MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Maryland Department of Transportation
State Highway Administration

SOP No.: 5300.300.02
Effective Date: September 30, 2023

Approved by: Andree Fitzell
Chief Operating Officer

Date: 10-11-23

Assuring the Daily Erosion and Sediment Control (ESC) Inspection Report is Completed Correctly Prior to Signature Approval and Data Recording Standard Operating Procedure (SOP)

Purpose

The purpose of this SOP is to provide guidance to the responsible party representing the administration on projects that are required to complete a Daily Erosion and Sediment Control inspection report. This is in response to the new requirements implemented by MDE and the instructions and guidance below are vital to the project's success.

Reference

1. Maryland General Permit No. 20-CP: General Permit for Discharges from Stormwater Associated with Construction Activity, effective April 1, 2023
2. National Pollution Discharge Elimination System (NPDES)

Scope

This SOP is applicable to any SHA staff that is a Duly Authorized Person that has the signatory responsibility for reviewing and approving contractor's portions of the Daily Erosion and Sediment Control Inspection Reports.

Definitions

Please refer to the Maryland General Permit No. 20-CP for a comprehensive list of definitions. Most common terms are listed below.

ESC – Erosion and Sediment Control
ESCM - Erosion and Sediment Control Manager
SWPPP – Stormwater Protection Prevention Plan
LOD – Limit of Disturbance
SOP – Schedule of Procedures
IFB – Invitation for Bids
MDE – Maryland Department of the Environment
EPA- Environmental Protection Agency
NTU – Nephelometric Turbidity Unit

Responsible Party

SHA Chief Operating Officer
SHA Office of Construction Director
SHA Deputy Administrator for Hanover Offices
SHA I-495/I-270 Office Director

PROCEDURE

Project Staff assigned to review and sign the Daily Erosion and Sediment Control (ESC) Inspection Report must ensure that the information is, to the best of their knowledge, accurate and complete. The following outline will provide the guidance and requirements that Daily ESC Inspection Report must have for a SHA representative to approve. It is the intent that the Project Staff work with the contractor on a daily basis to ensure that the ESC Inspection Report is completed and submitted as required.

1. General Information: Assure that all project information is correct.
    a. Project number, (as shown on the Invitation for Bid (IFB))
    b. Contractor, (Prime Contractor for the project)
    c. Contractor's ESCM
        i. ESCM Certification number and expiration date.
            1. Assure that the ESCM Certification is not expired.
        ii. ESCM Contact information,
            1. Phone number
            2. Address
            3. Email
    d. Date of inspection
    e. Start and End Times
    f. Date Earth Disturbance, - First day contractor is required to complete Daily ESC Inspection Report and would include the first day ESCs are installed.
    g. Construction Activity – should reflect the current activities.
2. Inspection Information: This section is where the ESCM or representative documents significant weather events and expresses that the job site was inspected.
    a. Has there been a storm event since the last inspection?
        i. Storm events are considered to be when ¼ in of rain falls within a 24-hour period. These events must be documented with additional reporting requirements for SHA Project staff related to NPDES requirements.
        ii. The Date, Duration, and Precipitation must be documented for storm events.
    b. Are all discharges composed entirely of stormwater or as authorized by the permit?
        i. All Project Staff responsible for ESC must become familiar with the permit language related to the project and assure that unauthorized discharge is not leaving the project site without being appropriately treated, contained, or removed in accordance with the permit.
    c. Is the Notice of Permit posted as required?
        i. The Maryland General Permit No. 20-CP requires a notice visible to the public, be displayed showing that the project has an active permit.
        ii. This Notice will be a Minimum 24 in. by 36 in. temporary traffic sign to be mounted as per applicable sign standards.
        iii. Notice shall be posted in public right of way.
        iv. Sign shall include:
            1. Project Number
            2. Project Description
            3. Project's Permit Number
    d. Are all LOD, wetlands, buffer, or other special resources demarcations in place and maintained?

i. LOD must be demarcated as shown on the plans.
ii. This includes properly demarcating areas of special interest such as wetlands, tidal buffers, floodplains, and other areas related to protected plant and animal species.
iii. All demarcation of LOD and areas of special interest as described in the plans must be maintained throughout the lifespan of the project construction activities.

e. If Stabilization (temp or permanent) is implemented, does it need any maintenance?
f. Are all ESCs installed as per plan and schedule?
    i. If this answer is no, then the contractor should be working to resolve the problem. The corrective action section will need to be completed is answered no.
g. Are all ESCs performing as intended?
    i. ESCs are implemented to mitigate sediment and other pollutants from leaving the job site. If the controls are not working as intended and there if signs of sediment or other pollutants leaving the job site, then this should be answered no with the corrective actions section completed.
h. Did any controls need maintenance?
    i. Maintenance of ESCs are not to be considered corrective actions and should be routinely performed as required to assure that the controls function as intended.
    ii. Document the Date and Time the maintenance is completed.

3. Dewatering Information – Form A must be completed for each day that dewatering activities are occurring on site. Each dewatering discharge location needs a separated Form A.
    a. Discharge Point Location: The location in which the dewatering outflow discharges into the waterway
    b. Make sure the Start and End Times of the dewatering activities are documented.
        i. If 24Hrs, then Start Time = 12:00 AM and End Time = 11:59 PM
    c. Assure Rate of Discharge is calculated correctly, See SHA Daily Standard Erosion and Sediment Control Inspection Report - Basic Instructions
    d. The daily maximum and average of the turbidity test results, if only one test is taken the value for the maximum and average test results will be the same.
    e. The Project Engineer must initial this section assuring that the data is properly transferred to the SHA Project Weekly Turbidity Benchmark Monitoring Log for the correct reporting week of the reporting period: (Monitoring Quarters below are broken out into 14 weeks)

Monitoring Quarter	Months	Submission Deadline
1	January 1st – March 31st	April 28th
2	April 1st – June 30th	July 28th
3	July 1st – September 30th	October 28th
4	October 1st – December 31st	January 28th

    f. NTU Meter Operator Information: Assure the Name, Title, Mailing Address, Phone Number, and Email of the individual is documented on Form A.
    g. Turbidity Testing Device Information: Assure the Testing Method, Device Manufacture, and Model Number is included on each Form A.
    h. If: a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, presence of foam; -OR- a visible sheen on the water surface, oily deposits on the bottom or shoreline of the receiving water is observed, stop the dewatering activities and preform immediate corrective actions.

i. If corrective actions are required assure that a Form B is completed by the contractor for that day's daily report.
ii. Document the corrective actions as per section 4 of this SOP.
iii. Also assure a description of the pollutant indications observed at the discharge point or the dewatering activity(s).

i. A minimum of three (3) photos are required for inclusion with a Form A and they are as follows:
   i. Dewatering water prior to treatment by a dewatering control(s); and
   ii. The final discharge after treatment at the dewatering control(s); and
   iii. Point of Discharge to any receiving waters flowing through or immediately adjacent to the site and/or to construction or natural site drainage features, storm drain inlet, and other conveyances to receiving waters.

   NOTE: Required photographs can be attached along with Form A of the Daily Report or within the email when submitted to the Project Engineer, label each photo with Location Name and Date by caption or file name.

j. Additional Comments should include:
   i. Information pertaining to certain features of your site, including where stormwater controls are installed and where exposed soil will be stabilized.
   ii. Information about any unsafe conditions, their location, and what was/is being done to resolve.
   iii. EPA encourages that the SWPPP site map is referenced and corresponds to the locations of the dewatering activities on site.

k. 20CP Part III.B.4.d.iii requires the permit owner (ADE-C or equivalent) to use the MDE e-Permits Portal, found at https://egov.maryland.gov/mde/npdes/Account/Login to electronically submit the MDE Appendix D: Turbidity Monitoring Report Form by the deadline of each quarter for each Dewatering Location for each Project with dewatering activities.
   i. It is the responsibility of the Project Engineer to provide their respective ADE-C or equivalent a MDE Appendix D each quarter with the complete the following sections of the MDE Appendix D:
      I – Permit Information
      II – Operator Information – Preparer section
      III – Site Information
      IV – Monitoring Quarter
      V – Turbidity Information Data
      From the Weekly Project Turbidity Benchmark Monitoring Logs
   ii. The responsible ADE-C or equivalent will complete the following sections of the MDE Appendix D:
      II – Operator Information - Operator's Section
      VI – Certification Information
   iii. These reports MUST be completed and submitted before the deadline of each quarter, the 28th of the month following each quarter, if any dewatering activities occur during a monitoring quarter.

4. Corrective Actions – All corrective actions must be documented, MDE expects SHA to be self-policing and demonstrate it through documentation. Showing that we are taking the appropriate steps to resolve problems related to ESC is part of the practices expected from the permit language. Each Triggering event will need a separate Corrective Actions Form B completed.
   a. Identify when problem is first noticed by Date and time:
   b. Location(s) the problem was identified:

i. May be multiple locations, if need additional sheets can be attached to the report.
ii. The contractor can be descriptive in this field.

c. What site condition triggered this corrective action? The following list of numbered trigging events directly related to the chooses on the Dewatering Information Form A (1, 2, 3, 4, 5a, 5b, and 6). Project Engineer is to ensure the correct trigging event number is chosen when signing off on the Daily ESC Inspection Report.

1. A stormwater control needs a significant repair or a new or replacement control is needed, or you find it necessary to repeatedly (i.e., 3 or more times) conduct the same routine maintenance fix to the same control at the same location (unless you document in your inspection report that the specific reoccurrence of this same problem should still be addressed as a routine maintenance fix.
2. A stormwater control necessary to comply with the requirements of this permit was never installed or was installed incorrectly.
3. Your discharges are not meeting applicable water quality standards.
4. A prohibited discharge has occurred.
5. During discharge from site dewatering activities:
    a. The weekly average of your turbidity monitoring results exceeds the 150 NTU benchmark; or
    b. You observe or you are informed by EPA, State, or Local Authorities of the presence of any of the following at the point of discharge to a receiving water flowing through or immediately adjacent to your site and/or to constructed or natural site drainage features or storm drain inlets:
        - sediment plume
        - suspended solids
        - unusual color
        - presence of odor
        - decreased clarity
        - presence of foam
        - visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water
6. EPA or MDE requires corrective action because of permit violations found during an inspection carried out.

NOTE: SHA Staff will complete the Dewatering Information Form A if a triggering event of 1, 2, 3, 4, or 6, not related to dewatering activities is chosen.
NOTE: Contractor staff will complete the Dewatering Information Form A if Trigging events 5a, 5b, or 6 related to dewatering activities is chosen.

d. Provide a description of the specific condition(s) that triggered the need for corrective actions and the cause (if identifiable):
e. This description should be a summary of the conditions observed to cause corrective actions, the cause of the problem if identifiable, and the specific location details with stationing and offsets if possible or a reference to a site map attached to the report.

f. Corrective Action Completed: This section of the Daily Report is required to be completed within 24 hours AFTER the corrective action is completed.
    i. If the corrective action is not completed within the reporting period for the inspection the Project Engineer (PE) will retain an unsigned draft of the Daily ESC Inspection Report until the contractor completes the Corrective actions and submits a signed report.
    ii. The PE and their staff will monitor the corrective actions and ensure that all Daily ESC Inspection Reports are completed with 24 hours of corrective actions being completed.
g. For Selections 1, 2, 3, 4, or 6: not related to dewatering activities.
    i. The First Checkbox must be marked by default, and it is everyone's responsibility on site to assure immediate steps are taken to address the condition, including the cleaning of any contaminated surfaces to prevent discharge in future storm events.
        1. Only one of the proceeding checkboxes should be marked:
            a. Completed by close of next business day,
            b. Completed within 7 Calendar Days,
            c. Or that completing within 7 Calendar days was in feasible.
h. For selections 5a, 5b, or 6: Those related to dewatering discharge, the Project must assure that the next 3 deadlines are met, Each checkbox should be marked if applicable.
    i. The Contractor must immediately take steps to minimize or prevent the discharge of pollutants, include shutdown of dewatering system as soon as possible, until a solution is implemented, while maintaining a safe working environment.
    ii. The Project's Stormwater Management Team needs to determine whether the dewatering controls were operating effectively and whether they are the cause of the condition(s).
    iii. Contractor must make the necessary adjustments, repairs, or replacements to the dewatering controls before being allowed to restart the dewatering by the Engineer.
        1. An explanation needs to be provided explaining why it was infeasible to complete corrective actions within 7 calendar days.
        2. The contractor needs to submit a schedule outlining the timetable and milestones for completion of corrective actions after 7 calendar days.
i. Briefly describe any modification(s) made:
    i. Modification(s) must be documented associated with corrective actions and if those modifications require updates to the SWPPP. Additional sheets should be attached if multiple modifications are required for an event.
    ii. Within 24 hours of completing the modification the contractor should complete and sign the associated inspection to be submitted.

NOTE: The corrective actions may not be completed the same day as the inspection is to be submitted. The Project Office is to retain a copy of the unsigned draft for that day until the corrective actions are completed, and within 24 hours thereof the signed inspection for that day is submitted by the contractor. The SHA staff is responsible to ensure that all corrective actions are completed, and that all documentation associated is also completed correctly before approving.

5. E&S Document Retention:
    a. All records that pertain to the information described in this SOP must be retained for a minimum of 3 years from the date the permit coverage expires.

b. Project Offices must maintain a file (electronic - recommended, or hardcopy) of SHA Contractor's Daily Erosion and Sediment Control Inspection Reports with all included attachments and photographs.
c. Project Offices must maintain a SHA Corrective Actions Log to be included in the Daily Erosions and Sediment Control Inspection Reports file, when applicable.
d. Project Offices must maintain a file (electronic - recommended, or hardcopy) of SHA Project Weekly Turbidity Benchmark Monitoring Logs when applicable. This file should be separated into respective monitoring quarters.

ADDITIONAL AUTHORIZED DOCUMENTS

SHA Contractor's Daily Erosion and Sediment Inspection Report; includes Dewatering Information Form A and Corrective Action Form B.
SHA Contractor's Daily Erosion and Sediment Inspection Report - Basic Instructions
SHA Project Weekly Turbidity Benchmark Monitoring Log
SHA Corrective Actions Log

ADDITIONAL INFORMATION

Other Divisions Impacted
Varies, please refer to individual SOP.

Contact Information
SHA Office of Construction Director