

# 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:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Two Rivers		M-1998-038	Gravel	Pueblo
<b>INSPECTION TYPE:</b>		WEATHER: Clear	INSP. DATE:	INSP. TIME:
Monitoring			April 5, 2023	12:00
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Kirkland Construction, R.L.L.P.		Jodi Schreiber	112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b>		<b>BOND CALCULATION TYPE:</b>	BOND AMOUNT:	
Surety Related		Complete Bond	No Bond Held	
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:	
NA		None	None	
INSPECTOR(S):	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:	
Amber Michels			April 19, 2023	

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:** Backfilling & Grading

**PROBLEM:** An erosion gully was observed on-site. This is a problem at this time for failure to protect the affected land from erosion pursuant to C.R.S. 34-32.5-116 (4) (j).

**CORRECTIVE ACTIONS:** The operator shall provide photo documentation to the Division verifying the erosion gully has been repaired, and that the site has have been reconstructed and stabilized to prevent erosion damage by the corrective action date.

#### **CORRECTIVE ACTION DUE DATE:** 5/19/23

# **OBSERVATIONS**

The Two Rivers Pit was inspected by Amber Michels with the Division of Reclamation, Mining and Safety (Division/DRMS). This inspection is Part Two of two, and was completed in response to a Succession of Operators application (Revision No. SO1) that was received by the Division on February 13, 2023. Excluding Part One of the SO1 inspection series (March 2023), the site was previously inspected by the Division on January 17, 2020 as part of the Division's routine monitoring program. Jodi Schreiber of Fremont Paving & Redi Mix, Inc. represented the prospective Successor Operator, and accompanied me during the inspection. The weather was clear and cool.

The Two Rivers Pit is located in Pueblo County approximately 5.5 miles east of Avondale, Colorado. The Two Rivers Pit is a 339-acre 112c Construction Materials Reclamation Permit with a maximum allowed disturbance of 99 acres. The primary commodity being mined at the site is sand and gravel. The 112c Construction Materials Reclamation Permit was issued in July 1998. The 112c Two Rivers Pit was permitted over the area previously permitted by a 111 permit. The approved post-mining land use is rangeland. The mine site was surrounded by the following land uses: residential, agricultural, and rangeland.

#### **Backfilling and Grading:**

The highwalls located in the Phase I area cited in the Division's January 2020 inspection and reported to have been reclaimed (mentioned in Part One of the 2023 inspection series), were observed during this inspection. The highwalls in the Phase I area have been returned to 3H:1V slopes. The slopes on the west side of the Phase I area appears to have been seeded, and are growing sparse vegetation (Photos 24 and 25). The slopes on the east side of the Phase I area possess rills, and have very little vegetation established on them (Photos 14-17). It is difficult to determine whether or not they have been seeded. Along the northern border of the Phase I pit, there is an earthen berm that stretches from west to east. Near the center of this berm (see Marker 3 on Map 1), there is a deep erosional feature (Photos 18-20, and 22). There is vegetation growing within this eroded section, and it does not appear to be affecting the area downslope and to the north.

The location where highwalls existed along the southern permit boundary, cited in the Division's January 2020 inspection and were reported to have been reclaimed, were observed during this inspection (see Marker 4 on Map 1). The slopes appear to have been returned to 3H:1V slopes, but rills were observed on the north facing side (Photo 13). These slopes, as well as the other slopes in the Phase I area will need to be stabilized from erosion and revegetated prior to being eligible for acreage release.

A problem has been cited above for the deep erosional feature, or gully, located in the earthen berm at the northern border of the pit in Phase 1. Because the berm separates Phase I from the lowland area to the north that is currently not approved to be affected by mining, the prospective Successor will be responsible for repairing the gully by the corrective action date. The prospective Successor is also advised to monitor the rills observed on the highwalls in the Phase I area through ensuring that they remain stable and that they do not deepen or subsequently cause substantial erosion to occur.

## Hydrologic Balance:

Currently, the area north of the internal road is primarily composed of a lowland floodplain area (see Photos 7, 8, and 20). When asked if this area was currently being used for farming the prospective Successor said that it is not. The prospective Successor also said that they may decide to mine that area eventually. Prior to doing so, the prospective Successor would be required to submit an amendment requesting the approval to mine in

this area. An old depression located to the east of some abandoned structures, and north of the internal road (see Marker 1 on Map 1) appears to be an old water retaining structure (Photos 9-11). A pipe that appears to have allowed water to flow into the depression was also observed (Photo 9). The prospective Successor stated that they believe this was created by previous owners of this portion of the property that used this area for farming purposes. During post-inspection evaluation, the Division agrees that this area was likely created independent of mining activities (see Map 2).

## Other:

The prospective Successor pointed to the location of Gary Fillmore's well. Mr. Fillmore had an easement with the current Operator and now with the prospective Successor to allow his well and water line to run through the permit boundary. The prospective Successor stated that neither the currently approved map, nor the Division of Water Resources' website accurately depicts the location of Mr. Fillmore's well. Photo 21 shows the structure located above the well. The prospective Successor stated that Mr. Fillmore confirmed this to be the actual location of the well. The water line for this well goes underneath the Phase I area and under County Road 50, into the area south of County Road 50. The prospective Successor stated that upon the approval of SO1, they would maintain the buffer zone currently approved around this well and around this water line to protect this structure.

Trash was observed to the east of the entrance road during Part One of the 2023 SO1 Inspection. The prospective Successor representative at that time stated that it was likely due to trespassers dumping their waste at the site's entrance. Upon arrival at the site location for Part Two of the inspection, the trash observed during Part One was still present (Photo 26). Upon approval of SO1, the prospective Successor will be responsible for removing this waste from the site.

## Roads:

An internal road begins in the west side of the permitted area, within the processing area, and expands to the eastern border of the previously affected land in the Phase I mining area (see Map 1). During the Division's January 2020 inspection, the Operator stated that they wanted to keep this road upon reclamation. At the time, the Operator was advised to submit a technical revision stating that the road may remain upon the release of the permit. However, a technical revision to retain the road was never submitted. The prospective Successors will need to address in their amendment package whether they plan to reclaim this road or if it shall remain upon reclamation.

## **Right of Entry:**

The prospective Successor has purchased the majority of the property within the existing permit areas. Some of this property includes abandoned houses, previous landowner's growing facilities, and wells. The majority of the structures on the property are north of the Phase 3 permit area. Photos 1-7 highlight a few of these structures. At the inspection, the prospective Successor was asked what their plan was for these structures upon acquiring the reclamation permit, to which they answered they are not yet certain. The prospective Successor believes they may tear the structures down, or they may mine around them. Either way, they are aware that they will need to update their mining plan prior to affecting this area.

## Support Facilities On-site:

There are a few wells on the property that Fremont Paving & Redi Mix, Inc. (the prospective Successor) is now the owner of. During the inspection, the prospective Successor stated that most of the wells will likely not be used again, but that there is a well in the north portion of the property that may be used for mining related

purposes such as dust suppression. The use of any of these wells for mining purposes will need to be approved by the Colorado Division of Water Resources and will need to be addressed in the forthcoming amendment the prospective Successor plans to submit upon the approval of SO1.

This concludes the Division's Inspection Report; a few maps displaying topics discussed during the inspection and a subset of photographs that were taken during the time of the inspection are included below. If you need additional information or have any questions, please contact me by email at <u>amber.michels@state.co.us</u> or by telephone at (720) 836-0967.

#### **Inspection Contact Address**

Jodi Schreiber Fremont Paving & Redi Mix, Inc. 839 Mackenzie Ave. Canon City, CO 81215

CC: John P. Ary, Fremont Paving & Redi Mix, Inc. James H. Kirkland, Kirkland Construction, R.L.L.P

#### **GENERAL INSPECTION TOPICS**

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

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

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

#### PERMIT #: M-1998-038 INSPECTOR'S INITIALS: ANM INSPECTION DATE: April 5, 2023

# **PHOTOGRAPHS**



**Photo 1:** Abandoned houses north of the Phase 3 area of the permit on the un-mined land.



**Photo 2:** Abandoned growing facility north of the Phase 3 area of the permit on the un-mined land.



**Photo 3:** Abandoned growing facility north of the Phase 3 area of the permit on the un-mined land.



**Photo 4:** Abandoned structure and silos north of the Phase 3 area of the permit on the un-mined land.



Photo 5: Looking west at the abandoned structures from the internal road.



**Photo 6:** Looking west from the internal road at the abandoned structures and the product stockpiles near the Phase 3 area.



**Photo 7:** Looking north-west from the internal road to the existing fields in the flood plain area extending to the Huerfano and Arkansas Rivers that follow closely with the estimated north portion of the permit boundary.



Photo 8: Looking north from the internal road to the existing fields in the flood plain area.



**Photo 9:** Looking west from the internal road, along the powerlines, at a depressed bermed in area with an abandoned pipe.



Photo 10: Standing at the west edge of the depressed bermed area looking north-west.



Photo 11: Standing at the west edge of the depressed bermed area looking south-west.



Photo 12: Standing on the western edge of the Phase 1 area, looking south at regraded slopes. The yellow arrow points to the south-east corner of Phase 2 that was inspected during part one of this SO1 inspection series.



**Photo 13:** Standing on the western edge of the Phase 1 area, looking south at regraded slopes. The yellow arrow points to a slope that is the regraded highwall near the southern boarder from the 2020 Inspection Report. Some rilling was observed on this slope.



Photo 14: Standing on the western edge of the Phase 1 area, looking south-east at regraded slopes.



Photo 15: Standing on the western edge of the Phase 1 area, looking east across the seeded pit area and at regraded slopes. Rilling is seen on the west facing sides of the re-graded slopes.



Photo 16: Standing on the western edge of the Phase 1 area, looking north-east at a regraded slope with rilling.



Photo 17: Looking south from the eastern facing side of the western slope of the Phase 1 area.



Photo 18: Looking north-east at the edge of the reclaimed Phase 1 area at an erosional feature in a bordering berm.



Photo 19: Looking north-east at the edge of the reclaimed Phase 1 area at an erosional feature in a bordering berm.



**Photo 20:** Standing in the Phase I reclaimed pit, looking north at the eroded berm and at the flood plain beyond it.



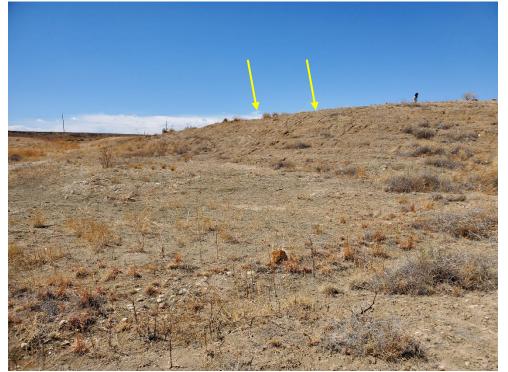
Photo 21: Standing on the berm, looking north-east at the adjacent property and well owned by Gary Fillmore. The circle indicates the well location.



Photo 22: Standing in the erosional feature seen in Photo 21, looking south-east at a reclaimed slope in Phase 1.



Photo 23: Standing on eroded berm in the north portion of Phase I, looking south across the reclaimed pit.



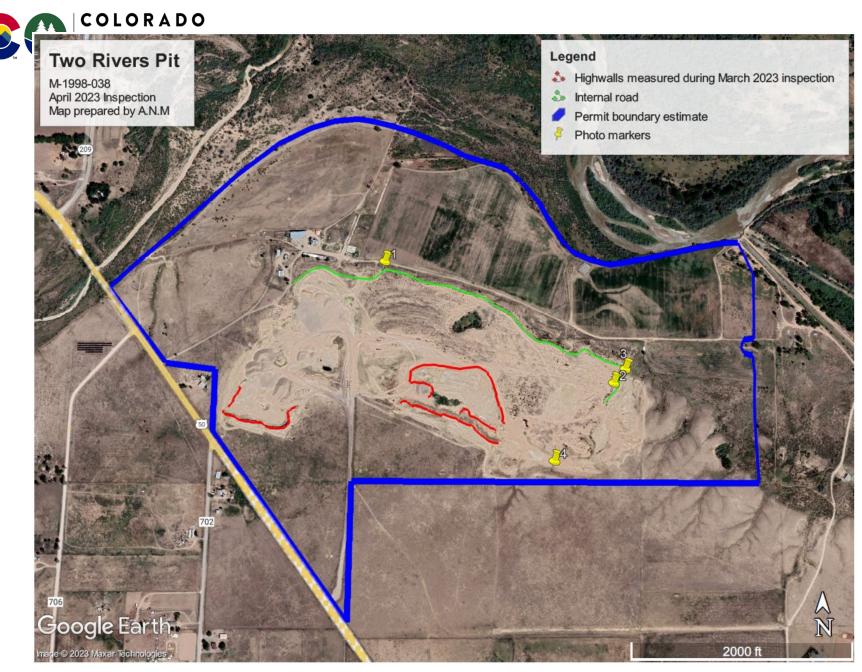
**Photo 24:** Standing on eroded berm in the north portion of Phase I, looking south-west across the reclaimed pit at the eastern face of the western slope. Yellow arrows point to slight rilling. This western slope has a greater quantity of stable vegetation growing than the eastern slopes.



Photo 25: Standing on the berm in the north portion of Phase 1, facing west.



Photo 26: Trash left to the west of the entrance road by trespassers.



Map 1: Map created in Google Earth Pro of features observed during Part One and Part Two of the 2023 SO-1 inspection series. The photo markers correspond to photos taken during Part Two of the Two Rivers Pit 2023 SO-1 Inspection.



**Map 2:** Images A-D taken from Google Earth Pro, represent the depression area marked by photo marker 1 from Map 1 from the years 2011 (A), 2013 (B), 2018 (C), and 2022 (D). The green line delineates the current location of the internal road identified on Map 1. Water appears to be retained in the marker 1 location

in 2013, but appears to not be in the years surrounding this time period.