

Inspection Photos

May 30, 2023

Operator: TEP Rocky Mountain- #96850

Location ID: 335045

Location Name: South Leverich /13-09 Pad

Inspection Document #: 702801561

Garfield County, CO

NESE Section 13 T7S R94W

Anna O'Malley
Reclamation Specialist, COGCC



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5/30/23
+39.434971,-107.829809
14° N

Photo 1. Photo taken from the southwest shows an overview of the working pad area.



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Photo 2. Photo taken from the southeast shows an overview of the working pad area.



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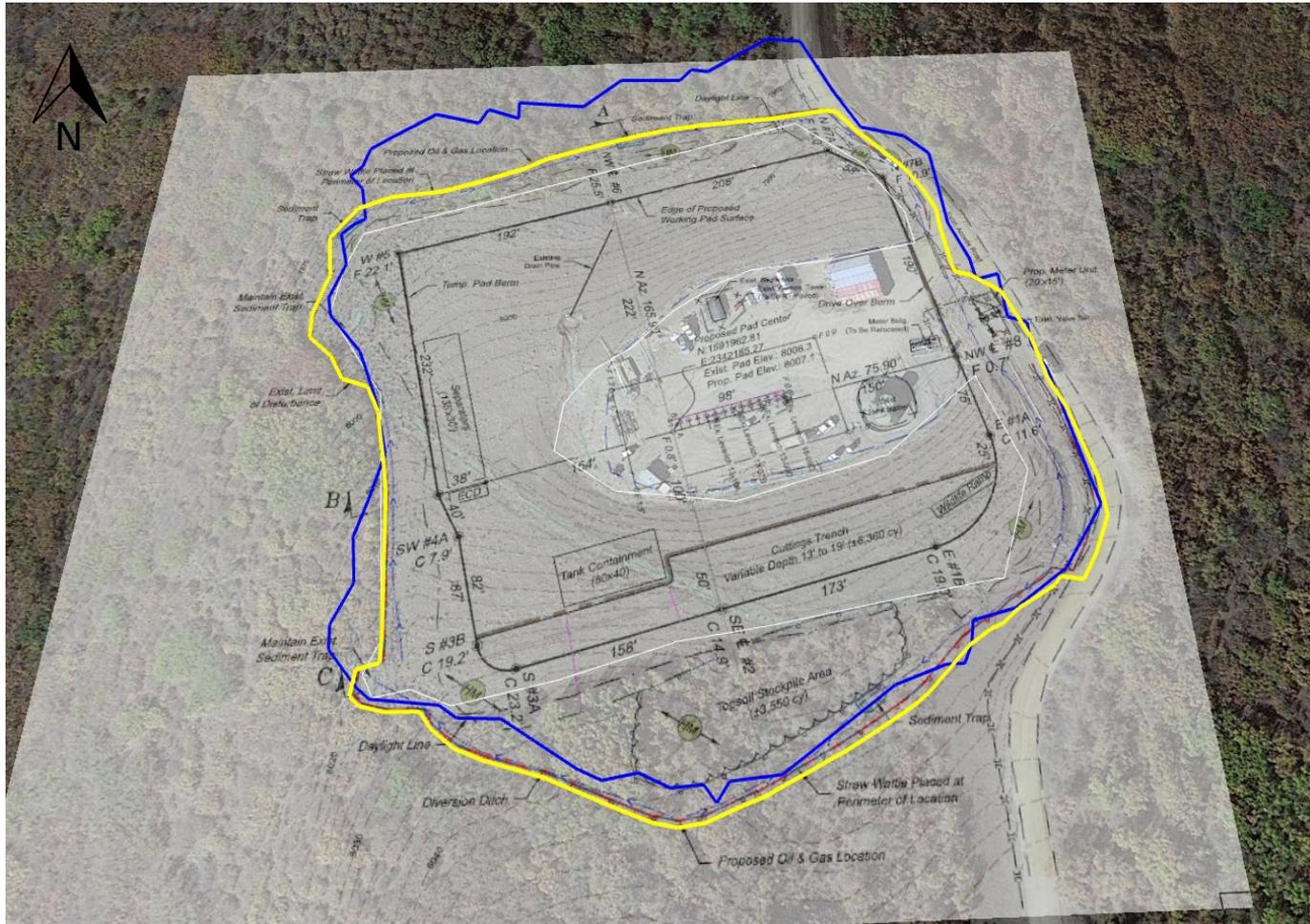


Photo 3. Photo shows the construction layout drawing overlaid on Google Earth imagery with the 2A location (yellow). The actual location disturbance extends approximately 70 feet beyond the permitted location to the north (blue).



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Photo 4. Photo taken from the northwestern edge of the location during the previous inspection shows lack of erosion protections for unconsolidated topsoil.



Photo 5. Photo taken from the northern edge of the location during the 5/30/23 inspection shows lack of erosion protections for unconsolidated topsoil.

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Photo 6. Photo taken from the north shows a close-up of the soil in Photos 4 and 5. The pile appears to contain topsoil. BMPs to protect topsoil from erosion degradation are missing/insufficient.



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Photo 7. Photo taken from the northwest. Topsoil does not appear to have been salvaged at stormwater BMPs (note presence of intact vegetation).



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Photo 8. Photos taken from the north during the previous inspection (left) and current inspection (right). Topsoil does not appear to have been salvaged at stormwater BMPs (note presence of intact vegetation). Note also stormwater discharges from a sediment trap into stockpiles which appear to contain topsoil (arrow).

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Photo 9. Photo shows where stormwater from a sediment trap (indicated by arrow and shown on previous slide) discharges into a ditch between two stockpiles which appear to contain topsoil. No BMPs present to protect unconsolidated topsoil from concentrated stormwater flows.



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Photo 10. Photo taken from the south during the previous (left) and current (right) inspection. Topsoil does not appear to have been salvaged. Stormwater BMPs appear to be constructed from topsoil. Additionally, the ditch is constructed from loose, unconsolidated material susceptible to erosion from concentrated flows.



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Photo 11. Photo shows a close-up of the ditch pictured on the previous slide. The ditch has not been stabilized and constructed per good engineering practices; soils are loose and unconsolidated and susceptible to erosion from concentrated flows.



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Photo 12. Photos show examples of two (2) slope drains which have not been installed per good engineering practices; the pipe is not properly anchored, the pipe is discharging mid-slope/does not extend beyond the toe of the slope and lacks proper outlet protections.



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Photo 13. Photo shows perimeter stormwater BMPs at the west of the location previously in disrepair (left) have been properly installed and are in proper functioning condition during the current inspection (right).

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Photo 14. Photo shows the western fill slope during the previous inspection. BMPs to segregate and protect topsoil from mixing with the lighter colored subsoil berm are missing/insufficient. Additionally, topsoil is bare, loose and unconsolidated and susceptible to erosion.



Photo 15. Photo shows the western fill slope during the current inspection. Although Hydromulch has been applied to stabilize topsoil (approximately below the line) BMPs to segregate and protect topsoil from mixing/contamination with the subsoil berm (approximately above the line) are missing/insufficient.



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Photo 16. Photo taken from the northwest shows the location perimeter berm is not constructed in accordance with good engineering practice. The berm is loose, unconsolidated, and portions are vertical.



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Photo 17. Photo shows a slump that has occurred in the northwest fill slope of the location.



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Photo 18. Photos show the top (left) and base (right) of a slump that has occurred in the northwest fill slope of the location.

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Photo 19. Photo taken from the southwest shows unstabilized and eroding slopes during the previous inspection (left) have been stabilized with Hydromulch (right).



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Photo 20. Photo shows fill slopes have been stabilized with Hydromulch. However, slumping of slopes is occurring indicating a lack of stabilization and degrading the Hydromulch coverage.



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Photo 21. Photo shows degradation of the Hydromulch on a portion of the topsoil stockpile at the south of the location. The Hydromulch is evenly and thoroughly applied to the rest of the topsoil pile.



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Photo 22. Photos show the topsoil stockpile at the south of the location. Wattles are trenched and backfilled (left). However one wattle is in disrepair and no longer functioning (center, right).



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Photo 23. Photo taken during the previous inspection shows a sediment trap to the northwest was designed to discharge stormwater directly into an unvegetated, unstabilized topsoil berm.



Photo 24. Photo taken during the current inspection shows the sediment trap is now discharging stormwater offsite into a vegetated, stabilized area.

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Photo 25. Photo taken from the southeast during the previous inspection shows degradation where stormwater was bypassing an armored inlet to a sediment trap.



Photo 26. Photo shows the sediment trap pictured in Photo 25 during the current inspection. No controls present to manage run-on which is bypassing an armored inlet to the sediment trap.



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Photo 27. Photos taken from the southeast shows where run-on is breaking through a berm into the perimeter run-on diversion ditch causing degradation to the ditch and berm BMPs. Note also the ditch appears to be constructed from topsoil and is built from loose, unconsolidated martial which is susceptible to erosion from concentrated flows in the ditch.



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Photo 28. Photo taken from the east shows a drain discharging concentrated stormwater flows without outlet protections during the previous inspection (left). During the current inspection, flows are diverted under the road and discharged to the east of the road at an armored outlet into a sediment trap (right). Note also sediment trap walls appear to be constructed from topsoil and are loose and unconsolidated and susceptible to erosion. This pipe diversion, and sediment trap on the east of the road appears to be outside the permitted disturbance area for the location.



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Photo 29. Photo shows the outlet for the sediment trap pictured on the previous slide is discharging stormwater into loose, unconsolidated soil subject to erosion. Photo also shows what appears to be an unpermitted area of disturbance to the east of the access road.



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Photo 30. Photo shows the sediment trap area pictured on the previous two slides. Disturbance to the east of the road in the area of the sediment trap appears to be outside the permitted disturbance (yellow line). The blue line indicates a mapped produced water pipeline disturbance. Note also the layout drawing shows the stormwater ditch continuing to the north around the perimeter of the location, not to the east of the road.



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Photo 31. Photos taken from the south shows rill erosion occurring on bare, unprotected, unstabilized slopes in the previous inspection (left) have been stabilized with Hydromulch (right).

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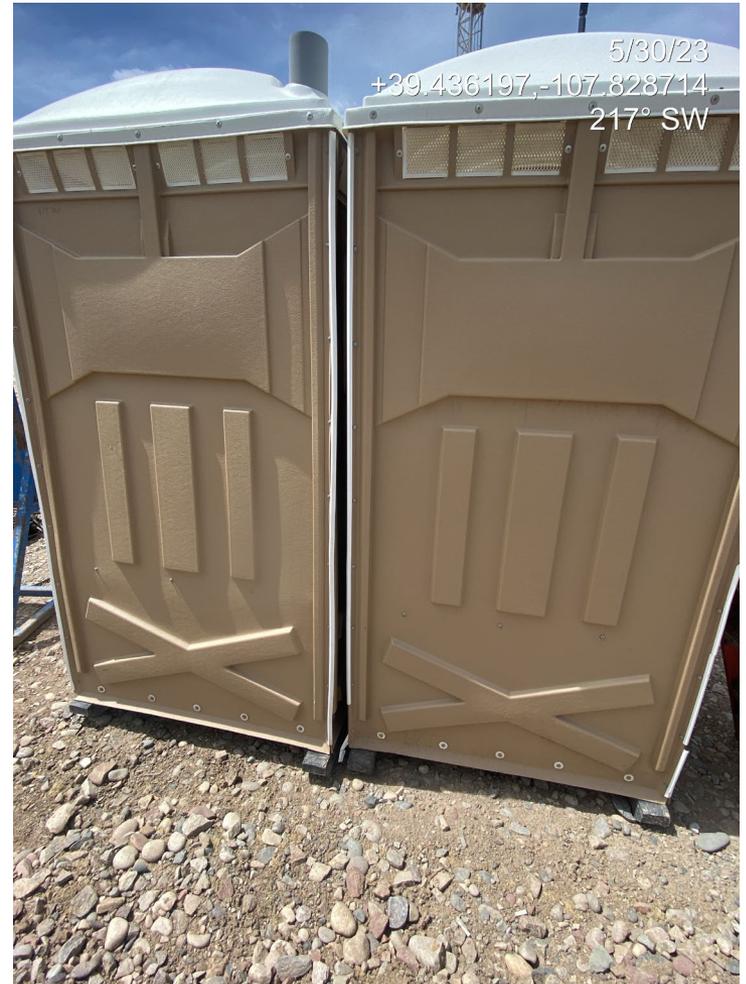


Photo 32. Photos taken from the Location entrance show portable toilets have not been secured to prevent a spill.



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Photo 33. Photos show List B Noxious Weeds Canada thistle (left) and scentless chamomile (right) at the northwest of the location.



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Photo 34. Photos show the location access road directly north of the pad (left) and before it merges with county road 317 (right). Surfaces are stabilized. There is no evidence of sediment tracking.



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