

# MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Maverick Placer	MINE/PROSPECTING ID#: M-1979-206	MINERAL: Anhydrite, gypsum and evaporites	COUNTY: Fremont
<b>INSPECTION TYPE:</b>	<b>INSPECTOR(S):</b>	<b>INSP. DATE:</b>	<b>INSP. TIME:</b>
Monitoring	Timothy Cazier, P.E.	November 7, 2019	10:55
<b>OPERATOR:</b>	<b>OPERATOR REPRESENTATIVE:</b>	<b>TYPE OF OPERAT</b>	TION:
U S Soil Conditioning Company	Joe Lionelle	112c - Construction H	Regular Operation

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	Partial Bond	\$32,500.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	Thims alt	December 1, 2020

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

### **INSPECTION TOPIC:** Availability Of Records

**PROBLEM/POSSIBLE VIOLATION #1:** Problem: The affected area stated in annual reports since the 2015 inspection has decreased from 15 acres in 2015 and 2016 to 10 acres in 2018 and 7 acres in both 2019 and 2020 (no affected area disturbance was reported for 2017). The DRMS has not approved an acreage reduction for this permit since the plant was removed via the approval of AR-01 in 1999.

**CORRECTIVE ACTIONS:** Submit and acreage reduction request or a revised annual report for 2020 correcting the affected area to the 15 acres reported in 2016 by the corrective action due date. **CORRECTIVE ACTION DUE DATE:** 12/31/20

#### **INSPECTION TOPIC:** Availability Of Records

**PROBLEM/POSSIBLE VIOLATION #2:** Problem: The Division does not have a complete record reflecting the mapped boundaries of the permit and affected area (Exhibit C).

**CORRECTIVE ACTIONS:** Submit a Technical Revision and the \$216 fee to include a complete record of the permit and affected area boundary depicting the unreleased Plant Area, Quarry Area and 800-foot abandoned haul road area by the corrective action due date

**CORRECTIVE ACTION DUE DATE:** 1/22/21

### **OBSERVATIONS**

This inspection was conducted by Tim Cazier (DRMS) as part of the regular monitoring program. The Permittee (US Soil Conditioning Company) was represented during the inspection by Mr. Joe Lionelle. The Maverick Placer is accessed from Fremont Co Rd 7 approximately 6.5 miles east of Salida on Hwy 50, and is located approximately 1.5 miles north of Wellsville. This is a 112c metamorphic evaporative mine. It was not operating at the time of the inspection. However, a stockpile of recently blasted and processed material was observed.

The DRMS has been reviewing the permit file for this site based on discussions with Mr. Lionelle during the inspection.

<u>Mine Plan Summary</u>: The mine plan was approved in 1980. No revisions have been requested to the mine plan. Active excavation is approved in Zone 2 (pit area: ~7 acres per Exhibit E of the original Application). Zone 1 surrounds the pit and is ~13 acres per the original Exhibit E. Mine benches are to be 20 feet high and 10 feet wide. The roads on the January 1980 Exhibit C, mine plan map were existing at the time of the permit approval and were anticipated to be adequate for the life of mine, no additional roads were planned.

<u>Reclamation Plan Summary</u>: The reclamation plan was approved in 1980. No revisions have been requested to the reclamation plan. Zone 1 is the area surrounding the pit and is to be graded to "shape and blend" with the natural topo. Zone 2 (pit area) is to be benched no steeper than 1.5H:1. Both zones are to be revegetated via drill seeding with the following: Indian Rice Grass @ 4 lb/ac, Sand Drop Seed @ 2 lb/ac, Blue Grama Grass @ 4 lb/ac, Needle and Thread Grass @ 2 lb/ac, Western Wheat Grass @ 6 lb/ac, Mountain Mahogany @ 0.5 lb/ac, Big Sage Brush @ 0.5 lb/ac, Pinon Pine @ 1 lb/ac, and Utah Juniper @ 0.5 lb/ac. Minimum depth of topsoil to be replaced is 6 inches. Fertilizer (18-46-0) is to be applied at 500 lbs/acre. Seeded areas are to be mulched (hay at 2 tons/acre, on slopes < 3H:1V) or wood fiber at 1 ton/acre, on slopes > 3H:1V). The hay is to be crimped.

<u>Availability of Records:</u> Annual fees are paid through June 2020. The previous inspection was on November 4, 2015. The approved post-mine land use is recreation/wildlife habitat. There were no open infractions prior to the inspection. Both the surface and minerals are privately owned. The affected area stated in annual reports since the 2015 inspection has decreased from 15 acres in 2015 and 2016 to 10 acres in 2018 and 7 acres in both 2019 and 2020 (no affected area disturbance was reported for 2017). The DRMS has not approved an acreage reduction for this permit since the plant was removed with the approval of AR-01 in 1999, releasing 5.9 acres. Once an area is disturbed by mining related activity, the DRMS considers it affected area until it is reclaimed according to the approved reclamation plan, and a release request is submitted to, and approved by the DRMS. **The decrease in reported affected area without a request for acreage release is cited as Problem #1 on page 1 of this report**.

There is also a records discrepancy in regards to the permit area. The original permit approval in 1980 indicates 42.9 acres were included in the permit area (assumed to all be disturbed or affected area). A file review indicates 18 acres (original Exhibit C-1 states 17.96 acres in the Fertilizer Plant area, including haul roads) were attributed to processing (Plant Area, see area outlined in green on **Figure 1**); 20 or 23 acres (19.8 from original Exhibit C, but 23 based on January 1980 MLRB presentation notes) attributed to mining (Quarry Area, see area outlined in magenta on **Figure 2**); and approximately 2 to 4 acres encompassing 800 feet of abandoned haul road (see area outlined in orange on **Figure 2**). Mapping to include the abandoned haul road was requested by the Division on January 24, 1980 and again on May 9, 1980, but we have no record of having received it.

In 1999, the Division approved a requested acreage reduction (AR-01) for the plant area and released 5.9 acres

around the Wellsville plant (see area outlined in red on **Figure 1**), leaving 37 acres in the permit area. All the annual report maps going back to at least 2012 show only the 19.8-acre pit area around the pit. It is unclear from the record where the additional 17.2 acres of the permit are. **This inconsistency in the mapping records is cited as Problem #2 on page 1 of this report.** 

<u>Backfilling and Grading</u>: The approved mine plan specifies 1.5H:1V stepped benches in Zone 2 (excavated portion of the pit). Zone 1 is for the most part, shaped and blended to the natural terrain. However, this includes the areas designated for overburden and topsoil storage in the north end of Zone 1 (northeast and northwest of the pit). If material from these two storage areas is to be used to topsoil Zone 2, additional grading and seeding of these areas will be required for final reclamation.

<u>Excess Spoil and Dev. Waste:</u> Mr. Lionelle pointed out revegetated overburden piles on the west side of the access road (see **Photo 1**).

<u>Explosives:</u> Blasting holes were observed on the upper/northern most bench. Mr. Lionelle stated Bill Tezak (Colorado Quarries) maintains the blasting records for the site.

<u>Financial Warranty:</u> There is a \$32,500 bond held by the Division. Given the uncertainty surrounding the completion of final reclamation and the permit area under Availability of Records above, it is not possible at this time to determine if this is adequate.

Fish and Wildlife: No impact to wildlife was observed.

Hydrologic Balance: No standing water was observed in the pit and no exposed groundwater was observed.

<u>Gen. Compliance with Mine Plan</u>: The operation appeared to be in compliance with the approved mine plan. The maximum allowed disturbed area appears to be 19.9 acres. Google Earth was used to measure the disturbed area which has had no reclamation initiated to date, which was measured to be approximately seven acres, based on October 2019 imagery. However, the total area affected by mining appears to be about 15 acres as reported most recently in the 2016 annual report. Highwalls were estimated to be 20 feet in height and appeared stable (see **Photos 2** and **3**). Mr. Lionelle stated the current pit floor is the bottom, no downward mining is planned; and the access road design is to approach the rear crest of the pit from both sides in order to enable circular traffic.

<u>Off-site Damage</u>: The operation appeared to be confined to the permit boundary, based on Google Earth review and site observations.

<u>Processing Waste:</u> No processing waste was observed. Mr. Lionelle stated all blasted material (see **Photo 4**) containing product is trucked to the Wellsville plant for processing.

<u>Roads:</u> Haul and access roads did not appear to be a source of sediment that could be tracked offsite.

<u>Reclamation Success</u>: As stated in Backfilling and Grading above Zone 1 is for the most part, shaped and blended to the natural terrain. (see **Photos 3** and **5**).

<u>Revegetation:</u> A fair amount of established vegetation was observed in Zone 1. No noxious weeds were observed. Mr. Lionelle stated he believed the pit floor and benches were not required to be revegetated. Subsequent to the inspection, the DRMS reviewed the approved permit and found the approved Exhibit E –

Reclamation Plan clearly states in the first paragraph "Both zones will be revegetated". <u>If you have</u> documentation indicating otherwise, please provide documentation to support this by December 31, 2020.

<u>Sediment Control</u>: No significant erosion problems were observed and no BMPs were needed at the time of the inspection.

Support Facilities On-site: A portable screen and crusher were observed on site (see Photo 5).

<u>Signs and Markers</u>: The permit sign was properly posted (see **Photo 6**) and the affected area boundary is delineated by adjacent roads (inside the permit boundary).

<u>Permit Stipulations:</u> There are no permit stipulations.

Storm Water MGT Plan: No oil or fuel spills observed. Stormwater drains to the pit and infiltrates.

<u>Structures:</u> An overhead transmission line crosses the entrance road in Zone 1, but the nearest transmission tower was estimated to be more than 200 feet away from the affected area.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at <u>tim.cazier@state.co.us</u> if you have any questions regarding this report.



# **PHOTOGRAPHS**

Photo 1. Revegetated overburden piles on the west side of the access road and presumed abandoned haul road (looking south).

## PHOTOGRAPHS (cont.)



Photo 2. Active pit highwalls (looking north from pit floor).



Photo 3. Mostly reclaimed benches on west side of pit (looking south).

## **PHOTOGRAPHS (cont.)**



Photo 4. Blasted, crushed & screened material containing product awaiting haul to Wellsville plant.



Photo 5. Screen and crusher (looking north).

#### PHOTOGRAPHS (cont.)



Photo 6. Permit sign.

#### **GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>PB</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>Y</u>
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS Y
(AT) ACID OR TOXIC MATERIALS <u>NA</u>	(OD) OFF-SITE DAMAGE <u>Y</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

#### **Inspection Contact Address**

Joe Lionelle U S Soil Conditioning Company P.O. Box 926 Salida, CO 81201

Enclosures: Figures 1 and 2

ec: DRMS file J. Lionelle, US Soil Conditioning Company Sheila Lionelle, US Soil Conditioning Company



### Legend

- Drill Holes 2019-11-07 located using hand held GPS unit
- M-79-206 2016 Zero Reclamation Disturbance (5.7 Ac)
- M-79-206 Abortive Haul Road
- M-79-206 Abortive Haul Road Disturbance (3.4 Ac)
- M-79-206 Overburden & topsoil from original mine plan map
- M-79-206 Permit Boundary from Annual Report Maps (19.4 Ac)

Maverick-Placer



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Figure 2. M-1979-206 Quarry Area Map

Satellite Imagery from 10/5/2019

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