



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Airport Gravel Pit	MINE/PROSPECTING ID#: M-1983-039	MINERAL: Sand and gravel	COUNTY: Las Animas
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: September 9, 2015	INSP. TIME: 11:30
OPERATOR: Las Animas County	OPERATOR REPRESENTATIVE: Bob Santistevan	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$0.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: <i>Amy Eschberger</i>	SIGNATURE DATE: January 7, 2016

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/POSSIBLE VIOLATION: Problem: The Division has no evidence that the operator has a valid well permit, substitute water supply plan, or approved water augmentation plan for the exposed groundwater at the site. 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 backfill the pits to at least two feet above the groundwater surface by the corrective action date specified.

CORRECTIVE ACTION DUE DATE: 03/07/16

OBSERVATIONS

This was a normal monitoring inspection of the Airport Gravel Pit (Permit No. M-1983-039) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety. Mr. Bob Santistevan represented the operator, Las Animas County during the inspection. The site is located approximately 4 miles southeast of Hoehne, Colorado. Access to the site is off of Co Rd 36. Both the surface and subsurface rights of the affected land are owned by Las Animas County. The approved post mining land use is rangeland.

This is a 112c operation permitted for 152 acres to mine sand and gravel for use in county road construction and maintenance. However, after reviewing the permit file, the Division has determined that the correct approved permit area is actually 175 acres. When Amendment No. 2 (Revision No. AM-02) was approved on 10/17/2005, 134 acres were added to an existing permit area of 41 acres. This revision should have given a revised total permit area of 175 acres (134 acres + 41 acres), and not 152 acres as entered. The Division has corrected this error in the permit system (see enclosed Memorandum). Mining began at the center of the current permit area, then continued westward. In 2006, mining began in the eastern half of the permit area, where active mining currently takes place. All disturbed land west of the current pit area has been in reclamation for several years. The approved maximum mining depth for this operation is 30 feet. This site operates every year, which is in compliance with its intermittent status.

At the time of the inspection, the weather was clear, sunny and warm. A permit sign was posted at the main site entrance off of Co Rd 36 (**Photo 1**). This sign includes the operator name and permit number as required by Rule 3.1.12(1). However, to be fully compliant with the Rule, the permit sign should also include a statement that the permit was issued by the Colorado Mined Land Reclamation Board (MLRB). This statement could be abbreviated on the sign to read "issued by CO MLRB". The permit boundary was delineated by Co Rd 36 on the northern and eastern boundaries, by Co Rd 87 on the western boundary, and by fencelines and metal stakes on the southern boundary. The site was active at the time of the inspection. Mined material was being processed adjacent to the pit using mobile equipment (**Photo 2**). Mined walls daylight mainly to the north, and have -0.5H:1V to near vertical slope gradients (**Photos 3 and 4**). The pit was approximately 10-12 feet deep. The eastern and northern portions of the pit have been backfilled and graded to slopes of 3H:1V or flatter (**Photos 5-7**).

In the western portion of the pit, standing water was observed in a few areas (**Photos 8-10; also shown in Photos 3 and 4**). After speaking with Mr. Santistevan during the inspection, it appears that the standing water is exposed groundwater. This was cited as a problem in the inspection report for 12/9/2010. The problem was considered abated after the operator submitted photos to the Division showing that the exposed groundwater had been backfilled to two feet above the static groundwater level. On 04/30/2010, the Division sent a letter to all operators regarding mining operations with exposed groundwater (see enclosed letter). This letter identified four approaches for operators to gain compliance with the Division for exposed groundwater. Besides the fact that the county is not required to post a financial warranty, one of the four approaches outlined in the enclosed letter should be implemented at this site. According to Mr. Santistevan, the operation is currently attempting to mine at depths less than 10 feet to avoid exposing groundwater in the future. The operator has indicated that the operation is typically able to mine down to 15-20 feet deep in the eastern pit. However, when the adjacent irrigation ditches are full of water (approximately every 3-5 years), the operation is unable to mine more than approximately 10 feet deep without exposing groundwater. During such times, the operator backfills the exposed groundwater and works to expand the pit at less than 10 feet deep.

The Division is citing a problem in this report for failure to minimize disturbance to the prevailing hydrologic balance (see Page 1), which will require corrective action(s). *It should be noted that after discussing this issue with the operator after the inspection, the operator has been working to backfill the exposed groundwater and*

has been keeping the Division informed of progress. However, the project is taking longer than initially expected mainly due to the difficulty getting equipment across the saturated material. The Division is giving the operator an additional 60 days from the signature date of this report to get the site back into compliance with regard to exposed groundwater.

Several material stockpiles of various sizes and shapes were scattered throughout the eastern portion of the permit area (**Photos 11-13**). Topsoil stockpiles were stored mainly along the eastern and southern edges of the pit. All stockpiles appeared to be stable. The approved maximum allowed disturbed acreage at any time is 41 acres. The Division estimates current disturbance to include approximately 31.2 acres in the active pit area on the eastern half of the site, and approximately 1.5 acres in the previously mined area on the western half of the site (see enclosed Google Earth image of site). Current disturbance on the western half of the site includes a few small stockpiles, and storage of old processing equipment and a small trailer (**Photo 14**). According to annual reports submitted by the operator, the western area was backfilled, graded, and retopsoiled in 2012/2013. This area is graded to nearly flat with vegetative cover consisting of a mixture of native grasses, forbs, and annual weeds (primarily Russian thistle and wild sunflowers).

Overall, the site appeared to be stable. This concluded the inspection.

PHOTOGRAPHS



Photo 1. View of permit sign posted at main site entrance off of Co Rd 36. Sign includes operator name and permit number as required by Rule 3.1.12(1). However, to be in full compliance with the Rule, sign should also include a statement that the permit was “issued by the CO MLRB”.



Photo 2. View of mobile material processing plant located west of and adjacent to active pit.



Photo 3. View looking southwest from western portion of active pit, showing mined wall approximately 10 feet in height. Note exposed groundwater in foreground (at right).



Photo 4. Closer view of mined wall shown in **Photo 3**, showing slope gradients of approximately -0.5H:1V. Note exposed groundwater along bottom edge of highwall.



Photo 5. View looking west across eastern portion of active pit area that has been backfilled and graded to slopes flatter than 3H:1V.



Photo 6. View looking southwest across eastern portion of active pit area that has been backfilled and graded to slopes flatter than 3H:1V.



Photo 7. View looking east across eastern portion of active pit area that has been backfilled and graded to slopes flatter than 3H:1V.



Photo 8. View looking northeast, showing standing water present in western portion of active pit area.



Photo 9. View looking north, showing standing water present in western portion of active pit area.



Photo 10. View looking west, showing standing water present in western portion of active pit area. Note processing plant located adjacent to pit (in background).



Photo 11. View of material stockpiled just north of the pit.



Photo 12. View of material stockpiled near the haul road, west of the pit.



Photo 13. View of material stockpiled north of the pit, near the main entrance.



Photo 14. View looking south from Co Rd 36, showing western portion of permit area where mining has been completed for some time. Current disturbance in this area includes a few small stockpiles, and storage of some processing equipment and a small trailer (shown in background).

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>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SW) STORM WATER MGT PLAN---- <u>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</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

Phil Dorenkamp
Las Animas County
2000 N. Linden Ave.
Trinidad, CO 81082

Enclosure(s): Memo to Permit File Re: Change in Permit Acreage to Correct Discrepancy in Division Records
Letter Re: Mining Operations with Exposed Groundwater
Google Earth image of site showing permit area and approximate disturbed area

CC: Wally Erickson, DRMS



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

MEMORANDUM

To: Permit File for Airport Gravel Pit, Permit No. M-1983-039

From: Amy Eschberger, DRMS

Date: October 30, 2015

Re: **Change in Permit Acreage to Correct Discrepancy in Division Records**

On October 30, 2015, the Division changed the permit acreage for this site in the permit system from 152 acres to 175 acres.

This change was made due to a discrepancy found in the permit acreage reported for permit Amendment No. 2 (Revision No. AM-02) that was approved by the Division on 10/17/2005. This revision added 134 acres to an existing permit area of 41 acres. This addition should have given a revised total permit area of 175 acres (134 acres + 41 acres), and not 152 acres (as entered into the permit system).



DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215
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Phone: (303) 866-3567
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Bill Ritter, Jr.
Governor

James B. Martin
Executive Director

Loretta E. Piñeda
Director

April 30, 2010

Las Animas County
2000 N. Linden Ave.
Trinidad, CO 81082

RE: Mining Operations with Exposed Ground water

To Whom It May Concern:

The Division of Reclamation Mining and Safety is responsible for ensuring that Sand and Gravel mining operators comply with the requirements of the Colorado Land Reclamation Act for the Extraction of Construction Materials (Act) and the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials (Rules). Among these requirements are provisions for the protection of water resources. The Act requires that reclamation plans must ensure minimization of disturbances to the prevailing hydrologic balance, including disturbances to the quantity of water in the area affected by mining and in the surrounding areas. § 34-32.5-116(4)(h). Rule 3.1.6(1)(a) requires compliance with Colorado water laws and regulations governing injury to existing water rights both during and after mining. Permits must specify how the permittee will comply with applicable Colorado water laws and regulations governing injury to existing water right rights. Rule 6.3.3(j); Rule 6.4.5(2)(c). After an extensive review, the Division determined that several operators may not have appropriate permit conditions to address certain reclamation liabilities arising from impacts to water resources.

In September 2009 the Division of Water Resources (DWR) updated its Guidelines for Sand and Gravel Pits. These guidelines provide guidance on achieving compliance with state law regarding replacement of depletions from sand and gravel mining, thus the guidelines provide a benchmark for the protection of hydrologic balance required under the Act and Rules. As noted in the Guidelines, sand and gravel operations which expose groundwater without complying with state law create a reclamation liability by impacting available groundwater.

State law requires that any person exposing ground water must obtain a well permit from the SEO pursuant to § 37-90-137(11). Because exposed groundwater results in out-of-priority water depletions, operations which expose ground water must also eventually obtain a water-court approved augmentation plan. Currently, several operators do not have either an augmentation plan or bonding to provide an alternative method to mitigate injurious stream depletions that result from mining-related exposure of ground water. The Division has a statutory duty to ensure that lands affected by mining are reclaimed in a manner that complies with state law and to ensure that operators have sufficient bonding to achieve reclamation. In order to assist operators in achieving compliance with these requirements, the Division proposes that, by April 30, 2011, operators should contact the Division and agree upon a plan for achieving compliance.

The Division has identified four approaches for operators:

1. File a financial warranty that will ensure backfilling of the pit to cover the exposed ground water to a depth of two feet above the static ground water level or,
2. Obtain a court approved augmentation plan prior to exposing ground water or,
3. File a financial warranty to cover the cost of installing a clay liner or slurry wall that meets the Division of Water Resources requirements for preventing ground water exposure or,
4. Obtain approval from the Division of Water Resources that acknowledges compliance with the SEO's requirements pursuant to § 37-90-137(11).

The Division will work with operators on an individual basis as they move to implement one of these plans. It is likely that options 1 and 3 will require the submittal of a technical revision or an amendment to the existing permit depending on the nature of the current mining and reclamation plan and the proposed changes. Increased financial warranties, as a result of these modifications, may be posted in a phased manner not to exceed three years. Amendments or revisions currently under review will be required to be approved by April 30, 2011 and may use the phased financial warranty approach described above. New applications going forward or presently under review by the Division will be required to meet the requirements of one of the options 1-4 at the time of application approval. Failure of affected operators to initiate contact with the Division and gain compliance as described above could result in an enforcement action being issued by the Division.

If you have any questions, please contact Tony Waldron at 303-866-3567, extension 8150.

cc: M2000053 Castillo Pit
M2001015 Sandoval Land and Cattle Pit
M1979163 Shannon Pit
M1983039 Airport Gravel Pit
M1999060 Yocam Pit
M1997100 Branson Gravel Pit
M1998011 Unwin Gravel Pit

M1983-039 / Airport Gravel Pit / Las Animas County

Red Outline = 175 acres = Approved Permit Area (after AM-02 approval on 10/17/2005)

Blue Outline = 32.7 acres = Approximate Disturbed Area (1.5 acres west + 31.2 acres east)

