




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: D Road Gravel Pit	MINE/PROSPECTING ID#: M-2002-046	MINERAL: Sand and gravel	COUNTY: Mesa
INSPECTION TYPE: Monitoring	WEATHER: Cloudy	INSP. DATE: May 2, 2023	INSP. TIME: 10:00
OPERATOR: Ephemeral Resources, LLC	OPERATOR REPRESENTATIVE: Mark Gardner	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$162,289.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: DRMS	JOINT INSP. AGENCY: None	
INSPECTOR(S): Amy Yeldell	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 10, 2023	

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>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>PB</u>	(FW) FISH & WILDLIFE----- <u>N</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>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>NA</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / **PB = Problem cited** / **PV = Possible violation cited**

The following inspection topic(s) were identified as having a **Problem (PB)**, which includes correction actions and a deadline whereby the Operator must demonstrate compliance with the conditions of the Permit and the requirements of the Act and Rules. Failure to address the corrective actions by the deadline may cause the Division to escalate the **Problem to a Possible Violation (PV)** and schedule the issue for formal hearing before the Mined Land Reclamation Board (Board).

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM: The site is utilizing off-site fill (import) without prior approval by the Division per 3.1.5(9) of the Rule.

CORRECTIVE ACTIONS: In order to import material the operator must provide the office with notice per Rule 3.1.5 (9). The notice shall include but is not limited to: a narrative that describes the approximate location of the proposed activity; the approximate volume of inert material to be backfilled; a signed affidavit certifying that the material is clean and inert, as defined in Rule 1.1(20); the approximate dates the proposed activity will commence and end, however, such dates shall not be an enforceable condition; an explanation of how the backfilled site will result in a post-mining configuration that is compatible with the approved post-mining land use; and a general engineering plan states how the material will be placed and stabilized in a manner to avoid unacceptable settling and voids." Please submit this notice in the form of a Technical Revision (TR) with the required revision fee of \$216 by the corrective action due date. Alternatively the Operator may submit a written commitment to no longer import inert material until a TR is submitted and approved.

CORRECTIVE ACTION DUE DATE: 7/10/23

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM: The maximum disturbance on site is greater than specified within the Mine Plan. The Mine Plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-112 (1)(c)(VI). The operator must provide sufficient information to describe or identify how the operator intends to conduct the operation.

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

CORRECTIVE ACTION DUE DATE: 7/10/23

OBSERVATIONS

This inspection was conducted as part of the Colorado Division of Reclamation, Mining and Safety's (Division) normal monitoring program. The D Road Gravel Pit is a 112c permitted that consists of 104 acres. The site is located in Mesa County at the intersection of D Road and 29 ½ Road in Grand Junction, Colorado. Amy Yeldell of the Division conducted the inspection. Mark and Ian Gardner represented Ephemeral Resources, LLC, the Operator.

Acid And Toxic Materials:

All fuel is stored within secondary containment. The primary fuel storage is located in Area A adjacent to the

scale (Photo One). A small secondary fuel tank is stored within Area E. No other hazardous or toxic materials were observed on site.

Backfilling and Grading:

Area A is completely mined out. The pit has been backfilled to above the water table. Perimeter slopes have been backfilled to a 3H: 1V or less.

Area B is completely mined out. Slopes have been graded to a 3H: 1V or less and are in compliance with Rules 3.1.5 and 6.4.5.

Area E has an active vertical highwall adjacent to the permit boundary which will require backfill to reduce the grade (Photos Two and Three). Interior highwalls may be graded with cut/fill (Phot Four). The northern permit boundary highwall has been sufficiently graded to a 3H: 1V. Approximately 6 acres which has previously been mined is backfilled.

Area F is completely mined out and has mostly been backfilled (approx. 6.2 ac). A small excavated portion remains in the southwest corner of this phase. These slopes may be graded with cut/fill (Photos Four, Five and Six).

Financial Warranty:

The Division currently requires a financial warranty amount of \$162,289.00 for this site. The bond was last recalculated with TR-1 in 2014. In an effort to ensure the Financial Warranty adequately reflects the actual current cost of fulfilling the requirements of the approved reclamation plan the Division will be updating the reclamation cost estimate. If the current bond is found to be insufficient the Division will send a Notice of Surety Increase under a separate cover.

Hydrologic Balance:

The water table is located approximately 10 feet below the original contour. The active mine areas are dewatered via a series of trenches. Water is then pumped into the existing ditches which drain southwesterly into the Colorado River.

Gen. Compliance With Mine Plan:

Mining is occurring to a depth of approximately 30 feet deep. Overburden is approximately 10 feet thick over a 20 foot deep layer of sand/gravel. Backfilled areas remain approximately 10 feet below original grade.

Most stockpiles are located within Area A. Area B is in final reclamation. Area C is undisturbed and being used for agricultural purposes. Area D is partially affected, with undisturbed areas remaining in agricultural use. Within Area D approximately 6.6 acres is being utilized for stockpile storage (Photo Seven). No excavations have occurred in this phase. Areas E and F are the active mining phases. Approximately 11 of the 13 acres within Area E have been affected to date. 6 acres have been backfilled, 2 acres is stripped and a 3 acre excavation (or pond) is present. All of Area F has been affected. Approximately 6.2 acres of Area F has been backfilled, the southwest portion remains open (pond).

The permitted area is 104 acres, with a maximum disturbance of 45 acres per the Mining Plan. Based on the 2023 annual report approximately 75 acres have been affected. Staff estimates approximately 60 acres to be affected which is more than the 45 acre maximum per the approved Permit. This is cited as an inspection

problem. The maximum disturbance specified within the Mining Plan needs to be updated.

The use of import backfill structural material for reclamation is not mentioned in the Mining or Reclamation Plans. Use of excess materials on site for backfill is addressed. This is cited as a problem. The Mine Plan needs to be revised to address the importation of material generated off site that will be utilized as structural backfill pursuant to Rule 3.1.5(9).

Note that several changes may be requested under one Technical Revision request with the required \$216 revision fee. The Mining Plan needs to be updated and clarified to reflect the current mining operation. At a minimum include changes to the maximum disturbance and use of import fill. Additionally the Reclamation Plan may also need to be updated to reflect changes made on site. Specifically the decrease in pond surface sized due to backfill.

Other:

The site is approved for asphalt and concrete production. At the time of the inspection no plants were located on site. No washing of material occurs at this location.

Right of Entry:

Division staff verified that Ephemeral Resources, LLC remains the landowner of all affected lands and therefore is in compliance with Rule 6.3.7 by maintaining its Legal Right of Entry.

Reclamation Success:

The site has a post mining land use of wildlife habitat that includes a combination of ponds and revegetated areas. Per the Reclamation Plan there will be three ponds for a total water surface of 57 ac. All areas not inundated shall be revegetated.

During the inspection staff discussed with the operator a potential change of the post mine land use. This type of change to the Reclamation Plan will require an amendment to the permit.

Area B is completely mined out and has been reclaimed. Revegetation has not been successfully established throughout this phase. According to Mr. Gardner the ponds water level have come up significantly, inundating lots of the grasses that had established. Upper banks and surrounding areas within Area B are extremely sparse or lacking desirable species (Photos Eight and Nine). Additional revegetation efforts are likely necessary.

Revegetation:

The perimeter berms of Area A have been revegetated. No other areas aside from B have been reclaimed to date. Noxious weeds were established throughout the reclaimed areas (Area B). The operator is encouraged to aggressively manage noxious weeds in reclaimed areas to avoid delays in reclamation success and permit release. Also if areas void of vegetation or sparse in desirable species do not germinate in the next few weeks additional seeding efforts are recommended. Tamarisk and Russian Olive shall be managed pursuant to Rule 3.1.10(6).

Support Facilities On-site:

Area A is the operations area for the mine. This includes the scale, office, primary fuel storage and crusher plant (Photo Ten). No other buildings are located within the permit.

Signs and Markers:

A mine sign was posted at the entrance to the mine site as required by Rule 3.1.12(1). The information depicted was correct/ up to date and the sign was of sufficient size (Photo Eleven). The permit boundary of the affected land was clearly delineated primarily by a wire fence pursuant to Rule 3.1.12(2).

Topsoil:

Area D is currently being used for stockpile storage. The topsoil was not stripped/salvaged prior to placement of stockpiles in this area. In the future, all topsoil needs to be removed and salvaged for reclamation prior to utilizing an area for mining pursuant to Rule 3.1.9. Additionally any stockpiled topsoil that will not be replaced within a short enough time (180 days), shall be revegetated to avoid deterioration. The operator is encouraged to save any imported topsoil for future reclamation use. If additional areas will be backfilled rather than becoming a lake, additional topsoil will be required for reclamation.

Conclusion:

Responses to this inspection report should be directed to: Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver Co 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

Inspection Contact Address

Mark Gardner
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Box 1769
Grand Junction, CO 81502

Enclosure

CC:

Travis Marshall, Senior EPS, Grand Junction DRMS

PHOTOGRAPHS



Photo One: Primarily fuel storage within secondary containment located in Area A







Photo Six: Overview of pond within Area F.



Photo Seven: Area D being utilized for stockpile storage.



