



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## Inspection Report

Permit Number:	<b>C0150032</b>
Inspection Type:	COMPLETE
Inspection Date:	Tuesday, December 11, 2018
Start Date/Time:	12/11/2018 11:00:00 AM
End Date/Time:	12/11/2018 1:30:00 PM
Last Inspection:	Monday, November 19, 2018

Representatives Present During the Inspection:	
OGM	Justin Eatchel
Company	Karin Madsen

Inspector: Justin Eatchel  
 Weather: Sunny, Clear, & Cold. 19F  
 InspectionID Report Number: 6317  
 Accepted by:

Permittee: **GENWAL RESOURCES INC**  
 Operator: **GENWAL RESOURCES INC**  
 Site: **CRANDALL CANYON MINE**  
 Address: **PO BOX 910, EAST CARBON UT 84520-0910**  
 County: **EMERY**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **INACTIVE**

**Current Acreages**

1,257.75	<b>Total Permitted</b>
34.23	<b>Total Disturbed</b>
11.89	<b>Phase I</b>
	<b>Phase II</b>
	<b>Phase III</b>

**Mineral Ownership**

- Federal
- State
- County
- Fee
- Other

**Types of Operations**

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

**Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:**

This complete inspection was conducted on the morning of Tuesday, December 11. Company representative Karin Madsen was present for this inspection. There was at least 10 - 12 inches of snow blanketed across the entire site, which made some culverts and ditches inaccessible.

**Inspector's Signature:**

Justin Eatchel,  
Inspector ID Number: 73

**Date** Wednesday, December 12, 2018



**REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS**

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
  - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
  - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS check	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **1. Permits, Change, Transfer, Renewal, Sale**

The existing DOGM permit was renewed on May 13, 2018, and will expire in exactly five years from that date. The current UPDES permit was renewed on January 27, 2018, and will expire at midnight, January 31, 2023.

## **2. Signs and Markers**

The permit identification sign at the entrance contains all of the necessary information. Topsoil signs are posted and visible on all topsoil piles, and disturbed area perimeter signs are in place.

## **3. Topsoil**

The topsoil piles appeared stable and were all covered by a thick blanket of fresh snow.

## **4.b Hydrologic Balance: Sediment Ponds and Impoundments**

Both the mine sediment pond and the Burma pond appeared stable and the surfaces frozen. Both ponds were inspected on October 24, 2018, and found to have no instability, structural weakness, or other visible hazards. The inspection reports for the lower pond at the main site as well as the Burma pond were both stamped and signed by J. Thomas Paluso, a Professional Engineer for the State of Utah.

## **4.d Hydrologic Balance: Water Monitoring**

Water continues to discharge from the mine and into the treatment facility. The severe cold weather has caused the coagulant and flocculant lines to freeze and plug in the treatment facility recently. The reported flowrate was 232 gpm. Water samples were taken at a point just prior to treatment and again at the UPDES discharge point 002, after the water has flowed through the treatment system. The samples were delivered to the Utah State Laboratory for processing yesterday afternoon.

## **11. Contemporaneous Reclamation**

Since the levels of iron in the mine water are low and demonstrate a pattern of decreasing concentration, there are plans in the works to address the issue of discharging mine water in a manner that doesn't require a treatment facility. These plans are still preliminary, and would require the approval of several different agencies including the USFS.

## **15. Cessation of Operations**

Site has been in temporary cessation since 2007.

## **20. Air Quality Permit**

The Air Quality approval order was issued on March 20, 2003. It allows 4,300,000 tons of coal to be stored per rolling 12 month average.

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**21. Bonding and Insurance**

Insurance is provided through Lloyd's Underwriters at London and is valid until June 1, 2019. A reclamation bond in the amount of \$2,802,910 is currently held through Indemnity National Insurance Co. Of that total \$720,000 was tacked on to the original bond on July 2, 2012, and was put in place specifically to address the cost of perpetual mine water treatment.

**ATTACHMENT A – Crandall Canyon Complete inspection, December 11, 2018**



**PHOTO 1 – WATER TREATMENT FACILITY**  
 Overlooking cell 1. Water sampling location Pre-002 is from the end of the white PVC at center.



**PHOTO 2 – TREATMENT POND OUTFALL**  
 The water flowing under the trash rack is sampling point for UPDES discharge #002. The white PVC pipe drains snowmelt that collects at the base of the weeping highwall adjacent to the treatment pond.



**PHOTO 3 – PERMIT SIGN**  
 This is the Mine Permit sign at the entrance to the mine site.



**PHOTO 4 – BURMA POND**  
 The Burma pond appears to be about half full, and is currently an ice skating rink.

**ATTACHMENT A – Crandall Canyon Complete inspection, December 11, 2018**



**PHOTO 5 – CRANDALL CREEK**

This culvert is the 72" bypass that runs beneath the main mine site.



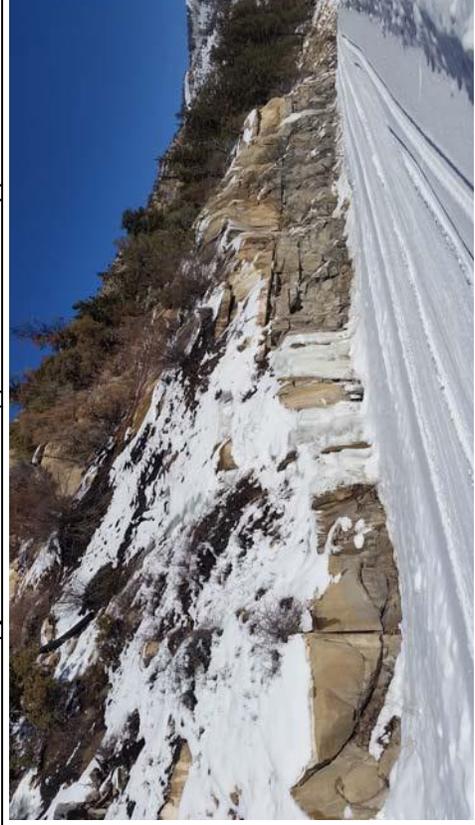
**PHOTO 6 – GABION WALL**

The steel pylons and other support structures appear stable



**PHOTO 7 – SEDIMENT POND**

The sediment pond is currently a frozen winterland.



**PHOTO 8 – CULVERT C-5**

Notice the black culvert C-5 at the top of the image. It drains DD-11 which by design is supposed to trickle down the slope and collect at the base of the highwall in DD-7. However, in the winter this turns into an ice flow that can grow over the road.