

Incoming, C0150032

#3722

OK



P.O. Box 910, East Carbon, Utah 84520 794 North "C" Canyon Rd, East Carbon, Utah 84520  
Telephone (435) 888-4000 Fax (435) 888-4002

Daron Haddock  
Permit Supervisor  
Utah Division of Oil, Gas and Mining  
P.O. Box 145801  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

December 23, 2010

Re: Crandall Canyon Mines, C/015/032  
Midterm Review Deficiencies  
Task # 3614

Dear Mr. Haddock:

Enclosed are six (6 each) copies of the response to the midterm review, Task # 3614. Please note that I have attempted to describe the various items and their associated unit costs in such a way that it will be easy for the Division to update the current reclamation bond spreadsheet, item by item, as appears in Appendix 5-20. The items represented on the attachment reflect all the cost changes that I can identify. As expected, most of the costs have increased, with the exception of one item (demolition of heavy mechanical equipment), as noted. All costs come from the latest (2011) copy of RS Means, from current Nielson Construction Company rate sheets, and from current information provided by Pete Hess.

If you have any questions or comments regarding this request please contact me at 435 888-4017.

Sincerely,

A handwritten signature in blue ink, appearing to read "David Shaver", is written over the typed name.

David Shaver  
Resident Agent

cc: Denise Dragoo, Esq.

RECEIVED

DEC 29 2010

DIV. OF OIL, GAS & MINING

# APPLICATION FOR PERMIT PROCESSING

Permit Change  
  New Permit  
  Renewal  
  Transfer  
  Exploration  
  Bond Release

Permit Number: 015/032

Title of Proposal **Response to Midterm Review, Task #3614**

Mine: **Crandall Canyon Mines**

Permittee: **GENWAL Resources, Inc.**

Description, include reason for application and timing required to implement.

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 2. Is the application submitted as a result of a Division Order?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 4. Does application include operations in hydrologic basins other than as currently approved?  |
| <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | 5. Does application result from cancellation, reduction or increase of insurance or reclamation bond? <i>Perhaps</i>                                   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 6. Does the application require or include public notice/publication?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 7. Does the application require or include ownership, control, right-of-entry, or compliance information?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 9. Is the application submitted as a result of a Violation?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 10. Is the application submitted as a result of other laws or regulations or policies? Explain:  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 11. Does the application affect the surface landowner or change the post mining land use?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 12. Does the application require or include underground design or mine sequence and timing?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 13. Does the application require or include collection and reporting of any baseline information?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 15. Does application require or include soil removal, storage or placement?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 16. Does the application require or include vegetation monitoring, removal or revegetation activities?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 17. Does the application require or include construction, modification, or removal of surface facilities?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 18. Does the application require or include water monitoring, sediment or drainage control measures?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 19. Does the application require or include certified designs, maps, or calculations?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 20. Does the application require or include subsidence control or monitoring?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 21. Have reclamation costs for bonding been provided for?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 23. Does the application affect permits issued by other agencies or permits issued to other entities?  |

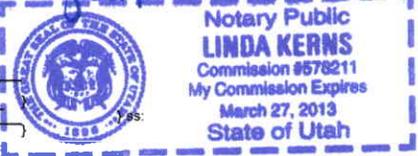
Attach 3 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations herein. (R645-301-123)

Signed: *[Signature]* Name: \_\_\_\_\_ Position: *agent* Date: *12/23/2010*

Subscribed and sworn to before me this *23rd* day of *December*, 2010

My Commission Expires: *March 27, 2013*  
Notary Public: *Linda Kerns*  
Attest: STATE OF *Utah* COUNTY OF *Carbon*



Received by Oil, Gas & Mining

**RECEIVED**

**DEC 29 2010**

**DIV. OF OIL, GAS & MINING**

ASSIGNED TRACKING NUMBER

NOTARY PUBLIC  
LINDA KENNEDY  
COMM. NO. 45787  
EXPIRES 01/31/2013  
STATE OF UTAH





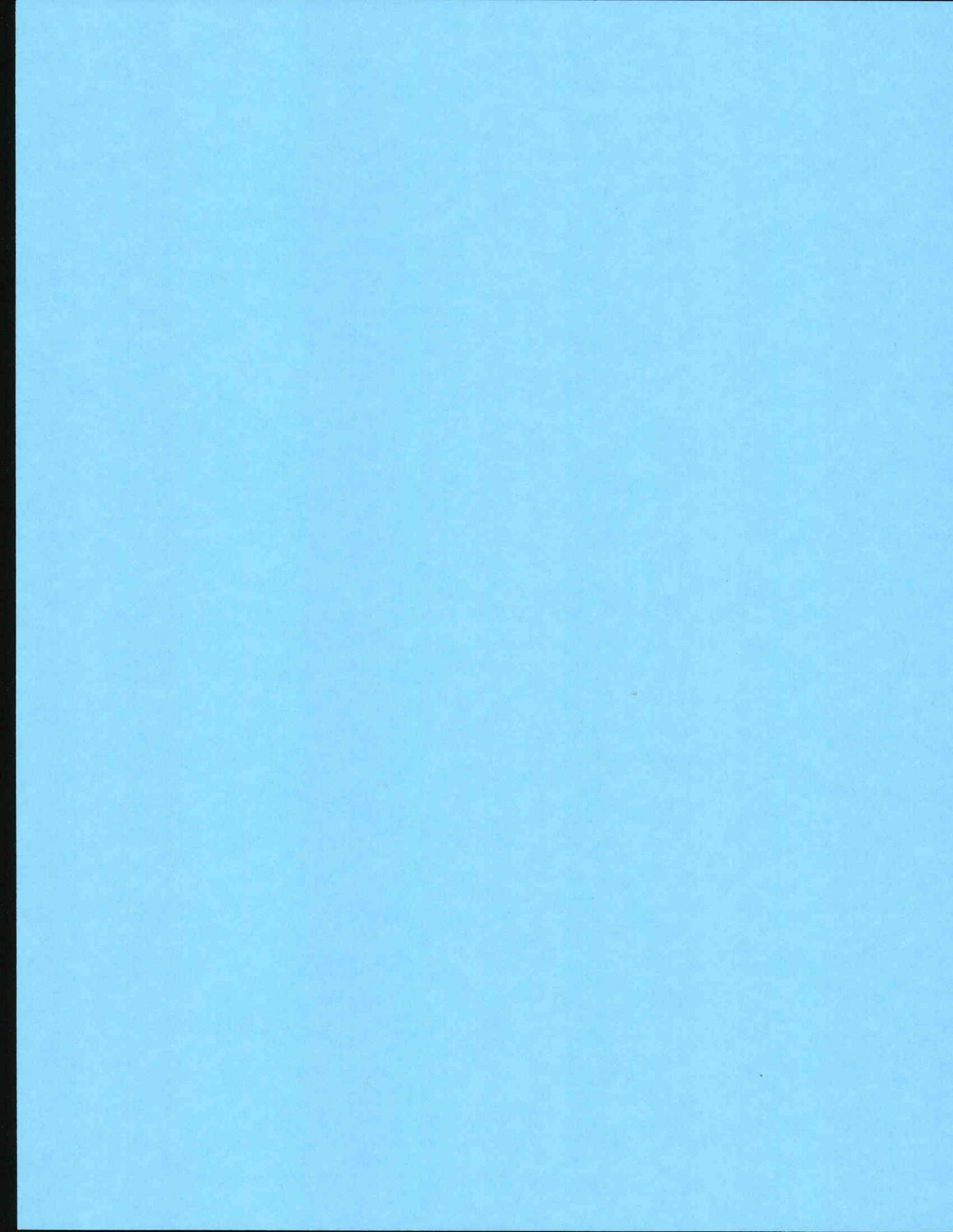
**GENWAL RESOURCES, INC  
CRANDALL CANYON MINES  
C/015/032**

**THIS SUBMITTAL IS:**

**RESPONSE TO DEFICIENCIES  
MID-TERM REVIEW  
TASK #3614**

**SUBMITTED: DECEMBER 23, 2010**

**CHAPTER 2**  
**REPLACEMENT PAGES**



## CHAPTER 2

### LIST OF PLATES DESCRIPTION

#### PLATE NUMBER

PLATE 2-1	Soils Types Study Map
PLATE 2-2	Topsoil Storage Piles
PLATE 2-2A	Topsoil Storage Pile #3
PLATE 2-3	Topsoil Stockpile Locations
PLATE 2-4	Proposed Culvert Disturbed Area Soil Pit Locations
PLATE 2-5	Plan and Profile Proposed Topsoil Storage Pile #4
PLATE 2-5A	Proposed Topsoil Storage Pile #4 Cross-Sections
PLATE 2-5B	Proposed Topsoil Storage Pile #4 Cross-Sections
PLATE 2-6	Regional Soil Map

**LIST OF APPENDICES**

**APPENDIX NUMBER**

**DESCRIPTION**

APPENDIX 2-1	Negative Determination, Prime Farmland
APPENDIX 2-2	Negative Determination, Alluvial Valley Floor
APPENDIX 2-3	Soils Study
APPENDIX 2-3A	Soils
APPENDIX 2-3B	Supplemental Soils Inventory Proposed Culvert Expansion
APPENDIX 2-4	****deleted****
APPENDIX 2-5	Surface Facility Expansion - Topsoil Removal Report
APPENDIX 2-6	Soil Survey Report - Proposed Phase Two Expansion Area (South Portals) - James Nyenhuis
APPENDIX 2-7	Geotextile Properties
APPENDIX 2-8	Laboratory Analysis, Native Fill and Imported Fill
APPENDIX 2-9	Letter Regarding Noxious Weeds in Fill
APPENDIX 2-10	Letter Regarding Prime Farmland
APPENDIX 2-11	Laboratory Analysis, South Crandall Portals Tunneling Material

Note: Bold number plates and appendices are included with this submittal.

### **2.31.2 Analysis of Topsoil Substitute**

The soil survey and chemical analysis for the proposed topsoil substitute have been completed. A portion of the B horizon of the TCE soil was salvaged and stockpiled along with that from the JDE to insure that an adequate supply of plant growth medium will be available for reclamation of the steep slopes (50 to 70 percent).

### **2.31.3 Topsoil Evaluation**

Testing plans for evaluating the results of topsoil handling are discussed within Section 2.42 of this chapter. Nutrient and soil amendments will be added based on the results of these tests. Sampling techniques are discussed in Section 2.41.

Five years prior to beginning reclamation operations, GENWAL will consult with the Division to re-evaluate the techniques and practices being proposed in the reclamation plan (Appendix 5-22). This consultation will include forming a task force of members with various areas of reclamation expertise to review the reclamation plan and recommend the best and most suitable reclamation techniques and products available at that time. The review and consultation will re-assess and revise, where needed, the existing reclamation plan to provide the best and most appropriate reclamation measures for the site.

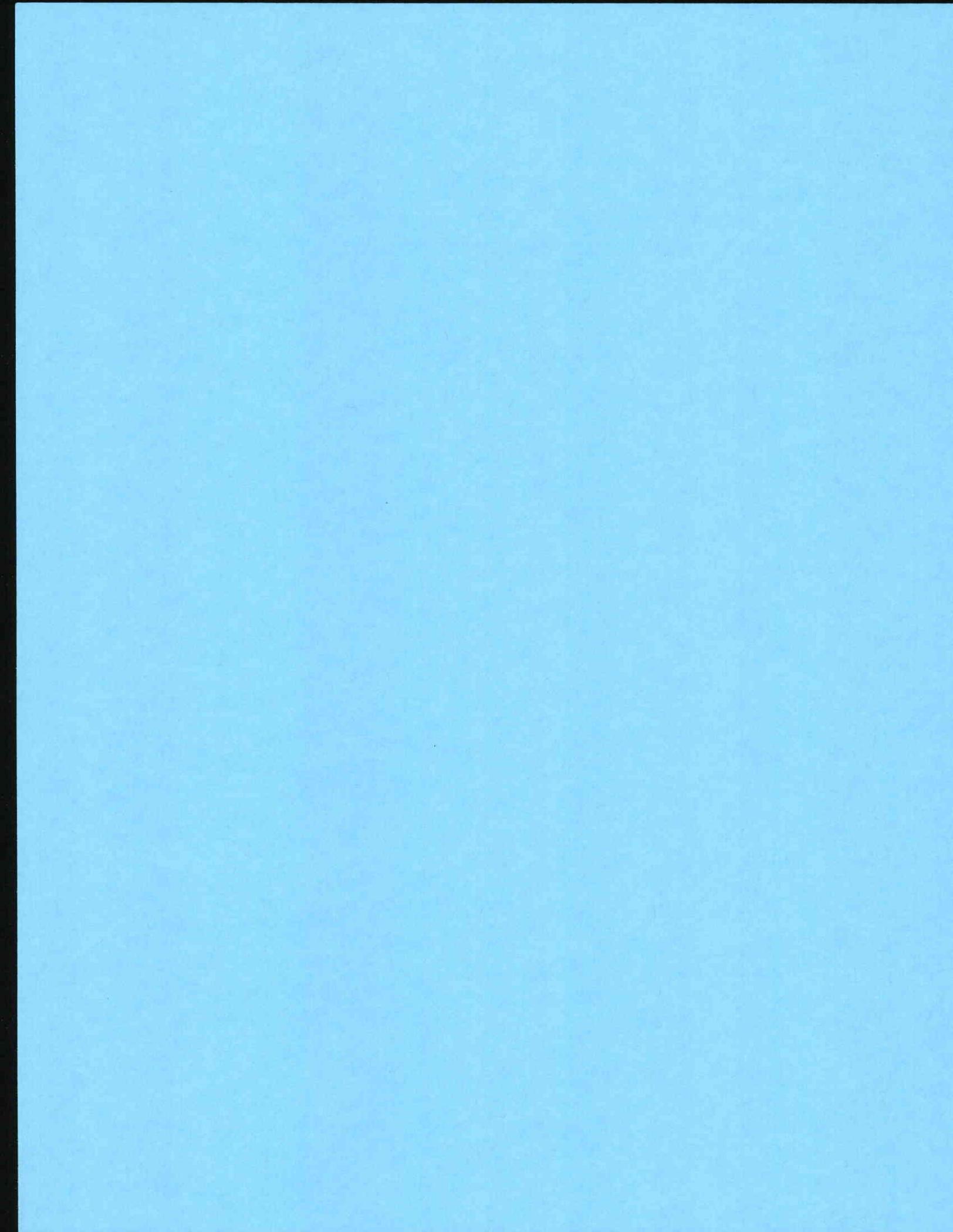
### **2.31.4 Stockpiles**

The volume of each stockpile is included on Plates 2-2, 2-2a and 2-5 as well as in Section 2.42 of this application.

The topsoil stockpiles are protected from erosion, compaction, and contamination. An earthen berm and asphalt berm in combination with strawbale dikes have been constructed to protect against topsoil loss and the stockpiles have been revegetated with an approved vegetative cover.

The cross sectional views of the topsoil and subsoil stockpiles are included on Plates 2-2, 2-2a, 2-3, 2-5, 2-5A and 2-5B. Stockpile #4 will be used for the salvaged materials from the culvert expansion area, and the design is shown on Plates 2-5, 2-5A and 2-5B. GENWAL has submitted Plate 2-3 showing the location of the topsoil stockpiles with respect to the surface facilities. Topsoil identification and protection markers are installed. The perimeter and topsoil markers conform to UDOGM regulations.

**UPDATED RECLAMATION BOND  
UNIT COSTS  
(DECEMBER 23, 2010)**



**CRANDALL CANYON MINE, UPDATED RECLAMATION BOND UNIT COSTS  
DECEMBER 23, 2010**

**1) DEMOLITION**

<u>ITEM</u>	<u>Means Reference</u>	<u>Current Bond Unit Cost</u>	<u>Updated Unit Cost</u>	<u>unit</u>
concrete demolition cost	(ConcreteDemo1)	6.81	11.03^	CY
concrete on site disposal	02 41 16 17 4200	7.75	9.15**	CY
steel bldg large	02 41 16 13 0020	0.26	0.31**	CF
concrete bldg large	02 41 16 13 0050	0.37	0.44**	CF
front end loader 3 (2.5) CY	31 23 16 42 1600	1.43	1.49**	BCY
12 CY (16 ton) Dump truck				
½ mile round trip	31 23 23 20 1214	3.49	3.69**	LCY
5 (6) mile round trip	31 23 23 20 0522	11.15	11.95**	LCY
excavation 1 CY backhoe earth	31 23 16 16 6040	13.1	16.50**	BCY
silt fence	31 25 14 16 1100	1.09	1.34**	LF
rip rap dumped 300 lbs average	31 37 13 10 0370	36.5	37**	ton
pavement removal (asphalt) 3"	02 41 13 17 5010	4.11	5.20**	SY
mechanical equipment heavy	25 05 05 10 3600***	850	615#	ton
chain link removal 8'-10'	02 41 13 60 1700	3.05	3.86**	LF
guiderail remove	02 41 13 33 0800	12.2	15.05**	LF
guiderail posts remove	02 41 13 33 0860	14.2	16.95**	each
powerpole		100	126^	each

^ costs from latest Dugout bonding, provided by Pete Hess, DOGM (Dec. 20, 2010)

\*\* from 2011 RS Means

# taken from latest Dugout bonding, but this entry can't be found in 2011 Means (section 25 has been deleted in 2011 version) According to Pete Hess, the current "mechanical equipment heavy" cost is \$615/ton

## 2) EARTHWORK

<u>ITEM</u>	<u>Current Bond Unit Cost</u>	<u>Updated Unit Cost</u>	<u>unit</u>
D9 Dozer	259.26	279.35	hour
988G loader	155.77	180.00	hour
769 D (rock truck)	163.97	175.00	hour
8 x 4 85,000lbs 15-18 CY truck	109.37	115.00	hour
446 D 4WD	110.88	120.00	hour
5000 gal H2O truck	109.63	138.46	hour
pickup truck crew 4x4 1 ton	11.57	21.1	hour
foreman average outside	59.9	62.25	hour

All rates from Nielson Construction Company, December 20, 2010

## 3) REVEGETATION

<u>ITEM</u>	<u>Current Bond Unit Cost</u>	<u>Updated Unit Cost</u>	<u>unit</u>
Hydroseed material	281.72	394.75^	acre
Hay 1" material	69.85	129^	ton
Transplant Material	118.5	349^	acre

^ costs from latest Dugout bonding, provided by Pete Hess, DOGM (Dec. 20, 2010)