



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: Wattenberg Lakes	MINE/PROSPECTING ID#: M-2004-051	MINERAL: Aggregate	COUNTY: Weld
INSPECTION TYPE: Monitoring	INSPECTOR(S): Peter S. Hays	INSP. DATE: June 28, 2018	INSP. TIME: 12:30
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Connie Davis, Christine Felz	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$520,000.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: July 3, 2018	

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: Availability Of Records

PROBLEM: The Operator was required to provide the Division agreements with the City of Westminster to mine within 200 feet of the City owned structure. The original farm house and other buildings were razed 3 years ago according to the Operator.

CORRECTIVE ACTIONS: The Division was not provided with the City of Westminster agreements to mine within 200 feet or raze the City of Westminster structures. The Operator must provide the Division will documentation allowing the structures to be razed by the corrective action date.

CORRECTIVE ACTION DUE DATE: 8/02/18

OBSERVATIONS

The Wattenberg Lakes site was inspected by Peter Hays with the Division of Reclamation, Mining and Safety (Division/DRMS) as part of the Division's monitoring inspection program. Mrs. Connie Davis and Mrs. Christine Felz with Aggregate Industries, Inc. were present during the inspection. The site was previously inspected by the Division on December 1, 2014. An inspection map created following the inspection is attached.

The Wattenberg Lakes 112c permit was issued with conditions by the Division on February 10, 2005. The site is permitted for 420.8 acres with 245 acres of mining disturbance. No revisions to the original Mining and Reclamation Plans have been submitted by the Operator. The Operator is required to notify adjoining landowners, including Peter L. Baurer and Carl C. Eiberger, of any technical revisions submitted to the Division per the permit approval stipulation. The Operator has recently purchased the Baurer property. The site entrance has moved since the last inspection. The entrance is now from CR 23 ½, instead of from CR 23 ¾. The required mine sign was observed at the entrance gate and the site boundaries were well defined pursuant to Rule 3.1.12.

The site was actively mining aggregate, dewatering and backfilling the mining cells during the inspection.

Phase 2 / Pond 1 Mining Area – The phase was actively being mined during the inspection. An approximately 8 foot thick seam of mud was discovered between the sand and gravel resource in the phase. The mud was being transported to Phase 1 / Mining Area 3 to backfill the phase to the approved wetland mitigation area reclamation. The depth of excavation was estimated at 25 feet. The cell was being dewatered during the inspection.

Phase 1 / Mining Area 3 – The phase has been mined and was being backfilled with mud material from Phase 2 / Pond 1. The final grade to create the approved wetland mitigation area reclamation will occur later according to the Operator.

Phase 1 / Mining Area 2 – The phase has been mined and backfilled by the Operator. A road has been built through the phase to access Phase 1 / Pond 2. The final grade to create the approved wetland mitigation area reclamation will occur later according to the Operator.

Phase 1 / Pond 2 Mining Area – The phase has been stripped of topsoil and overburden south, east and northeast of the oil and gas well. The topsoil was stockpiled around the perimeter of the phase. The overburden was stockpiled south of the oil and gas well on the stripped sand and gravel surface. The Operator intends to concurrently reclaim the phase as mining progresses. The Operator stated the phase will be backfilled instead of lined to create a reservoir as currently approve in the Reclamation Plan. The Division will require the Operator to update the Reclamation Plan in the future to reflect the change. The Operator stated the oil and gas wells in Phase 1 / Pond 2 mining area might be abandoned by the oil and gas company.

Phase 3 / Pond 3 Mining Area – The phase is mostly mined out except for the powerline islands around the power poles. The perimeter highwalls have been graded to the final 3H:1V slope except for a 1000 foot section of highwall south of the conveyor along the east side of the phase. Stockpiles of overburden and topsoil to complete the reclamation of the remaining highwall were observed on the pit floor. The Operator is working on an agreement with Xcel Energy to move the powerline along the west side of the phase to allow the remaining island to be excavated. The slurry wall around Phase 3 – Pond 3 was installed in 2013. T-posts indicating the centerline of the slurry wall were observed during the inspection. The Division does not have proof of SEO approval of the slurry wall. The approved mining plan states an offset of 40 feet will be maintained from the slurry wall. The required Platte River offset of 200 feet was not confirmed during the inspection, since mining activity did not appear to be closer than 300 feet from the river.

Phase 2 / Mining Area 1 – The Phase is undisturbed by mining activity and is scheduled to be mined as the last during the winter when groundwater elevations are lower due to the proximity to the South Platte River.

The material mined at the site is conveyed to the adjacent Platte Valley operation for processing and stockpiling. The conveyor loading point was located in the northeast corner of the Phase 2 / Pond 1 Mining Area. The Operator stated the conveyor would be extended to allow mining of the Phase 1 / Pond 2 Mining Area. The approved Mining Plan states the average mine depth is 24 feet with a maximum depth of 41 feet. The approved post mining land use for the site is Developed Water Resource. As stated above, the slurry wall has been completed around Phase 3 / Pond 3 Mining Area. The approved Reclamation Plan states all reservoir slopes will be reclaimed to at least a 3H:1V final grade. The slopes around the perimeter of Phase 3 / Pond 3 Mining Area appeared to be graded to 3H:1V, however the slopes were not measured by the Division. The Operator stated survey control was used while creating the slopes.

The Operator was required to provide the Division agreements with the City of Westminster to mine within 200 feet of the City owned structure. The original farm house and other buildings were razed 3 years ago according to the Operator. The Division was not provided with the City of Westminster agreements to mine within 200 feet or raze the structures. As cited as a problem, the Operator must provide the Division will documentation allowing the structures to be razed by the corrective action date.

During the permit application review process, the Operator committed to notify the Division if during dewatering or after installation of the slurry wall, the relative groundwater elevation between two or more monitoring wells differed from the seasonal baseline condition by more than 2 feet and to provide monthly monitoring groundwater well data along with the annual report. The required monthly monitoring well data was submitted with the 2018 Annual Report.

The Operator provided a copy of a groundwater concerns report dated June 27, 2018 prior to the inspection discussing two on-going groundwater mitigation activities. The Operator is mitigating impacts to the water level in the ski lake owned by Mr. Eiberger southeast of the site. On May 25, 2018 the Operator began diverting a portion of the dewatering discharge from the site to the ski lake. The diverted groundwater is in accordance with the Division of Water Resources according to the Operator. The Operator was contacted on May 2, 2018 by Royce and Tobbi Monroe regarding concerns with their domestic well. The Operator has decided to drill a new well on the Monroe property to mitigate the issue at Aggregate's expense. Quality Pump and Well was hired to drill the new well. The well is schedule to be installed the week after this inspection.

The Operator has recently purchased the Baurer property southeast of the mine site. The Operator intends to mine the property and install a slurry wall around Phase 2 / Pond 1 Mining area and the Baurer property. The Operator is aware of the requirement to amend the existing permit to allow the property to be mined. The Operator anticipated the amendment application would be submit to the Division in the winter of 2018.

The Division currently holds a financial warranty in the amount of \$520,000.00. The financial warranty includes the cost to install slurry walls at the site to comply with the Division's long-term exposed groundwater requirement. The site is covered by a current SWSP for all short-term groundwater impacts. The inlet and outlet structures required as part of the final reclamation plan have not been installed. The financial warranty amount appeared adequate to complete reclamation at the site. The financial warranty will be evaluated as part of the pending permit amendment application for the site.

Overall, the site appeared well-organized and operated by the Operator. Photographs taken during the inspection are attached.

Inspection Contact Address

Connie Davis
Aggregate Industries - WCR, Inc.
1687 Cole Blvd., Ste. 300
Lakewood, CO 80401

Enclosure – Inspection Map

Ec: Michael Cunningham, DRMS

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- PB	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>Y</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

PHOTOGRAPHS



Wattenberg Lakes mine sign



Phase 1 / Mining Area 3 backfill activity looking SW from NW corner of phase



Phase 2 / Pond 2 Mining area from the NW corner looking SE



Phase 3 / Pond 3 Mining Area from south side looking NE



Phase 3 / Pond 3 Mining Area from east side looking SW



Phase 3 / Pond 3 Mining Area from east side looking west



Phase 3 / Pond 3 Mining Area from east side looking NW



Phase 3 / Pond 3 Mining Area from west side looking SE



Phase 1 / Mining Area 2 from north side looking south



Phase 1 / Pond 2 Mining Area from south side looking north