

**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:     |
|----------------------------------|------------------------|---------------------------------|---------------------------------------|-------------|
| Tucson South Resource            |                        | M-2004-044                      | Sand and gravel                       | Adams       |
| <b>INSPECTION TYPE:</b>          |                        | INSPECTOR(S):                   | INSP. DATE:                           | INSP. TIME: |
| Preoperation Inspection          |                        | Jared L. Ebert                  | January 24, 2019                      | 09:00       |
| OPERATOR:                        |                        | <b>OPERATOR REPRESENTATIVE:</b> | TYPE OF OPERATION:                    |             |
| Aggregate Industries - WCR, Inc. |                        | Joel Bolduc                     | 112c - Construction Regular Operation |             |
|                                  |                        |                                 | 1                                     |             |
| <b>REASON FOR INSPECTION:</b>    |                        | BOND CALCULATION TYPE:          | BOND AMOUNT:                          |             |
| Preoperation Inspection          |                        | None                            | \$326,040.00                          |             |
| DATE OF COMPLAINT:               |                        | POST INSP. CONTACTS:            | JOINT INSP. AGENCY:                   |             |
| NA                               |                        | None                            | County                                |             |
| WEATHER:                         | INSPECTOR'S SIGNATURE: |                                 | SIGNATURE DATE:                       |             |
| Snowing                          | Ja                     | nd Ebert                        | February 11, 2019                     |             |

## **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 <u>N</u>    | (RD) ROADS <u>N</u>          |
|--|-------------------------------------|------------------------------|
| (HB) HYDROLOGIC BALANCE <u>N</u>         | (BG) BACKFILL & GRADING <u>N</u>    | (EX) EXPLOSIVES <u>N</u>     |
| (PW) PROCESSING WASTE/TAILING <u>N</u>   | (SF) PROCESSING FACILITIES <u>N</u> | (TS) TOPSOIL <u>N</u>        |
| (MP) GENL MINE PLAN COMPLIANCE- <u>N</u> | (FW) FISH & WILDLIFE N              | (RV) REVEGETATION <u>N</u>   |
| (SM) SIGNS AND MARKERS <u>N</u>          | (SP) STORM WATER MGT PLAN <u>N</u>  | (RS) RECL PLAN/COMP <u>N</u> |
| (ES) OVERBURDEN/DEV. WASTE <u>N</u>      | (SC) EROSION/SEDIMENTATION <u>N</u> | (ST) STIPULATIONS <u>N</u>   |
| (AT) ACID OR TOXIC MATERIALS <u>N</u>    | (OD) OFF-SITE DAMAGE <u>N</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 pre-operation inspection of the Tucson South Resource site, Colorado Division of Reclamation, Mining and Safety ("Division" or "DRMS") permit number M-2004-004. The permittee for the site is Aggregate Industries - WCR, Inc. ("AI"). I, Jared Ebert with DRMS conducted the inspection. Joel Bolduc and Mark Miller with AI accompanied me during the inspection. Also, Jen Rutter with Adams County accompanied us during the inspection. It was snowing and the visibility was limited during the inspection.

Al submitted an amendment application ("AM01") to the Tucson South Resource permit to add an additional 16.2 acres to the currently approved permit area of 291.5 acres. The total proposed permit area for the site is 307.7 acres. The additional proposed permit area is split between three tracts; C, G and J as shown on the Exhibit C (C-1) map. Each of these tracts is proposed to be affected by the mining operation. Mining has not begun at the site with the exception of previously affected land within Tract M that was previously mined and partially reclaimed under former permit number M-1991-140. The affected land within Tract M was incorporated into the Tucson South Resource permit area as part of the original approval process.

With AM01, AI is revising the approved mining and reclamation plan. AI proposes to mine the site in three distinct phases as shown on the proposed Exhibit C maps. Phase 1 (South Area) is proposed to be wet mined and backfilled with overburden and non-marketable material. Phase 2 (West Area) and the Phase 3 (East Area) will have a slurry wall installed around the propose mine cells. Once the slurry wall is installed, AI intends to dewater and dry mine the material within the cells. The mine cells will be backfilled and graded to 3H: 1V slopes, topsoiled above the waterline and revegetated. For more specific details, please see the proposed mining and reclamation plan included with AM01.

The West Area consists of previously used general agricultural land. Agricultural structures have been demolished on site in preparation for mining and debris from this activity is being removed from the site. A previously used pump house, well and waterline and associated powerlines are located on the west central portion of this parcel. Al now owns these structures. The Brighton Ditch runs north and south on the west side of the proposed mine plan area within the Phase 2 (West Area). This ditch appears to be un-lined. Tract C part of the amended permit boundary is located in the northeast corner of the West Area. It appears there used to be greenhouses within Tract C. These greenhouses have been demolished in preparation for mining and the debris has been taken off-site.

The East Area also is largely former agricultural land. This parcel is nearly bisected by a wooded drainage. On the east end of this drainage is Tract G, a portion of the amended area. Tract G encompasses what appears to be a former borrow pit area that has become a wetland basin. The wooded drainage was walked, this area appears to have evidence of small pits or excavations that have long since reverted to wetlands. Overall, the area appeared dry with exception of the wetland basins, but the snow cover limited the visibility. Deer, turkeys and various song birds were observed within the wooded area. The southwest corner of the East Area includes a private residence that is now owned by AI. The South Platte River boarders the East Area on the east side. The snow cover made it difficult to access but according to the Exhibit C maps, portions of the riverbank have been armored. Tract M is located on the north end of the East Area. This area was mined and partially reclaimed. This area is vegetated with a small open water pond. The proposed conveyor corridor was observed within proposed Tract J. This tract runs along the west and north end of the existing City of Thornton reservoir north of the East Area. This corridor currently appears to consist of an access road for the

reservoir.

The South Area consists of an agricultural field. A small ditch boarders the southwest side of the South Area, this ditch appears to be an unlined ditch. According to the Exhibit C map, this ditch is used for return flow to the river from the Brighton Ditch.

Overall, the site appears to conform to the descriptions and depictions included in the AM01 application narrative and associated maps.

## **PHOTOGRAPHS**



Figure 1. Tract C, from northwest corner looking east.



Figure 2. Brighton Ditch on the west side of the West Area, looking north.



Figure 3. Notification sign located near the entrance to the south area.



Figure 4. Brighton Ditch return flow ditch on south side of South Area.



Figure 5. South area from the west side looking east.



Figure 6. Drainage east of Tract G.

Inspection Contact Address Joel Bolduc Aggregate Industries - WCR, Inc. 1687 Cole Blvd Golden, CO 80401

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