


**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: Duckworth Pit	MINE/PROSPECTING ID#: M-2003-091	MINERAL: Sand and gravel	COUNTY: Weld
INSPECTION TYPE: Preoperation Inspection	INSPECTOR(S): Peter S. Hays	INSP. DATE: April 13, 2017	INSP. TIME: 13:30
OPERATOR: Martin Marietta Materials, Inc.	OPERATOR REPRESENTATIVE: Julie Mikulas	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Preoperation Inspection	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$1,603,000.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 3, 2017

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: Revegetation

PROBLEM/POSSIBLE VIOLATION: Problem: Russian olive trees are present within or have volunteered into the permit area and are becoming established. This is a problem for failure to employ weed control methods for a state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10(6) of the Rule.

CORRECTIVE ACTIONS: The Operator shall either implement the existing weed control plan, or develop a weed control and management plan in accordance with Section 3.1.10(6) of the Rule. This plan should be developed in consultation with the county extension agency, or weed control district office and should include specific control measures to be applied, a schedule for when control measures will be applied and a post-treatment monitoring plan. This weed control plan may be submitted to the Division as a Technical Revision to the approved plan with the appropriate Technical Revision fee of \$216.00 or in response to the Division's adequacy letter for the amendment application. Please submit photographic evidence of the removal of the Russian olive trees by the corrective action due date.

CORRECTIVE ACTION DUE DATE: 6/05/17

OBSERVATIONS

This was an amendment application (AM-01) pre-operational inspection of the Duckworth Pit conducted by Peter Hays with the Division of Reclamation, Mining and Safety (Division/DRMS). Mrs. Julie Mikulas with Martin Marietta Materials, Inc. was present during the inspection.

The 112 construction materials permit amendment application was received by the Division on February 2, 2017. The application was deemed complete on February 23, 2017. The Applicant published public notice as required by Rule 1.6.2(d) for four consecutive weeks. The last notice was published on March 23, 2017. The public comment period for the application ended on April 12, 2017. No objections were received by the Division during the public comment period. The notice sign was observed during the inspection as required by Rule 1.6.2(b). The decision due date for the amendment application is May 24, 2017.

The amendment application proposes changing the post-mining land use for the site from recreation to developed water resources. The Duckworth Pit is a 56.5 acre construction materials mining operation. The site was inactive during the inspection. The last date of mining activity at the site occurred on May 1, 2016 according to the 2017 annual report submitted by the Operator. The site is in final reclamation. Topsoil was replaced in the upland areas and the upper five feet of the shorelines. The site was seeded in the fall of 2016. The existing vegetation consists of kochia and sparse reclamation vegetation, except the northeast corner of the east pit which had establishing native vegetation. Due to limited revegetation success, the Operator is scheduled to disc, fertilize, re-seed and mulch the site the week after the date of this inspection. The fertilizer mixture is based on a soil test performed by the Operator. The area surrounding the oil and gas facility will be included in the revegetation work.

The pit floors have been regraded and cleaned up since the last inspection on August 29, 2016. The Operator stated additional pit floor cleanup will be completed on both pits. Evidence of slope regrading was observed during the inspection in the west pit.

As cited as a problem on Page 1 of this report, Russian olive trees, a Class B noxious weed listed on Colorado's Noxious Weed List were observed adjacent to Idaho Creek. The Operator must develop or implement a weed control plan to control the Russian olive trees at the site and provide evidence of the Russian olive tree removal by the corrective action due date.

The Division currently holds a financial warranty in the amount of \$1,603,000.00, which accounts for the cost to install the slurry walls. The slurry walls were installed by the Operator and approved by the Division of Water Resources on November 28, 2016. The required financial warranty amount will be evaluated as part of the amendment application review.

Photographs taken during the inspection and an inspection map are attached. The Division's amendment application adequacy letter was sent on April 14, 2017.

PHOTOGRAPHS



Duckworth Pit sign



Duckworth Pit amendment notice sign



View of vegetation from NW corner of west pit looking south



View of vegetation from NW corner of west pit looking east



View of vegetation from SE corner of east pit looking west



View of vegetation from SE corner of east pit looking north



View of vegetation from NE corner of east pit looking south



View of vegetation from NE corner of east pit looking west

GENERAL INSPECTION TOPICS

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

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>N</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>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- PB
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	(ST) STIPULATIONS----- <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

Inspection Contact Address

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

Enclosure – Pre-Operational Map

Ec: Wally Erickson, DRMS

Duckworth Pit

AM-01 Pre-Operational Inspection Map
M-2003-091

Legend

- Approx. Permit Boundary
- Establishing Vegetation
- Monitoring Well
- Russian Olive Tree

