

Corrective Action Summary:

Submit a supplemental Form 27 to Jim Hughes by July 22, 2019, that describes a detailed remediation plan, soil depth analysis, vegetation impacts and potential sediment/contaminated soil migration within the spill area. The following details must also be addressed for compliance with this corrective action:

Stormwater and erosion controls- Date work to be complete: immediately

1. Description in Form 27 of measures taken, and immediate installation of stormwater and erosion controls from the spill area to be installed to prevent the migration of any possible contaminated soil or sediment from the spill or disturbance into Muddy Creek.
2. Description in Form 27 of measures taken, and immediate installation of more robust stormwater/erosion controls in all disturbed areas with loose soil or soil stockpiles.

Reclamation- Planting plan due July 22, 2019, revegetation shall be in coordination with remediation.

1. Trees: Inspection of the disturbance area revealed approximately 12 trees recently killed or dying within the spill pathway. The tree mortality appears to be a direct result of the spill. Therefore, 12 trees need to be replaced within the project disturbance. If more trees die, then additional tree replacement may be required. The trees to be replaced will have the following specifications:
 - a. -10 of the trees to be replaced will be Rocky Mountain junipers (*Juniperus scopulorum*).
 - b. -2 of the trees to be replaced will be Colorado pinyon pines (*Pinus edulis*)
 - c. Size: Replaced trees will be a minimum of 3 feet tall and in a ball and burlap condition.
2. Shrubs: Inspection of the spill area revealed an area of shrub mortality that is approximately 100 square feet, appearing to be a direct result of the spill. Shrubs killed are largely gambel oaks (*Quercus gambelii*). Gambel oaks need to be replaced with the following specifications:
 - a. Gambel oaks need to be replaced at a rate of 1 individual/square foot of disturbance area. Therefore, 100 gambel oaks need to be replaced.
 - b. Size: Replaced oaks need to be sized at a minimum of 1 gallon container size, no less than 1 foot tall.
3. Herbaceous vegetation: Seed the remediation areas and any disturbed soils using the BLM recommended seed mix for the area. High quality mulch or erosion control fabric will be needed to stabilize disturbed slopes and prevent migration of seed down slope.
4. Planting plan: to be submitted as an attachment to a Form 4 and due by July 22, 2019, that describes how/when/where trees, shrubs, and herbaceous vegetation will be planted, maintained, and monitored to ensure long-term survival. Plan needs to describe detail about planting depth, methods, and watering. Vegetation that does not survive will need to be replaced. Planting/revegetation timing shall in coordination with remediation.