

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:     |
|---------------------------|---------------------------------|---------------------------------------|-------------|
| Halde Pit                 | M-2008-014                      | Sand and gravel                       | Kit Carson  |
| <b>INSPECTION TYPE:</b>   | <b>INSPECTOR(S):</b>            | INSP. DATE:                           | INSP. TIME: |
| Monitoring                | Elliott R. Russell              | May 12, 2014                          | 16:00       |
| OPERATOR:                 | <b>OPERATOR REPRESENTATIVE:</b> | TYPE OF OPERATION:                    |             |
| Halde Sand & Gravel, Inc. | None                            | 112c - Construction Regular Operation |             |

| <b>REASON FOR INSPECTION:</b> | BOND CALCULATION TYPE: | BOND AMOUNT:        |  |  |
|-------------------------------|------------------------|---------------------|--|--|
| Normal I&E Program            | Complete Bond          | \$35,670.00         |  |  |
| DATE OF COMPLAINT:            | POST INSP. CONTACTS:   | JOINT INSP. AGENCY: |  |  |
| NA                            | None                   | None                |  |  |
| WEATHER:                      | INSPECTOR'S SIGNATURE; | SIGNATURE DATE:     |  |  |
| Windy                         | Flitte Kurdel          | May 21, 2014        |  |  |
|                               |                        |                     |  |  |

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:** Signs & Markers

**PROBLEM/POSSIBLE VIOLATION:** 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); specifically the eastern boundary needs to be clearly delineated. The operator shall provide photographic proof to the Division that this has been done by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 6/11/14

## **OBSERVATIONS**

The inspection was conducted by Elliott Russell of the Division of Reclamation, Mining and Safety (Division). Kerry Halde of Halde Sand & Gravel, Inc. was contacted prior to the inspection, but was unable to join the Division. The Halde Pit is located approximately 2 miles southwest of Bethune, Colorado. The site is an active 112c operation with 68.28 acres permitted and the post-mining land use is rangeland. The Applicant has committed to only disturbing 10 acres at any given time through a phased reclamation plan. This inspection was carried out as a part of the Division's routine monitoring inspection program.

At 16:00, the Division arrived at mine site located south of County Road U. At the time of the inspection it was windy and overcast, and the ground was damp from a recent snowfall. The mine site identification sign was observed near the access road. The notice which was posted in 2008 during the application process was also at the entrance; this notice should be removed so there is no confusion regarding the status of the pit. The site was delineated by a fence along the western boundary. The eastern boundary markers could not be located. Please see the corrective action section of this report for more information.

The site consisted of two pits; a northern pit located in a field that appeared to be recently active and a southern pit that was older and located near the creek bed. After further research of the permit's file, the southern pit was pre-existing but on April 8, 2008 the Division received a letter and revised maps stating that this pit would be included in the permit. The northern pit had several small stockpiles just adjacent to the pit walls. There is a high possibility of erosion of these piles due to steep slopes and no vegetation cover. As required by Rule 3.1.9, if these piles are not to be utilized for reclamation within a short time frame, they should be seeded and have vegetative cover to be protected from erosion and deterioration.

An old dump was observed just south of the northern pit; this area consisted of trash, bottles, and cans. This debris will need to be removed prior to stripping topsoil off this area to ensure clean topsoil is used during reclamation.

In the approved mining plan, it was stated that earthen berms and/or silt fences would be utilized, as necessary, to prevent off-site damages resultant of surface run-off water. It was also stated that all mining would stop within 50 feet of Landsman Creek. The southern pit is just adjacent to the creek bed may have been pre-existing, but since that area is within the permit boundary and appears to have been mined since 2008 this area will need to meet the conditions of the mining plan as well. **The Division recommends putting an earthen berm between the mining activities and the creek to ensure there is no off-site damages from erosion and sediment.** This berm shall also contain and stabilize two erosion features that lead to the creek from along the access.

After review of the document records, the Division has created the attached map which shows the approved permit boundary (determined from georeferencing the Land Survey Plat submitted April 8, 2008) and an approximate disturbance boundary using a 2013 NAIP Aerial Image; approximate disturbance is estimated at 4.86 acres.

The reclamation cost estimate was recalculated with updated costs and information; the current bond held for reclamation in the amount of \$35,670 is adequate.

Photographs taken during the inspection are attached.

### PERMIT #: M-2008-014 INSPECTOR'S INITIALS: ERR INSPECTION DATE: May 12, 2014

# **PHOTOGRAPHS**



Permit identification sign at entrance; looking south.



Northern Pit; looking west.



Southern pit; looking south.



Topsoil piles along south edge of northern pit; looking southeast.



Erosion feature along access road; looking south.



Old trash dump; looking southwest.

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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>Y</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>NA</u>   |
| (PW) PROCESSING WASTE/TAILING <u>NA</u>  | (SF) PROCESSING FACILITIES <u>NA</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 PB                | (SP) STORM WATER MGT PLAN <u>NA</u>  | (SB) COMPLETE INSP Y        |
| (ES) OVERBURDEN/DEV. WASTE <u>NA</u>     | (SC) EROSION/SEDIMENTATION Y         | (RS) RECL PLAN/COMP Y       |
| (AT) ACID OR TOXIC MATERIALS <u>NA</u>   | (OD) OFF-SITE DAMAGE <u>Y</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

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