



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: Nyholt Pit (aka Mann)	MINE/PROSPECTING ID#: M-1982-147	MINERAL: Sand and gravel	COUNTY: Adams
INSPECTION TYPE: Monitoring	INSPECTOR(S): Tyler V. O'Donnell	INSP. DATE: April 23, 2014	INSP. TIME: 10:00
OPERATOR: Adams County	OPERATOR REPRESENTATIVE: Craig Tessmer, Kurt Carlson, and Marc Pedrucci	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>Tyler O'Donnell</i>	SIGNATURE DATE: May 22, 2014

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>NA</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>NA</u>	(SF) PROCESSING FACILITIES----- <u>NA</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>Y</u>	(SB) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</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>NA</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

OBSERVATIONS

This was a normal routine monitoring inspection conducted by Tyler O'Donnell of the Division of Reclamation, Mining and Safety (Division/DRMS). Adams County, the Operator, was represented by Craig Tessmer, Kurt Carlson, and Marc Pedrucci during the inspection. The Nyholt Pit is located approximately 5.5 miles southwest of Brighton, Colorado. The Nyholt Pit is a 308.7-acre 112C reclamation permit. The commodity mined at the site was sand and gravel, however no mining has taken place in several years and no additional mining is planned. The Operator is in the process of completing reclamation. There were large stockpiles located in the eastern portion of the site; the Operator is currently hauling material from the stockpiles out of the pit. The Operator's representative stated that the material is being used as road base on the county's dirt roads. The approved post-mining land use is recreation. The Operator intends to reclaim the mine site to a county open-space park.

Availability Of Records:

On June 23, 2010 the Operator submitted Technical Revision TR-03 which proved a revised interconnecting pipe design. TR-03 was approved on August 9, 2010. The Operator had completed construction of the interconnecting pipes between reservoirs 1, 2, and 3. The Operator constructed a large buttress in Lake 2 to tie the pipe back into the compacted clay liner. The Operator's representative stated that they are in the process of doing the required leak test with the State Engineer's Office (SEO). Please provide the Division with the results of the SEO's leak test.

Backfilling and Grading:

The shoreline of lakes 1, 2, and 3 were graded to 3H:1V or flatter. Portions of Lake 1 and 2 have been damaged by erosion.

Hydrologic Balance:

The pit is located just west of the South Plate River. The Operator's representative stated that reservoirs/Lakes 1, 2 and 3 passed the SEO leak test in 2006. The bottom of lakes 2 and 3 were mostly dry. Lake 1 still had a couple of feet of water in the bottom of the reservoir. There appeared to be no significant impacts to the prevailing hydrologic balance.

Gen. Compliance With Mine Plan:

All activity appeared to be within the permit boundary.

Reclamation Success:

The Operator has successfully backfilled and graded slopes to 3H:1V or flatter, creating a seim-stable land surface. The Operator's representative explained that the site was seeded and then re-seeded to achieve the current stand of vegetation. Vegetation was well established in the majority of the permit boundary.

Revegetation:

Based on visual estimate of the amount of standing vegetation observed around the majority of the permitted site, lives vegetative cover within the permitted area can be expected to be more than 40% excluding the location of the stockpiles between lakes 1 and 3. The cover included a variety of life forms and species. Herbaceous species included: Switchgrass, Blue Grama, Neddle and Thread, Sandreed, Slender Wheatgrass and Side Oats Grama. Sunflowers, and various forbs, are scattered on the site. The Operator had planted trees along the access road and around the lakes. The mix of vegetation on the site can be expected to provide self-generating forage for wildlife. Vegetation within the permit area was at least as well established as that on the surrounding area.

Erosion/Sedimentation:

Portions of Lake 1 slopes have been damaged by erosion. The northwest corner of Lake 1 was damaged by water that over topped the dewatering trench and ran down the pit slope. The water that flowed from the dewatering trench created large gullies in the pit slope (see photo 1 and 2). The segment of damaged pit slope is approximately 150 feet long. It appears that the compacted clay liner could have been damaged in the northwest corner of the pit. The northeast corner of Lake 1 was also damaged by water flowing either from the dewatering trench or from the South Platte River. A gully formed near the spillway in the northeast corner of Lake 1. The riprap structure failed which allowed the gully to down cut further into Lake 1. In the northwest and northeast corners of Lake 1 portions of the compacted clay liner were visible at the surface. No seeps or damp spots were observed, however it is unclear if the gullies compressed the compacted clay liner in either location. The Division would request that the Operator provide an engineering analysis demonstrating that the liners have not been comprised and don't require a SEO's leak test. The Operator's representative explained that there is potential that the northwest and northeast slopes will be reconstructed and armored. The Operator will need to submit a technical revision to revise the reclamation plan and the reclamation plan map if the Operator chooses to add armoring to the northwest corner and/or additional armoring in the northeast corner.

Inspection Contact Address

Kurt Carlson
Adams County
9755 Henderson Rd
Brighton, CO 80601

Enclosure:

CC: Tom Kaldenbach, DRMS

PHOTOGRAPHS



Photo 1: Northwest corner of Lake 1 was damaged by water that over topped the dewatering trench.



Photo 2: Gully in the northwest corner of Lake 1.



Photo 3: Revegetated area near the northeast corner of lake #2.



Photo 4: Product stockpiles between lakes 1 and 3.



Photo 5: View into Lake 3, interconnecting pipe which is connected to lake 2.



Photo 6: Spillway in the northeast corner of Lake 1, which was damaged by water flowing into the pit.