive discharges to the MS4
- The site developers are having difficulties meeting EPSC goals due to unusual site conditions
- The site developers are particularly resistant to meeting required EPSC goals

Critical sites are to be inspected following any weather event depositing 1/2 inch or more of rain. Post rain inspections do not need to be as complete as standard EPSC inspections (see Section 7.7) and thus will not be considered sufficient to meet the requirements of a standard inspection. The post rain event inspections can be performed as part of a standard EPSC inspection if the regularly scheduled inspection is performed within 24 hours of a rain event, but post rain event inspections cannot be used to satisfy the requirements of a standard EPSC inspection.

The objective of post rain event inspections is to insure that a site's EPSC controls are functioning properly and are effective in preventing sediment from leaving the site. The general site condition is assessed during a post rain event by checking down gradient discharges to see if sediment is being released. The following should be used as part of that assessment:

- Down gradient runoff turbidity and color
- Obvious chemical sheens on the runoff
- Flooding around storm water drains and controls
- Sediments being deposited on the site roads

If obvious EPSC problems are noted during the post rain event inspection, a complete inspection should be performed as soon as practical to determine what steps should be taken to correct the site EPSC deficiencies. The Storm Water Contact listed for that project should be notified as soon as possible that there are notable EPSC problems, and that attention is required.

Post rain event inspections will be recorded on a Post Rain Event Inspection form in each hardcopy file and electronically in the project computer file. The data, time, general findings, and required follow up actions will be noted on the form.