




**MINERALS PROGRAM INSPECTION REPORT**  
**PHONE: (303) 866-3567**

The Division of Reclamation, Mining and Safety 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> Duckworth Pit	<b>MINE/PROSPECTING ID#:</b> M-2003-091	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Weld
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Peter Hays	<b>INSP. DATE:</b> June 26, 2020	<b>INSP. TIME:</b> 10:30
<b>OPERATOR:</b> Martin Marietta Materials, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Julie Mikulas	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$60,900.00	
<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> August 1, 2020	

**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>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</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>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 / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

## **OBSERVATIONS**

The Duckworth Pit 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. Julie Mikulas with Martin Marietta Materials, Inc. was present during the inspection. The site was previously inspected by the Division on April 13, 2017.

The site is an 112c operation permitted for 56.50 acres. Mining extraction is complete at the site. The site is in final reclamation. The approved post mining land use for the site is developed water resources. The approved Reclamation Plan states the site will be reclaimed as two (2) clay lined reservoirs with 3H:1V slopes. The liners were approved by the Division of Water Resources on November 28, 2016.

The site vegetation consisted primarily of noxious and annual weeds including; downy brome (cheat grass), kochia, field bindweed, yellow sweet clover, Canada thistle, Scotch thistle and an annual mustard species. The Operator will be required to implement the approved weed management plan for the site to control the annual and noxious weeds while revegetation grasses are established at the site. Large patches of cheat grass and kochia were observed in the upland areas. The Division recommends the Operator consult with a revegetation company to develop a plan to establish reclamation grasses at the site. The Division recommends the downy brome is treated with Esplanade to control the downy brome for several years to allow the reclamation grass to out compete the downy brome. Cottonwood trees have volunteered on the pit slopes and pit floor. The presence of the trees could compromise the integrity of the clay liners. The Operator stated they would investigate filling the reservoirs with water during the next free river period to inundate the trees. A survey of the pit slopes to verify the required 3H:1V grade was provided by the Operator during AM-01. The reservoir slopes were stable and no erosion features were observed during the inspection.

The mine sign and boundary markers were observed as required by Rule 3.1.12.

The Division currently holds a reclamation bond in the amount of \$60,900.00. The warranty is adequate to complete reclamation at the site based on the observations from this inspection.

Photographs taken during the inspection are attached. If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303.866.3567 x 8124, or by email at [peter.hays@state.co.us](mailto:peter.hays@state.co.us).

### **Inspection Contact Address**

Mrs. Julie Mikulas  
Martin Marietta Materials, Inc.  
1800 N. Taft Hill Road  
Fort Collins, CO 80521

## PHOTOGRAPHS



View of the site from the southwest corner of Lake 2 looking east



View of the site from the southwest corner of Lake 2 looking northeast





View of the site from the southwest corner of Lake 2 looking north



View of the site from the northwest corner of Lake 2 looking south





View of the site from the northwest corner of Lake 2 looking east



View of the site from the northeast corner of Lake 2 looking east





View of the site from the northeast corner of Lake 2 looking south



View of the site from the southwest corner of Lake 1 looking east





View of the site from the southeast corner of Lake 1 looking north



View of the site from the southeast corner of Lake 1 looking northwest





View of the site from the southeast corner of Lake 1 looking west



View of large patch of cheat grass along the east shoreline of Lake 1