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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

June 30, 2016

Karin Madsen, Resident Agent  
Genwal Resources, Inc.  
P.O. Box 910  
East Carbon, Utah 84520-0910

Subject: 2015 Annual Report, Genwal Resources, Inc., Crandall Canyon Mine, Task ID #5104, C/015/0032

Dear Ms. Madsen:

The Division of Oil, Gas and Mining has completed the review of the 2015 Annual Report. Enclosed is a copy of the review which was completed June 29<sup>th</sup>, 2016. Additional information is required in order to meet the requirements of the approved Mining and Reclamation Plan (MRP) commitments (See attached).

- 1) The Permittee must submit data that compares 2014 and 2015 subsidence monitoring. The submitted subsidence report did not include the annual subsidence comparison of active subsidence points with the 2015 year.
- 2) The Permittee must provide the October 2015 Burma Pond inspection report. The report is needed in order to clarify the amount of accumulated sediment in the Burma Pond.
- 3) Once concurrence from SITLA and USFS is obtained on the methods, success standards and reference sites relative to re-vegetation on East Mountain, the Permittee must amend the MRP with that information.

Please provide the aforementioned information by August 5, 2016. If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/sqs

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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	Genwal Resources Inc.	Mine Name	Crandall Canyon Mine
Permit Number	C/015/0032	Permit expiration Date	2018-05-13
Operator Name	UtahAmerican Energy	Phone Number	+1 (435) 888-4000
Mailing Address	PO Box 910	Email	kmadsen@coalsource.com
City	East Carbon		
State	UT	Zip Code	84520

## DOGGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Refuse Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Sediment Pond Annual Certification is included.
Other:		

## OPERATOR COMMENTS

The annual impoundment inspection reports are included for both the Burma Evaporation Basin and the Crandall Canyon Mine Site's primary sediment pond. No evidence of instability, structural weaknesses or visible hazards were observed for either of the impoundments. David Hibbs (State of Utah Professional Engineer #6449561) stamped and signed both of the impoundment reports.

## REVIEWER COMMENTS

Met Requirements  Did Not meet Requirements

The annual impoundment inspection reports were submitted for both the Burma Evaporation Basin and the Crandall Canyon Mine sites primary sediment pond. No evidence of instability, structural weaknesses or visible hazards were observed for either of the impoundments. David Hibbs (State of Utah Professional Engineer #6449561) stamped and signed both of the impoundment reports. (CP)

# COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

## Title: MACROINVERTEBRATE SAMPLING

**Objective:** To monitor macroinvertebrate populations in Crandall Creek

**Frequency:** Annually, during the spring and fall beginning in 2009.

**Status:** Spring and Fall 2015 reports are due to the Division.

**Reports:** Submit surveys in annual report.

**Citation:** MRP, Volume A Text, Chapter 3, page 3-17.

### Operator Comments

Macro-invertebrate Study was completed by EIS for the Spring and Fall of 2015. Results are included within the Annual Report.

Reviewer Comments    Met Requirements                       Did Not Meet Requirements

4/1/16, LR: Spring and Fall 2015 Macroinvertebrate studies were performed by EIS Environmental & Engineering Consulting. Samples were shipped to the BugLab in Logan, Utah for processing. Results from the assessments are consistent with previous years.

## Title: SUBSIDENCE MONITORING

**Objective:** To determine subsidence effects from mining. Please provide a map that shows the locations of the monitoring points to compare variations due to mining.

**Frequency:** Annually

**Status:** Ongoing.

**Reports:** Submit surveyed monitoring data and map to Division annually.

**Citation:** MRP, Volume B, Chapter 5, Section 5.25.14, page 5-25.

### Operator Comments

Subsidence Monitoring was completed by Ware Surveying. Results are located within the Annual Report.

Reviewer Comments  Met Requirements

Did Not Meet Requirements

Per commitments outlined in the MRP 5.25.14 Subsidence Monitoring Plan, subsidence information was provided with pertinent subsidence data. The survey data includes an easting, northing, and elevation for each subsidence monitoring point starting at the baseline in 2003/2007/2009 compared to 2015. The report did not include the annual subsidence for an annually comparison to see active subsidence points with the 2015 year. The Permittee will submit the second set of subsidence data comparing the 2014 to 2015 subsidence. The Permittee has not addressed the requirements of this commitment. (CP)

**Title: Burma Pond Information/Sampling**

**Objective:** Provide report of accumulated depth of sludge in the Burma Evaporatio Pond. Grab samples to be obtained every five years or when 7.5" of solid waste has been deposited. Grab Samples to be analyzed for all RCRA metals.

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Include in Annual Report

**Citation:** Appendix 7-66. Pg. 7

Operator Comments

As per the requirements, sludge is only to be sampled after 5 years, or when accumulated depth of sediment reaches 7.5 inches. Construction of Burma Pond was completed on Thursday, January 9th, 2013. It is not scheduled to be sampled until January 2018, unless the sediment reaches 7.5 inches. In 2014, the pond evaporated enough to reveal an accumulated depth of approximately 3.5 inches of sediment. In 2015, the pond did not evaporate enough to show a total accumulation of sediment. When sediment surveys were done on the ponds in October 2015, it was the surveyor's estimate of what the sediment is while suspended in water, therefore the accumulated level is unknown at this time. It is my estimation that sediment levels will be close to 7.5 inches in the summer of 2016, and the sediment will be sampled then, or a measurement taken.

Reviewer Comments  Met Requirements

Did Not Meet Requirements

3/23/2016, Recent photographs are in the Image folder dated 3/17/2016, PWB. The Permittee provided the Burma Pond inspection reports that show indeed the accumulated depth of sediment in 2015 was estimated on November 4, 2015 to have an approximate elevation of 6516.7. Drawing 4 of Appendix 7-66 shows the pond base elevation to be 6514.5. Based off the MRP drawings and the November inspection report a total of 2.2 feet of sediment is accumulated in the pond. The sediment level survey that was completed in October 2015 was not submitted to the Division at the time of the annual report. The Permittee must provide the October 2015 sediment survey that estimate a sediment level to clarify the amount of accumulated sediment. The Permittee has not address the requirements of this commitment and will submit the sediment level of the Burma Pond detailed in the October 2015 sediment survey. (CP)

# 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: RECLAMATION OF CULVERT**

**Objective:** To reclaim part of the culverted section of the stream which provided habitat to the cutthroat trout population. And enhancement of the stream below the mine discharge point due to the impact on the stream habitat and aquatic wildlife that occurred because of the iron-laden water discharge.

**Frequency:** Once during reclamation.

**Status:** To be done during reclamation.

**Reports:** Submitted to the Division upon project completion.

**Citation:** MRP, Volume A, Chapter 3, page 3-16

**Title: RAPTOR SURVEYS**

**Objective:** To monitor raptor activity and nesting within and adjacent to the permit area.

**Frequency:** Every three years, or annually if a.) UDWR recommends it, b.) it will not unduly harrass raptors, or c.) it if is prudent to insure raptor safety and/or habitat. Raptor surveys are not required if the mine is not active AND no significant activity is taking place.

**Status:** Surveys required prior to installation of any discharge treatment facilities or prior to reclamation work.

**Reports:** In annual report.

**Citation:** MRP, Volume A, Chapter 3, page 3-17.

**OPERATOR COMMENTS (OPTIONAL)****REVIEWER COMMENTS**

## 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:

2015 Re-vegetation Monitoring at the East Mountain Project report completed by Patrick Collins, Mt. Nebo Scientific is included in the Annual Report. The purpose of the report is to provide information and data about the proposed reference areas chosen for success standards and to provide data of the reclaimed areas to monitor the progress of re-vegetation on the East Mountain Project.

### Reviewer Comments

The report has been reviewed and accepted by the Division. The Division is currently seeking concurrence on the methods, success standards, and reference sites with SITLA and USFS as required by the agreement. With acceptance from SITLA and USFS, Genwal must amend the MRP to reflect methods, success standards, and reference sites for East Mountain. 4/1/16 LR

# 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"/>
		<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Comments  Met Requirements  Did Not Meet Requirements