



# Daily Erosion and Sediment Control (ESC) Inspection Report

## General Information

Project Number	Date of Inspection
NPDES Permit Number	Start Time
Contractor	End Time
Project Engineer	Date Earth Disturbance began:
Contractor's ESCM	Construction Activity
ESCM Certification #	
ESCM Contact #	
ESCM Address	
ESCM Email	

## Inspection Information

Was this a joint inspection performed with SHA Project Staff?	Yes	No
Has there been a storm event since last inspection?	Yes	No
If Yes:    Date	Duration (Hrs)	Precipitation (in.)
Are all discharges composed entirely of stormwater or as authorized by the permit?	Yes	No
Is the Notice of Permit posted as required?	Yes	No
If No Posting must be placed/replaced immediately.		
Are all LOD, protected areas, Waters of the US, etc. demarcations in-place and maintained?	Yes	No
If silt, super silt, or diversion fence implemented, does it need maintenance?	Yes	No
If Stabilization (temp or Permanent) is implemented does it need any maintenance?	Yes	No
Are all E&S Controls installed as per plan and schedule?	Yes	No
Are there dewatering activities occurring on site?	Yes	No
a. If Yes complete the Dewatering Information Form A and attach		
Are all E&S Controls performing as intended?	Yes	No
a. If No complete the corrective actions Information Form B and attach		
b. If the corrective actions are not completed at submission a draft Form B is                      Submitting?		
required to be submitted for tracking, A final Form B should be submitted along side    Draft      Final		
the daily report for the day in which the corrective actions are completed.		

Additional Comments:

## Attachments

Form A    Form B    Photos:    Via Attachment    Via Email    Other:

## Signature and Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### MDOT SHA Project Engineer or Responsible Party

Signature:	Date:
Printed Name	Affiliation:

### Contractor ESCM or Responsible Party

Signature	Date:
Printed Name	Affiliation:

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## Dewatering Information Form A

**If dewatering is implemented this section must be completed daily**

A Dewatering Information Form A must be completed for each dewatering discharge point. Collect at least one turbidity sample per day, per active discharge point on any day there are dewatering activities occurring.

Project Number:

Discharge Point Location:

Discharge Start time:

AM

PM

Discharge End Time:

AM

PM

Rate of Discharge:

Gallons/Day

Data recorded on Project Log: PE Initials

Daily Maximum Turbidity Test Result:

NTU

SHA Project Weekly Turbidity Benchmark Log maintained by SHA for completion of Appendix D: Turbidity Monitoring Report From.

Daily Average Turbidity Test Result:

NTU

### NTU Meter Operator Information:

Name:

Title:

Mailing Address:

Street:

City:

State:

Zip:

Phone Number:

Email:

### Turbidity Testing Device Information:

Testing Method:

Device Manufacture

Model #:

Was the device Calibrate?

Yes

No

**Immediate corrective action is required when the following indicators of pollutant discharge are observed:**

\* A sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; or

\* A visible sheen on the water surface of visible oily deposits on the bottom or shoreline of the receiving water.

Are corrective actions required?

Yes

No

If Yes, complete the Corrective Actions Information Form B and attach.

Describe indicators of pollutant discharge at point of dewatering outfall(s).

Turbidity Test Result after Corrective actions completed

NTU

**Photographs of the dewatering activity must be included with this inspection report, see below:**

1. Dewatering water prior to treatment by a dewatering control(s) and
2. The final discharge after treatment dewatering control(s); and
3. 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 to this form or within the email when submitted. Label each photograph with location name and date by caption or file name.

**Additional Comments:**

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## Corrective Actions Form B

**If corrective actions are required this section must be completed**

Date Problem was first identified: \_\_\_\_\_ Time first Identified: \_\_\_\_\_ AM PM

Location(s) the problem was identified \_\_\_\_\_

What site condition triggered this corrective action?

1            2            3            4            5a            5b            6

See instructions for descriptions of triggering conditions 1 through 6

Provide a description of the specific condition(s) that triggered the need for corrective actions and the cause (if identifiable):

Corrective Action Completed: \_\_\_\_\_ Yes          No          Date if Yes: \_\_\_\_\_

**\*\* SHA Project Staff Completes below section if 1,2,3,4, or 6 is chosen as a triggering event. \*\***

For selections 1, 2, 3, 4, or 6: not related to Dewatering activities:

Immediately took all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the area will not discharge in subsequent storm events. **AND**

Completed corrective action by the close of the next business day, unless a new replacement control, or significant repair, was required. **OR**

Completed corrective action within (7) calendar days from the time of discovery because a new or replacement control, or significant repair, was necessary to complete the installation of the new or modified control or complete the repair. **OR**

It was infeasible to complete the installation or repair within (7) calendar days from the time of discovery. Contractor to provide a schedule for installing/repair of ESC to complete the corrective action as soon as possible with adherence to all safety standards.

**\*\* Contractor Staff completes below section if 5a, 5b, or 6 is chosen as a trigger event. \*\***

For selections 5a, 5b, or 6: those related to dewatering discharge, confirm that you met the following Deadlines.

Immediately took all reasonable steps to minimize or prevent the discharge of Pollutants until a solution could be implemented, including shutting off the dewatering discharge as soon as possible, while taking safety considerations into account.

Determined whether the dewatering controls were operating effectively and whether they were causing the Made any necessary adjustments, repairs, or replacements to the dewatering controls to lower the turbidity levels below the benchmark or remove the visible plume or sheen.

Briefly describe any modification(s) made as part of corrective action(s):	Date Completed (XX-XX-XXXX)	SWPPP Update Necessary	If Yes, Date SWPPP was updated (XX-XX-XXXX)
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1	Yes	No
2	Yes	No
3	Yes	No
4	Yes	No
5	Yes	No

Include an additional sheet with description of modifications if necessary: does this inspection include an additional sheet for modifications \_\_\_\_\_ Yes          No

**Additional Comments:**

# Standard Daily Erosion and Sediment Control (ESC) Inspection Report - Basic Instructions

## 1. General

These instructions are not to take the place of the language within the contract's official permit. All users of these documents are to become familiar with the permit for each project in which they are reporting on. The below instructions are a guide only to help complete the forms and submit them as needed. It is the responsibility of all project staff, SHA and Contractor, to assure that the permit is being followed and construction activities are documented as required by the **General Permit For Discharges of Stormwater Associated With Construction Activity Maryland General Permit No. 20-CP**, and/or any current associated permit, along with all associated contract documents.

## 2. Submission of the Daily ESC Report

The intent is to have a paperless workflow and submit the documents through email and electronic signatures. The main daily report is contained on page 1 or the cover page. When there are no dewatering activities or corrective actions that occurred during the day, then page 1 is the only page that needs to be submitted.

As dewatering or corrective actions occur those pages (Form A and B) must be completed, sometimes jointly between SHA Staff and Contractor Staff, see attached Form A and B of the report, and just the needed pages can be saved/printed to PDF for submission.

Additional Dewatering Information Form A and Additional Corrective Actions Form B can be completed as needed and attached to the main report through .pdf editors. This can also be done via physically printing out the reports and scanning the additional reports into a signal PDF for electronic signature before submission.

The forms have been created so that 2 of each document (Form A and B) can be complied within a PDF editor before needing to create a portfolio. It is recommended that if your project has 3 or more Dewatering Discharge Points -or- 3 or more Corrective Action Triggering Events in the same day the project's stormwater team work together to resolve these technical issues and how the project will collect this report. This volume of reporting for a single day is not expected to occur often.

## 3. Page 1

Page 1 is the primary report which if there are no dewatering operations or corrective actions is the only page that needs submitted.

### a. General Information:

Complete all the fields in the general information section, at the top of the report. Include the Contract number, NPDES Permit number if applicable, Contractor name, Project Engineer's name, Contractor's Erosion and Sediment Control Manager or ESCM's name, along with their information including Certification number, Phone number, Address, and Email.

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The Date and Time of the inspection must be recorded along with identifying when Earth Disturbances Began on the project. Choose the current Construction Activity from the drop-down list.

## **b. Inspection Information:**

Each question must be answered within this section for each report.

Note if a joint inspection was performed along SHA Project Staff

Storm event information must be documented, when any storm that results in rain precipitation equal to or greater than 0.25 in. The Date, Duration, and Total Precipitation must be recorded, and an inspection should be done within 24 hours of the end of the event within a safe manner.

If all discharges are not composed entirely of stormwater or as authorized by the permit, then a Corrective Actions Information Form B should be completed, and steps should be immediately taken to resolve the issue. Remember General Maintenance to Erosion and Sediment controls are not considered Corrective actions, If general maintenance resolved the issue note that in the additional comments of this section.

The MDE 20-CP General Permit requires that public notification be posted within public right of way for each project. If this notification is not posted it must be replaced or placed immediately.

Verify that all demarcations are in-place and maintained, including buffer areas, LOD, Waters of the US, etc.

If any E&S Controls are not installed as per plan and schedule then the project must rectify this immediately, A Corrective Actions Information Form B may need to be completed if a triggering event occurred do to improper installation and sequencing.

If the Controls are not performing as intended than it is assumed corrective actions would need to be taken. Immediate steps should be taken to prevent pollutants from leaving the job site, confer with the Project Engineer to come to a resolution.

Additional comments should include any maintenance performed and state if there are multiple Form A or Bs attached, along with other relevant comments for that day's inspection.

## **c. Signature and Certification**

The Contractor's ESCM or Duly Responsible Party must sign and affirm the statement on the form that all reported information is correct. This signature also affirms that all attachments identified are also true and accurate. The Project Engineer or Duly Responsible Party must review the information provide and affirm that to their understanding all the information provided is true and accurate. This must be done for each Daily report.

## **4. Dewatering Information Form A**

The MDE new general permit 20-CP has increased the responsibilities the project has with monitoring any dewatering process occurring on the project. Anytime there is a dewatering activity occurring on site a daily turbidity test must be taken and the Dewatering Information

# Standard Daily Erosion and Sediment Control (ESC) Inspection Report - Basic Instructions

Form A captures the required information in order to for SHA to supply MDE with a quarterly report as required by the permit.

## **a. General Information**

The information at the top of Form A is required for each dewatering discharge point active on the day of reporting. If there are 2 discharge points than 2 Dewatering Information Form As will need to be completed and submitted along with the daily report.

- Identify the Discharge Point Location into the watershed.
- Start and End Times of the discharge need to be recorded.
- The project must calculate the Rate of Discharge as Gallons per Day.
  - Calculate the Rate of Discharge in Gallons per Day based on the specification of the pump(s) used.
  - Example: I have a pump that at full throttle can pump 100 Gallons/Minute. I am running the pump at 75% (3/4) throttle. Then I would calculate my rate per minute at  $100 \times 0.75 = 75$  Gallons/minute. Now we find the Gallons/hour:  $75 \times 60 = 4500$  Gallons/hour. So, on an 8-hour shift that would total,  $4500 \times 8 = 36,000$  per day for that day with the pump running at 75% (3/4) throttle.
  - In cases where the dewatering system is pumped over a long distance or up a significant incline, the project can improve the accuracy of their calculations by filling a container of a known volume while recording how long it takes to fill that container.
    - Example. It takes 60 seconds to fill a 55-gallon container = 55 gallons/minute. Use these recorded gallons/minute in the example above to calculate the Gallons/Day
- Turbidity Test Results
  - Only one turbidity test is required per day by MDE at each dewatering discharge location. If only one test is taken in a day then the Daily Maximum and Daily Average Test Result should be the same
  - When a turbidity test is above 150 NTUs, the dewatering system must be turned off and the issues causing the test to be above 150 NTUs must be corrected and documented on the Corrective Actions Information Form B. Once the corrective actions are completed then another turbidity test is required to demonstrate the project in back within tolerances. The Maximum NTU needs to be recorded and the Daily Average Turbidity Test needs to be under 150 NTUs to be in compliance for that working day.
- The Project Engineer needs to initial this document within the general information area of Form A to ensure that the Turbidity Test Results are document on the SHA Project Weekly Turbidity Monitoring log for the completion of the quarterly report by the ADE-C or equivalent.

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## b. Operator Information:

The term operator in this section refers to the contractor's staff performing the turbidity test. This staff member doesn't have to be the ESCM but must be a responsible person that can demonstrate to the project staff they can properly administer and document the turbidity as required by the testing device's manufacture recommendations and the permit. MDE 20CP also requires that the individual administering the test provide their contact information.

Contact information includes:

- Name: as shown on driver's license/ID
- Mailing Address: Street, City, State, ZIP code
- Phone Number: A number in which the individual can readily be reached.

## c. Turbidity Testing Device Information:

Identifying the device and method of testing is required to be documented. This will include a description of the Testing Method along with the Device Manufacture and Model #, along with confirmation of a daily calibration.

Below is an excerpt from the Maryland General Discharge Permit No. 20CP (NPDES No. MDRC) on Page 26 of 43:

- **Sampling frequency.** You must collect at least one turbidity sample from your dewatering discharge each day a discharge occurs.
- **Sampling location.** Samples must be taken at all points where dewatering water is discharged. Samples must be taken after the dewatering water has been treated by installed treatment devices pursuant to Parts III.A.4.a and III.A.4.c and prior to its discharge off site into a receiving water, constructed or natural site drainage feature, or storm drain inlet.
- **Representative samples.** Samples taken must be representative of the dewatering discharge for any given day as required in Appendix G (standard permit conditions), Part IV.K.
- **Test methods.** Samples must be measured using a turbidity meter that reports results in nephelometric turbidity units (NTUs) and conforms with an approved method contained in Part 136 of the Federal Regulations (e.g., methods 180.1 and 2130). You are required to use the meter, and conduct a calibration verification prior to each day's use, consistent with the manufacturer's instructions.

The Methods contained in [Part 136 of the Federal Regulations](#) are the following as of July 1, 2023:

- Methods For Analysis of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resource Investigations of the U.S. Geological Survey, Book 5, Chapter A1., unless otherwise stated. 1989. USGS. [TWRI 5-A1 \(usgs.gov\)](#).

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- Method 180.1, Determination of Turbidity by Nephelometry. Revision 2.0. Table IB, Note 52.
- Mitchell Method M5331, Determination of Turbidity by Nephelometry. Revision 1.0, July 31, 2008. Leck Mitchell.
- Mitchell Method M5271, Determination of Turbidity by Nephelometry. Revision 1.0 July 31, 2008. Leck Mitchell.
- Orion Method AQ4500, Determination of Turbidity by Nephelometry. Revision 5, March 12, 2009. Thermo Scientific.

### **d. Are Corrective Actions Required?**

It is important to remember that general ESC maintenance, such as cleaning sediment from controls or fixing holes in silt fence, is not considered corrective actions. Corrective actions are when a control as installed is not functioning allowing sediment or pollutant to by-pass the control.

However, when it is observed that:

- A sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; or
- A visible sheen on the water surface of visible oily deposits on the bottom or shoreline of the receiving water.

Then immediate corrective action is required which includes cleaning the area affected by the unwanted discharge to prevent subsequent storms from causing the release of that unwanted discharge into the watershed.

If the answer is Yes to “Are corrective actions required?” then a Corrective Actions Information Form B will be required to be completed and submitted along with the Daily Report.

Complete the Description of the indicators of pollutant discharge at point of dewatering outfalls.

### **e. Photographs of the Dewatering Activity:**

It is required that each day there is an active dewatering system on the site at least three (3) photos of that dewatering system must be taken and submitted with each Daily Report.

The photos must include:

- The dewatering prior to treatment by a dewatering control,
- The final discharge after treatment of the dewatering at the dewatering control, and
- The 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 inlets, and other conveyances to receiving waters.



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Photographs must be submitted with the report either as an additional page or through email with the photos being identified by either captions on the page or by the file name when attached to the email submission of the report.

## 5. Corrective Action Information Form B:

The ESCM is responsible for completing the Corrective Action Information Form B when triggers 5a, 5b, or 6 are chosen and it relates to dewatering activities, and SHA Staff is to complete this form when Triggers 1, 2, 3, 4, or 6 are chosen and it does not relate to dewatering activities, when required. It is the intent that all information is completed, accurate and signed by both the contractor and Project Engineer at the end of the day. Again, general ESC maintenance activities are not considered corrective actions. As per the Maryland General Discharge Permit No. 20CP (NPDES No. MDRC) Part III. Control measures and effluent limitation (A.)(1.)(d.)(iii.) "If at any time you find that a stormwater control needs repaired or replaced, you must comply with the corrective action requirements in Part III.D. The events that cause corrective actions are considered Triggering events, and a Corrective Action Information Form B must be completed for each separate triggering event observed.

- Project must identify the Date and Time in which the triggering event was first observed.
- Identify the Location where the triggering event first occurred.
- And identify the condition 1 through 6 that triggered the corrective action.
  - Check the box corresponding to the numbered triggering condition below that applies to your site.
    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 re-occurrence of this same problem should still be addressed as a routine maintenance fix; or
    2. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
    3. Your discharges are not meeting applicable water quality standards; or
    4. A prohibited discharge has occurred; or
    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

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- 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.
- You must complete the initial Corrective Action Information Form B within 24 hours after completing the correction action.
  - Deadlines for completing corrective action for condition # 1, 2, 3, 4, or 6 (if not relating to a dewatering discharge)
    - Check the box to confirm that you met the deadlines that apply to each triggering condition. You are always required to check the first box (i.e., Immediately took all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events.). Only one of the next three boxes should be checked depending on the situation that applies to this corrective action.
    - Check the second box if the corrective action for this particular triggering condition does not require a new or replacement control, or a significant repair. These actions must be completed by the close of the next business day from the time of discovery of the condition.
    - Check the third box if the corrective action for this particular triggering condition requires a new or replacement control, or a significant repair. These actions must be completed by no later than seven calendar days from the time of discover of the condition.
    - Check the fourth box if the corrective action for this particular triggering condition requires a new or replacement control, or a significant repair, and if it is infeasible to complete the work within seven calendar days. Additionally, you will need to fill out the table below the checkbox that requires:
      - An explanation as to why it was infeasible to complete the installation or repair within seven calendar days of discovering the condition.
      - Provide the schedule you will adhere to for installing the stormwater control and making it operational as soon as feasible after the seventh day following discovery.
    - Note: Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within seven calendar days of completing this work.
  - Deadlines for completing corrective action for condition # 5a, 5b, or 6 related to a dewatering discharge
    - These deadlines apply to conditions relating to construction dewatering activities. Check the box to confirm that you met the deadlines that apply to each triggering condition. You are required to check all of the boxes in this section to indicate your compliance with the corrective action deadlines.

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- Provide a list of modifications implemented to resolve the issue for the triggering event being reported on, assure coordination with QAD on all modifications. Modifications would be above and beyond the general maintenance, replacement, repair, or other corrective actions and would result from changes in controls, location, schedule, or other significant alteration to the site and contract documents.
- Provide additional comments if necessary.