5892

State of Utah

DEPARTMENT OF NATURAL RESOURCES

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Division of Oil, Gas and Mining

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May 5, 2014

Blake Anderson
TM Crushing, LLC
P.O. Box 437
Lehi, Utah 84043

Subject: Initial Review of Notice of Intention to Commence Large Mining Operations,TM Crushing, LLC., Talon's Cove Mine, M/049/0091, Utah County, Utah

Dear Mr. Anderson:

The Division of Oil, Gas and Mining has reviewed the referenced Notice of Intention to Commence Large Mining Operations (NOI) which was received February 11, 2014. The attached comments will need to be addressed before tentative approval may be granted. Please note that the State Historic Preservation Officer has concurred with the Division's determination of "No Significant Effects" (see attached letter).

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using redline and strikeout text. After the notice is determined technically complete, the Division will ask that you send us two clean copies of the complete and corrected plan. Upon final approval, the Division will return one copy stamped "approved" for your records.

The Division will suspend further review until receiving your response. Please contact April Abate at 801-538-5214 or me at 801-538-5261 if you have questions about the review or if you desire to set up a meeting to discuss the review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB:aa:eb
Attachment: Review
SHPO Letter
Cc: Peggy Kelsey, Utah County
P:\GROUPS\MINERALS\WP\M049-Utah\M0490091-Talon'sCove\final\REV1-5892-03242014.doc

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UTAH DNR OIL, GAS & MINING

INITIAL REVIEW OF NOTICEOF INTENTION
TO COMMENCE LARGE MINING OPERATIONS
TM Crushing
Talons Cove Mine
M/049/0091
May 5, 2014

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Figures should be resubmitted with a smaller scale (larger area). The General Location Map and the 105.1 Base Map should be submitted as larger base maps. Rule R647-4-105 requires an approximate scale of 1 inch = 2,000 feet. Maps 105.2, 105.3, 105.3a should be submitted at scales closer to 1"= 200' according to rule R647-4-105.2.	aa	
2	General	Please verify the accuracy of the scale bar relative to the features on the maps.	aa	
3	General	Operations details and contour elevation lines were difficult to read. The Division recommends submitting the maps on 11 x 17 size paper	aa	

R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4	Map 105.3	The reclamation map should distinguish the two phases of reclamation discussed in section 107.6 of the plan. It is not clear where these areas are on the map.	aa	
5	Map 105.3	The slopes that will remain at 2H:1V that will only receive seeding should be identified on the map. The slopes that are to be graded to 1H:1V that are to receive topsoil and seed should be distinguished on the map.	aa	
6	Map 105.3	Please indicate on the map which mine-related roads are to be reclaimed.	aa	
7	Map 105.3	Please include an approximate final elevation of the pit floor at reclamation.	aa	
8	Map 106.5	Soil Map units in the legend should be defined, or at least add a reference on the map to Table 1, page 7 of the NOI.	aa	
9	Omission	Please add a regional geologic map to the plan as per rule R647-4-105.3.16.	aa	
10	Omission	Please provide an additional map showing hydrologic controls and identifying features, such as culverts, check dams, water bars for routing storm water around the disturbance areas, as well as how storm water will be managed inside the disturbance area.	aa	

105.2 - Surface facilities map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	Figure 105.1-Base Map	This map needs to identify the Kern River gas pipeline, which is adjacent to the high tension power lines.	lk	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
12	Figure 105.3a – Reclamation Plan	This figure indicates all disturbed areas will receive six inches of topsoil, but it conflicts with the soils section (106.6) which states that slopes steeper than 2H:1V will not have soil replaced. To resolve this conflict, it would be best to revise the plan and replace topsoil on all disturbed areas. See comments under R647-4-106.6 and R647-4-112.	lk	

R647-4-106 - Operation Plan

106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
13	Page 17-18	A statement is made that only six inches of soil will be salvaged in areas with deeper soils. This should be corrected to salvage all available soils so that there is a sufficient resource for reclamation.	lk	

106.6 - Plan for protecting & re-depositing soils

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14	Page 8	Please provide a map showing areas where topsoil will not be replaced, or correct this reference that not all areas will receive topsoil for reclamation. There is apparently sufficient soil to replace six inches over the entire disturbed area of 103.4 acres with 83,427 cubic yards stockpiled. If topsoil is not replaced on all areas, a variance would need to be requested, including a description of the alternative measures to be taken and a demonstration that these measures will meet the intent of the Act.	lk	

106.8 - Depth to groundwater, extent of overburden, geology

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
15	Pg. 11	Please provide additional information on the geology in the narrative to accompany the geologic map as requested in comment 9.	aa	
16	Pg. 11	Please include a statement that overburden will not be generated. The plan states in section 106.4 that all rock will be used as product, but overburden should be specifically addressed in this section.	aa	

R647-4-109 - Impact Assessment

109.4 - Slope stability, erosion control, air quality, safety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
17	Pg. 15	The plan states that erosion control will be managed through the use of storm water best management practices. In order to meet the requirements of R647-4-107.3, additional information regarding how storm water runoff will be managed is needed. Please provide the Division with more information on how drainage from upland undisturbed areas will be routed around the disturbed areas. Please provide information on how storm water drainage inside the disturbance area will be managed. The plan indicates no sediment ponds are planned. How will excess water be managed inside the pit areas? A storm water pollution prevention plan was submitted, but the text and a hydrologic features map in the NOI should include this additional information so that an inspector has a clear idea of where the hydrologic structures on the site are and how it is intended that they function.	aa	

R647-4-110 - Reclamation Plan

110.1 - Current & post mining land use

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18	Page 16	The current or pre-mining land use is open space, grazing and wildlife habitat, and the plan and reclamation cost estimate need to show reclamation to this use. The reclamation plan may also include an alternative of some kind of development, or this alternative reclamation plan could be included later. Even though the area is zoned for a master development plan, zoning does not ensure development. If the Division were to reclaim the site, it would be to an open space/grazing/wildlife habitat use. It could be several years or decades before development takes place. If building permits are issued for development at the time of reclamation, the reclamation plan could be amended to residential/commercial use. Please correct the plans to show this.	lk	

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
19	Page 16	The eastern slope along the boundary with the Staker Parsons mine can only be left at 1H: 1V slope if in unconsolidated rock. If it is unconsolidated, slopes would need to be reduced to a stable configuration, generally 2H:1V or flatter.	lk	
20	Pages 16-17	It appears from this section that TM Crushing is not planning to replace topsoil on all areas though it also appears that there is sufficient soil for a minimum of six inches over the entire site. Considering the long-term potential of the area for residential and commercial use, revegetating these steeper slopes becomes more important since it is likely they would remain. Adding soil would enhance revegetation potential. Soil material will also fill in small holes, cracks, etc, and provide a better seedbed, thus improving revegetation efforts. A variance would need to be applied for, and approved, to not topsoil the 2H:1V or steeper slopes. See also comments under R647-4-106.6 and R647-4-112.	lk	

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
21	Page 17	The plan says final grading and storm water management will be addressed during residential and commercial development construction. Though this may be the ultimate use of the site, the plan needs to provide for reclamation to the premining land use, including grading and storm water management. It may be several years from end of mine to potential development of residential/commercial use.	lk	

110.5 - Revegetation planting program

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
22	Page 19	If the site is drill seeded, small seeds, particularly sagebrush and forage kochia, should not be run through the disc openers. Keep these species separate and make sure the drill has multiple boxes. Pull the drop tubes from the box(es) in which the sagebrush and kochia seed are placed so these seeds are scattered on the surface.	lk	

R647-4-112 - Variance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
23	Page 21	While no variances were requested, not replacing topsoil on steeper slopes would require a variance. If this variance request is made, it would need to reference the rule to which the variance would apply, provide an alternative plan, and demonstrate that the alternative plan would meet the intent of the Act.	lk	

R647-4-113 – Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
24		The escalation rate for 2014 is 1.9%. Please increase the bond total using that rate.	whw	
25		Please include worksheets for the cost for earthwork. Worksheets can be found on the Division's web site at http://linux1.ogm.utah.gov/WebStuff/wwwroot/minerals/bonding_worksheets.html. The worksheet should include the Blue Book rates for equipment rental (use monthly rates of 176 hours/month) and operating costs. Equipment rental rates and operating costs should have an additional 10% for overhead and profit. The wage rates should be from Means.	whw	
26		Please include costs for backfilling and regrading the site. The Division assumes some backfilling and regrading will be needed if the operator is unable or unwilling to conduct reclamation.	whw	