

March 15, 2018

Jeff Simonson
SGM
118 W 6th St, 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, File No. M-2012-016 , Technical Revision (TR-3) Adequacy Review

Dear Mr. Simonson:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced Technical Revision in order to ensure that it adequately satisfies the requirements of the Colorado Land Reclamation Act (Act) and the associated Mineral Rules and Regulations for the Extraction of Construction Materials (Rules). During review of the material submitted, the Division determined that the following issue(s) of concern need to be adequately addressed before the Technical Revision can be considered for approval. Please provide the following:

Reclamation

- The request references a change to the seed mix. However there appears to be no changes from the seed mix approved under TR-2. Please clarify this.
- Previous discussions have mentioned removing the remaining terraces and replacing them with other surface roughening techniques such as micro-pocketing. Both, in the narrative and on the map, terraces are still apart of the reclamation plan. Please clarify which method is to be used.
- Please specify what type of soil amendment Sulphur will be used.
- Please provide the Division with unit costs for each the following materials so that they may be properly bonded for.
 - Triganics
 - Richlawn 3-6-3 with Mycorrhiza and Humates
 - Quantum Growth Light
 - Quantum Growth Light VSC
 - EcoFlex
- Under Discussion of Application Methods and Acreage of Such-Fertilizer spreading:
 - Some of the soil amendments listed are liquids while others are solids. Please clarify the application method for each of these products. Also specify timing and if they will be applied differently based on seeding location/type.



- I.e. will the seed be coated, fertilizer tilled into the soil prior to seeding, added to hydromulch slurry and applied, etc.
- Under Discussion of Application Methods and Acreage of Such-Mulch Spreading:
 - It was previously specified that Ecoflex is to be used in all areas except those areas hand broadcasted. Item #2. States that drill seeded areas will not be mulched. These are conflicting statements. Please clarify.
- The Division notes that the only changes to the 2018 map is the soil treatment narrative. Please provide additional information on the map to show revegetation and storm water management discussed below.

Stormwater Management Plan

- The December 20, 2017 inspection report identified sediment control and stormwater management as a problem. The current reclamation plan does not adequately address these issues. Nor does this technical revision request provide enough additional information to address the noted problem.
- Attached is your map with specific areas of concern from the December inspection highlighted (Yellow) where run-on has created significant erosion problems on site. Storm water BMPs were observed during the inspection but are not depicted on the reclamation map, these areas are highlighted (Blue).
- Please provide engineered design specs for structures to withstand a two year, 24 hour storm event up to the probable maximum precipitation (PMP) event plus the 10 year, 24 hour storm event for this area. The design and implementation are needed to help protect the site from excessive erosion during and after reclamation completion based on past inspection observations.

Please submit your response(s) to the above listed issue(s) **by Friday, April 06, 2018** in order to allow the Division sufficient time for review. If you cannot address the above issues by April 6, 2018 please request an extension to the decision due date to ensure adequate time for the Division to review materials. A decision due date of April 13, 2018 has been set.

The Division will continue to review your Technical Revision and will contact you if additional information is needed.

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

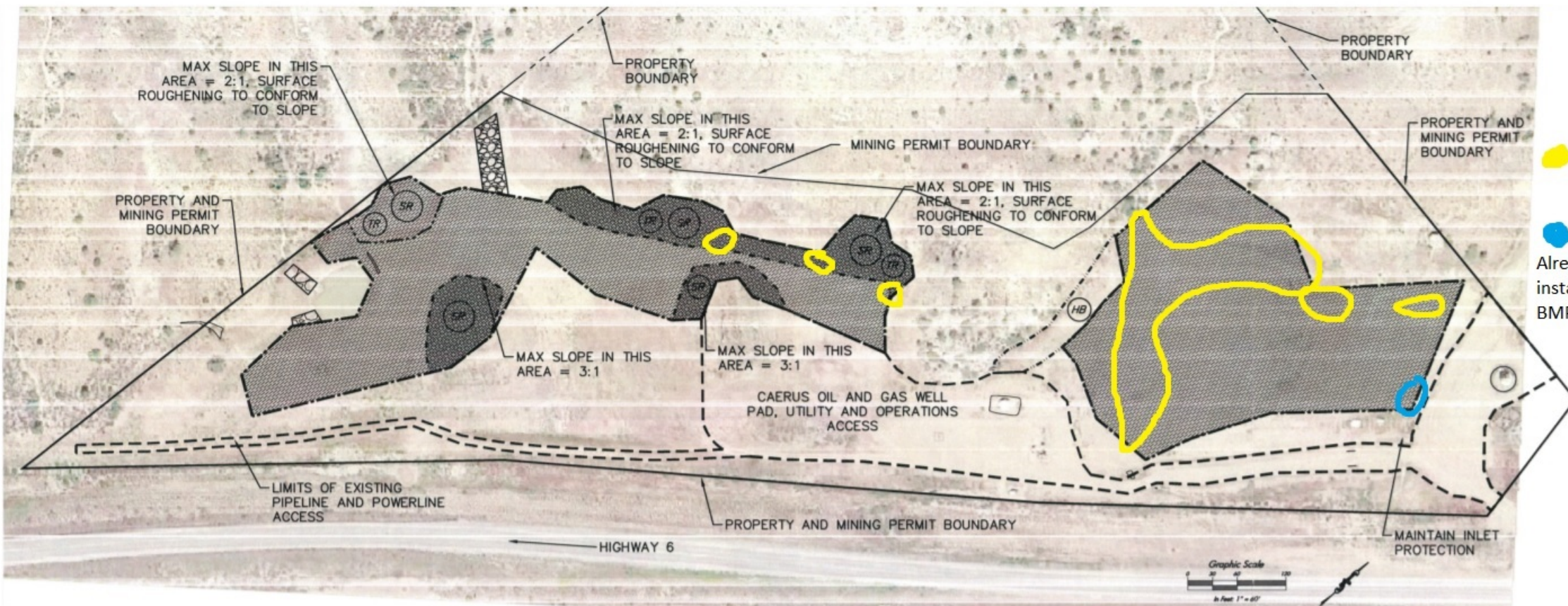
Sincerely,



Amy Yeldell

Environmental Protection Specialist
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
Ray Anderson, PLC
Chuck Whiteman, PLC



Need BMP
Already installed BMP

- SURFACE ROUGHENING WITH HYDRO SEEDING AND HYDRO MULCHING BETWEEN SEPTEMBER 15 TO APRIL 15 (BOUNDARY IS TOE AND TOP OF SLOPE) (TO CONFORM TO EXISTING SLOPES)
- HAND BROADCAST SEED TO STRENGTHEN GROWTH DENSITY OF EXISTING
- RIP RAP EROSION PROTECTION - TO BE MAINTAINED
- REGRADE ALL SURFACES TO REMOVE ALL SIGNS OF EROSION. PROVIDE SURFACE ROUGHENING AND MICROPOCKETING TO HOLD SEED, AMENDMENTS AND MULCH. APPLY PROGNATICS BIOTIC SOIL MEDIA PER TRITON ENVIRONMENTAL. APPLY 60% OF SEED DENSITY VIA BROADCASTING DIRECTLY TO THE SOIL. MIX ALL AMENDMENTS IN A HYDRO SEEDER TOGETHER WITH THE REMAINING SEED AND APPLY AT RATES PER TRITON ENVIRONMENTAL (BASED ON SOIL TESTING). TOP OFF WITH ECO-FLEX FMG HYDRO MULCH.
- RETENTION POND - TO BE MAINTAINED BY REMOVING EXCESS SILT/DEBRIS

TERRACE REPAIR (REGRADE) OF EXISTING CORRUGATIONS AND EROSION ON HILLSIDE. PROVIDE MICRO-POCKETING/RETENTION OF SLOPE FOLLOWED BY HYDRO SEEDING GENERIC SEED MIX, AMENDMENT APPLICATION AND HYDRO MULCHING

Application Method Table			
SURFACE ROUGHENING/TILLING		SEED SPREADING	
CHISEL PLOWING	0.28 AC.	HAND BROADCAST	0.17 AC.
HAND RAKING	0.17 AC.	DRILL SEEDING	3.84 AC.
MICRO POCKETING	0.57 AC.	HYDRO SEEDING	0.85 AC.
FERTILIZER SPREADING		MULCH SPREADING	
HAND SPREADERS	4.01 AC.	HYDRO MULCHING	0.85 AC.
HYDRO SPREADING	0.85 AC.		

GENERIC SEED MIX

COMMON NAME	SCIENTIFIC NAME	LBS PLS/AC
"EGAN" AMERICAN SLOUGHGRASS	BECKMANNIA SYZIGACHNE	3 (WET AREAS, DMPT IF NOT NEEDED)
"PALOMA" INDIAN RICEGRASS	ACHNATHERUM HYMENOIDES	2.5
"SECAR" BLUEBUNCH WHEATGRASS	PSEUDOROEGNERIA SPICATA	4
"BARTON" WESTERN WHEATGRASS	PASCOPYRUM SMITHII	7
GALLETA GRASS	HILARIA JAMESII	5
"SALADO" ALKALI SACATON	SPOROBOLUS AIROIDES	2
"HATCH" WINTERFAT	KRASCHENNIKOVIA LANATA	5
		24 DRILL SEED RATE, ALL OTHER

METHODS OF SEEDING TO BE DOUBLE THIS RATE.

SOIL TREATMENT (PER ACRE) TO BE 4,000 LBS OF TRIGANICS, 2,000 LBS OF SULPHUR, 3,000 LBS OF RICHLAWN 3-6-3 WITH MYCORRHIZA AND HUMATES, 2 GALLONS PER ACRE OF QUANTUM GROWTH LIGHT AND 2 GALLONS PER ACRE OF QUANTUM GROWTH VSC. PROVIDE ECO-FLEX AT 3,500 LBS PER ACRE TO PROVIDE EROSION CONTROL AND AMENDMENT COVER.

NOTE: STRAW WADDLE PLACEMENT AND INLET PROTECTION TO BE PER APPLICABLE DETAIL OF CDOT STD PLAN M-208-1 (SHEET 2 AND 3 OF 12), ATTACHED

RECEIVED
MAR 13 2018
DIVISION OF RECLAMATION
MINE RECLAMATION DIVISION

Preliminary
for Review

SGM
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Nolte Pit #1
Puckett Land Company

#	Revision	Date	By
1			

Reclamation Plan Update
for 2018

Job No. 2009-115-002
Drawn by: JES
Date: March 2, 2018
QC: RSM PE: JST
File: 030218 Reclamation Plan

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