

U.S. EPA Construction Inspection Training Course

Module 5: 2022 Construction General Permit (CGP)

Site Inspections

Site 2

This document is a text-based version of Module 5: Site 2 of the EPA Construction Inspection Training Course. It is intended to be used in conjunction with the other modules in the EPA Construction Inspection Training Course.



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1. Screen 1

1.1. Visual Element



1.2. Narration

Welcome to Module 5: Conducting Construction General Permit Site Inspections, Site 2. When you are ready, select the Start Training button to begin your second virtual site inspection.

2. Screen 2

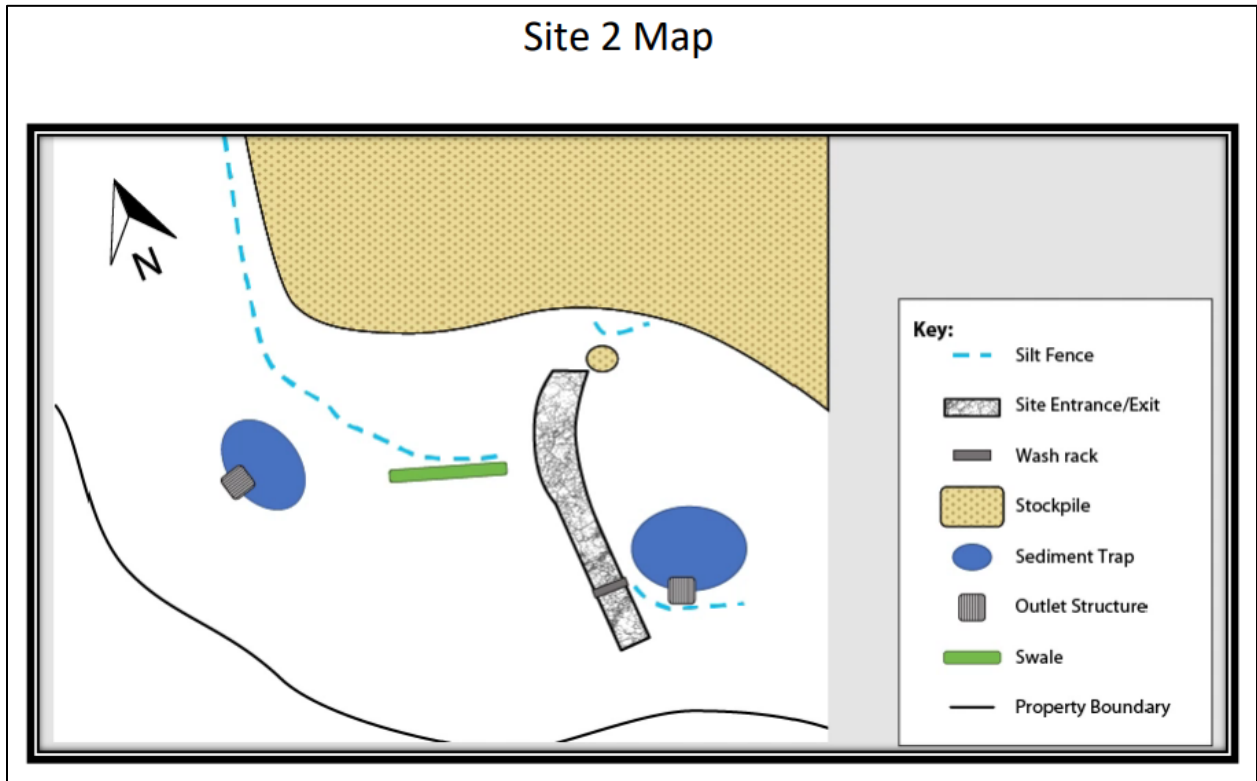
2.1. Visual Element



2.2. Narration

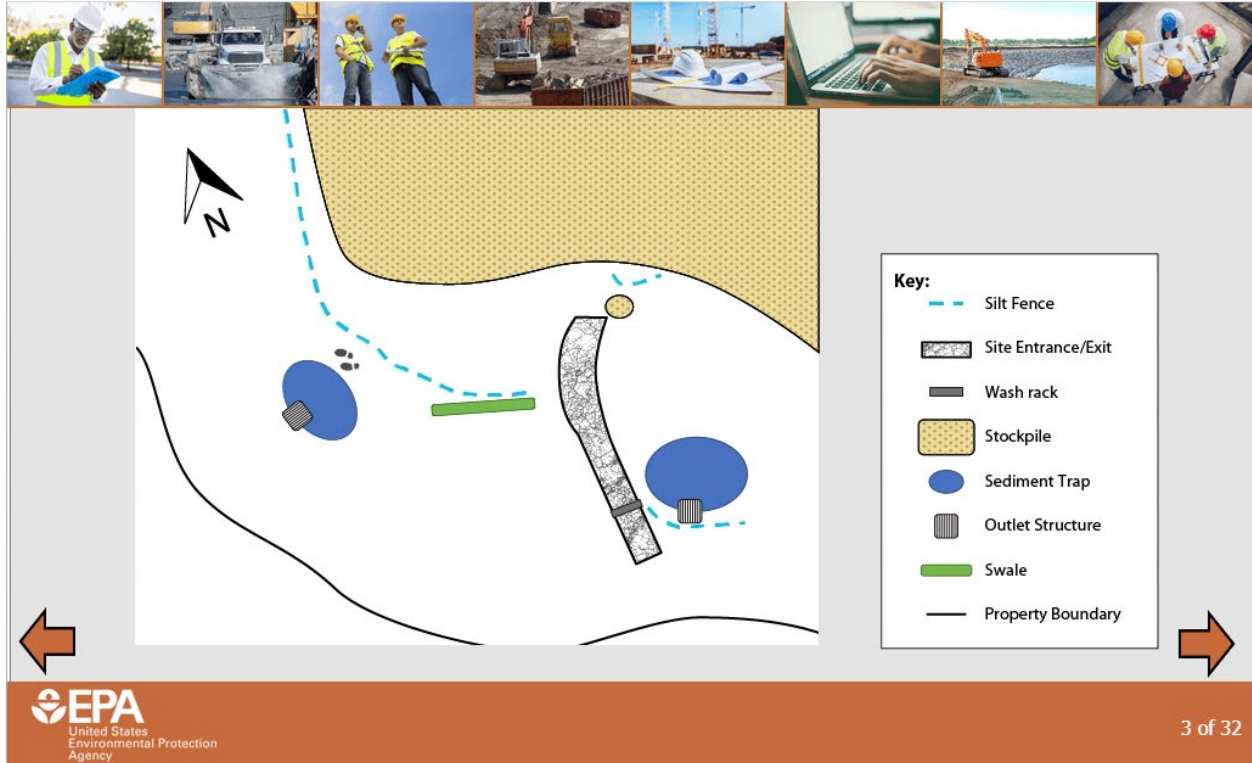
Before you start the inspection, select the link on the screen to open a copy of the Site 2 map. You may find it useful to keep a copy of the site map open in another window throughout the virtual inspection. To help you become familiar with the site, the next screen will present a brief video showing the path you will travel through Site 2. Then, you will proceed to the first 360-degree area. Let's hop in the truck and go!

2.3. Links
Site 2 Map



3. Screen 3

3.1. Visual Element



3.2. Narration

This is a map for the second virtual site. This map will be a handy tool that we will refer to throughout the inspection. Watch the animation of the footprints to see the path you will follow. You will walk north along the construction entrance and stop to inspect the first sediment trap on your right. Then, you will walk further into the site to assess the condition of the stockpile. Finally, you will walk along the swale and toward the second sediment trap on the western side of the site, which also functions as the site's main discharge point. Select the next arrow to begin your inspection at the site's construction entrance.

4. Site 2, Area 1

4.1. Starting View



Figure 4-1. Starting view for Site 2, Area 1.

4.2. Opening Narration

Welcome to the second virtual construction site inspection. Compared to the first site, this one is in a noticeably different phase of construction: much of the site is inactive and temporarily stabilized. However, you are still required to conduct inspections. For the sake of time, you won't walk the entire permitted area as you would normally do during a real inspection. Instead, this virtual inspection will focus on different types of construction stormwater controls that you didn't encounter at the previous site. Keep in mind that issues or potential issues observed during the inspection must be noted as triggering either routine maintenance or a corrective action in your inspection report. These will be pointed out throughout the inspection.

At this site, we'll be walking with a colleague. You will see him throughout our inspection. Before you head into the site, take a moment to review the icons in this area.

4.3. Site 2, Area 1 Interactive Icons



Figure 4-2. Composite view of interactive icons for Site 2, Area 1.

Map Pin Icon

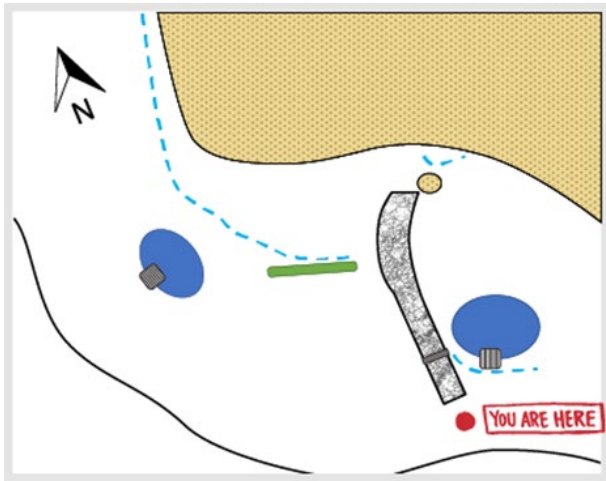


Figure 4-3. Site 2 Map. "You Are Here" in Area 1.

Information Icon (Left)

This is construction material. You must look for potential stormwater pollution issues such as uncovered materials, spills, or leaks. The material here appears fully covered in plastic and stored on pallets.

Image Icon



Figure 4-4. View of wash rack in the stabilized construction entrance.

Here is a wash rack at the site's stabilized construction entrance. You must check that the controls are properly installed according to the construction plans and functioning as intended. The stone aggregate used at this construction entrance appears to be smaller than the intended design. In addition, the wash rack is overgrown with vegetation and does not extend as long as designed. The wash rack likely cannot be used as intended to capture sediment washed off from vehicle tires.

Document these issues in your inspection report. That being said, because the site is inactive and mostly stabilized, this entrance is probably not frequently used and there isn't much sediment track-out to be contained. In this kind of situation, it's important to talk to the operator as soon as possible about what controls are necessary based on current activities and then decide whether maintenance or a repair is needed. Remember, if the operator decides to change or remove a control, they must update the project SWPPP and site map accordingly.

Information Icon (Right)

This is a sediment trap that you will inspect when you take the next step into the site.

Arrow Icon

[Selecting this icon moves the user to the next area.]

5. Site 2, Area 2

5.1. Starting View



Figure 5-1. Starting view for Site 2, Area 2.

5.2. Opening Narration

We just walked onto the western embankment of the sediment trap. At first glance, the embankment of this sediment trap appears stable. Select the icons to learn more about how to inspect a sediment trap.

5.3. Site 2, Area 2 Interactive Icons

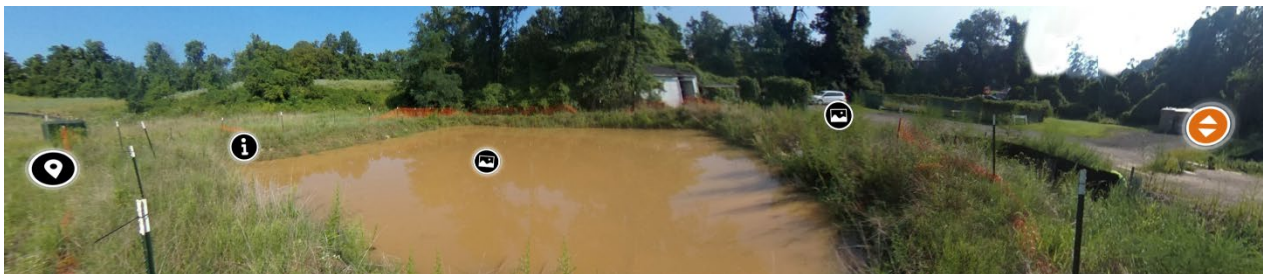


Figure 5-2. Composite view of interactive icons for Site 2, Area 2.

Map Pin Icon

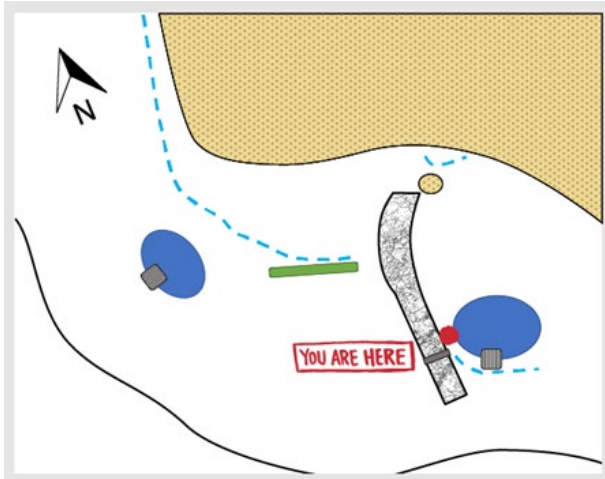


Figure 5-3. Site 2 Map. "You Area Here" in Area 2.

Information Icon

You must check the trap's embankments and outlet for erosion. You also need to check that the trap is installed according to State, Tribal, Territorial, and local design specifications. There may be specifications that require the trap to hold a certain volume or use specific outlet structures.

Image Icon (Left)



Figure 5-4. View of sediment trap full of turbid water.

When inspecting a sediment trap, you need to check that the operator is removing accumulated sediment from the basin to maintain at least half of the trap's design capacity. This sediment trap is full of turbid water; however, a large storm event passed through this area last night, so this is not surprising and shows that the trap is working as designed by capturing and slowly filtering the sediment laden stormwater.

Image Icon (Right)



Figure 5-5. View of stone outlet on southern embankment of sediment trap.

It's difficult to see, but the outlet of the sediment trap is on this southern embankment. The outlet is an overflow weir made of riprap that leads to a grassy swale downgradient of the trap. This outlet is obscured by heavy vegetation that may obstruct the flow of stormwater. Removing the overgrown vegetation is considered upkeep that ensures the stormwater control remains in effective operating condition, therefore this work should be handled as routine maintenance as opposed to a corrective action. Document this issue in your inspection report as needing routine maintenance, and present this finding to the operator after the inspection so the operator can begin maintenance immediately. You should walk around to the downgradient side of the outlet to see if you can get a better view of the structure.

Arrow Icon

[Selecting this icon moves the user to the next area.]

6. Site 2, Area 3

6.1. Starting View



Figure 6-1. Starting view for Site 2, Area 3.

6.2. Opening Narration

We have walked around to the southern side of the sediment trap. Select the icon to check out the outlet.

6.3. Site 2, Area 3 Interactive Icons



Figure 6-2. View of interactive icons for Site 2, Area 3.

Map Pin Icon

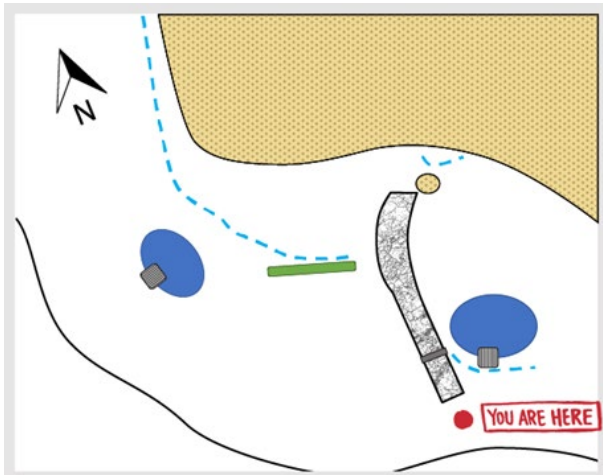


Figure 6-3. Site 2 Map. "You Are Here" in Area 3.

Image Icon



Figure 6-4. View from the downgradient side of the sediment trap's outlet.

We are standing next to the southern embankment of the sediment trap, on the downstream side of the outlet. This provides a slightly better view of the overflow weir, but the structure is still mostly obscured by vegetation. Because of the vegetation, it's difficult to check for evidence of sediment leaving the sediment trap. Let's walk to the downgradient end of the swale and see if there is any sediment leaving the trap.

Arrow Icon

[Selecting this icon moves the user to the next area.]

7. Site 2, Area 4

7.1. Starting View



Figure 7-1. Starting view for Site 2, Area 4.

7.2. Opening Narration

We have walked back to the western side of the sediment trap. Select the icons to inspect the swale that is downgradient of the sediment trap's outlet. After, select the arrow icon to move further into the site.

7.3. Site 2, Area 4 Interactive Icons



Figure 7-2. Composite view of interactive icons for Site 2, Area 4.

Map Pin Icon

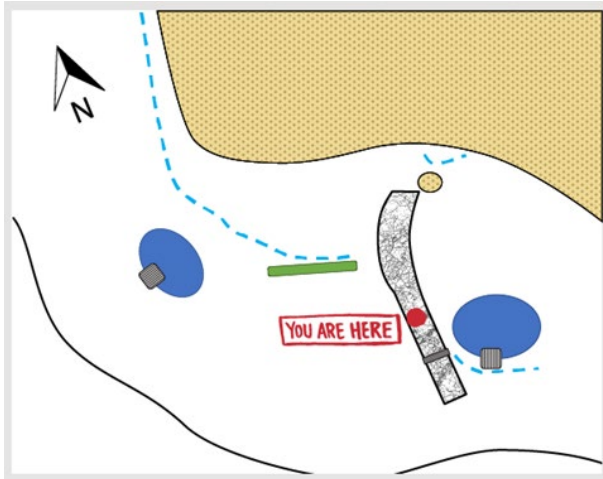


Figure 7-3. Site 2 Map. "You Are Here" in Area 4.

Image Icon (Left)



Figure 7-4. View of the sediment trap's outlet and downstream swale.

This image was taken at the downgradient end of the swale, looking upgradient toward the sediment trap's outlet. Because there is so much vegetation growing here, the image is annotated to make clear the locations of the weir outlet and the swale. The segment of super silt fence at the end of the swale filters any sediment leaving the trap.

Image Icon (Right)



Figure 7-5. View of super silt fence downgradient of the sediment trap outlet.

This is a close-up view of the segment of super silt fence that is downgradient of the sediment trap outlet. This is where any sediment leaving the trap accumulates. The amount of sediment currently accumulated against the fence is minimal and not a concern. However, you can see that a corner of the silt fence fabric has detached and folded over. This can be resolved with routine maintenance because it is a minor repair that ensures the stormwater control remains in effective operating condition. Document this issue in your inspection report and communicate this problem to the operator immediately after the inspection."

Arrow Icon

[Selecting this icon moves the user to the next area.]

8. Site 2, Area 5

8.1. Starting View



Figure 8-1. Starting view for Site 2, Area 5.

8.2. Opening Narration

We are now standing at the foot of the stockpile. Most of the stockpile is stabilized with temporary vegetation, but it appears the operator recently initiated stabilization of this bare area by applying hydroseed. This is a good reminder that temporary vegetation is just that: temporary. If left unattended and uninspected, vegetated areas can fail to establish or go bare and require re-stabilization. As you investigate this area, keep an eye out for signs of erosion. Select the icons in this area, and then select the arrow icon to start walking up the stockpile.

8.3. Site 2, Area 5 Interactive Icons



Figure 8-2. Composite view of interactive icons for Site 2, Area 5.

Map Pin Icon

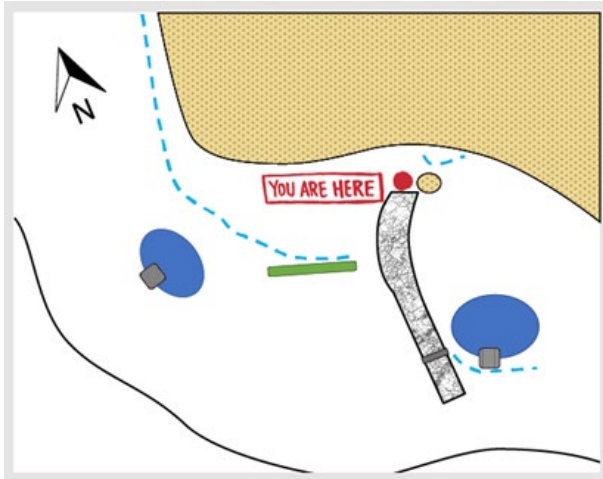


Figure 8-3. Site 2 Map. "You Are Here" in Area 5.

Information Icon (Left)

The hydroseed appears to be applied inconsistently; there is bare ground visible among streaks of green hydroseed. Note this issue as triggering routine maintenance, which is appropriate here because the repair is not significant, nor does it require replacement of the entire stabilization measure.

Information Icon (Middle)

What is going on with this silt fence? You will inspect it when we walk to the next area, further up the side of the stockpile.

Image Icon (Left)



Figure 8-4. Small soil and gravel stockpile near the base of the large soil stockpile.

Here is a small stockpile of soil and gravel that is separate from the big stockpile. It appears to have been here for a little while because there are signs of light rill erosion and vegetation growing on one side. Stockpiles that will be unused for 14 or more days must be covered or otherwise temporarily stabilized. During your site inspections, if you don't know whether a stockpile is actively being used, you need to talk to the operator, check past inspection reports,

and check the SWPPP. Add this finding in your inspection report as a condition triggering corrective action because a required control has not been implemented. Present this finding to the operator and remind them that they must initiate corrective action immediately after the inspection.

Image Icon (Right)



Figure 8-5. View of the back of the small soil and gravel stockpile.

You need to walk all the way around a stockpile to assess the condition of all sides. This side of the little stockpile, facing away from the construction entrance, is in the same condition as the other side. There are no other findings about this stockpile to add to your inspection report.

Information Icon (Right)

Your colleague is wearing steel toed boots but no hard hat or construction vest at this site because there is no active construction or heavy machinery in the area. When selecting PPE for a site visit, make sure to follow your employer's protocols, the site's protocols, and your best judgement.

Arrow Icon

[Selecting this icon moves the user to the next area.]

9. Site 2, Area 6

9.1. Starting View



Figure 9-1. Starting view for Site 2, Area 6.

9.2. Opening Narration

We have started to walk up the side of the large stockpile. This stockpile is mostly stabilized with temporary vegetation, but there are signs of inadequate stabilization. Can you spot the issues? Select the icons in this area to learn more, and then select the arrow icon to head to the top of the stockpile.

9.3. Site 2, Area 6 Interactive Icons



Figure 9-2. View of interactive icons for Site 2, Area 6.

Map Pin Icon

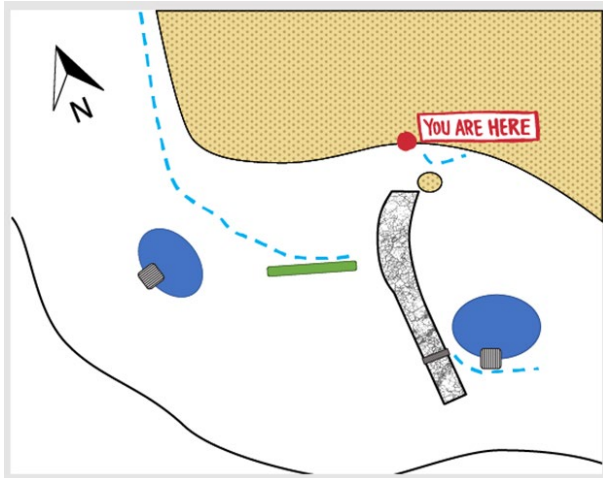


Figure 9-3. Site 2 Map. "You Are Here" in Area 6.

Image Icon (Left)



Figure 9-4. Rill erosion on the large soil stockpile.

You can see rill erosion down the entire length of the slope, leading toward the silt fence. The red box in the image highlights the location of the rill erosion. If not addressed, this area will continue to erode, and the rill may widen into a gully. Note this as a finding requiring routine maintenance in your inspection report. The operator must begin the routine maintenance immediately after the inspection. If the operator decides to add supplemental controls such as matting or a check dam to help with the rill erosion, then a corrective action would be triggered because a new control would be installed, and the operator would need to document the repair in a corrective action log. Because the erosion could lead to an accumulation of sediment on-site, you must reinspect this area during each site inspection. You must check the condition of the stabilization and make sure the area doesn't continue to erode.

Image Icon (Middle)



Figure 9-5. View of water ponded against the silt fence at the base of the large stockpile.

There is water ponded against the silt fence, likely from the large storm that passed through the area yesterday. The silt fence is doing its job by holding the sediment back and allowing water to filter through. However, it seems like there may be quite a bit of sediment built up against the silt fence. You need to check the control after the water has drained to assess if the sediment is

accumulated to more than one half of the above-ground height of the filter fabric. If the sediment has accumulated to that level, the operator will be required to perform routine maintenance to remove built-up sediment.

Image Icon (Right)



Figure 9-6. View of eroded stockpile slope upgradient of silt fence.

The area upgradient of this section of silt fence is unstabilized and eroded. The unstabilized area is likely contributing to the turbidity of the water ponded against the silt fence, which is circled in red. Note the unstabilized area as a finding that triggers routine maintenance in your inspection report and present the problem to the operator. The operator could fill in and restabilize the eroded area with hydroseed or use an alternative stabilization technique to prevent further erosion. You can write all of the erosion findings related to the stockpile as one finding in the inspection report.

Arrow Icon

[Selecting this icon moves the user to the next area.]

10. Site 2, Area 7

10.1. Starting View



Figure 10-1. Starting view for Site 2, Area 7.

10.2. Opening Narration

We have just climbed to the top of the stockpile. Whew, what a workout! The extra steps are necessary, though, because you must inspect all stabilized areas as long as site conditions are safe. Select the icons to assess the condition of the stabilization. After, select the arrow icon to walk back down the stockpile.

10.3. Site 2, Area 7 Interactive Icons

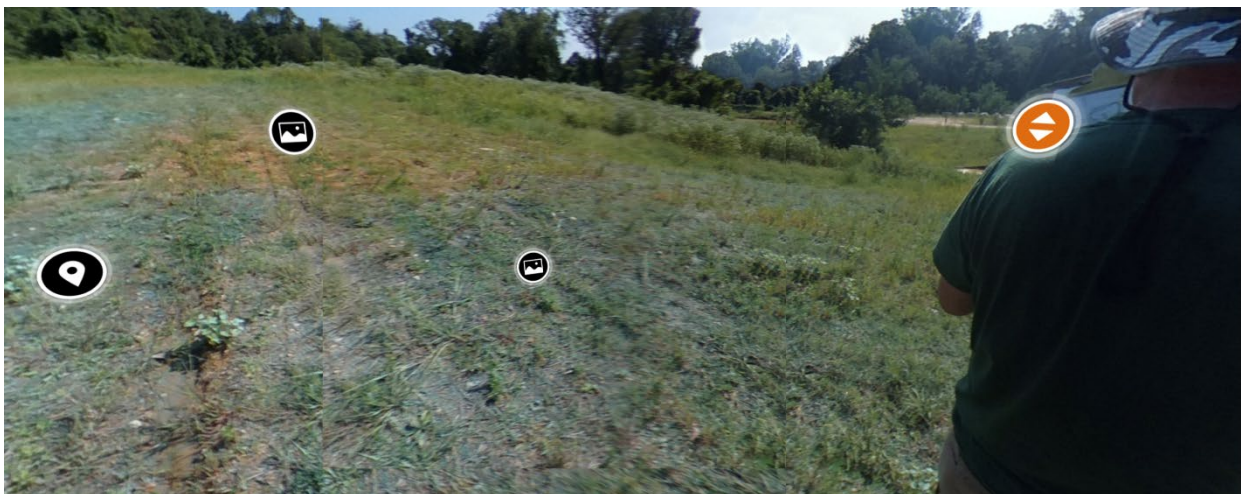


Figure 10-2. Composite view of interactive icons for Site 2, Area 7.

Map Pin Icon

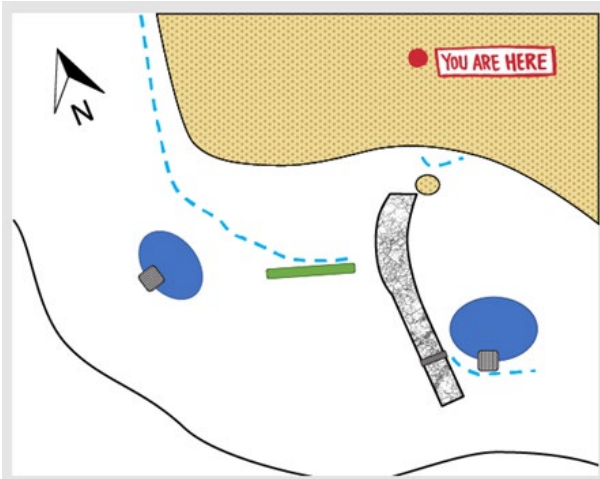


Figure 10-3. Site 2 Map. "You Are Here" in Area 7.

Image Icon (Left)



Figure 10-4. Close-up view of bare area on the large stockpile.

There are parts of the stockpile that are bare. It appears that the contractor missed some spots during hydroseeding. Mark this as a finding that requires routine maintenance in your inspection report and present the finding to the operator after the inspection. The operator must immediately begin maintenance as required by the CGP. Again, routine maintenance is appropriate here because the work does not amount to a significant repair of a control, nor does it require the replacement of the entire stabilization measure. This finding can be added to the previous finding about applying hydroseed more consistently across the large stockpile.

Image Icon (Right)



Figure 10-5. Close-up view of hydroseeding on the large stockpile.

This area is very well covered with hydroseed and there are no findings to report.

Arrow Icon

[Selecting this icon moves the user to the next area.]

11. Site 2, Area 8

11.1. Starting View



Figure 11-1. Starting view for Site 2, Area 8.

11.2. Opening Narration

We carefully walked down and are now back at the foot of the stockpile. Let's begin to head over to the western part of the site to inspect the final sediment trap and the site's discharge point. Select the arrow icon to move forward.

11.3. Site 2, Area 8 Interactive Icons



Figure 11-2. View of interactive icons for Site 2, Area 8.

Map Pin Icon

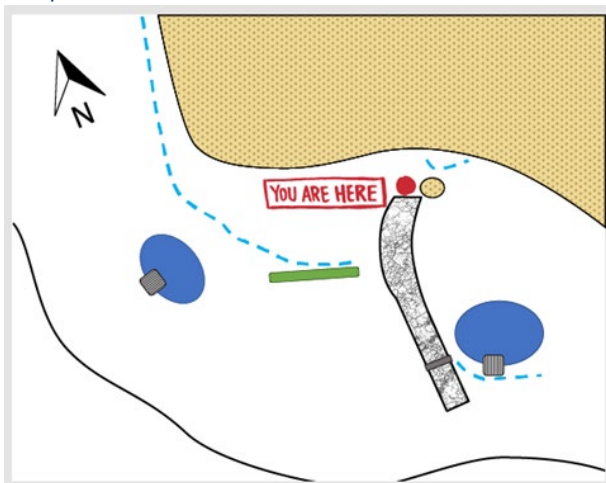


Figure 11-3. Site 2 Map. "You Are Here" in Area 8.

Arrow Icon

[Selecting this icon moves the user to the next area.]

12. Site 2, Area 9

12.1. Starting View



Figure 12-1. Starting view for Site 2, Area 9.

12.2. Opening Narration

To get to the western side of the site, let's walk along this swale and section of silt fence. After you explore the icons in the area, select the arrow icon to move forward.

12.3. Site 2, Area 9 Interactive Icons



Figure 12-2. Composite view of interactive icons for Site 2, Area 9.

Map Pin Icon

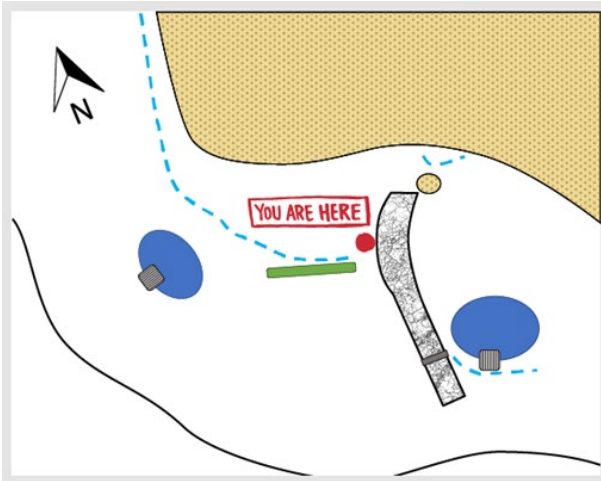


Figure 12-3. Site 2 Map. "You Are Here" in Area 9.

Image Icon (Left)



Figure 12-4. Check dam at the upgradient end of the grass swale.

There is a gravel check dam here, at the upgradient end of a grass swale. This check dam control was not included on the site map, but the operator may have decided that it was necessary to install to prevent sediment from moving into the swale. Add this finding to your inspection report and tell the operator to add a description of this control to their SWPPP and include its location on the site map. Similar to how you inspected check dams at the first site, you must ensure that the check dam spans the entire width of the area it is controlling, is well maintained, and is not filled with sediment. This one is in good condition.

Image Icon (Middle)



Figure 12-5. Silt fence along the upgradient side of the grass swale.

There is a length of silt fence installed along the upgradient side of a swale. The approximate path of the swale is shown in blue. The silt fence controls stormwater flowing downhill from the stockpile before it enters the swale. You will continue to inspect this silt fence by walking along its length as you move toward the second sediment trap.

Information Icon

This swale conveys water toward the second sediment trap before the site's discharge point.

Image Icon (Right)



Figure 12-6. View of bare area adjacent to the construction entrance.

Here is another area that is unstabilized because the hydroseed has been applied inconsistently. This finding can be added to the other routine maintenance finding about bare spots on the stockpile. The operator must restabilize the bare area by reapplying hydroseed or another stabilization measure. Similar to the other findings about bare spots, routine maintenance is appropriate here because the work does not amount to a significant repair of a control, nor does it require the replacement of the entire stabilization measure. Remember to communicate this finding to the operator so that work can begin immediately to address this condition. If the

operator decides to add supplemental controls to the bare area such as matting, then a corrective action would be triggered because a new control would be installed.

Arrow Icon

[Selecting this icon moves the user to the next area.]

13. Site 2, Area 10

13.1. Starting View



Figure 13-1. Starting view for Site 2, Area 10.

13.2. Opening Narration

We have just walked down the length of the swale and are approaching the western perimeter of the site. Notice how the ground slopes in this area. Stormwater will flow downhill, away from the stockpile, and toward the second sediment trap. The silt fence in this area is serving as the downgradient sediment barrier for the stockpile. Take a moment to explore the icons in this area, and then select the arrow icon to move to the sediment trap.

13.3. Site 2, Area 10 Interactive Icons



Figure 13-2. Composite view of interactive icons for Site 2, Area 10.

Map Pin Icon

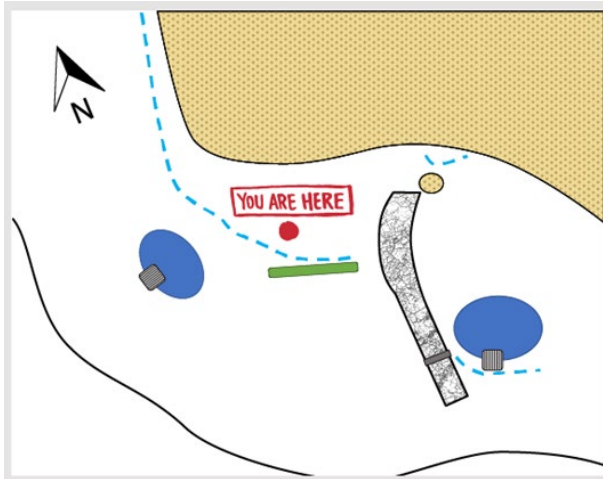


Figure 13-3. Site 2 Map. "You Are Here" in Area 10.

Image Icon (Left)



Figure 13-4. View of collapsed silt fence along the grass swale.

Uh-oh. This section of the silt fence has collapsed. It appears to have collapsed due to sediment accumulation and possibly the force of stormwater flow from the stockpile. This is the only downgradient sediment barrier for the stockpile. At a minimum, the operator must remove the accumulated sediment and repair the damaged silt fence at this location. In addition, the operator should consider installing additional controls to manage the expected volume and velocity of stormwater flow. Present this finding to the operator as a corrective action because this is a significant repair and new or replacement controls may be needed. In addition, remind the operator that repairs must be initiated immediately.

Information Icon

This is where the final sediment trap is. You'll check this out after you finish inspecting the silt fence.

Image Icon (Right)



Figure 13-5. View of detached filter fabric on the silt fence along the grass swale.

The filter fabric on this section of silt fence has detached. Note this as a finding that triggers routine maintenance in your inspection report and tell the operator to repair the silt fence. Routine maintenance is sufficient because the work to repair the silt fence is a minor repair to ensure a stormwater control remains in effective operating condition. In addition, remind the operator that repairs must be initiated immediately.

Arrow Icon

[Selecting this icon moves the user to the next area.]

14. Site 2, Area 11

14.1. Starting View



Figure 14-1. Starting view for Site 2, Area 11.

14.2. Opening Narration

We have arrived at the second sediment trap at the site's western perimeter. This will be the last stop in the inspection of Site 2. This sediment trap is the final control that stormwater flows through before it is discharged from the site. Remember, you must inspect all discharge points from a site during your inspection; this site only has this one discharge point. Select each of the icons to inspect the sediment trap and discharge point, and then select the exit icon to end your second site visit.

14.3. Site 2, Area 11 Interactive Icons



Figure 14-2. Composite view of interactive icons for Site 2, Area 11.

Map Pin Icon

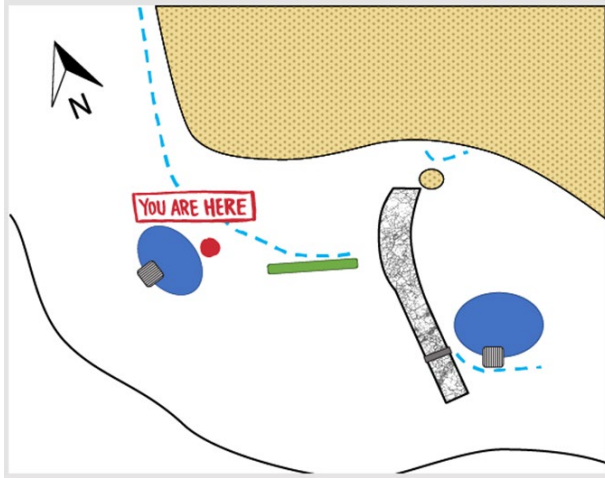


Figure 14-3. Site 2 Map. "You Are Here" in Area 11.

Information Icon

If they are available, it may be helpful to conduct your inspection with the operator or designated entity who is responsible for implementing the construction stormwater controls. This way, you can immediately point out observations and discuss necessary routine maintenance or corrective actions.

Image Icon (Left)



Figure 14-4. View of the second sediment trap at the western perimeter of the site.

The overgrown vegetation makes it difficult to assess the condition of the sediment trap's embankments and outlet. Remember to inspect the entire perimeter of the sediment trap as long as site conditions are safe. This sediment trap is supposed to have a riprap outlet similar to the first sediment trap you inspected. You can see some silt fence from this view, but not the riprap outlet, at least not from this vantage point. You may need to walk around to the downstream side of the sediment trap to assess the condition of the outlet. Although the embankment of the sediment trap appears to be well stabilized, note in your inspection report that the operator needs to trim the vegetation to ensure the sediment trap is in effective operating condition. Document this finding as requiring routine maintenance and discuss it with the operator.

Image Icon (Right)



Figure 14-5. View of the downstream side of the sediment trap's outlet, and the concrete channel downgradient of the outlet.


When you inspect a site's discharge point, you must check for signs of erosion and sediment deposition. This image shows the downstream side of the sediment trap's riprap outlet, where stormwater flows into a concrete channel. Accumulated sediment is visible in the concrete channel and needs to be removed so it does not discharge into any downstream waterbodies or storm systems. Document this finding in your inspection report as triggering routine maintenance. This, along with the other issues you've noted during your inspection, shows that despite the site being inactive and mostly stabilized, there is still sediment moving off-site. You shouldn't see this much sediment at this discharge point on your future inspections if the operator completes the various routine maintenance and corrective action items identified across the site during this inspection. If the necessary routine maintenance and corrective actions are complete elsewhere on the site but you continue to observe sediment at this location during future inspections, the operator may need to consider improving the riprap outlet for this sediment trap. Improvements to the outlet could include adding smaller stone or filter fabric to the riprap to help filter out sediment. Improvements could also include ensuring the riprap is not clogged with sediment, which could cause sediment-laden water to overtop the outlet instead of filtering through it.

Exit Icon

[Selecting this icon moves the user to the next area.]

15. Screen 15

15.1. Visual Element



Reminders: After a Site Inspection...

- Communicate your findings and suggested fixes to the operator immediately.
- The operator must initiate routine maintenance and corrective actions immediately.
- The operator must complete the work by the deadlines specified in the CGP.
 - Routine maintenance: complete by the close of the next business day.
 - Corrective actions that do not require a new or replacement control or significant repair: complete by the close of the next business day.
 - Corrective actions that do require a new or replacement control or a significant repair: complete within seven calendar days.





Photo by Christina Hawkins on Unsplash

[EPA's Inspection Report Template](#)



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15.2. Narration

After a site inspection, in addition to completing an inspection report, you need to communicate your findings and suggested fixes to the operator so they can initiate routine maintenance and corrective actions immediately and complete the work by the deadlines specified in the CGP. Routine maintenance must be completed by the operator by the close of the next business day. Corrective actions that do not require a new or replacement control or significant repair must also be completed by the operator by the close of the next business day. Corrective actions that require a new or replacement control or a significant repair must be completed by the operator within seven calendar days.

To conclude the inspection, let's practice filling out an inspection report with your findings. Before continuing to the next screen, select the button on the screen to navigate to EPA's webpage for a copy of EPA's Inspection Report Template.


15.3. Links

EPA's Inspection Report Template

<https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates#inspection>


16. Screen 16



16.1. Visual Element




Completing an Inspection Report

Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2)				
Type and Location of E&S Control	Conditions Requiring Routine Maintenance?	If "Yes" How Many Times (Including This Occurrence) Has This Condition Been Identified?	Conditions Requiring Corrective Action?	Description of Conditions Observed
1. Wash rack at the site entrance.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. The wash rack is overgrown with vegetation. However, because the construction site is inactive, the wash rack is not being used as part of the stabilized site entrance. The operator must update the SWPPP and site map within seven days.
2. Outlet of sediment trap by the site entrance.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Heavy vegetation is growing at the stormwater trap. Trim the vegetation by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection.
3. Silt fence at the sediment trap by the site entrance.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Filter fabric has detached from the silt fence. Reattach the filter fabric by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection.
4. Unstabilized small stockpile.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4. The stockpile is showing signs of erosion and appears to have been unused for more than 14 days. Cover or temporarily stabilize the stockpile within seven calendar days.




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16.2. Narration

On this screen, the findings for Site 2 are presented in a modified version of EPA's site inspection report template. Let's practice filling it out together. First, the wash rack in the construction entrance is overgrown with vegetation. However, because the site is inactive, the wash rack is not currently being used and this finding does not need to trigger routine maintenance or corrective action. The operator must return the control to functionality if the site resumes regular construction activity. Even though it does not trigger routine maintenance or corrective action, you should still include the observation in your inspection report to document your assessment of all controls on-site. Remember to tell the operator that they must update the SWPPP and site map to reflect the status of the wash rack within seven days.

Next, routine maintenance is needed to remove the excessive vegetative growth at the outlet of the sediment trap. Routine maintenance is also needed to reattach the filter fabric for the super silt fence at end of the sediment trap's swale.

Fourth, the small stockpile is showing signs of erosion and appears to have been unused for more than 14 days. Let's assume that after checking previous inspection reports, you learn that this finding has been made during two previous inspections. Because of this, this finding must trigger a corrective action.

Keep in mind, you can document in the inspection report if the reoccurrence of the same problem should still be addressed as a routine maintenance fix instead of corrective action. You can also document in your inspection report if and why specific routine maintenance activities cannot be completed by the close of the next business day.

16.3. Links

Quick Tips Icon

The CGP does not require you to state the timeframe for maintenance or corrective actions in your findings; however, it's a good practice to remind the operator of their responsibilities.

17. Screen 17

17.1. Visual Element



Completing an Inspection Report

Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2)				
Type and Location of E&S Control	Conditions Requiring Routine Maintenance?	If "Yes" How Many Times (Including This Occurrence) Has This Condition Been Identified?	Conditions Requiring Corrective Action?	Description of Conditions Observed
5. Stockpile stabilization	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. There is rill erosion down the side of the stockpile. Fill in and restabilize the eroded area with hydroseed or another stabilization technique by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection.
6. Hydroseed in various areas on the stockpile	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Hydroseed was applied inconsistently across the stockpile. Stabilize the bare areas (e.g., reapply hydroseed consistently) by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection.
7. Silt fence by the large stockpile	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. There is water ponded against the silt fence. Inspect this control again after the water has drained to assess if the sediment has accumulated to more than one half of the above-ground height of the filter fabric.



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17.2. Narration

Moving on, the next three findings are related to the large stockpile. The rill erosion along the side of the large stockpile needs to be filled in and restabilized. There are also several spots along the slope and at the top of the stockpile that are bare and need to be stabilized. Both of these findings trigger routine maintenance. To effectively communicate with the operator about these two findings, you should walk this area of the site again with the operator and point out the specific eroded and bare areas that need to be fixed.

In addition, you should include a finding in your inspection report about the ponded turbid water against the silt fence downgradient of the large stockpile. Although this finding does not trigger routine maintenance or corrective action, it is a good practice to include it in your inspection report to document that you have assessed all stormwater controls on-site. You should plan to inspect this control again, after the water has drained, to assess the condition of the silt fence.

18. Screen 18

18.1. Visual Element



Completing an Inspection Report

Condition and Effectiveness of Erosion and Sediment (E&S) Controls (CGP Part 2.2)				
Type and Location of E&S Control	Conditions Requiring Routine Maintenance?	If "Yes" How Many Times (Including This Occurrence) Has This Condition Been Identified?	Conditions Requiring Corrective Action?	Description of Conditions Observed
8. Check dam by the grass swale	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	-	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8. The check dam is not included on the site map. The operator must update the SWPPP, including the site map, within seven days.
9. Silt fence by sediment trap #2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. The section of silt fence down gradient of the stockpile has collapsed. Evaluate the cause of the problem, remove the accumulated sediment, and reinstall the silt fence within seven calendar days. Consider installing additional stormwater controls to prevent a recurring finding.
10. Silt fence by sediment trap #2	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10. Near the second sediment trap, the silt fence's filter fabric has detached. Repair the silt fence by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection.
11. Discharge point from sediment trap #2	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11. Sediment was observed at the discharge point. Remove the sediment from the discharge point by the close of the next business day. If infeasible, document why, and complete by no later than 7 days following this inspection. Continue to monitor after routine maintenance is completed to confirm that sediment is not discharged off-site.



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18.2. Narration

Here are the rest of the findings for Site 2. First, you should document that the check dam by the grass swale is not in the SWPPP and site map. Again, it is good to include notes about all of the construction stormwater controls that you assessed, even if the finding does not trigger routine maintenance or corrective action. To address this finding, the operator must update the SWPPP and site map within seven calendar days.

Next, the section of silt fence that has collapsed by the second sediment trap triggers a corrective action because it requires a significant repair. The operator should remove the accumulated sediment and repair the damaged section of silt fence. In addition, the operator should consider if additional construction stormwater controls are needed in this area to prevent the silt fence from collapsing again. Routine maintenance is also needed to reattach the filter fabric on a section of the silt fence by the second sediment trap.

Finally, although you did not observe a discharge occurring during your inspection, the sediment accumulation that you observed at the site's discharge point indicates that a previous discharge may have occurred. You need to ask the operator to remove the accumulated sediment from the discharge point by the close of the next business day.

19. Screen 19

19.1. Visual Element



Updating a Corrective Action Log: Introduction

- The operator is responsible for completing entries in a corrective action log.
- Each entry consists of:
 - Documenting the corrective action condition (Section B of EPA's template)
 - Describing the actions taken to address the condition (Section C of EPA's template)
- The operator must complete a separate entry for each corrective action that is identified.



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19.2. Narration


Now that you've documented which findings trigger corrective action, let's look at how a corrective action log is filled out.

The operator is ultimately responsible for entering a complete entry into the corrective action log. Each entry into the corrective action log consists of documenting the corrective action condition, which is included as Section B of EPA's template, and describing the action taken to address the condition and modify the SWPPP if necessary, which is included as Section C of the template.

Keep in mind, the operator must complete a separate corrective action log entry for each individual corrective action that is identified.

20. Screen 20

20.1. Visual Element



EPA's Corrective Action Log Template

Updating a Corrective Action Log

Section B: Details of the Problem (CGP Part 5.4.1.a)

Complete this section within 24 hours of discovering the condition that triggered corrective action.

Date problem was first identified: 7/7/2022	Time problem was first identified: 2:30pm
---	---


What site condition triggered this corrective action? (Check the box that applies. [See a description of each triggering condition \(1 through 6\).](#))

1 2 3 4 5a 5b 6

Specific location where problem identified: Silt fence by sediment trap #2

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

The section of silt fence down gradient of the stockpile has collapsed. The accumulated sediment needs to be removed, and the collapsed silt fence needs to be reinstalled or replaced. Possible causes for the collapse include sediment accumulation and possibly the force of stormwater flow from the stockpile.



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20.2. Narration

This screen presents a modified portion of EPA's corrective action log template. Select the button on the screen to navigate to EPA's webpage for a copy of EPA's template. The CGP requires that Section B of the corrective action log, which is shown on this screen, must be completed within 24 hours of discovering the condition that triggered the corrective action.

Let's use the finding of the collapsed silt fence by sediment trap number 2 as an example. In this case, a corrective action was triggered because a new or replacement control is needed. On EPA's template, this situation corresponds to condition number 1. Select the link on the screen to see a description of each triggering condition, 1 through 6. In addition to documenting the specific location where the problem was identified, the operator must also provide a description of the condition that triggered the corrective action, and the cause, if it can be identified.

20.3. Links

EPA's Corrective Action Log Template

<https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates#inspection>

See a description of each triggering condition (1 through 6):


1. A stormwater control needs a significant repair or a new or replacement control is needed, or, in accordance with Part 2.1.4c, you find it necessary to repeatedly (i.e., three or more times) conduct the same routine maintenance fix to the same control at the same location (unless you document in your inspection report under Part 4.7.1c that

the specific reoccurrence of this same problem should still be addressed as a routine maintenance fix under Part 2.1.4).

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 (see Part 1.3).
5. During discharge from site dewatering activities:
 - a. The weekly average of your turbidity monitoring results exceeds the 50 NTU benchmark (or alternate benchmark if approved by EPA pursuant to Part 3.3.2b); 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 requires corrective action as a result of permit violations found during an inspection carried out under Part 4.8.


21. Screen 21

21.1. Visual Element



Updating a Corrective Action Log

Section C: Corrective Action Completion (CGP Part 5.4.1.b)	
Complete this section within 24 hours after completing the corrective action.	
For site condition # 1, 2, 3, 4, or 6 (those not related to a dewatering discharge) confirm that you met the following deadlines (CGP Part 5.2.1):	
<input checked="" type="checkbox"/>	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. AND
<input type="checkbox"/>	Completed corrective action by the close of the next business day, unless a new or replacement control, or significant repair, was required. OR
<input checked="" type="checkbox"/>	Completed corrective action within seven (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
<input type="checkbox"/>	It was infeasible to complete the installation or repair within 7 calendar days from the time of discovery. Provide the following additional information: Explain why 7 calendar days was infeasible to complete the installation or repair:
Provide your schedule for installing the stormwater control and making it operational as soon as feasible after the 7 calendar days.	


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21.2. Narration

Next, the template requires that the operator record within 24 hours of completing this corrective action that they have met the CGP deadlines for starting and finishing work to address the conditions triggering the corrective action. Section C documents the actions the operator took to address the issue. In the example of the collapsed silt fence by sediment trap number 2, first, let's assume that the operator immediately took all reasonable steps to address the condition, such as removing the accumulated sediment and assessing the condition of the silt fence. Then, the operator determined that the necessary corrective actions include replacing the collapsed section of silt fence and installing an additional check dam upgradient of the silt fence to control the speed of stormwater flow from the stockpile and prevent the silt fence from collapsing again. Because these corrective actions require installing a new or replacement control, the operator must complete the work within seven calendar days unless it is infeasible to do so. For the sake of this example, let's assume the operator completed the work within the seven-day timeframe. In this case, the operator would check the third box to confirm they met the required deadline. If it had been infeasible for the operator to replace the silt fence within seven calendar days, they would need to check the fourth box, and provide an explanation for why it was infeasible and their schedule for replacing the silt fence.

22. Screen 22

22.1. Visual Element






Updating a Corrective Action Log

Section C: Corrective Action Completion (CGP Part 5.4.1.b)

Complete this section within 24 hours after completing the corrective action.

Describe any modification(s) made as part of corrective action: (insert additional rows below if applicable)	Date of Completion:	SWPPP update necessary?	If yes, date SWPPP was updated:
1. Replaced the collapsed section of silt fence.	6/15/2022	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. Installed a new check dam upgradient of the silt fence.	6/15/2022	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6/16/2022

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Environmental Protection
Agency

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22.2. Narration

As part of Section C of the corrective action log template, the operator also needs to describe any modifications they made to address the problem and document the dates when they completed the work. Additionally, the operator needs to indicate whether the modifications require a SWPPP update. Replacing the collapsed silt fence does not require a SWPPP update because the silt fence in this area of the site was already planned for in the SWPPP and documented on the site map. However, the operator would need to update the SWPPP to describe the new check dam and add its location to the site map. The operator must document the date of any SWPPP updates.

EPA's corrective action log template contains other sections, such as a section to cover corrective actions triggered by dewatering activities and a signature and certification section. We will not go over those sections in this module, so be sure to review EPA's corrective action log template and Part 5.1 of the CGP for more information. We will also not go over Section D of the template, which includes the signature and certification by the operator. Just be aware that an entry into the corrective action log is only considered complete after it has been signed and certified.

Now that you understand how an operator is required to update a corrective action log, you will know what to look for if you are reviewing one as part of a site inspection.

23. Screen 23

23.1. Visual Element



Module 5 Summary

In this module, you learned how to do the following:

- Prepare for a site inspection.
- Apply what you've learned to evaluate construction stormwater controls and identify deficiencies.
- Document a site inspection
- Communicate findings to the site operator and perform post-inspection follow-up to verify completion of corrective actions.



Time to take the knowledge check! Then, exit this module to advance to the final exam.



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23.2. Narration

Congratulations, you've finished Module 5! Now that you've learned about your responsibilities for conducting a CGP site inspection, advance to the next screen to take the knowledge check.

The knowledge check serves only as a review of your understanding of the material. You have unlimited chances to complete the knowledge check successfully. Once you've completed the knowledge check, exit the module and advance to the final exam, which will test your understanding of content presented in all five modules.

24. Screen 24

24.1. Visual Element



Time for a Knowledge Check!



United States Environmental Protection Agency

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24.2. Narration

This knowledge check and others we provide will help you when taking the final exam. If you're ready, go to the next screen to begin!

25. Screen 25

25.1. Knowledge Check Question



After completing each site inspection, you must complete your inspection report:

- A) Within fourteen calendar days
- B) Within 24 hours
- C) Before the next storm event of 0.25 inches or more
- D) Not necessary, just verbally inform the operator of your findings

Submit



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25.2. Knowledge Check Explanation

Correct, the answer is B. This requirement is specified by CGP Part 4.7.1.

26. Screen 26

26.1. Knowledge Check Question



True or false. You must inspect all storm drain inlets that are within the permitted boundary per the site map, including those outside of the active construction area.

- A) True
- B) False

Submit



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26.2. Knowledge Check Explanation

Correct, the answer is True. You must inspect all stormwater controls within the permitted area.

27. Screen 27

27.1. Knowledge Check Question



Check all that apply. Which of the following documents should you review before an inspection?

- A) The Notice of Intent of the neighboring construction site(s)
- B) Past inspection reports
- C) The SWPPP
- D) The corrective action log

Submit



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27.2. Knowledge Check Explanation

Correct, the answers are B, C, and D. You are only required to inspect the permitted area, so the NOI for the neighboring construction site is not relevant.

28. Screen 28

28.1. Knowledge Check Question



When must the operator complete routine maintenance identified as a result of a site inspection?

- A) Within the week
- B) By the end of the next routine inspection
- C) By the close of the next business day
- D) Before the end of the next storm

Submit



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28.2. Knowledge Check Explanation

Correct, the answer is C. The operator must immediately initiate the needed maintenance work and complete the work by the close of the next business day. This requirement is specified in CGP Part 2.1.4 b. Note that if it is infeasible for the operator to complete the routine maintenance work by the close of the next business day, the permit allows the deadline to be extended to 7 calendar days from the time of discovery of the condition as long as the reason for why the work could not be completed by the close of the next business day is documented.

29. Screen 29

29.1. Knowledge Check Question



During a site inspection you discover that site conditions have changed from what is represented in the SWPPP site map. What is the operator's deadline for updating the site map?

- A) Within seven calendar days of the inspection
- B) Right before the next inspection performed by the permitting authority
- C) The original site map does not need to be modified
- D) Within the permit term

Submit



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29.2. Knowledge Check Explanation

Correct, the answer is A. This requirement is specified by CGP Part 7.4.1.

30. Screen 30

30.1. Knowledge Check Question



Check all that apply. What are some best practices for communicating your findings with the operator after a site inspection or dewatering inspection?

- A) Share a copy of your inspection report with the operator.
- B) Leave your inspection report in the SWPPP and hope the operator sees it.
- C) Wait until the next inspection to communicate your findings to the operator.
- D) Communicate your finding to the operator immediately.
- E) Remind the operator of the timelines for completing routine maintenance and corrective actions.
- F) Discuss your findings with the operator to see if they have additional information that may change your findings.

Submit



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30.2. Knowledge Check Explanation

Correct, the answers are A, D, E, and F. The answers shown here are best practices, and not specifically required by the CGP. Although you are not required to verbally discuss your findings with the operator or remind them of the timelines for completing work, it is important to make the operator aware of your findings immediately after your inspection so they can complete the work by the CGP-required deadlines.

31. Screen 31

31.1. Knowledge Check Question



What is the CGP deadline for an operator to complete a corrective action that does not require a new or replacement control, or significant repair?

- A) Immediately.
- B) By the close of the same business day.
- C) By the close of the next business day.
- D) Within seven calendar days.

Submit



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31.2. Knowledge Check Explanation

Correct, the answer is C. The deadlines for completing corrective actions are specified in Part 5.2 of the CGP.

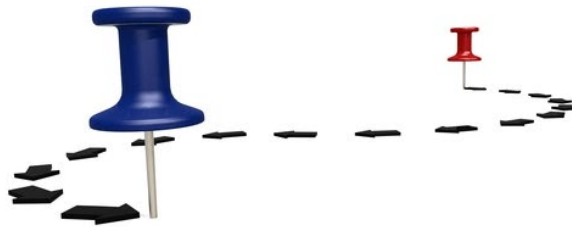
32. Screen 32

32.1. Visual Element



Congratulations on completing Module 5!

Please close this module and navigate to the Final Exam to complete the CGP Inspector Training course.



32.2. Narration

[no narration]