


**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.

<b>MINE NAME:</b> Henderson Development	<b>MINE/PROSPECTING ID#:</b> M-1980-110	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Adams
<b>INSPECTION TYPE:</b> Surety Release Inspection	<b>INSPECTOR(S):</b> Jared L. Ebert	<b>INSP. DATE:</b> July 17, 2019	<b>INSP. TIME:</b> 10:00
<b>OPERATOR:</b> E-470 Public Highway Authority	<b>OPERATOR REPRESENTATIVE:</b> Derek Slack	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Surety Release Requested	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$0.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> County
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> August 1, 2019

**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:** Hydrologic Balance

**PROBLEM:** Water was observed within the pit basin that does not appear to infiltrate or otherwise discharge within 72 hours. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

**CORRECTIVE ACTIONS:** The Operator shall demonstrate that the operation is in compliance with the Office of the State Engineer (SEO), show evidence that the Operator is taking measures to bring the site into compliance with the SEO, or submit a plan to bring the site into compliance with the SEO.

**CORRECTIVE ACTION DUE DATE:** 11/01/19

**INSPECTION TOPIC:** Reclamation Success

**PROBLEM:** There are state-listed noxious weeds present on site. This is a problem for failure to employ weed control methods for 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:** Implement approved weed control plan and provide proof to the Division that this has been done. If a weed control plan is not already in place, the operator shall 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 shall be submitted to the Division as a Technical Revision to the approved plan with the appropriate Technical Revision fee of \$216.00 by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 10/01/19

**INSPECTION TOPIC:** Reclamation Success

**PROBLEM:** The current reclamation plan needs to be updated and revised to include the use of an alternate seed mixture used at the site. Pursuant to C.R.S. 34-32.5-116 (1), the operator must follow the approved reclamation plan or provide sufficient information to describe or identify how the operator intends to conduct reclamation.

**CORRECTIVE ACTIONS:** The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved reclamation plan to reflect existing and proposed activities by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 10/01/19

### **OBSERVATIONS**

This was an inspection of the Henderson Development site, Division of Reclamation, Mining and Safety (DRMS or Division) permit number M-1980-110, operated by the E-470 Public Highway Authority (E-470). I, Jared Ebert with DRMS conducted the inspection. Ms. Katie Keefe and Mr. Miles Buescher with Adams County accompanied me during the inspection. Mr. Derek Slack with E-470 also accompanied us during the inspection.

On June 24, 2019 the Division received a full/final bond release application (SL01) from E-470 for the site. This inspection was conducted to evaluate if the site was eligible for release at this time.

#### Backfilling and Grading:

Overall, the pit excavation has been backfilled and graded to the general configuration approved in accordance with the reclamation plan. No slopes steeper than 3H:1V were observed. The pit slopes were vegetated and stable.

#### Hydrologic Balance:

Standing water was observed at the base of the pit at the southern end of the site. After the inspection, Mr. Slack sent a copy of a letter sent to the State Engineer's Office (SEO) regarding the closeout and well abandonment for the site. This letter described that surface water run-off collects within the pit from time to time and they made a demonstration that the water collected at the site is not exposed groundwater. Currently, the operator has a temporary substitute water supply plan (SWSP) in place to cover lagged depletions from the evaporation associated with the previously exposed groundwater at the site.

The standing water issue was discussed with Ms. Ioana Comaniciu with the SEO after the inspection. According to Ms. Comaniciu, if the water in the pit is runoff from precipitation, E-470 will need to show that the water can infiltrate or be released to the stream within 72 hours. If E-470 is storing out-of-priority storm water, then a permanent plan for augmentation must be obtained for the site or the problem must be corrected to show that the water can be released within 72 hours. However, the evaporation from the storm water cannot be included in the current SWSP and a new SWSP must be obtained pursuant to 37-92-308(4),

C.R.S. while a court application for a permanent augmentation plan is pending with the water court. Or, according to Ms. Comaniciu, the site may qualify as a "storm water detention and infiltration facility" and may be exempted from administration under Colorado's water rights system. E-470 should review the SEO's "Administrative Statement Regarding the Management of Storm Water Detention Facilities"

(<http://water.state.co.us/DWRIPub/Documents/DWR%20Storm%20Water%20Statement.pdf>) and work with SEO to determine if this exemption applies

This issue is cited as a problem at the beginning of this report.

#### Reclamation Success:

The post mine land use approved for the site is pastureland. The backfilling and grading is complete at the site leaving a basin surrounded by roads. Vegetation has established throughout the site. The Division observed many desirable species of grass such as several types of wheatgrasses, sideoats grama and blue grama established at the site and forbs including sweet clover. However, several large bare areas were observed and a substantial amount of noxious weeds were observed throughout the site such as knapweed, bull thistle and field bindweed. The Division did not observe many species established at the site included in the approved seed mixture in the reclamation plan. Given the amount of weeds observed at the site as well as a lack of the species approved for planting at the site, the Division cannot approve the release of the permit at this time. The Division will deny the SL01 bond release application.

After this inspection, Mr. Slack provided the Division a copy of the seed mixtures used at the site. One of the mixtures is in compliance with the approved reclamation plan, the second seed mixture was used to reseed the site. This mixture included many of the species observed at the site and species the Division believes are adequate to facilitate the approved post-mine land use. The Division will require the operator to submit a Technical Revision to the reclamation plan to include a weed control plan and to include the second seed mixture in the revegetation plan. These issues are cited as a problem at the beginning of this report.

#### Revegetation:

As discussed above, the Operator utilized an un-approved seed mixture at the site. However, the seed mixture utilized would be acceptable for use but needs to be included in the approved reclamation plan. Several bare areas or areas with significant weed patches were observed at the site. E-470 will need to manage the noxious weeds at the site and monitor the establishment of the desired vegetation and conduct re-seeding of some of these bare areas should the desired vegetation fail to germinate and establish.



## **PHOTOGRAPHS**



Figure 1. From near the entrance of the mine site looking north. Patch of knapweed observed.



Figure 2. From the east side of the site looking south.





**Figure 3. Standing water observed at the site. From the south end of the site from the east side looking west.**



**Figure 4. From the eastern side of the site looking northwest.**



Figure 5. From the south end of the site looking north.

### 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>NA</u>	(RD) ROADS----- <u>NA</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>NA</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>NA</u>	(RS) RECL PLAN/COMP-- <u>PB</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</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

#### Inspection Contact Address

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