



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Western Aggregates	MINE/PROSPECTING ID#: M-1988-108	MINERAL: Shale	COUNTY: Jefferson
INSPECTION TYPE: Monitoring	INSPECTOR(S): Tom Kaldenbach	INSP. DATE: January 31, 2012	INSP. TIME: 09:30
OPERATOR: TXI Operations LP dba Western Aggregates	OPERATOR REPRESENTATIVE: Randy Moulton	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial	BOND AMOUNT: \$464,162.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: <i>Tom Kaldenbach</i>	SIGNATURE DATE: July 9, 2012

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

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

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

OBSERVATIONS

This was a routine monitoring inspection conducted by Tom Kaldenbach of DRMS. Randy Moulton represented the operator. The weather was clear and the ground was dry. The site is located next to Highway 93, approximately 5 miles south of Boulder. The pit and material stockpiles are located west of the highway. The processing plant is located east of the highway, outside the permit area. The mine extracts shale from the Pierre Shale, using a hydraulic excavator. A haul truck carries the shale to a crusher, then a conveyor carries the shale to the processing plant where a kiln produces a light-weight aggregate product.

Mining in the pit is advancing southward, although the pace of mining has slowed in recent years due to the general economic downturn. There are three pond areas in the pit having an estimated total combined pond surface area of approximately 10 acres. Sides slopes of the pit walls appear to be no steeper than the 2.5:1 maximum slope specified in the reclamation permit.

Air Resource Protection:

There were no problems with fugitive dust.

Hydrologic Balance:

A ditch surrounds the pit for channeling surface runoff into a catchment basin in the bottom of the pit.

Gen. Compliance With Mine Plan:

Exhibit E of the permit application explains that the current pit originally was excavated by Great Western Aggregates in 1962-75 as a pre-law pit of about 30 acres. The current mine plan is to deepen the pit from the pre-law elevation of 5,940 ft down to 5,860 ft, about 10 acres at a time, with mining advancing southward in increments.

Backfilling has occurred in the northwestern part of the pit. During the inspection, the pit area appeared consistent with the 24 acres reported in the operator's recent annual reports.

The approved postmining land use of the pit area is rangeland and wildlife habitat. The bottom of the pit will contain a permanent pond and access road that were requested to remain as permanent by the landowner. A pond of about 10 acres (containing 150 acre-feet of water) that currently is in the northern part of the pit was in existence in 1988 when the permit was approved. The permit application says the pond is recharged by surface runoff, precipitation, and some groundwater.

Reclamation in the pre-law areas will involve pushing overburden stockpiles on the eastern and northern rims of the pit down into the pit, covering the bottom of the pit and side slopes of the pit with 2 to 4 feet of overburden material. The sideslopes will be terraced, with resulting slopes no steeper than 2.5:1.

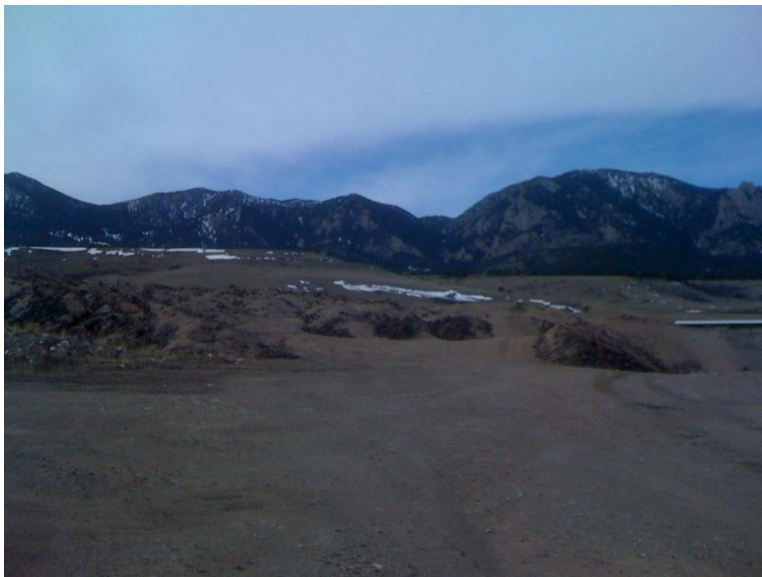
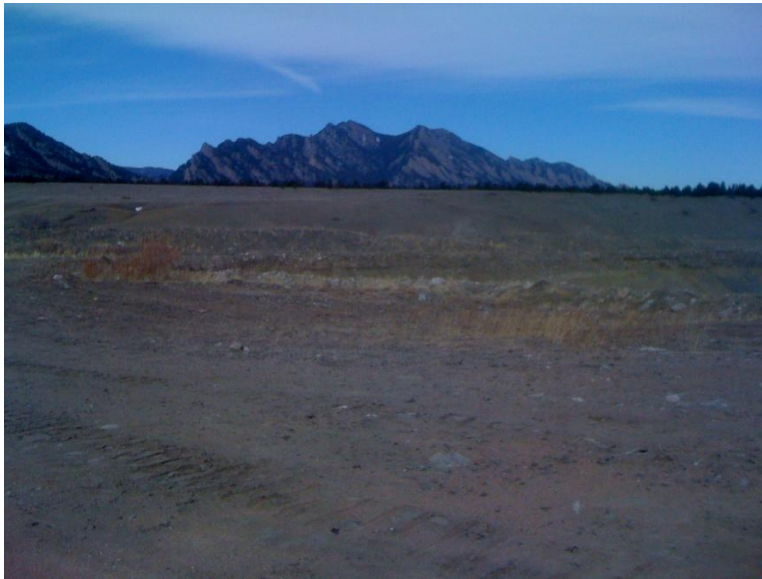
Topsoil was not salvaged during pre-law mining; therefore, the overburden on the bottom of the pit and on the pit sideslopes will be fertilized and manured before it is seeded with a grass seed mix that contains some saltbush and winterfat. Topsoil in any newly disturbed areas will be live-hauled directly to areas where overburden has been placed on the pit sideslopes.

The operator appeared to be in general compliance with the mine plan.

Financial Warranty:

The \$464,162 of bond on deposit appears adequate for reclaiming the site to the requirements of the approved reclamation plan.

PHOTOGRAPHS







Inspection Contact Address

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Enclosure