

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:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Nolte Pit #1	M-2012-016	Borrow site	Garfield
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Amy C. Yeldell	June 20, 2018	11:45
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Puckett Land Company	Craig Kohles	111 - Goverment Contract	
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	
Priority	None	\$36,250.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGEN	CY:
NA	None	None	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	
Clear	Amy Geldell	July 2, 2018	

GENERAL INSPECTION TOPICS

Inspection topics with a <u>PB</u> were identified as a problem, which require timely corrective action from the Operator to ensure compliance with conditions of the permit and Act and Rules. Inspection topics with a <u>PV</u> were identified as a possible violation, which will be scheduled for hearing before the Mined Land Reclamation Board. Official notice of the date(s), time and location of the Board hearing for the possible violation (<u>PV</u>) will be provided under separate cover.

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

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

INSPECTION TOPIC: Reclamation Success

PROBLEM: Failure to implement the approved reclamation plan in an orderly manner to promote reclamation success. Reclamation tasks were either not implemented or completed out of sequence. Pursuant to Rule 3.1.3, the five year deadline whereby reclamation was to be completed occurred on September 29, 2017. **CORRECTIVE ACTIONS:** This problem and corrective action deadline were previously identified by the Division in its correspondence dated June 11, 2018. The Operator shall submit a reclamation schedule for Division review through the Technical Revision process, due July 11, 2018. The reclamation schedule shall address the timing and sequence of the remaining tasks necessary to complete reclamation in an orderly manner. **CORRECTIVE ACTION DUE DATE:** July 11, 2018

INSPECTION TOPIC: Revegetation

PROBLEM: There are state-listed noxious weeds present on site. This is a problem for failure to employ weed control methods for all prohibited noxious weed species within the permitted area, and to reduce the proliferation of weeds to nearby areas as required by Rule 3.1.10(6).

CORRECTIVE ACTIONS: This problem and corrective action deadline were previously identified by the Division in its correspondence dated June 11, 2018. The Operator shall develop a weed control plan in accordance with Rule 3.1.10(6). 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 implementation of the control measures, and a post-treatment monitoring plan. This weed control plan shall be submitted for review by the Division through the Technical Revision process, due July 11, 2018.

CORRECTIVE ACTION DUE DATE: July 11, 2018

INSPECTION TOPIC: Erosion/Sediment Control

PROBLEM: Erosion, gullies and ruts have routinely been observed on-site. TR-3 requires the installation of five rip-rap structures and straw waddles as a means to combat excessive erosion and protect reclamation efforts. Failure to follow approved reclamation plan, to C.R.S. 34-32.5-116 (1).

CORRECTIVE ACTIONS: The operator shall provide photo documentation to the Division that the approved stormwater BMP structures have been installed as per the approved reclamation plan. Include a signed statement that all gullies and ruts have been repaired, and that the site has been reconstructed and stabilized to prevent erosion damage by the corrective action date.

CORRECTIVE ACTION DUE DATE: July 11,2018

OBSERVATIONS

This inspection was conducted in accordance with the Division's monitoring program for permitted operations and to evaluate the implementation of the approved reclamation plan. Craig and Cindy Kohles represented Puckett Land Company (Operator) during the inspection. The Nolte Pit #1 is a Special 111c type operation, permitted to affect 22.34 acres. Affected lands will be reclaimed to support rangeland post-mining land use. The Division holds \$36,250 financial warranty to ensure the completion of reclamation. To date, reclamation has not been completed and no acreage has been released.

According to the annual reports submitted each year by the Operator, mining permanently ceased on September 30, 2012. Pursuant to Rule 3.1.3, the five year period for completion of reclamation closed on September 29, 2017. The reclamation plan was updated through TR-03, approved April 20, 2018. The plans

approved through TR-03 were not implemented in an orderly manner. In a correspondence dated June 11, 2018, the Division identified reclamation deficiencies and imposed a corrective action deadline of July 11, 2018 to establish a schedule whereby reclamation will be completed. A copy of this letter is enclosed.

Mr. Kohles gave a summary of the recent reclamation activity on site. The majority of the hillsides were pocketed with an excavator and/or manually for steep slope areas. The site was seeded on May 10-11, 2018 by D & D Hydroseeding in consultation with Triton Environmental. Seeding measures included hand broadcasting of slopes first. Soil amendments, fertilizer and additional seed were applied hydraulically in one mixture. Then a tackifier was applied separately. Mrs. Kohles estimated that approximately 2.5 acres was seeded. Most recently on June 11, 2018 approximately 10,000-20,000 gallons of water was applied over the reclamation since no rain had occurred since the seeding. It has since rained once and the Operator indicated additional water may be applied at a later date.

In discussions with Mr. and Mrs. Kohles it was indicated that they were unaware of the approved reclamation plan. Their maps, shown during the inspection, were outdated. Mr. Kohles was unaware of several key items in the recently revised reclamation plan. This miscommunication between the permittee and the land manager may have led to deficiencies in the implementation of the approved reclamation plan. TR-3 is attached for future reference.

During the inspection, staff verified that none of the stormwater rip-rap structures or straw waddles, approved through TR-03, had been installed. Furthermore several areas with excessive erosion were not repaired or properly graded prior to seeding. Only the slopes were seeded despite the reclamation plan requirement for revegetation of the pit floor and slopes. The application of hydroseeding arbitrarily stopped short of all disturbed areas where vegetation was inadequate. Lastly seeding once again occurred outside of the seeding window identified in the reclamation plan, however Triton felt it would still be appropriate.

Noxious weeds were present during the inspection, specifically Halogeton, Kochia, Russian Thistle, Bull Thistle and Tamarisk. Mr. Kohles stated that he last sprayed for weeds in 2014. Failure to treat noxious weeds is <u>cited</u> as a problem. Details of the correction action deadline are provided on page two of this report.

This pit is bisected by a Careus gas pad. Under TR-02 the boundary of the gas pad was established. At the time of the inspection a trailer that was presumed to be in support of Careus' operation was parked outside of the gas pad boundary. Evidence of excessive and/or uncontrolled vehicle traffic was observed within the pit area. The Operator is encouraged to work with Careus to ensure reclamation efforts are not adversely affected by Careus.

Inspection Contact Address

Chuck Whiteman Puckett Land Company P.O. Box 957 Meeker, CO 81641

Enclosure: Division correspondence dated June 11, 2018 and 13 photographs EC w/enclosure: Ray Anderson, Puckett Land Company Craig Kohles, Puckett Land Company

PERMIT #: M-2012-016 INSPECTOR'S INITIALS: ACY INSPECTION DATE: June 20, 2018

PHOTOGRAPHS











PERMIT #: M-2012-016 INSPECTOR'S INITIALS: ACY INSPECTION DATE: June 20, 2018







COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

June 11, 2018

Chuck Whiteman Puckett Land Company P.O. Box 957 Meeker, CO 81641

RE: Nolte Pit #1, File No. M-2012-016, Failure to Complete Reclamation per Rule 3.1.3

Dear Mr. Whiteman:

On June 27, 2013 the Division of Reclamation Mining and Safety (Division) received your annual report where it was declared that final reclamation had commenced. In the annual report it was indicated that mining concluded on September 30, 2012. Per Rule 3.1.3 reclamation shall be completed within 5 years from the date the Operator informs the Board or Office that such phase has commenced, unless an extended by the Board or Office. To date no extension to the reclamation completion deadline has been requested or granted.

The Division acknowledges that several seeding attempts have been made, as well as revisions to the reclamation plan to facilitate successful reclamation. Most recently TR-3 was approved on April 20, 2018. TR-3 revised the reclamation plan and added stormwater features to the final reclamation plan. The Division was notified via email that seeding was to occur on or around May 10th, 2018. It does not appear that stormwater features have been installed. The addition of stormwater features to the reclamation plan was required as the result of previously cited inspection problems.

Failure to comply with the approved reclamation plan is cited as a <u>problem</u>. Corrective actions require that the operator submit a schedule of the remaining reclamation items to be completed by the end of this construction season (October 31, 2018). The schedules should be submitted in the form of a technical revision with the required \$216 fee. Items that need to be addressed on the reclamation schedule are; installation of 5 rip-rap structures and straw waddles (within 60 days), reseeding of disturbed areas (when timing is appropriate) and treatment of noxious weeds. The technical revision request needs to be submitted to the <u>Division by July 11, 2018</u>.



Mr. Whiteman June 11, 2018 Page 2

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Yeldell

Environmental Protection Specialist

Ec: Wally Erickson, Senior EPS, Grand Junction DRMS

Cc:

Ray Anderson, Puckett Land Company Puckett Land Company 5460 S. Quebec St., Suite 250 Greenwood Village, CO 80111





April 19, 2018

Ms. Amy Yeldell **Division of Reclamation** Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

RE: Nolte Pit #1 Permit # M-2012-016

Dear Amy,

The purpose of this letter follows our receipt of your April 12, 2018 correspondence to us regarding the Nolte Pit, File No. M-2012-016, Technical Revision (TR-3) Adequacy Review. We have identified your questions/concerns as follows and accordingly have responded, in bold following each concern/questions. Please note the following:

Reclamation

Please state the revised seed mix in the narrative portion of your reclamation plan. • The seed mix listed in the original submission differs from that posted on the reclamation map rev. 4/5/2018

The narrative portion of the reclamation plan has been revised.

o Note that seeding rated will be doubled for all methods other than drillseeding

The seeding rates have been adjusted such that the methods other than drill seeding are doubled. This is noted in both the narrative and on the plan.

Please provide the Division with the unit cost per acre for Wood Cellulous Fiber mulch and the application rate.

Cost for the Wood Cellulous Fiber is \$675/acre and it will be applied at 1800 #/acre.

- On the reclamation plan map rev. 4/5/2018 the Application Methods Table
 - No acreage is given for areas to be Drill Seeded

No drill seeding is proposed.

• No acreage is given for those areas to have Wood Cellulous Fiber mulch applied

Table on the reclamation plan has been adjusted. The bare areas in the flat that are to receive seed and fertilizer are to be receiving such. Acreage is 0.17 ac.



RECEIVED

APR 24 2018

DIVISION OF RECLAMATION MINING AND SAFETY



• Under fertilizers a significantly larger area is stated to be hand spread than previous versions, does this mean areas that aren't going to be seeded will also be fertilized?

This has been modified to match other surface treatments to make sense. A fertilizers will be applied using hydro spreading. Acreage is 1.02 ac.

• Based on the narrative portion of this revision the entire area will be fertilized/soil amendments applied hydraulically, however the table indicates that only a small portion will utilize this method.

Clarified in both narrative and on plan.

Stormwater Management Plan

• On the reclamation plan map rev. 4/5/18 the straw waddle placement is based on the attached CDOT specs however no specs were included. Also rather than using a generic 50' spacing of waddles, horizontal placements should determine by slope.

Drawing has been adjusted to reflect that waddle placement to be per CDOT requirements based upon slope.

- Rip-Rap channels;
 - o Please provide a cross section detail

A cross section detail has been provided on the drawing.

• A table summarizing each channel that includes the followings; length, depth, width bottom, and slope (X:1)

A table has been provided on the drawing and a noted area next to each rip rap channel has been identified to cross reference to the table.

Upon your receipt and review, if you have any questions, please don't hesitate to call.

Respectfully submitted nonson, PE, CFM

Cc: Ray Anderson, PLC Chuck Whiteman, PLC



April 19, 2018

Ms. Amy Yeldell Division of Reclamation Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

RE: Nolte Pit #1 Permit # M-2012-016 Technical Revision Submittal #3

Dear Amy,

The purpose of this letter is to submit the attached technical revision for the Puckett Land Company Nolte Pit #1. This submittal follows your correspondence of January 4, 2018. From your recent correspondence, this letter is intended to serve as a narrative to the Technical Revision to be used in conjunction with the revised map of the Reclamation Plan Update for 2018. Accordingly, you will find attached the following:

1. A map of the Reclamation Plan Update for 2018

TECHNICAL REVISION NARRATIVE

The map of the Reclamation Plan Update has been prepared to reflect needed improvements to the seeding, erosion repair, and need for soil amendment application to existing soils unable to sustain vegetation on site. Note that the seed mix noted is changing to incorporate seed types that are more favorable to the observed alkaline soils. The new seed mix is noted as follows:

	Common Name	Application Rate (Drill seeding) Pounds/Acre
1.	American Sloughgrass	2.4 (in wet areas, omit if not needed)
2.	Indian Ricegrass	2.0
3.	Bluebunch Wheatgrass	3.3
4.	Western Wheatgrass	5.8
5.	Galleta Grass	4.2
6.	Alkali Sacaton	1.6
7.	Winterfat	0.4
8.	Rabbit Brush	0.3
9.	Triticale	5.0



Total Seed

25 #/acre (Drill seeding) All other seeding methods will need to double this seeding application rate.

The seeding will be performed using hydro seeding, hand broad casting and drill seeding. All seeding operations area to take place in the time frame between September 15 to April 15.

On the Reclamation Plan Update map, we have identified four separate areas of treatment that are to be employed to this site to enhance potential success in revegetation in the areas deemed deficient from our May survey of the site. These areas are noted as follows:

- 1. SR- Surface Roughening- to consist of raking, plowing, discing or micro-pocketing using hand tools or by mechanical means based upon the area of question and accessibility. The purpose of this will be to eliminate observed rills in the slopes identified, trap sediment, increase infiltration and to aid in the establishment of vegetative cover. The surface roughening will be performed to create horizontal ridges and depressions across the slope. Following the surface roughening, soil treatment will be added at the rate of 4,000 lbs/acres of Triganics, 2,000 lbs/acre of Sulphur, 3,000 lbs of Richlawn 3-6-3 with Mycorrihiza and Humates, 2 gallons per acre of Quantum Growth Light and 2 gallons per acre of Quantum Growth VSC. Subsequently the slope will be hydro seeded at 48 #/acre with the Generic Seed Mix identified on the Reclamation Plan Update for 2018 Map. Eco-Flex will be followed at 3,500 lbs per acre to provide erosion control and amendment cover for the slopes and a wood cellulous fiber mulch will be applied to currently bare flat areas.
- 2. HB- Hand Broadcasting- to consist of broadcasting the previously referenced Generic Seed Mix at a rate of 50 #/acre using a hand spreader (This is double the rate for drill seeding). The areas identified for this treatment are areas that are in the flat area that are on bare/thin areas. Using equipment to prep the intermittent bare soil areas will likely damage vegetation currently deemed acceptable. Prior to hand broadcasting, hand raking those areas to receive hand broadcasted seed shall be performed to break up the "crust" on the soil followed by soil treatment that will be added at the rate of 4,000 lbs/acres of Triganics, 2,000 lbs/acre of Sulphur, 3,000 lbs of Richlawn 3-6-3 with Mycorrihiza and Humates, 2 gallons per acre of Quantum Growth Light and 2 gallons per acre of Quantum Growth VSC.
- 3. TR- Terrace Repair- to consist of repair of the existing corrugations on the hillside along with surface roughening of slopes into and out of the corrugations. The objective of the surface roughening will be to remove the crust on the surface of the soils, and to provide more "micro-pocketing" of slopes in anticipation of receiving a soil treatment that will be added at the rate of 4,000 lbs/acres of Triganics, 2,000 lbs/acre of Sulphur, 3,000 lbs of Richlawn 3-6-3 with Mycorrihiza and Humates, 2 gallons per acre of Quantum Growth Light and 2 gallons per acre of



Quantum Growth VSC. Subsequently the slope will be hydro seeded at 48 #/acre with the Generic Seed Mix identified on the Reclamation Plan Update for 2018 Map. Eco-Flex will be followed at 3,500 lbs per acre to provide erosion control and amendment cover.

Discussion of Application Methods and Acreage of Such

Surface Roughening/Tilling:

- 1. Chisel plowing will be performed in those areas of 3:1 slope or less that are designated to receive surface roughening. The total area of such is 0.28 acres.
- 2. Micro pocketing will be performed using a backhoe, excavator or similar equipment in those areas of 2:1 slope and subject to terrace repair. A CAT 385 Excavator (or equivalent) is anticipated to have the reach to safely access the upper portions of the slope on the 2:1 slopes in the center of the site. The total area of such is 0.57 acres.
- 3. Hand raking will be performed in those areas to receive hand broadcast seeding. The total area of such is 0.17 acres.

Fertilizer spreading:

1. Hydro spreading will be used in all bare areas of slope and flat areas that are to receive seed. The total acreage is 1.02 acres.

Seed spreading:

- 1. Hand broadcast seeding will be performed using hand spreaders. The total area of the site to receive hand broadcast seeding is 0.17 acres.
- 2. Hydro seeding will be performed in those areas receiving surface roughening on slopes of 2:1 and 3:1. The total area of the site to receive hydro seeding is 0.85 acres.

Mulch spreading:

- 1. Those areas to receive hydro seeding are also to receive hydro mulching. ECO-Flex FMG hydro mulch will be applied to the slope. The area of such will be 0.85 acres.
- 2. Wood cellulous fiber mulch will be provided on the hand broadcast areas at a rate of 1800#/acre. The acreage of this is 0.17 acres.

Upon your receipt and review, if you have any questions, please don't hesitate to call.

Respectfully submitted,





Cc: Ray Anderson, PLC Chuck Whiteman, PLC



	Ар	plicato	n Method Table		
DUGHENING/TILLING		SEED SPREADING			
WING	0.28	AC.	HAND BROADCAST	0.17	AC.
NG	0.17	AC.	DRILL SEEDING	0	AC.
KETING	0.57	AC.	HYDRO SEEDING	0.85	AC.
SPREADING			MULCH SPREADING		
ADERS	0	AC.	HYDRO MULCHING	0.85	AC.
EADING	1.02	AC.	FIBER MULCHING	0.17	AC.

"PALOMA" INDIAN RICEGRASS	ACH
"SECAR" BLUEBUNCH WHEATGRASS	PSEC
"BARTON" WESTERN WHEATGRASS	PASO
GALLETA GRASS	HILA
"SALADO" ALKALI SACATON	SPO
"HATCH" WINTERFAT	KRA.
RABBIT BRUSH	ERIC
TRITICALE	TRITI

	# Revision	
Nolte Pit #1 Puckett Land Company	1 ADDED BMPS PER DRMS LETTER OF 3/15/18	
	2 ADDED RIP RAP DETAIL, TABLE AND MADE TABLE REVISIONS	





118 West Sixth Street, Suite 200 Glenwood Springs, CO 81601 970.945.1004 | www.sgm-inc.com

> Ms. Amy Yeldell Division of Reclamation Mining and Safety 1313 Sherman St., Room 215 Denver, CO 80203



April 26, 2018

Jeff Simonson Puckett Land Company 118 W. 6th, Suite 200 Glenwood Springs, CO 81601



COLORADO Division of Reclamation, Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

RE: Nolte Pit, Permit No. M-2012-016, Technical Revision (TR-3) Approval

Dear Mr. Simonson:

On April 20, 2018 the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision request (TR-3) submitted on March 13, 2018, addressing the following:

Revised Reclamation Plan and Stormwater Management Plan

- Repair terraces AND/OR provide additional surface roughening to remove all signs of erosion and aid reclamation, use of hand raking, chisel plow and mirco-pocketing
- The use of fertilizers and soil amendments (Sulphur, Triganics, Richlawn 3-6-3 with Mycorrihiza Humates, Quantum Grow Light and Quantum Growth VSC)
- New seed mix as stated on reclamation plan map rev. 4/19/18
- Seeding applied over two applications (40% hydraulically @ 50 lbs/ac with amendments and fertilizer, remaining 60% hand broadcast or hydraulically @ 50 lbs/ac)
- More robust mulching to prevent erosion (EcoFlex on slopes and Wood Cellulous Fiber on hand broadcast area)
- The addition of 5 riprap erosion protection channels
- The use of straw waddles for erosion protection on the eastern portion of the permit

The terms of the TR-3 approved by the Division are hereby incorporated into Permit No. M-2012-016. All other conditions and requirements of the permit remain in full force and effect.

Currently the Division holds a reclamation bond in the amount of \$36,250 for this site. The Division has determined this amount to be adequate.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@ state.co.us



Jeff Simonson April 26, 2018 Page 2

Sincerely,

Amy Geldell

Amy Yeldell Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety Phone: (970) 254-8511 Fax: (970) 241-1516

Ec:

Russ Means, Senior EPS, Grand Junction DRMS Chuck Whiteman, Puckett Land Company Ray Anderson, Puckett Land Company Tim Arrasmith, Triton