Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

Turbidity Monitoring and Inspection Guide for Construction Dewatering

NPDES General Permit for the Discharge of Stormwater from Construction Activities

March 2026

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Permittees are responsible for reviewing the permit in its entirety and ensuring full compliance.

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Section 1: Introduction

This guide describes how to conduct inspections and turbidity monitoring for discharges from construction dewatering activities. Its target audience is Permittees and their contractors covered under **CTDEEP's 2026 Construction General Permit (CGP)** who will be discharging dewatering water.

This guide does not impose any new legally binding requirements on the Permittee. In the event of a conflict between this document and any requirement of the permit, the requirements of the permit take priority.

Authorized dewatering discharges under DEEP's CGP

The CGP defines dewatering water as "water associated with the construction activity generated from the lowering of the groundwater table, the pumping of accumulated uncontaminated stormwater or uncontaminated groundwater from an excavation, the pumping of surface water from a cofferdam, or pumping of other surface water that has been diverted into a construction site. Note that the dewatering water must be **uncontaminated**. See **Section 5.2.2.8** of the CGP for procedures to evaluate dewatering water for possible contamination.

This document serves as guidance and CTDEEP retains the discretion to adopt approaches on a case-by-case basis that differ from those described in this guide, where appropriate.

1.A Introduction to CGP Dewatering Inspection and Monitoring Requirements

The 2026 CGP established inspection and turbidity monitoring requirements for dewatering discharges as follows:

- **Dewatering inspections for all sites.** All sites discharging dewatering water must complete inspections of dewatering operations upon initiation of dewatering operations and during Routine Inspections once per week and within 24 hours of a storm that generates a discharge. Operators must check for signs of sediment or other visual indicators of pollution in dewatering discharges and take corrective action, when needed. ***Remember – dewatering inspections and monitoring must be conducted by a Qualified Inspector, as defined in the CGP.***

Section 2: Prepare for Inspection and Monitoring

Preparing to inspect and monitor dewatering discharges requires that you collect information about your construction site and your site's dewatering operations. This information will have been collected previously, as it was used in submitting your construction stormwater application in ezFile for coverage under the CGP and developing the monitoring procedures section of the site's Stormwater Pollution Control Plan (SPCP) in accordance with Section 5.2.2.8 of the CGP.

You will need to compile the dewatering information in your SPCP. This guide discusses resources for doing so – for example, determining receiving waters and evaluating SPCP site map components.

2.A Determine Where Dewatering Discharges Are Occurring

What if my site does not discharge dewatering water?

The CGP does not require dewatering inspections or turbidity monitoring if dewatering water stays on-site. Retained water may, for instance, be allowed to evaporate or infiltrate into the soil (unless groundwater contamination concerns exist as described in CGP, Section 5.2.2.8.c and d) or be used for on-site dust control, irrigation, or other construction-related purposes.

The following documents will direct you to the location(s) of dewatering discharges from your site. This is the first step toward planning for inspection of dewatering discharges and possible turbidity monitoring.

- A copy of the CGP.
- A copy of the CGP application submitted in ezFile. The application identifies the site's discharge points and receiving waters.
- The SPCP, which must include:
  - Procedures for dewatering, including any treatment
  - Procedures for dewatering inspection, maintenance, and corrective action (CGP Sections 5.2.2.8 and 5.2.4.2).
  - Procedures for turbidity monitoring from dewatering discharges, if applicable (CGP Section 5.2.2.8.b).
  - A site map that:
    - Shows the location(s) of any receiving waters within the site and all receiving waters to which the site discharges.
    - Identifies if any receiving waters are listed as: impaired waters; waters with an established TMDL; High Quality Waters; Wild and Scenic Rivers; or Cold Water Stream Habitat.
    - Shows all discharge locations, as well as the location(s) where turbidity monitoring will take place, if applicable to your site.

Discharge point

For the purposes of the CGP, the discharge point is the location where concentrated stormwater flows or dewatering waters are discharged from the construction site.

You should inspect all dewatering operations and dewatering discharge points to verify the information in the SPCP. For each dewatering operation, note:

- Whether groundwater, accumulated stormwater, or a combination of the two is being dewatered. Groundwater and stormwater have different potential pollutants.
- Whether the dewatering operation is continuous or intermittent and the expected frequency of dewatering discharges. Continuous dewatering may occur at sites with high groundwater or alluvial aquifers, or when work is done next to receiving waters. Intermittent dewatering may occur during wet weather periods.
- Whether dewatering water is discharged to a municipal separate storm sewer system (MS4). If you discharge to an MS4, you must contact the operator of the system (e.g., the local public works department, the highway department) to alert them to the discharge.

You should consider taking photos of each dewatering operation and discharge point before commencing dewatering. You will later be able to use these initial photos as a baseline to identify erosion or other adverse impacts from dewatering.

2.B Determine Each Dewatering Discharge Point

Daily Dewatering Inspections

All Permittees must inspect dewatering operations once per week, preferably during a Routine Inspection, when dewatering discharge is occurring. If dewatering operations are not conducted every day, an inspection shall be conducted such that there is at least one inspection per week when dewatering is conducted. All dewatering discharges must be inspected and monitored.

Turbidity Monitoring

You must carry out turbidity monitoring if you discharge dewatering water to waters of the State or to an MS4. You must collect at least one turbidity sample from each dewatering discharge point within 30 minutes of initiating the dewatering discharge and then at least once a week during dewatering operations. With the exception of the initial sample within 30 minutes of the initiation of the dewatering discharge, samples may be taken at any time during the day while dewatering water is being discharged. You may consider taking the daily turbidity sample during a Routine Inspection.

What is turbidity?

The EPA defines turbidity as “a condition of water quality characterized by the presence of suspended solids and/or organic material”. Water with low turbidity appears clear; water with higher turbidity appears cloudy or murky.

Turbidity samples must be analyzed using a turbidity meter that reports results in nephelometric turbidity units (NTUs) and conforms with an EPA-approved method under 40 CFR Part 136 (e.g., EPA Method 180.1). Record the turbidity level in the Turbidity Monitoring Report form found on the DEEP CGP webpage. This log shall be submitted to DEEP by email to DEEP.StormwaterConstruction@ct.gov with the subject line “Construction Turbidity Monitoring”. Submission shall be on the first day of each month following the initiation of dewatering discharges and shall continue as long as the discharge exists.

2.C Determine Where You Will Collect Samples

If your site has one or more discharge points through which treated dewatering water flows to a water of the state or to an MS4, each of these dewatering discharges must be sampled and analyzed for turbidity within 30 minutes of discharge initiation and then weekly. As previously mentioned, the SPCP site map must identify discharge points, receiving waters, and the specific turbidity sampling locations.

The CGP does not prescribe an exact sampling location for turbidity monitoring; you are responsible for identifying a safe and accessible sampling location that is representative of the discharge. (A sample is representative if it has the same physical and chemical characteristics as the dewatering discharge.) CGP Section 5.2.2.8.b stipulates that "samples shall be taken after the dewatering water has been treated by any treatment device or control measure".

Note that the sampling location for turbidity monitoring may be different than the discharge point based on the configuration of the dewatering operation. However, the sampling location for a particular discharge point should be the same from sample to sample unless adverse conditions prevent safe access.

Sampling from a Pipe or Hose

If dewatering water flows from the treatment control through a pipe or hose to the discharge point, take the sample directly from the pipe or hose. Typically, a cuvette is used to collect the sample and the same cuvette is used for the analysis. This avoids having to transfer the sample from the sampling container to the cuvette for analysis.

What is a cuvette?

A cuvette is a small tube-like container with straight sides and a circular or square cross section. It is sealed at one end, and made of a clear, transparent material such as plastic, glass, or fused quartz. Cuvettes hold the sample, and the turbidity meter passes a beam of light through the sample within the cuvette to measure turbidity.

For hard-to-reach locations, you may need to fasten a collection bottle to a pole. If you take the sample in a bottle or other container, you must transfer the sample to the cuvette for analysis. Before transferring the sample, gently agitate or mix it to keep solids in suspension while transferring. (Otherwise, the transfer process can cause a turbidity result that is artificially low and is not representative of the discharge.) Take care when transferring to the cuvette to minimize formation of air bubbles, which can cause a turbidity result that is artificially high and is not representative of the discharge.

Sampling Overland Flow

In some areas of your site, it may be difficult to obtain a sample because the dewatering flow discharges as overland flow and is not deep enough to collect a sample. If the flow is too shallow to directly fill a cuvette, consider:

- Concentrating overland flow by excavating a small depression in an existing ditch or other location where stormwater runoff flows.

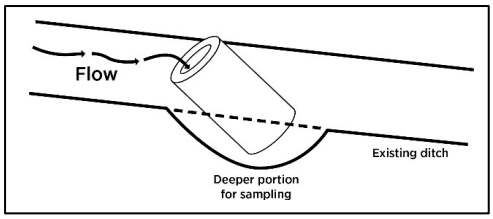

Figure 1. Sampling overland flow by deepening an existing ditch

- Installing a trough, gutter, or ditch to intercept and concentrate dewatering flow.

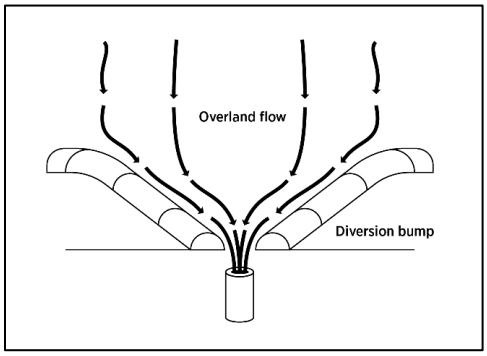

Figure 2. Sample overland flow from vegetated areas by constructing a shallow ditch to intercept the runoff and a deepened area to place bottles to catch the runoff.

- Installing "speed" bumps to convey and concentrate overland flow. A container positioned on the edge of the collection area can collect samples directly.

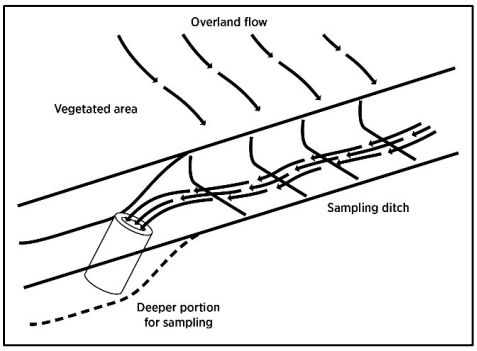

Figure 3. Sample overland flow by constructing diversion bumps to collect and concentrate the flow.

If you dig a ditch or disturb the earth in some way, line the disturbance with concrete or plastic to avoid contaminating stormwater samples with sediment or other pollutants.

Sampling from a Drainage Ditch or Swale

If dewatering water is discharged via a drainage ditch or vegetated swale, collect the sample from a consistently flowing part of the ditch/swale. If the ditch/swale is too small or shallow, install a barrier device in the channel or deepen a small area so you can sample directly into the bottles. If you dig a ditch or disturb the earth in some way, line the disturbance with concrete or plastic so that you do not contaminate your stormwater samples with sediment or other pollutants.

Sampling from a Stormwater Detention/Retention Basin

If you need to sample from a detention or retention basin, only do so at the structure's outlet and only when a discharge from the basin occurs. You are not required to conduct turbidity monitoring if the on-site basin that receives dewatering water is not discharging, but you should check the basin outlet for discharge every day dewatering is occurring. Note that if the basin receives other inflows in addition to dewatering water (e.g., stormwater), the discharge from the basin must still be sampled for turbidity.

Potential Sampling Issues

Potential problems for dewatering sampling include adverse weather and lack of accessibility.

- **Adverse weather.** High tides and high flow or flood conditions can make it difficult to reach the dewatering sampling location. Pipes and hoses may be clogged or submerged and dewatering treatment controls may be overloaded. You should use your best professional judgment when choosing sampling locations during adverse weather. In some cases, you may need to sample at a point before the discharge point.
- **Discharge point/sampling location is inaccessible.** Discharge points and sampling locations may not be accessible for a variety of reasons. In these instances, you may need to identify an alternate, representative sampling location. Go upstream of the dewatering sampling location until a sample can be taken. If you cannot collect a sample, make a note on your Turbidity Monitoring Report table and take photos if possible.

2.D Select Dewatering Inspection and Monitoring Staff

Each Permittee covered under the CGP must have a "stormwater team" responsible for monitoring activities and corrective actions. The SPCP requires Routine Inspections to be conducted by a Qualified Inspector, as defined in Section 10 of the CGP. Section 6 of this guide provides an overview of training requirements and recommendations for stormwater team members who will inspect and monitor dewatering operations. It may be advantageous to have the person or persons performing dewatering inspections also conduct turbidity monitoring, when required. Using the same person or team for inspections and turbidity monitoring will help produce consistent, comparable samples over time.

2.E Select a Turbidity Meter That Meets EPA Requirements

Samples must be measured using a turbidity meter that reports results in NTUs. EPA-compliant (field or benchtop) turbidity meters comply with the methods outlined in 40 CFR Part 136. The most common approved method used for turbidity monitoring is *EPA*

Only purchase a turbidity meter that conforms with an EPA-approved method in 40 CFR Part 136 (e.g., EPA Method 180.1). This information should be readily available from the manufacturer or retailer.

Method 180.1: Determination of Turbidity by

Nephelometry, the standard for determining turbidity in drinking, ground, surface, waste, and seawater samples. The applicable range of EPA Method 180.1 is 0–40 NTUs, making it ideal for low-range samples. The method can be modified for higher levels of turbidity with dilution of the sample. EPA has approved other methods for turbidity. Some methods are better suited for measuring higher or lower levels of turbidity. Choose a method to reflect the expected level of turbidity of the dewatering discharge.

Things to look for when purchasing a turbidity meter include, but are not limited to:

- The meter complies with an approved EPA method. (This is usually highlighted by the manufacturer.)
- The meter is durable and weather-resistant if it will be used in the field.
- Calibration materials are readily available.

Potential issues with turbidity meters include:

- **Malfunctions**. If the turbidity meter malfunctions or fails to calibrate correctly, it should be repaired or recalibrated, or another sampling device should be used. It may be advisable to maintain more than one turbidity meter, in case of malfunction.
- **Turbidity sample exceeds the meter's range.** If the sample's turbidity level is outside the meter's range, refer to the manufacturer's manual. You may need to dilute the sample to obtain a result. *EPA Method 180.1: Determination of Turbidity by Nephelometry* describes how to dilute a sample to obtain a turbidity result.

2.F Document Dewatering Inspection and Monitoring Procedures in Your SPCP

You must correctly document dewatering inspection and turbidity monitoring procedures in your SPCP. If your site is required to conduct turbidity monitoring, the SPCP must describe the procedures for collecting and evaluating samples, reporting results to DEEP, keeping records of monitoring information, and taking corrective action when necessary. The SPCP must identify the specific type of turbidity meter used for monitoring and all manuals or manufacturer instructions on how to operate and calibrate the meter.

2.G Collect and Organize Inspection and Monitoring Supplies

You should make a list and collect all the supplies you will need for the required turbidity monitoring. These supplies should be stored and organized in a common location to ensure they are accessible when you need to sample. These include, but are not limited to:

- **Sampling equipment.** Ensure the turbidity meters are in working condition, calibration solutions are available and not expired, and that any other needed sampling materials (e.g., cuvettes, wipes, extra batteries) are stocked.
- **Personal protective equipment.** Hard hats, vests, safety glasses, etc., should be readily accessible on-site for inspection and monitoring activities.
- **Documentation**. A copy of the Turbidity Monitoring Report form.

Section 3: Conduct Inspections and Monitoring and Evaluate Results

This section addresses how to conduct dewatering inspections, perform turbidity monitoring of dewatering discharges, and evaluate inspection observations and sampling results. It covers inspection procedures, how to collect and analyze samples, and how to record the results. Recall that operators must inspect and conduct monitoring of dewatering discharges within 30 minutes of initiation of these discharges and at least weekly while occurring.

3.A Inspect Dewatering Operations

You must inspect dewatering operations within 30 minutes of commencing discharge and then at least weekly when dewatering water is being discharged to ensure that dewatering treatment controls are working correctly; to evaluate whether there are observable indicators of pollutant discharges; and, if so, to know whether you need to take action to correct any problems at the site or with the dewatering controls that may have contributed to the pollutant discharges. There are two general conditions to watch for during dewatering inspections, either of which would mean you must take corrective actions:

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

Figure 4. Dewatering discharge operations.

You should give special attention to the dewatering operation during initial setup, when the dewatering operation changes, and after major storm events. If you observe any of the pollutant indicators identified above during your inspection, you must conduct corrective action under CGP Section 5.2.4.2.c.i. Section 4 of this guidance presents corrective actions to consider when you observe pollutant indicators in dewatering discharges.

Photo documentation of dewatering, and all other, inspections is highly recommended. You should take photos of:

1. dewatering water prior to treatment by a dewatering control(s) and the final discharge after treatment;
2. the dewatering control(s); and

3. the point of discharge to any receiving waters flowing through or immediately adjacent to the site and/or to constructed or natural site drainage features, storm drain inlets, and other conveyances to receiving waters.

Field personnel should also estimate the rate of discharge, in gallons per day (gpd), if the dewatering treatment control does not have a flow gauge. If dewatering flows are pumped, Permittees may rely on the manufacturer's design pump rating for the pump model in use. For example, a pump rated at 164 gallons per minutes (gpm) by the manufacturer can be assumed to be discharging at 164 gpm in most cases. To convert to gpd, multiply the rate in gpm by 1,440 (the number of minutes in one day), resulting in a daily discharge rate of 236,160 gallons. If the dewatering discharge is being pumped over long distances or a substantial distance uphill, which will result in a pump rate lower than the manufacturer's specification, the Permittee may improve the accuracy of the estimate by estimating the time required to fill a container of a known volume. For example, if it takes 60 seconds to fill an empty 55-gallon barrel, the estimated discharge rate is 55 gpm, or 79,200 gpd.

Refer to Section 5.A of this guide for dewatering inspection recordkeeping requirements.

3.B Collect and Analyze Turbidity Monitoring Samples

The protocol below outlines the appropriate steps for collecting a grab sample for turbidity monitoring. A grab sample is a single sample obtained by filling up a container directly from the source. Always wear clean, disposable, powder-free gloves during sampling activities. To avoid sample contamination, dispose of the gloves after using them once. You should refer to the turbidity meter manufacturer's instructions for details on calibrating and using your meter.

Figure 5. Turbidity sample collected in a cuvette.

- Conduct a daily calibration verification consistent with the manufacturer's instructions.
- Fill the cuvette (or other sample container) directly from the sampling location. Make sure not to set its opening on the ground, or against the mouth of the discharge point, to avoid contaminating the sample.
- If you have used a different container to collect the sample, transfer the sample to the cuvette.
    - Gently agitate or mix the sample before transferring to keep the solids in suspension during the transfer.
    - Pour the sample onto the interior wall of the cuvette to avoid bubble formation.
- Wipe the outside of the cuvette with a clean cloth or tissue and gently agitate the sample to disperse the solids before inserting the turbidity meter.
- Run the meter and record the result in NTUs on the sampling form, as described in Section 3.C below.
- Empty the cuvette and other sampling container (if you used one). Rinse and dry them before collecting and analyzing another sample.

If you are taking multiple dewatering samples for analysis with a benchtop turbidity meter in the trailer, be sure to properly label the containers so the sample results can be matched to each sampling location.

3.C Record Information for Each Monitoring Event

You must keep records of the following information for each turbidity sample.

- The date, time, and exact location of the turbidity sample.
- The person(s) who performed the sampling and analyses.
- The analytical techniques or methods used. For this, it is sufficient to record the make and model of the turbidity meter.
- The date and time each sample was analyzed. Note that sampling and analysis times may be the same if using a field meter, or they may be different if samples are collected and taken to a different location for analysis, such as a benchtop turbidity meter in the trailer, office, or elsewhere nearby. 40 CFR Part 136 specifies that turbidity samples must be analyzed within 48 hours of collection, which is the maximum holding time.
- The turbidity result for each sample. The CGP requires turbidity monitoring results to be rounded to the nearest whole number.

Record the required information on your Turbidity Monitoring Report table.

Section 4: Take Corrective Action

In accordance with Sections 2.2.1.1 and 5.2.4.2.c.i of the CGP, you must take corrective action if any of the following triggering conditions occurs:

- During dewatering discharge, you observe a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or foam at the point of discharge to receiving waters or to constructed or natural site drainage features or storm drain inlets.
- During dewatering discharge, you observe a visible sheen on the water surface or visible oily deposits on the receiving water's bottom or shoreline.
- DEEP or local authorities inform you that your dewatering discharge or the receiving water for the discharge has visual pollution indicators described above.

4.A Corrective Action Deadlines

If your inspection observations results trigger a corrective action, you must document the triggering condition in your inspection report and, for non-engineered corrective actions, implement the corrective action within 24 hours of identifying it, as well as the date and time it was identified. For engineered corrective actions, implement the corrective action within 7 calendar days of identifying it. All corrective actions shall be incorporated into the SPCP on-site. (See CGP Section 5.2.4.2.c.i) You must also do all of the following:

- Immediately take all reasonable steps to minimize or prevent the discharge of pollutants until you can implement a solution, including shutting off the dewatering discharge as soon as possible (depending on the severity of the condition and taking safety considerations into account).
- Determine whether the dewatering controls are operating effectively and whether they are causing the conditions.
- Make any necessary adjustments, repairs, or replacements to the dewatering controls to lower the turbidity levels or remove the visible plume or sheen.

4.B Corrective Action Options

A successful corrective action will minimize or eliminate indicators of pollutants (e.g., sediment plume or sheen) observed in dewatering discharge and reduce turbidity in the discharge.

Pollutant Indicators Observed During a Dewatering Inspection

Table 1 presents possible corrective actions to address inspection observations of pollutant indicators. Some of them—such as evaluating the effectiveness of the dewatering treatment control—may require the assistance of a Qualified Professional, the vendor who provided the control, or another subject matter expert.

Table 1. Corrective Actions to Consider When Pollutant Indicators Are Observed in Dewatering Discharge

Observed Pollutant Indicator	Potential Corrective Actions
Dewatering water is causing erosion between the treatment control and the receiving water.	• Stop dewatering if the downgradient area shows signs of instability or erosion. • Investigate whether channels used to convey dewatering discharges are stabilized and protected with vegetation, riprap, erosion control blankets, or a similar erosion control measure. If not, implement appropriate erosion control measures. • Move dewatering controls installed on steep slopes to a flatter area. • Install outlet protection or a velocity dissipation device. • Move the discharge location, if possible, to a stable, erosion-resistant surface (e.g., well-vegetated grassy areas, clean filter stone, geotextile underlayment). • Check for leaking pumps, hoses, and pipe connections and fix if identified. Leaks under pressure can be significant causes of erosion.
Pollutant indicators such as a sediment plume, suspended solids, unusual color, odor, decreased clarity, or foam are observed in or on the dewatering water discharge.	• If ongoing construction activity is identified as the pollutant source, install or maintain stormwater control measures between active construction areas and the dewatering operation to minimize the transport of sediment and other pollutants into the dewatering operation. • If the dewatering control is not operating properly, service the dewatering treatment control to remove accumulated sediment and other pollutants. Sediment is typically removed before storage volume is reduced by one-half. • If you observe a distinct color or odor, look for raw materials, chemicals, or other materials used or stored near the area being dewatered. Move these materials away from the dewatering operation if you determine them to be the source of color, odor, foam, or sheen. • If you observe foam, check for and clean up any leaks or spills near the dewatering operation. • Stop dewatering and evaluate whether the installed dewatering treatment control is the correct treatment control for the site. Visual turbidity may indicate that installed dewatering controls are ineffective for the soil composition or site conditions, are undersized, or were incorrectly installed. For example, sediment filtration practices

Observed Pollutant Indicator	Potential Corrective Actions
	(e.g., dewatering bag filters, silt fence enclosures, sediment traps, basins) are effective at removing larger sediment particles, but fine particles need advanced treatment technology. An undersized or incorrectly installed treatment control may result in the discharge of untreated or partially treated dewatering water. An undersized treatment control will also need more frequent maintenance than a correctly sized one. If it is determined that groundwater is the source of the pollutant, then a different permit may be required. Contact XXXX for information.
The water surface has a visible sheen or the receiving water's bottom or shoreline has visible oily deposits.	• Check upstream and downstream of the dewatering discharge location to see if a sheen or oily deposits may be coming from a different source such as a spill or other discharge from your site or a neighboring property. • Verify that your dewatering treatment control is equipped with an oil-water separator to remove oil, grease, and other hydrocarbons. If not, add an oil-water separator to the dewatering treatment control. • If an oil-water separator is already in place, perform any necessary maintenance to ensure that it is operating properly.

You may resume discharging from your dewatering activities after completing the relevant corrective actions, including making any adjustments, repairs, or replacements to the dewatering controls. You should consider taking photographs of corrective actions, when possible, to supplement the descriptions in your corrective action log.

Section 5: Reporting and Recordkeeping

It is important that accurate recordkeeping of dewatering inspections and turbidity monitoring become a standard operating procedure at your construction site. You need to be able to show that records of dewatering inspections and turbidity monitoring, if required, meet all permit requirements. It is always preferable to document more than less when dealing with permit compliance. Create easy-to-use logbooks for keeping track of dewatering events. Ensure that your site map in the SPCP is current and easy to understand. Develop simple instruction sheets for recording inspection information and turbidity monitoring activities. Your SPCP should include these instruction sheets, and you should keep copies of the sheets with the sampling equipment.

Record information from all inspections on standardized forms, including specific information on dewatering activities. Also, be sure to document any corrective actions and regularly update the SPCP to include new or modified measures and remember to attach the Turbidity Monitoring Report form to the corresponding inspection form. This will provide consistency in information reported.

If possible, regularly transfer inspection and turbidity monitoring information into databases or spreadsheets. This will provide back-up records for hard-copy logs or forms as well as provide an easy way to analyze your sampling data.

5.A Recordkeeping for Dewatering Inspections

The following information must be recorded for each dewatering inspection and identified on the Routine Inspection report form, if inspected during a Routine Inspection:

- The inspection date.
- Names and titles of personnel conducting the inspection.
- The approximate time that the dewatering discharge began and ended on the day of inspection. If dewatering is continuous, include this information in the record.
- Estimates of the rate (in gpd) of discharge on the day of inspection. You will need to read the flow meter, or estimate flow rate, and convert gpm into gpd using the number of minutes the site was discharging dewatering water. A continuous discharge, for example, would multiply gpm by 1,440 minutes to obtain gpd. See also Section 3.A.
- Evidence of pollutants at the point of discharge, including:
    - a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam and/or
    - a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.
- Photographs of:
    - the dewatering water before treatment by a dewatering control(s) and the final discharge after treatment;
    - the dewatering treatment control(s); and
    - the point of discharge to any receiving waters flowing through or immediately adjacent to the site and/or to constructed or natural site drainage features, storm drain inlets, and other conveyances to receiving waters.

While turbidity monitoring results must be submitted monthly to DEEP, you do not need to submit your inspection reports to DEEP. However, you must maintain them at the permitted site, or at an easily accessible location, so that they are immediately available at the time of an on-site inspection or upon request by DEEP. You must keep these records for at least five years after permit coverage is terminated.

5.B Reporting Turbidity Monitoring Results

You must submit reports of your weekly turbidity results to DEEP at DEEP.StormwaterConstruction@ct.gov starting on the first of the month following the beginning of a dewatering discharge. If there are monitoring weeks in which there was no dewatering discharge, you must indicate this in the monthly Turbidity Monitoring Report.

When you report your turbidity monitoring results for the month, you will be entering data for each monitoring week and must enter the dates on which the samples were taken to ensure accuracy.

5.C Corrective Actions

You must record each corrective action related to your dewatering operations in your inspection reports and in your SPCP. This is required in Section 5.2.4.2 of the CGP. You should record corrective actions as follows:

- Within 24 hours of identifying the corrective action trigger, document the specific trigger and the date and time it was identified.
- Within 24 hours of completing the corrective action (in accordance with the deadlines in CGP Section 5.2.4.2.c.i), document the actions taken to address the condition, including whether any SPCP modifications are required.
- Each entry for a corrective action must be included in an inspection report and must be signed by the Qualified Inspector and, if necessary, the designing Qualified Professional.

You may prepare, sign, and maintain an electronic record of corrective actions, instead of a paper log, if the records are:

- in a format that can be read in a similar manner as a paper record;
- legally dependable with no less evidentiary value than their paper equivalent; and
- immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

The inspection reports and log of corrective actions, or an up-to-date copy, must be kept at the site or at an easily accessible location, so that it is immediately available at the time of an on-site inspection or upon request by DEEP.

Section 6: Train Personnel

Each Permittee must assemble a "stormwater team" that will carry out activities, including those related to dewatering discharges, necessary to comply with the CGP. Each stormwater team member must understand the CGP requirements, including:

- The permit requirements and deadlines associated with installation, maintenance, and removal of stormwater controls and stabilization.
- The locations of all stormwater and dewatering controls on the site required by this permit and how they are to be maintained.
- The proper procedures to follow with respect to the permit's pollution prevention requirements.
- When and how to conduct stormwater and dewatering inspections, record applicable findings, and take corrective action.

Any stormwater team member who performs inspections, including dewatering inspections, must be a Qualified Inspection as defined in CGP Section 10.

In addition, you should train staff responsible for turbidity monitoring in the procedures for sample collection, reporting, and recordkeeping. Trainings should be held regularly to update staff on any changes to the permit or SPCP related to procedures for turbidity monitoring from dewatering discharges.
Employees who will be responsible for turbidity monitoring should be trained on the following:

- Where to monitor.
- How to collect and analyze samples for turbidity.
- How to interpret turbidity results.
- How to keep accurate and complete records.
- How to report turbidity monitoring results to DEEP.

Section 7: References

General Permit for the Discharge of Stormwater from Construction Activities. https://portal.ct.gov/deep/water-regulating-and-discharges/stormwater/construction-stormwater-gp

Connecticut Guidelines for Soil Erosion and Sediment Control. https://portal.ct.gov/deep/water/soil-erosion-and-sediment-control-guidelines/guidelines-for-soil-erosion-and-sediment-control

Connecticut Stormwater Quality Manual. https://portal.ct.gov/deep/water-regulating-and-discharges/stormwater/stormwater-manual

EPA Turbidity Monitoring and Inspection Guidance. https://www.epa.gov/npdes/turbidity-benchmark-monitoring-dewatering-under-construction-general-permit

Turbidity Monitoring Data Table

Project Name:
Permit Number:
Dewatering Discharge Point ID (if multiple discharge points)**:**
Sample Location:
Turbidity Meter (make and model)**:**
Test Method (e.g., EPA 180.1)**:**

SAMPLE COLLECTION			TURBIDITY ANALYSIS				
Name of Individual Collecting Sample	**Date**	**Time**	**Name of Individual Analyzing Sample**	**Date**	**Time**	**Meter Calibrated?**	**Turbidity Result (NTUs)**
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	
						☐ Yes	

Notes: