

**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:
Hitch Rack Ranch Quarry		M-2017-049	Granite Aggregate	El Paso
INSPECTION TYPE:		INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Preoperation Inspection		Amy Eschberger, Tim Cazier	January 30, 2018	12:50
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
Transit Mix Concrete Co.		Brandon Heser, Paul Kos, and Bob Stabo	112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b>		BOND CALCULATION TYPE:	<b>BOND AMOUNT:</b>	
Preoperation Inspection		Complete Bond	No Bond Held	
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA		None	None	
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:	
Clear	Λς.		April 16, 2018	
	-1	my achluger	▲ ·	

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

## **OBSERVATIONS**

This was a preoperation inspection of the proposed Hitch Rack Ranch Quarry (File No. M-2017-049) conducted by Amy Eschberger and Tim Cazier of the Division of Reclamation, Mining and Safety (Division). The 112c permit application for the proposed Hitch Rack Ranch Quarry (Application) was filed for review on November 9, 2018 by Transit Mix Concrete Co. (Applicant). The Applicant was represented during the inspection by Brandon Heser, Paul Kos, and Bob Stabo.

The site is located approximately 10 miles southwest of Colorado Springs, in El Paso County. The Application proposes constructing an access road off of Hwy 115 that would cross the Hitch Rack Ranch property and enter the mining area from the southeast. Currently, the site is accessed from the east via Little Turkey Creek Road, which has a locked gate at both the eastern and western edges of the property in Section 16. The proposed affected land is primarily owned by RMBC Group, LLC, with a small portion of the proposed access road area owned by the State of Colorado. The State of Colorado owns the mineral rights of the proposed affected land.

The terrain in the proposed mining area consists of steep drainages separated by narrow finger ridges with prominent granitic rock outcrops. This area is covered with dense forest of lodgepole pine, spruce, Douglas fir, ponderosa pine, and pinyon pine. The lower slopes of the foothills have wider ridges with steep drainages and vegetation primarily composed of Gambel oak, and grasses with mixed conifers on steeper slopes. The lower elevations of the valley are wide gentle slopes with vegetation marked by thick long grass prairie. Elevations at the site range from 7,720 feet on the ridge in the southwest corner of Section 16 to 6,600 feet where the proposed access road would intersect Highway 115.

The project area is drained by Little Turkey Creek. This creek empties into Turkey Creek four miles southeast of the site, and eventually empties into the Arkansas River upstream from Pueblo, Colorado. Little Turkey Creek crosses the property, but is located north (and outside) of the proposed affected land boundary. The Application states the operation will maintain a 100 foot lateral mining buffer from Little Turkey Creek, and will keep the pit floor a minimum of 10 feet above the elevation of the creek. The proposed operation will only be used by light duty pickups to access surface and groundwater monitoring locations, and to secure the road during blasting operations. The proposed access road will cross Little Turkey Creek in Section 22. This culvert crossing will be located along the current creek alignment and will match the existing channel grade. The length of culverts to be installed at this crossing will be minimized to reduce the area of the channel that will be affected.

The Application describes a granite quarry operation with on-site processing of mined materials to include crushing, screening, washing, and production of aggregate products. The permit area includes 398.88 acres, with 239.03 acres to be affected by the operation. The quarry operation will develop one large excavation area with highwalls maintained at a benched configuration. Fines/overburden material will be stored in three primary locations, two inside the pit, and one to the west of the pit. The quarry operation will advance through six mining phases with reclamation of affected lands occurring concurrently as the operation progresses, thereby minimizing the extent of the unreclaimed disturbance. Given the nature of the phased mining plan with contemporaneous reclamation, the Division will require a financial warranty in the amount of \$3,549,294.00, to address the cost of reclamation through the development of the third mining phase. Affected lands will be reclaimed to support wildlife habitat post-mining land use.

At the time of the inspection, it was partly cloudy and cool. The public notice signs, required by Rule 1.6.2(1)(b), were posted at the Little Turkey Creek Road entrance off Hwy 115 (**Photo 1**), and at the location of the proposed access road off Hwy 115. Given that Hwy 115 is the only road located near the proposed mine site

where the notices may be viewed by the public, the locations chosen are sufficient.

The Division observed the locations of groundwater monitoring wells LTC-GW-7, LTC-GW-6, LTC-GW-2, and LTC-GW-1, discussed in Exhibit G of the Application. Monitoring wells LTC-GW-1, LTC-GW-2, and LTC-GW-7 were completed with continuous monitoring well tubing (**Photos 2-5**). Monitoring well LTC-GW-6 was completed without the continuous monitoring well tubing (**Photos 6 and 7**). Three additional monitoring wells were installed on site, including LTC-GW-3, LTC-GW-4, and LTC-GW-5. These wells were installed outside (and south) of the Little Turkey Creek valley, in the proposed mining area. The seven monitoring wells were installed in 2017 under a Notice of Intent to Conduct Exploration Operations (NOI) to begin collecting baseline groundwater quality and quantity data for the site. Once the required baseline data has been collected, the Applicant will submit a final report to the Division in the form of a Technical Revision. This revision will also propose a groundwater compliance monitoring plan based on the results of the baseline study. The Application proposes two compliance monitoring wells, LTC-GW-1, located upstream of the proposed quarry area, and LTC-GW-2, located downstream of the proposed quarry area. The proposed compliance wells are located within the permit area.

The Division also observed the two surface water monitoring stations on Little Turkey Creek, including LTC-1 (**Photo 8**), located downstream of the proposed quarry area, and LTC-2 (**Photo 9**), located upstream from the proposed quarry area. The Applicant has begun collecting baseline surface water quality and quantity data for Little Turkey Creek at these two monitoring locations. The results of the surface water baseline study will be submitted with the results of the groundwater baseline study in the form of a Technical Revision. The revision will also propose a surface water compliance monitoring plan based on the results of the baseline study.

The Application identified several significant, valuable and permanent man-made structures located within 200 feet of the proposed affected land, in accordance with Rule 6.4.19. These structures were identified on Figure C-2 of the Application. The originally submitted Figure C-2 showed structures located within 200 feet of the proposed permit boundary. However, the revised Figure C-2 (submitted March 9, 2018), showed all structures located within 200 feet of the proposed affected land boundary, as required by Rule 6.4.3(b). With this revision, some of the structures shown on the originally submitted Figure C-2 were removed on the revised Figure C-2, as they are not located within 200 feet of the proposed affected land boundary. For example, the gates that exist at the entrances to the property along Little Turkey Creek Road are not shown on the revised Figure C-2. The Division observed a gate lying on the ground (**Photo 10**) near monitoring well LTC-GW-7. The Division does not consider this gate to be a significant, valuable, and permanent structure as described in Rule 6.4.19, which would require a structure agreement. The Division observed the location of the Schluckebier headwall, headgate, and pipeline (**Photos 11 and 12**) located within 200 feet of the proposed affected land boundary, north of Little Turkey Creek. The pipeline was disconnected and the structure appeared to be in disrepair. The Division did not observe any significant, valuable, and permanent man-made structures located within 200 feet of the proposed affected land boundary.

The Division observed the location for the proposed discharge point from the pit area into Little Turkey Creek (**Photo 13**). This point is located east of the proposed quarry area. During operations, water from the pit area will be temporarily detained in a sediment basin, before being released via a culvert to the discharge point. For reclamation, a channel will be constructed along the F2 Fines stockpile (inside the pit), across the pit floor, and through the ridge between the pit area and the creek to convey water to the same discharge point. The reclamation channel will follow the alignment of the plant sediment detention basin outlet culvert to minimize disturbances at the confluence with Little Turkey Creek. During the inspection, the Division observed water present in this portion of the creek. It should be noted, that all waters discharged from the site will be regulated by a National Pollutant Discharge Elimination System (NPDES) permit obtained from the Colorado Department of Public Health and Environment, Water Quality Control Division. The discharge permit will have specific

effluent limitations and monitoring requirements.

The Application proposes maintaining a 100 foot mining buffer from Little Turkey Creek. This buffer zone is also south of Little Turkey Creek Road in much of Section 16, except in the area where the creek crosses and is located north of the road, for a stretch of approximately 600-700 feet. The Division observed the buffer area to consist primarily of forested land, which separates the proposed quarry area from Little Turkey Creek and Little Turkey Creek Road (**Photos 14 and 15**).

No problems were observed during the inspection.

The Division sent notice of the application filing to several agencies on November 9, 2017, including to:

- Colorado Department of Public Health and Environment, Air Pollution Control Division
- Colorado Department of Public Health and Environment, Water Quality Control Division
- Colorado Division of Water Resources (CDWR)
- Colorado Parks and Wildlife (CPW)
- Colorado Oil and Gas Conservation Commission
- History Colorado, Office of Archaeology and Historic Preservation (OAHP)
- Colorado State Land Board (CSLB)
- El Paso County Commissioners
- El Paso County Planning and Community Development
- El Paso County Conservation District
- Turkey Creek Conservation District
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

The Division received comments on the application from the following agencies: History Colorado, OAHP, CSLB, CDWR, and CPW. The agency comments did not indicate the Application is contrary to law or in conflict with any agency concerns. All recommendations made by commenting agencies were incorporated into the permit.

#### PERMIT #: M-2017-049 INSPECTOR'S INITIALS: AME INSPECTION DATE: January 30, 2018

### **PHOTOGRAPHS**



Photo 1. View of public notice sign posted at Little Turkey Creek Road entrance off Hwy 115.



**Photo 2.** View of groundwater monitoring well LTC-GW-7, installed downgradient from proposed quarry area in Section 16, near eastern property boundary.



**Photo 3.** Close-up view of groundwater monitoring well LTC-GW-7, completed with continuous monitoring well tubing.



**Photo 4.** View of groundwater monitoring well LTC-GW-2, installed downgradient from proposed quarry area in Section 16, completed with continuous monitoring well tubing.



**Photo 5.** View of groundwater monitoring well LTC-GW-1, installed upgradient from proposed quarry area in Section 16, near western property boundary.



**Photo 6.** View of groundwater monitoring well LTC-GW-6, installed downgradient from proposed quarry area in Section 16, between monitoring wells LTC-GW-2 and LTC-GW-7.



**Photo 7.** Closer view of groundwater monitoring well LTC-GW-6, installed downgradient from proposed quarry area in Section 16, completed without continuous monitoring well tubing



**Photo 8.** View of surface water monitoring station LTC-1 (circled) on Little Turkey Creek, located downstream from proposed quarry area. Note creek partially frozen during inspection.



**Photo 9.** View of surface water monitoring station LTC-2 (circled) on Little Turkey Creek, located upstream from proposed quarry area. Note creek partially frozen during inspection.



**Photo 10.** View of gate observed lying on ground near monitoring well LTC-GW-7. The Division does not consider this a significant, valuable, and permanent structure as described in Rule 6.4.19, which would require a structure agreement.



**Photo 11.** View looking downstream on Little Turkey Creek, showing Schluckebier Headwall, Headgate, and Pipeline structures identified in application as located within 200 feet of proposed affected land boundary. Note pipeline is disconnected.



**Photo 12.** View looking upstream on Little Turkey Creek, showing Schluckebier Headwall, Headgate, and Pipeline structures identified in application as located within 200 feet of proposed affected land boundary.



**Photo 13.** View looking downstream on Little Turkey Creek from Little Turkey Creek Road, showing proposed discharge point for which Applicant will obtain a NPDES permit from CDPHE, WQCD. Discharge pipe/drainage would be from right side of photo as indicated with arrow (location approximated).



**Photo 14.** View looking east from Little Turkey Creek Road, showing existing vegetation between the road and Little Turkey Creek (located south of road at this location, at right).



**Photo 15.** View looking south from Little Turkey Creek Road, showing existing vegetation between the road and the proposed quarry area (hill in background).

### **Inspection Contact Address**

Brandon Heser Transit Mix Concrete Co. 444 E. Costilla St. Colorado Springs, CO 80903

EC: Paul Kos, Norwest Corporation at: <u>pkos@norwestcorp.com</u> Tim Cazier, DRMS at: <u>tim.cazier@state.co.us</u> Wally Erickson, DRMS at: <u>wally.erickson@state.co.us</u>