

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

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: |
|-------------------------|---------------------------------|---------------------------------------|-------------|
| Hatchery Pit | M-2014-043 | Gravel, sand and bor | Adams |
| | | for construction | |
| INSPECTION TYPE: | INSPECTOR(S): | INSP. DATE: | INSP. TIME: |
| Monitoring | Jared L. Ebert | July 19, 2018 | 10:30 |
| OPERATOR: | OPERATOR REPRESENTATIVE: | TYPE OF OPERATION: | |
| Albert Frei & Sons Inc. | Ben Frei and Steve O'Brian | 112c - Construction Regular Operation | |

| REASON FOR INSPECTION: | | BOND CALCULATION TYPE: | BOND AMOUNT: |
|-------------------------------|------------------------|------------------------|---------------------|
| Normal I&E Program | | Partial Bond | \$809,500.00 |
| DATE OF COMPLAINT: | | POST INSP. CONTACTS: | JOINT INSP. AGENCY: |
| NA | | None | None |
| WEATHER: | INSPECTOR'S SIGNATURE: | | SIGNATURE DATE: |
| Clear | Jand Ebett | | August 7, 2018 |

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 and Hydrologic Balance

PROBLEM: The Operator has not submitted to the Division in their annual reports all of the groundwater level monitoring data as required by the permit. This is a problem at this time for failure to submit the required water monitoring report in accordance with Rule 3.1.7(7) and Rule 1.15(1)(c) and for failure to comply with the condition of a reclamation permit in accordance with C.R.S. 34-32.5-124.

CORRECTIVE ACTIONS: Submit all the results of the groundwater monitoring program to the Division that has been collected to date.

CORRECTIVE ACTION DUE DATE: 9/10/18

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM: The current mine plan needs to be updated and clarified to address the use of the existing northwest lake for processing water. Pursuant to C.R.S. 34-32.5-112 (1) and (2), The Operator must provide sufficient information to describe or identify how the operator intends to conduct the operations and reclamation. **CORRECTIVE ACTIONS:** The Operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved mine plan and reclamation plan to reflect the change in use of the northwest lake for process water utilization and treatment.

CORRECTIVE ACTION DUE DATE: 10/08/18

OBSERVATIONS

This was a monitoring inspection of the Hatchery Pit, Division of Reclamation, Mining and Safety (DRMS or Division) permit number M-2014-043, operated by Albert Frei and Son's, Inc. (AFS). I, Jared Ebert with DRMS conducted the inspection. Mr. Ben Frei with AFS and Steve O'Brian with Environment, Inc. accompanied me during the inspection.

The Hatchery Pit is a 112c mining operation for gravel, sand and borrow material. The permit area is 53.17 acres in size and proposed post mine land use is Industrial/Commercial pending county land use approval.

Availability Of Records:

During the review process of the permit, AFS committed to conducting baseline water level monitoring and operations water level monitoring. The monitoring plan consisted of monitoring 7 piezometers shown on the attached map. The plan called for monthly monitoring of the water levels for one year prior to initiating mining and then quarterly monitoring after that. The results of the water monitoring is to be submitted with the annual report each year. The annual report received on November 15, 2016 for the 2016 monitoring year included monitoring results for June, July and November of 2016. The annual report received on November 16, 2017 did not include water monitoring results. This issue is cited as a problem at the beginning of this report.

Backfilling and Grading:

Mining has been initiated, at the time of the inspection it did not appear that inert fill has begun to be imported into the site.

<u>Financial Warranty:</u> The financial warranty appears adequate at this time.

Hydrologic Balance:

As discussed above. The Division has not received the results from the required groundwater level monitoring program. This issue is cited as a problem at the beginning of this report.

The Operator is utilizing the northwest pre-existing lake for processing operations at the site. AFS had dewatered the northwest lake to construct a berm separating the lake into a west and east cell. The two cells have filled back in with water. It appears water from the processing plant flows into the east cell to settle out the wash fines. A small break in the berm allows water to flow into the west cell. Water is then pumped from the west cell back to the processing plant and recycled creating a closed loop system.

Gen. Compliance With Mine Plan:

The Operator has mined the plant area and has setup a processing plant onsite. Mining has also begun in the Phase 1 mining area and they have installed the slurry wall around this phase. Mr. Frei indicated they have about four or five months remaining to complete the mining in the Phase 1 area. Also according to Mr. Frei, they may not install the slurry wall around the Phase II mining area.

As discussed in the Hydrologic Balance section of this report, the Operator is utilizing the pre-existing northwest lake for processing water and has modified the lake to create two cells. This activity was not

approved with the original permit application. AFS will need to submit an updated mining and reclamation plan to address this change in operations.

AFS has placed survey markers to delineate the 200 foot offset from the City of Thornton dam and slurry wall. The Phase 1 pit excavation has begun and the top of the pit excavation is outside the 200 foot setback.

Support Facilities On-site:

The processing plant area was observed and no problems were noted.

Topsoil:

Topsoil has been stripped in advance of mining and has been stockpiled for later reclamation use around the perimeter of the site in accordance with the approved plan.

PHOTOGRAPHS



Figure 1. From the northwest corner of the Phase 1 area looking south.



Figure 2. From the northwest corner of the Phase 1 area looking east.



Figure 3. From the southwest corner of the pre-existing northwest lake looking northeast. Berm between the west and east cell within dotted line.



Figure 4. From the east side of the processing area on top of the Phase II hillside looking west.

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 PB | (BG) BACKFILL & GRADING Y | (EX) EXPLOSIVES <u>NA</u> |
| (PW) PROCESSING WASTE/TAILING Y | (SF) PROCESSING FACILITIES Y | (TS) ТОРЅОІІ <u>Ү</u> |
| (MP) GENL MINE PLAN COMPLIANCE- <u>PB</u> | (FW) FISH & WILDLIFE <u>Y</u> | (RV) REVEGETATION <u>NA</u> |
| (SM) SIGNS AND MARKERS Y | (SP) STORM WATER MGT PLAN NA | A (RS) RECL PLAN/COMP NA |
| (ES) OVERBURDEN/DEV. WASTE <u>NA</u> | (SC) EROSION/SEDIMENTATION Y | (ST) STIPULATIONS \underline{Y} |
| (AT) ACID OR TOXIC MATERIALS <u>NA</u> | (OD) OFF-SITE DAMAGE \underline{Y} | |

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

Inspection Contact Address

Ben Frei Albert Frei & Sons Inc. P.O. Box 700 Henderson, CO 80640

Enclosure: 1.) Exhibit Gm-1, Monitoring Well Locations (Map).

EC: Steve O'Brian, Environment-inc@outdrs.net

