

TITLE PAGE

RECLAMATION PLAN FOR RULE 915.b.

OPERATOR NAME/NUMBER: SIMCOE, LLC 10749

LOCATION NAME: Perino Water Transfer Station

LOCATION NUMBER: 419311

DATE:11/3/2021

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## **1.0 Location Description**

### **1.1 Site Characterization**

The Perino Water Transfer Station located:

QtrQtr NWSE

Section 13

Township 32N

Range 32N

In Archuleta County Colorado

Current and historical use of the land has been non-irrigated grazing. The soils consist of Bodot Clay. The topography is approximately a 3% slope that is north to northwest facing.

Adjacent land vegetation is Pinyon-Juniper wooded shrubland. Current vegetation stand consists of primarily *Artemisia tridentata* (Big Sage), *Chrysothamnus* spp. (Rabbitbrush) and minimal *B. curtipendula* (Grama Grass).

Historic vegetative cover appears in attachment of aerial view map to be minimal in pre-disturbance area with majority of the trees being on top of the slope above the irrigation ditch to the southeast of disturbance. Another stand of trees is on a knoll to the west of the access road with no trees within the area of disturbance.

The historical rocky railroad berm that ran from east to west to the north of disturbance is present in aerial views with exception to the area immediately to the north of the current disturbance.

Current land use is cattle grazing with feeding operations evident to the southwest of the location. Previous hay storage can be seen as recent as 2016.

Future land use per landowner is undetermined. Cattle activity remains periodically on this plot of land.

The project area will include the location area of the transfer station which consists of a concrete wall berm area that contains 2 400 bbl produced water tanks and a small building that housed the water transfer pump and ancillary equipment. There are pipeline risers directly west of the pump building that services other wells and will remain active. The water line is to be reconfigured below grade with a valve can installation in the current pipeline riser area. The active gas line will remain as it is.

Following a produced water leak in July 2021 the determination was made that this water transfer station would be decommissioned and reclaimed. The pipeline is in a permitted ROW and will remain.

Projected area of reclamation totals less than 0.5 acres of disturbance.

Depth to ground water is estimated to be between 70 and 215 feet.

Impacted soils were determined to have a depth of less than 10 inches. Remediation of impacts is to not bury them. Treatment of impacts will be disking Gypsum into soils impacted to a depth of approximately 10 inches in all areas impacted.

Impacts are not going to be buried.

### **1.2 Reference Area Characterization**

Reference area has a 3% to 8% grade.

Vegetative cover is estimated to be 40% to 50%

Vegetation is Pinyon-Juniper wooded shrubland. Current vegetation stand consists of primarily *Artemisia tridentata* (Big Sage), *Chrysothamnus* spp. (Rabbitbrush) and minimal *B. curtipendula* (Grama Grass).

Background sampling conducted at 37.015131, -107.449194

Soils are very similar on the reference area and the project area. Vegetation has by COGCC rule been controlled on the project area historically. There is limited vegetation on the project area.

### **1.3 Timing**

Schedule of planned reclamation activities:

1. Soil sampling (including past dates)
  - a. Previously sampling conducted 7/19/2021
  - b. Sampling to be conducted under tanks and pump house upon removal
  - c. Follow up sampling of the impacted area from spill in July 2021 following remediation with gypsum.
  - d. Any further sampling TBD based off previous sample results.
2. Seed mixture consultation
  - a. 9/15/2021
3. Stormwater BMP installation
  - a. 11/15/2021-12/15/2021
4. Soil movement and recontouring
  - a. 11/15/2021-12/15/2021
5. Decompaction
  - a. 11/24/2021-12/20/2021 weather dependent
6. Topsoil Placement
  - a. 11/24/2021-12/20/2021 weather dependent
7. Soil Amendments
  - a. 11/24/2021-12/20/2021
8. Seedbed preparation
  - a. 11/24/2021-12/20/2021 weather dependent
9. Seeding
  - a. 11/24/2021-12/20/2021 weather dependent
10. Seedbed stabilization
  - a. 11/24/2021-12/20/2021 weather dependent

## **2.0 Soil Properties**

**2.1 USGS Soil description** – According to USGS the soils in the project are Bodot Clay.

**2.2 Topsoil** – Topsoil will be obtained from the southwestern area of the disturbance.

### **2.3 Affected Soil Analysis / Soil Suitability for Reclamation**

- 2.3.1** Root depth of native vegetation is between 3 and 6 feet for shrubs.
- 2.3.2** Root depth for established grass species is estimated to be around 1 to 2 feet.

### **2.4 Contouring and Compaction Alleviation**

- 2.4.1** Contour and compaction alleviation will be addressed utilizing a track hoe and dozer. The disturbance area does not demonstrate a cut and fill balance. The completion of the aggregate material removal will get the grade close to near natural.
- 2.4.2** Equipment will be utilized to move soils to obtain as near natural as practicable and rip soils not less than 6 inches and not more than 18 inches depending upon shale and rock encountered in the project area.

## **3.0 Seeding**

**3.1 Seed Mixture Consultation** – Land personnel spoke with landowner who does not reside on the property and the landowner agreed to plant native seeds that are currently growing on the adjacent area.

**3.2 Seed Mixture**

Scientific Name	Common Name	Named Varieties	PLS/acre
Artemisia tridentata	Big Sage	Artemisia tridentata	0.4
Chrysothamnus spp.	Rabbitbrush	Chrysothamnus spp.	0.2
B. curtipendula	Grama Grass	B. curtipendula	3
Hesperostipa comata	Needle & Thread Grass	Hesperostipa comata	5

**3.3 Seeding Methods**

Seeding will be performed by disking the seed bed to break up any clods and prepare the seed bed.

Seeding will be performed by no till drill seeder at the recommended rates above.

**4.0 Site Stabilization and Stormwater Erosion**

**4.1 Site Stabilization Methods**

Mulching will be performed with certified weed free straw and crimping.

**4.2 Stormwater Controls**

Project final grade will be approximately a 3% slope minimizing the need for stormwater controls.

Upon completion of recontouring disturbed area will be evaluated for needed stormwater BMP's.

Disturbance recontour will include shallow silt/water basins to slowdown stormwater and allow for infiltration of stormwater into the reclamation area.

**5.0 Weeds**

**5.1 Weed Management for Vegetation Establishment**

Monitoring will be performed for weeds and to evaluate the germination and progression of vegetation establishment.

**5.2 Noxious Weed Management**

Noxious weed management will be performed by a licensed vender if/when noxious weeds are noted on location. Weed management will be mechanical removal and/or cautious chemical treatment. Decision of treatment will be determined by the stage of vegetation growth and the noxious weeds identified.

**6.0 Fencing – no fencing will be installed**

**7.0 Monitoring** – will be performed periodically throughout the progression of vegetative establishment and until location has reached required vegetative success to be released.

**8.0 Justifications**

Soil sampling in July demonstrated that pH at 8" was 0.84 above the 915 standards. SAR was elevated at 8" and declined at the 10-14" depth. Application of Gypsum to the soils will remediate the salts in the effected areas.

Arsenic levels were elevated in the samples from July 2021; however the sample results in the impacted area are below the results from the back ground sample. The arsenic appears to be

naturally occurring within the native soils. No remediation of the arsenic should not be required as it is native to the soil in this area.

## Attachment A: Reclamation Figures

### Map of impacted area



Spill Area	0.05 acres
Reclamation Area (includes access road, location, and spill area)	0.61 acres
Total Location Disturbance	0.61 acres
Staging Disturbance area to reclaim	N/A
Total Area to be reclaimed	0.61 acres

Map of sampling planned – NOTE July Sampling mapped on above map

## Perino WTS Sample Map

Areas of sampling during decom of location.

### Legend

- Perino reclamation area
- Perino Water Transfer Station
- SS Tank
- Transfer House #2





Topographic map of area



## Historical Aerial Map

