




**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.

<b>MINE NAME:</b> Ravenkamp Pit No 1	<b>MINE/PROSPECTING ID#:</b> M-1991-060	<b>MINERAL:</b> Gravel	<b>COUNTY:</b> Lincoln
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Timothy A. Cazier	<b>INSP. DATE:</b> August 23, 2017	<b>INSP. TIME:</b> 12:40
<b>OPERATOR:</b> Lincoln County	<b>OPERATOR REPRESENTATIVE:</b> Trey James & Chris Monk	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$0.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> October 23, 2017	

**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>Y</u>	(FN) FINANCIAL WARRANTY----- <u>NA</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>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</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>Y</u>	(ST) STIPULATIONS----- <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 inspection was conducted as part of the regular monitoring program. The Permittee (Lincoln County) was represented by Messrs. Trey James and Chris Monk during the inspection. The Ravenkamp Pit No 1 pit is accessed from Lincoln Co Rd 26 (about 6 miles west of Hugo on County Rd 2W). The access road is located approximately 2 miles south of County Rd 2W. This is a 112c gravel mine. It was not operating at the time of the inspection.

Availability of Records: Annual fees are paid through October 2017. The previous inspection was on July 15, 2013. The approved post-mine land use is rangeland. There are no open infractions. The permit was converted to a 112c in 2000. The Division has approved the following four TRs: TR-01 – weed control plan; TR-02 - Temporary seed mixture for topsoil stockpiles; TR-03 – approval to stockpile rotomillings and crushed concrete in the pit; and TR-04 – approving intermittent status.

Backfilling and Grading: Sufficient backfill material appeared to be available to push down from the highwall crest.

Complete Inspection: The entire permit area was inspected. No problems were observed during the inspection.

Excess Spoil and Dev. Waste: Observed overburden piles were on the south end along the access road and appeared stable.

Financial Warranty: As the site is permitted by a government entity, no bond is required by the Division.

Fish and Wildlife: No impacts to wildlife were observed.

Hydrologic Balance: A small amount standing water was observed in the pit (see **Photo 1**) as a result of recent storms. It was determined not to be exposed groundwater. Mr. Monks indicated groundwater is close to the pit floor.

Mr. Monks asked what the Division would require from the County to add a diversion channel that would allow the County to mine towards the southwest where there is a natural swale that conveys significant runoff during storms. There were different options the County is considering. This inspector responded the diversion channel would require either a technical revision (TR) or an amendment (AM) depending on the scope of the Diversion channel. If the channel requires additional land and/or changes the location where the natural flow is captured for use (e.g. alters flow to stock or irrigation ponds) an amendment will be required. Otherwise, a TR will likely be adequate. The County should discuss specifics with the Division prior to submitting either the TR or amendment.

Gen. Compliance with Mine Plan: The operation appeared to be in compliance with the approved mine plan. Google Earth was used to measure the disturbed area, which was estimated to be approximately 16 acres (based on imagery from 7/24/1993 through 6/13/2017). The maximum affected area allowed by the approved permit is 40 acres. Highwalls were estimated to vary between 8 and 16 feet in height and appeared stable (see **Photo 2**). Mr. Monk indicated future mining would be towards the south and west acknowledging they would need to deal with the drainage discussed above under hydrologic balance.

Off-site Damage: The operation appeared to be confined to the permit boundary.

Processing Waste: None observed. The County had stored some milled asphalt (see **Photo 3**) in the northeast area of the permit, which is allowed under TR-03.

Roads: Haul and access roads did not appear to be a source of sediment that could be tracked to paved roads.

Reclamation Success: The east side had been graded to 3H:1V or flatter, topsoiled and seeded (see **Photo 3**) as per the approved reclamation plan. If the county does not intend to re-disturb this area, they may want to consider requesting an acreage release for the reclaimed area.

Revegetation: Revegetation was observed to be proceeding well on the east side (see **Photo 3**). No noxious weeds were observed.

Sediment Control: No erosion problems were observed and no BMPs were needed at the time of the inspection.

Support Facilities On-site: None were observed on site.

Signs and Markers: The permit sign was properly posted (see **Photo 4**) and T-post boundary marker posts were observed to delineate the permit boundary.

Permit Stipulations: There are no open permit stipulations.

Storm Water MGT Plan: No oil or fuel spills observed. Representatives stated no stormwater management plan is required. Stormwater drains to the pit and infiltrates.

Topsoil: A topsoil stockpile was observed on the uphill side of the pit (see **Photo 5**) and appeared stable.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at [tim.cazier@state.co.us](mailto:tim.cazier@state.co.us) if you have any questions regarding this report.

## **PHOTOGRAPHS**



Photo 1. Standing water observed in the pit (looking SE).



Photo 2. Highwalls estimated to vary between 8 and 16 feet in height.

**PHOTOGRAPHS (cont.)**

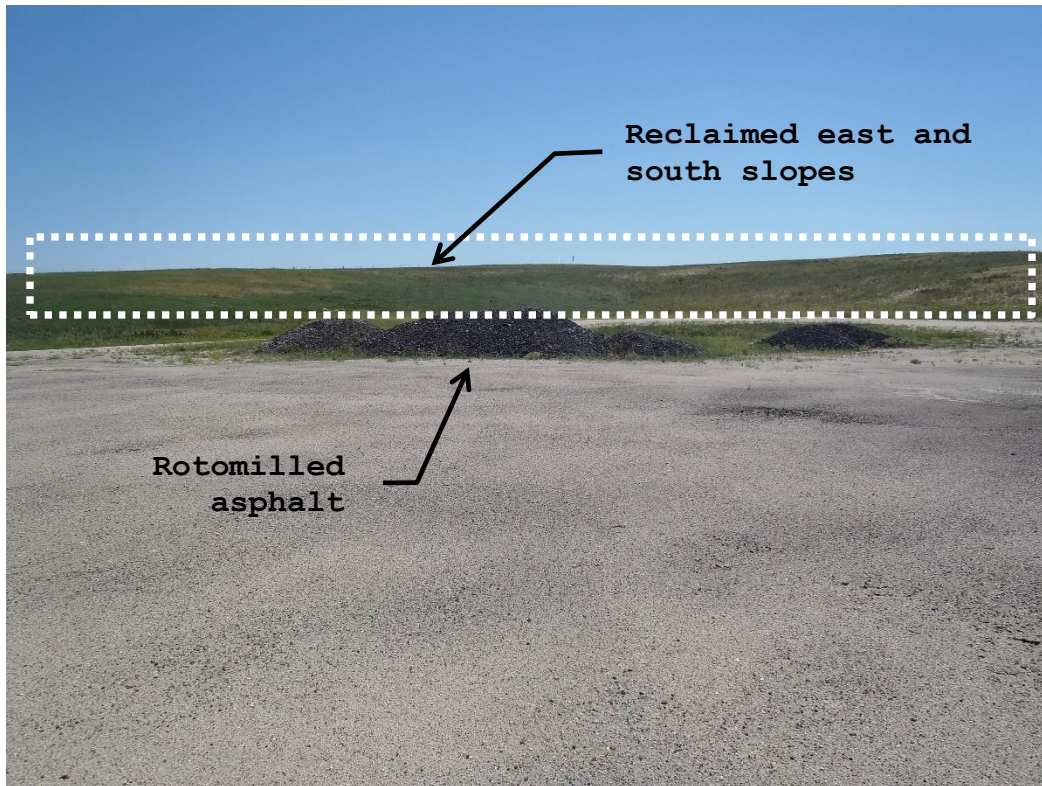


Photo 3. Reclaimed area and rotomilled asphalt (looking SE).



Photo 4. Permit sign at entrance (off County Rd 26).

**PHOTOGRAPHS (cont.)**



Photo 5. Topsoil stockpile (Near haul road).

**Inspection Contact Address**

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CC: DRMS file