

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:
Pioneer Farm	M-2000-080	Sand	Arapahoe
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Patrick Lennberg	May 13, 2021	10:30
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Pioneer Sand Company, Inc.	Russ Bartz	112c - Construction Regular Operation	

REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program		Complete Bond	\$47,215.00
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA		None	None
WEATHER:	INSPE	CTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	Patrick Ly		May 21, 2021

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: Markers

PROBLEM: The affected area boundary markers are missing or incorrectly placed. This is a problem for failure to maintain boundary markers around the affected area as required by Section 3.1.12(2) of the rule.

CORRECTIVE ACTIONS: The operator shall conduct a survey and replace the boundary markers in the correct location(s). The operator shall provide proof to the Division that this has been done by the corrective action date.

CORRECTIVE ACTION DUE DATE: 7/20/21

OBSERVATIONS

The Pioneer Farm site was inspected by Patrick Lennberg with the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was completed as part of the Division's routine monitoring inspection program. The site was previously inspected by the Division on September 20, 2017 as part of the Division's routine monitoring program. Russ Bartz, representing the operator Pioneer Sand Company, Inc., accompanied me during the inspection. The weather was warm, and the sky was clear.

Pioneer Farm is a 310 acre 112c mining operation on privately owned land. The commodity mined at the site is topsoil and fill material. The site is surrounded by rural residential and agricultural land with the approved post mining land use of cropland. A mine sign was observed as required by Rule 3.1.12.

At the time of the inspection the site was active. Trucks were being loaded with stockpiled material and a loader was actively reclaiming areas when not loading trucks. The permit and affected area boundary markers were not in place during the inspection pursuant to Rule 3.1.12(2) and is being cited as a problem within this report.

The mine is approved to disturb 36 acres at any one time with 12 acres being pre-stripped, 12 acres being mined and leveled, and 12 acres in reclamation. It appears that the mine has disturbed close to 121 acres during the life of mine with 70 acres currently being cultivated by the land owner. The Division estimates the remaining 51 acres are either being reclaimed, actively being mined or pre-stripped ahead of mining. The Division recommends the operator survey the reclaimed, active mine and pre-stripped areas to determine the actual areas and if needed submit a Technical Revision (TR) to update the Mine Plan to allow for disturbing more area at any one time.

As stated above the permit area is 310 acres but during the file review it was determined that it was not specified what the affected land area was to be. The Division estimates the affected area is to be near 260 acres. A TR to update the Mining and Reclamation Plan Maps to clarify the permit and affected land areas should be submitted to avoid confusion and possible problems during bond release in the future.

During the inspection it was observed that there is a solar farm, approximately 11 acres, located within both the permit and affected land boundaries. Russ stated that the solar farm was installed over the last couple of years and a 10 year lease agreement was signed by the land owner. The operator was involved with negotiations pertaining to the solar farm and does not anticipate mining that area for another 10 or more years. The Mining and Reclamation Plan Maps need to be updated to reflect the current location of the solar farm.

As mining is progressing the operator is conducting concurrent reclamation to facilitate the land owner to plant crops. In the areas where reclamation has been completed it appears those areas are sustaining cultivation well.

The Division evaluated the financial warranty and determined the current bond amount held by the Division is not adequate at this time. However, the Division will wait until the operator provides mapping details through submission of the TR to reevaluate the bond calculation. In the event the operator does not submit the TR in a timely manner the Division will issue a surety increase for the calculated amount.

All mining appears to have occurred within the permit boundaries.

Photographs taken during the inspection are attached.

Please contact Patrick Lennberg (303)866-3567 ext. 8114 or email at <u>patrick.lennberg@state.co.us</u> if you have any questions regarding this report.

Inspection Contact Address

Russ Bartz Pioneer Sand Company, Inc. 630 Plaza Drive, Suite 150 Highlands Ranch, CO 80129

- cc: Jared Ebert, DRMS
- ec: Russ Bartz, Pioneer Company, <u>russ.bartz@pioneerco.com</u> Angela Bellantoni Ph.D., Pioneer Company, <u>angela.bellantoni@pioneerco.com</u>

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PHOTOGRAPHS



Photo 1: Mine Sign



Photo 2: Conoco well released in AR-01 and updated in TR-01 in 2013, also former processing area was located in the center of the picture



Photo 3: Current processing and stockpiling area



Photo 4: Cross-section of material being mined, sand at base of the section is not mined



Photo 5: Stockpile of material being used for reclamation



Photo 6: Cropland area immediately adjacent to processing area, not mined yet



Photo 7: Dry processing area



Photo 8: Reclaimed area ahead of crop planting



Photo 9: Reclaimed area that has been planted crops (arrow)



Photo 10: Solar farm area looking south (bracket)

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Photo 11: Recent aerial photo of site, actual date unknown

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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 Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>PB</u>	(SP) STORM WATER MGT PLAN <u>N</u>	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION N	(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