




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: Kauffman Pit	MINE/PROSPECTING ID#: M-1978-327	MINERAL: Sand and gravel	COUNTY: Larimer
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: May 22, 2018	INSP. TIME: 11:00
OPERATOR: Jake Kauffman & Son, Inc.	OPERATOR REPRESENTATIVE: Dan Giroux, Frank Kauffman, Troy Kauffman	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$84,440.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 24, 2018	

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>Y</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>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</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 inspection of the Kauffman Pit (Permit No. M-1978-327) was conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The Division was accompanied by Dan Giroux of Terramax, Inc., Frank Kauffman, and Troy Kauffman during the inspection. The site is located approximately 2 miles east of Loveland, CO in Larimer County. The site can be accessed from the west off of Co Rd 9E, and passing through the operator's commercial yard. The site is located adjacent to the operator's other permitted site, called the Wagner/Kauffman Pit #3 (Permit No. M-1999-069). The affected land is owned by the operator.

This is a 112c operation permitted for 75.10 acres to mine sand and gravel just north of the Big Thompson River (see enclosed Google Earth image of site). The Division approved an Acreage Reduction (Revision No. AR-2) on 6/27/2017 that released 9.1 acres of reclaimed pastureland at the far eastern edge of the permit area. This operation dewatered mining areas prior to excavation. The maximum mining depth was approximately 15 feet. Mined material was processed on site. The operation began mining the southern portion of the site and proceeded generally northward, leaving a series of unlined ponds. According to the Division of Water Resources (DWR), a total of 36.2 acres of groundwater surface was exposed on site prior to 1981, and thus, does not require augmentation. There are currently two unlined ponds included in the permit area, with a total surface area of 34.7 acres. A small unlined pond is located just west and outside of the permit area, that is approximately 1 acre in size. The total surface area of groundwater exposed on site is less than the pre-1981 amount of 36.2 acres, and existing pond locations are within the boundaries of the pre-1981 areas of exposure. Therefore, the site is considered to be in compliance with DWR with regard to the amount of exposed groundwater on site. The operator does maintain a SWSP for the site for water used in dust control.

The approved reclamation plan for the site includes leaving unlined ponds with shoreline slope gradients ranging from 2.5H:1V to 5H:1V. Portions of the disturbed land will be revegetated with a native grass mixture. Two outdoor storage areas will remain for use by the operator's adjacent commercial yard. One storage area is located at the south end of the north pond, and the other is located east of the south pond. The two storage areas consist of approximately 12.5 acres, but may increase in area as the operation continues to backfill the eastern portion of the south pond to gain additional storage for the commercial operation. The material stored in these areas does not come from either of the two permitted sites on this property. The reclamation plan also calls for a recycled materials plant to operate at the eastern edge of the permit area. The plant area covers approximately 8.25 acres at this time. The approved post-mining land use for the site is industrial/commercial, in accordance with city zoning.

During the inspection, the recycled materials plant was in operation (**Photos 1-3**). Several material stockpiles are stored in this area. The Division observed no evidence of spills or improper storage of fuel. The two ponds appear to be reclaimed in accordance with the approved reclamation plan, as their shorelines have been graded to the approved final slope configuration and are stable. The north pond (**Photos 4 and 5**) appears to have been undisturbed for some time, as its shorelines have very good vegetative cover, including several mature trees. The south pond (**Photo 6**) has good vegetative cover around all but the eastern shoreline, which the operator continues to backfill. This shoreline has slopes of 4H:1V or flatter. Because the area east of the south pond has been designated for industrial/commercial use, it will not require revegetation for final release. This storage area is currently being used for stockpile storage in support of the operator's commercial yard (**Photo 7**). The designated storage area south of the north pond is currently being used for industrial/commercial purposes (**Photos 8 and 9**).

No problems were observed during the inspection. However, the Division recommends the operator implement the approved weed control plan for the site, especially for any state-listed noxious weed species. Additionally, because the site is considered releasable at this time, the Division strongly encourages the operator to submit a

full release request for the permit. If any additional flood damage were to occur at the site, the Division would have to increase the required financial warranty to cover costs for repairing the damage and re-doing any damaged reclamation work. Also, if the operator were to accidentally disturb land outside the approved permit boundary (e.g., in the recycled materials plant area), this would be considered "offsite damage". Because mining was completed at the site many years ago, and disturbed land has been reclaimed in accordance with its approved post-mining land use, the Division believes it would be in the operator's best interest to request full release of the site in the near future.

PHOTOGRAPHS



Photo 1. View looking northwest across northern portion of material recycling plant that operates at eastern edge of permit area.



Photo 2. View looking west across material recycling plant that operates at eastern edge of permit area.



Photo 3. View looking southwest across material recycling plant that operates at eastern edge of permit area.



Photo 4. View looking south across reclaimed north pond. Note established vegetation across shoreline, including several mature trees.



Photo 5. View looking southeast across reclaimed north pond. Note established vegetation across shoreline, including several mature trees. Bare ground in foreground is part of repaired berm separating the pond from a pit in the Wagner/Kauffman Pit #3 permit area.



Photo 6. View looking northeast across reclaimed south pond. Note shorelines have good vegetative cover, except for portion of eastern shoreline where pond continues to be backfilled (circled).



Photo 7. View looking north across designated storage area located east of south pond, where operator stores material and equipment in support of the adjacent commercial yard.



Photo 8. View looking northeast across designated storage area located south of north pond, which operator leases out for commercial/industrial use.



Photo 9. View looking northwest across designated storage area located south of north pond, which operator leases out for commercial/industrial use.

Inspection Contact Address

Frank Kauffman
Jake Kauffman & Son, Inc.
502 S. County Road 9E
Loveland, CO 80537

Enclosure: Google Earth image of site

CC: Dan Giroux, Terramax, Inc. at: dangiroux@terramax.com

M-1978-327 / Kauffman Pit / Jake Kauffman & Son, Inc.

Red Outline = 75.10 acres = Approved Permit Area

Blue Outline = 34.7 acres = Total Exposed Groundwater in Permit Area

(Image data from 10/14/2017)

