

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:
Bromley Lakes	M-1987-049	Sand and gravel	Adams
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Tyler V. O'Donnell	April 14, 2015	13:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Ready Mixed Concrete Company	Bill Timmons	112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	Complete Bond	\$4,169,240.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	Tyler O'Dormell	November 24, 2015

# **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>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 <u>N</u>	(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 Y	(SW) STORM WATER MGT PLAN <u>Y</u>	(CI) COMPLETE INSP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>Y</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 routine monitoring inspection was conducted by Tyler O'Donnell of the Division of Reclamation, Mining and Safety (Division). Ready Mixed Concrete Company, the Operator, was represented by Bill Timmons during the inspection. Michael Hart with Hart Environment, the consultant for Ready Mixed Concrete Company, was also present during the inspection.

The Bromley Lakes Pit is located in Adams County approximately 1 mile southeast of Brighton, Colorado. The Bromley Lakes Pit is currently a 287.8-acre 112c Construction Materials Reclamation Permit. The permit was issued in September 1987. The primary commodity being mined at the site is sand and gravel. The approved post-mining land uses are developed water resource and wildlife habitat. The mine site is surrounded by the following land uses; residential, cropland, wildlife habitat, developed water resource, industrial/commercial, and residential.

No problems or possible violations were observed during the inspection. The mining operation was active during the inspection. The Operator was processing and stockpiling material in phase 18. There were multiple stockpiles of product scattered around the processing plant. At the present time it appears that the mining operation has affected nearly the entire permitted site. The Operator was retreat mining phase 11 (land bridge), and removing sections of the conveyor belt as mining is completed. It appears that phases 9 through 17 have been mined out. Phases 9 through 17 are in various stages of reclamation. The Operator has done an exceptional job of conducting concurrent reclamation.

## Backfilling and Grading:

The slopes of Cell No. 3 were graded to 3H:1V or flatter. There appeared to be areas were minor wave erosion has occurred around the reservoir. The Operator will need to ensure all slopes are graded and stabilized at 3H:1V or flatter. With the exception of phase 15, it appears that the Operator was actively backfilling and grading phases 12 through 17. Cell No. 2 is currently being backfilled with imported fill from the City of Brighton's clean out of Cell No.1 and crusher fines from the permitted operation. Work was also being done to re-construct/restore the McCanne Ditch.

# Financial Warranty:

The current amount of financial warranty the Operator has on deposit with the State is \$4,169,240.00. The reclamation cost estimate for this pit was updated with this inspection. It was determined that the current financial warranty amount is adequate. The Operator could request a surety reduction and reduce the amount of financial warranty.

# Hydrologic Balance:

The pit is located just east of the South Platte River. There is a slurry wall installed around Cell No. 3, thus creating a water storage reservoir. The mined out Cell No. 3 was full of water, it appears that the City of Brighton has begun to use the mined out cell as a water storage reservoir. The Operator has a valid substitute water supply plan for the exposed groundwater that is not within a lined cell. There appeared to be no significant impacts to the prevailing hydrologic balance.

# Roads:

All haul roads were stable and well maintained. The haul roads were being watered during the inspection. No excessive dust was observed from mining activities.

## **Reclamation Success:**

Reclamation is currently progressing as described in the approved reclamation plan. Large portions of the site

have been backfilled and graded. The Operator has seeded the portion of the site located west of Cell No. 3 (Photo 4).

#### **Revegetation:**

There was 22 acres of recently seeded land just west of Cell No. 3. The area west of Cell No. 3 has been revegetated and has a strong mix of grasses beginning to establish.

#### Erosion/Sedimentation:

There was no evidence of excessive erosion (rills, gullies, or sediment fans). Some wave erosion was observed around the banks of Cell No. 3. The Operator will need to take measures to stabilize the banks and to prevent future erosion.

#### Signs and Markers:

There was a permit sign at the entrance to the processing plant.

#### **Inspection Contact Address**

Bill Timmons Ready Mixed Concrete Company 4395 Washington St. Denver, CO 80201

cc: Wally Erickson, DRMS

Michael J. Hart Hart Environmental P.O. Box 1303 Boulder, CO 80306

#### PERMIT #: M-1987-049 INSPECTOR'S INITIALS: TOD INSPECTION DATE: April 14, 2015

# **PHOTOGRAPHS**



**Photo 1:** Backfilling and grading in Phase 16.



Photo 2: Re-construct/restore the McCanne Ditch



**Photo 3:** Retreat mining of phase 11 (land bridge). Sections of the conveyor belt have been removed as mining is completed.



Photo 4: Seeded portions along the west side of Cell No. 3