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2017 Annual Report Review Completion

Suzanne Steab <suzannesteab@utah.gov>
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Wed, Jun 27, 2018 at 9:01 AM

The Division staff completed the review of the 2017 Annual Report for the Deer Creek Mine. Attached is a copy of the review with comments.

No hard copy will follow.

Thank you for your diligence in completing the Annual Report.

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 **Deer Creek.pdf**
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ANNUAL REPORT

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified in the cover letter. During a complete inspection an inspector will check and verify the information.

GENERAL INFORMATION

Company Name	InterWest Mining Company	Mine Name	Deer Creek Mine
Permit Number	C/015/0018	Permit expiration Date	02-07-2021
Operator Name	East Mountain Energy for Interwest Mining Co	Phone Number	+1 (435) 687-4712
Mailing Address	15 North Main Street	Email	ken.fleck@pacificcorp.com
City	Huntington		
State	Utah	Zip Code	84528

DOG M File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Refuse Piles	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Reports submitted to DOGM quarterly throughout 2017
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Reports submitted to DOGM quarterly throughout 2017
Other:	Veg Monitoring Rpt, Fish & Macroinvertebrate	Refer to Attachment A and B

OPERATOR COMMENTS

Note: East Mountain Energy was contracted by Interwest Mining Company to operate the Deer Creek Mine during the mine closure process. East Mountain Energy's contract was terminated on December 20, 2017. Interwest Mining Company retained the environmental compliance and reporting responsibilities FY2017.

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements

Title: Wildlife**Objective:** Adhere to wildlife exclusionary periods during reclamation activities**Frequency:** During Reclamation**Status:** Reclamation Pending**Reports:** Not Required**Citation:** MRP, Section 322, page 10; Section 330, page 16 #14; Section 342, page 32, #7**OPERATOR COMMENTS**

PacifiCorp amended its permit to remove the exclusionary periods in the left fork of Rilda Canyon. This amendment was approved on May 12, 2015, Task ID 4863.

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements

The amendment approved on May 12, 2015 (Task ID 4863) modified the Engineering section, Section 500, of the MRP and did not modify the wildlife exclusionary periods found in the MRP. Those conditions, found in Volume 11, Section 330 page 18 and Section 342 page 32 of the MRP are still in effect. It appears, based on DOGM inspection report ID #6095 dated March 13, 2018, that the Permittee did not violate these exclusionary periods. That report states "The mine site remains idle, awaiting demolition and reclamation activities which are planned for the spring of 2018." The next inspection was not conducted until after the end of the exclusionary period. Barring an approved amendment to the MRP, the wildlife exclusionary period remains in effect, restricting reclamation activity between Dec.1 and April 15. TM (6/6/18)

Title: DEMONSTRATION OF SELECTED OVERBURDEN AS BEST AVAILABLE MATERIAL IN THE PERMIT AREA FOR USE AS SUBSTITUTE TOPSOIL.**Objective:** Monitor chemical quality of identified substitute topsoil to show reduction in sodicity.**Frequency:** Sampling will occur once within each permit term until such time as the soils are found acceptable for substitute topsoil use. The last sample, collected in 2010, did not show suitability. The current permit term is 2011-2016.**Status:** To be conducted once in current permit term (2011-Feb 2016).**Reports:** Annual Report**Citation:** MRP, Volume 2, Part 4, section R645-301-233, page 2-3**OPERATOR COMMENTS**

Samples were taken in 2016.

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements

6/26/2018, PB. The referenced samples were taken in 2014 and analyzed in February 2015. The results were sent to the Division in August 2016 (Incoming document 08032016.5155).

FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

Title: SUBSOIL TESTING

Objective: Regraded subsoil will be sampled on 500 ft intervals to a depth of four feet (three or four samples for the 2,000 linear feet in the facilities area). The samples will be analyzed on site for pH and EC. Problem areas will be further sampled and sent to a laboratory of analysis.

Frequency: At final regrading

Status: Ongoing at reclamation

Reports: Laboratory analysis to be provided to the Division

Citation: MRP, Volume 11, Section R645-301-231.300

Title: TOPSOIL HANDLING TESTING PLAN

Objective: Three composite samples will be taken from the facilities area and sediment pond. Samples will be analyzed for parameters to be compared with baseline information and to determine the need for amendments, including fertilizer.

Frequency: Final Reclamation

Status: Ongoing

Reports: Analysis to be provided to the Division

Citation: MRP, Volume 11, Section R645-301-242

Title: WASTE ROCK SITE RECLAMATION SAMPLING

Objective: Monitor chemical quality of upper four feet of final waste reclaimed surface at waste rock site.

Frequency: Grab samples within four feet of final elevation at a rate of two samples per acre per lift. Parameters as described.

Status: At final reclamation of waste rock cell.

Reports: Annual report

Citation: MRP, Volume 10, Chapter 7, page 7-5

Title: FISH & MACROINVERTEBRATE MONITORING

Objective: Monitor the fish and macroinvertebrates in Rilda Creek

Frequency: Spring/fall two years prior to and spring/fall one year immediately following start of construction. Spring every three years during operations and reclamation.

Status: Construction complete in fall 2008. Spring and Fall 2009 surveys complete. 2011 & 2014 surveys complete. Next survey expected for Spring 2017.

Reports: Annual Report

Citation: MRP, Volume 11, Biology Section, page 25.

Title: REFERENCE VEGETATION SAMPLING**Objective:** Ensure that veg reference areas remain appropriate for comparison at time of reclamation.**Frequency:** Reference area qualitative and quantitative monitoring will continue on a five year interval through mine reclamation and bond release.**Status:** Next sampling to be conducted in 2017**Reports:** Annual Report**Citation:** MRP, Volume 1, Vegetation Monitoring Plan, page 2-174, paragraphs 4 & 5.

REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Attachment A: Vegetation Monitoring
Attachment B: Fish and Macroinvertebrate Survey
Subsidence Report
Hydrology Report

REVIEWER COMMENTS

Veg Monitoring: Mt. Nebo Scientific conducted vegetation monitoring of the reference areas in 2016 and that report was included in last year's annual report. These reports are due at least every five years so the next survey is not required until 2021. TM (6/6/18)

Fish & Macroinvertebrate Survey: Fish & macroinvertebrate sampling was conducted in July of 2017 by RedFish Environmental LLC. Their results are summarized in a report submitted in the annual report. Regarding macroinvertebrates, the survey concluded that any differences in aquatic invertebrate community that could potentially indicate a decline in habitat or water quality in Rilda Canyon since 2004 were not apparent. The report also notes that the lack of noticeable differences in invertebrate diversity and taxa richness across test sites indicate that similar water quality conditions persist throughout the control and test sites. These results indicate stable water quality measurements before, during, and after construction and mining activities in Rilda Canyon. Regarding the fish survey, the report notes that fish counts have varied widely before, during, and after construction and mining activities and that "no trends have been identified that could be associated to the mine portal construction and operation." TM (6/7/18)

The annual report meets the State of Utah R645 requirements for Hydrology. The Deer Creek annual report has updated the Annual Hydrologic Report for 2017. The hydrologic report summarizes the 2017 water year for the local and regional climate patterns. The quality and quantity of surface and groundwater is analyzed and summarized in narratives and graphs. The report provides graphs of spring flow and precipitation showing flow closely correlates with total precipitation. (KS, 6/6/2018)

MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mine Map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Raptor survey within permit boundary		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements