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The State of Utah

Department of Natural Resources

Division of Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

Inspection Report

Representatives Present During the Inspection:	
OGM	Kevin Lundmark
Company	Dana Marrelli
Company	Scott Dimick

Permit Number:	C0150032
Inspection Type:	PARTIAL
Inspection Date:	Wednesday, March 30, 2011
Start Date/Time:	3/30/2011 10:40:00 AM
End Date/Time:	3/30/2011 12:20:00 PM
Last Inspection:	

Inspector: Kevin Lundmark,

Weather: Partly Sunny, 40s

InspectionID Report Number: 2697

Accepted by: jhelfric
4/4/2011

Permitee: **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: **ACTIVE**

Current Acreages

6,235.80	**Total Permitted**
27.15	**Total Disturbed**
	Phase I
	Phase II
	Phase III

Mineral Ownership

- [x] Federal
- [ ] State
- [ ] County
- [ ] Fee
- [ ] Other

Types of Operations

- [x] Underground
- [ ] Surface
- [ ] Loadout
- [ ] Processing
- [ ] Reprocessing

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

Division Inspector visited Crandall Canyon mine to perform water sampling and inventory water treatment equipment.

Inspector's Signature: Kevin Lundmark,

Date Thursday, March 31, 2011

Inspector ID Number: 63

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.

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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 performace 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	☐	☐	☐	☐
2. Signs and Markers	☐	☐	☐	☐
3. Topsoil	☐	☐	☐	☐
4.a Hydrologic Balance: Diversions	☐	☐	☐	☐
4.b Hydrologic Balance: Sediment Ponds and Impoundments	☑	☐	☑	☐
4.c Hydrologic Balance: Other Sediment Control Measures	☑	☐	☑	☐
4.d Hydrologic Balance: Water Monitoring	☑	☐	☑	☐
4.e Hydrologic Balance: Effluent Limitations	☐	☐	☐	☐
5. Explosives	☐	☐	☐	☐
6. Disposal of Excess Spoil, Fills, Benches	☐	☐	☐	☐
7. Coal Mine Waste, Refuse Piles, Impoundments	☐	☐	☐	☐
8. Noncoal Waste	☐	☐	☐	☐
9. Protection of Fish, Wildlife and Related Environmental Issues	☐	☐	☐	☐
10. Slides and Other Damage	☐	☐	☐	☐
11. Contemporaneous Reclamation	☐	☐	☐	☐
12. Backfilling And Grading	☐	☐	☐	☐
13. Revegetation	☐	☐	☐	☐
14. Subsidence Control	☐	☐	☐	☐
15. Cessation of Operations	☐	☐	☐	☐
16.a Roads: Construction, Maintenance, Surfacing	☐	☐	☐	☐
16.b Roads: Drainage Controls	☐	☐	☐	☐
17. Other Transportation Facilities	☐	☐	☐	☐
18. Support Facilities, Utility Installations	☐	☐	☐	☐
19. AVS Check	☐	☐	☐	☐
20. Air Quality Permit	☐	☐	☐	☐
21. Bonding and Insurance	☐	☐	☐	☐
22. Other	☐	☐	☐	☐

4.b Hydrologic Balance: Sediment Ponds and Impoundments

The sediment pond was snow covered, with ice visible in the NE corner.

4.c Hydrologic Balance: Other Sediment Control Measures

UEI personnel were working at the site to install piping compatible with corrosive chemicals to facilitate usage of (acidic) ferric chloride coagulant beginning May 2, 2011. A plastic skid is now present to provide secondary containment for storage of a ferric chloride coagulant tote. UEI was also wiring a PCL controller to add automation, alarms and monitoring to the water treatment system. Mr Lundmark and Ms Marrelli inventoried the equipment present at the site - see attached. Ms Marrelli indicated that extra (redundant) equipment was either on-hand or on-order for the treatment system, including a polymer makeup unit.

4.d Hydrologic Balance: Water Monitoring

Mr Lundmark collected a sample of untreated minewater (Pre-002) at 1135 for analysis of total iron and sulfate. Ms Marrelli collected a split sample for total iron analysis and measured pH as 7.3. Flow reading at 1125 was 895.8 and at 1135 was 887.4, which include 450 gpm of recirculated sludge water.

Minewater Treatment Equipment Inventory 3/30/2011

Equipment	Manufacturer	Model No.	Notes
Flow meter, post Maelstrom	Grayline	AVFM11	
Flow meter, pre Maelstrom, Mag Flux Electromagnetic	MJK	297246-150-00	From Env. Solutions SLC, Not yet installed
Flow meter, Flocculant makeup water			
Flow meter, Flocculant neat			
Flow meter, Coagulant neat			
Flocculant mixer	Motor: Leeson Gearbox: Grove Gear	Motor: Cat 102862, Mod C4C17FC32B Gearbox: Flex-In-Line TXQI-56/56	
Coagulant injection pump	LMI	B131-75HV	4.5 gph, 50 psi, 1.5 A, HV = high viscosity.
Fresh water pond pump (to tanks)	Dayton	LTAF21SA	2 HP
Fresh water Jet Well Pump (to makeup unit)	Dayton	2XZF4	3/4 HP
Flocculant makeup unit, 90 gal	NALCO	181-MPF090.88	Mini polymer feder & tank package 10GPM
- Makeup unit control panel	NALCO	991-00502701.88	EM-90 Control Panel
- Flocculant transfer pump (to makeup unit)	NALCO	181-MPF400.88	Mini Poly FDR 10GPM SPLN 283ML/MIN Neat
Solution Pump Unit (Flocculant injection pump, variable speed gear pump)	NALCO	141-G81030.88	Nalgear, SS, MS, 1GPM 110/220 VAC
Sludge recirculation pump #1	Dayton	LTDH23TD	5 HP centrifugal
Sludge recirculation pump #2	Dayton	LTDH23TD	5 HP centrifugal
Maelstrom Unit			Need info from Genwal
Blower for Maestrom Unit			Need info from Genwal
PLC	Allen Bradley	Panel View Plus 1000	