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C/015/032 Incoming

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Dana Dean, P.E.
Associate Director
Utah Division of Oil, Gas and Mining
P.O. Box 145801
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

December 30, 2010

Re: Crandall Canyon Mines, C/015/032
Division Order 10A
Response to Division Letter of December 21, 2010
Bullet Items 1, 2 and 3

RECEIVED
JAN 06 2011
DIV. OF OIL, GAS & MINING

Dear Ms. Dean:

This letter is written in response to your letter to Denise Dragoo, dated December 21, 2010, regarding the schedule for the company's response to the Division's letter of December 7, 2010, involving submission of information for Division Order 10A, specifically Task #3703 related to changes to MRP Appendix 7-65. Your letter of December 21, 2010, contained five bullet items to be addressed by January 6, 2011. For accounting purposes, I have numbered these as bullet items 1 through 5. This letter addresses bullet items 1, 2 and 3, as pertains to Task #3703. Please note that this letter does not address the issues of Task #3704, which involves changes to Appendix 7-15 (PHC), which will be addressed directly by Erik Petersen through Denise Dragoo, Esq., and correspond to bullet items 4 and 5 of your December 21, 2010 letter.

As a point of clarification, your letter of December 21, 2010 refers to the Division's letter of December 7, 2010, citing deficiencies in the response to the Division's letter of July 2010, and stating that the response to this letter was "grossly inadequate". According to my records, the company addressed the December 7, 2010 letter in a hand-delivered submittal to your office on December 14, 2010, entitled "Response to Division Order DO10A, Revised Stipulation November 4, 2010, Additional Information Requests to Address Task #3582, Bullet Items 1, 3 and 4, Submitted December 14, 2010". In light of the "grossly inadequate" comment in your December 21, 2010 letter, it is not apparent whether or not the Division had received and reviewed the December 14, 2010 submittal prior to sending out the December 21 letter, since this latest submittal was made as a good-faith effort to respond to the Division's request in a professional manner. However, in checking my emails from Susan Steab, I received no confirmation of the Division's receipt of the submittal, although I did receive confirmation of several other submittals which I had made at the same time. I am hoping the submittal has now worked its way through the system. In the event that the December 14, 2010 submittal has been inadvertently misplaced, I am sending you another copy with this current submittal, as backup.

Continuing with the response to your December 21, 2010 letter.....

Bullet Item 1.....*Provide capital, operating, and maintenance costs for the current treatment system.*

Response: Detailed costs were provided in the November 30 submittal (entitled "Change to Appendix 7-65, Division Order DO10A, Paragraph IV, Item 1, Revised Stipulation November 4, 2010"). These costs totaled \$579,905.89. This was compiled from an extensive list of company requisitions and invoices, and represents the most accurate account obtainable of the costs incurred by the company in constructing and operating the existing water treatment facility. In this current submittal, we have taken the same list and attempted to break it down into the requested categories of Capital, Operating and Maintenance costs. In reviewing these costs, please keep the following points in mind:

1) Much of these costs have essentially been Research and Development (R & D) costs. As has been explained in previous correspondence with the Division, construction and operation of this facility has been on what could be described as a "trial and error" basis, and also under emergency duress conditions in order to come into compliance with discharge violation requirements. This is the first facility of its kind constructed in the Utah coal fields, involving unique water chemistry. Treatment options previously developed for eastern coal mine operations could not be directly replicated at the Crandall mine. It is estimated that at least half of the capital costs could be attributed to R & D.

2) Most of the on-site work was completed by Scamp Excavation, a local contractor. Oftentimes, Scamp was simultaneously involved in various aspects of building parts of the facility, maintaining the chemical supply, and cleaning the sludge from the settling basin. Since these activities were billed with lump invoices, it is impossible to account for the exact breakdown of capital, operating and maintenance costs, especially where Scamp also purchased many of the construction supplies and parts directly. Therefore, we have broken down the Scamp costs as 85% capital, 10% operating and 5% maintenance, based on our best assessment. The same percentages have been applied to the miscellaneous items. The Nalco chemicals (coagulant and flocculant) have been assigned to operating costs, and most other vendor equipment items previously listed have been placed under capital cost. Maintenance costs are primarily attributed to Scamp, associated with snow removal, etc., although this could also be considered as operating cost. Maintenance costs are often ascribed as a component of operating costs, with no definite distinction between the two. As explained earlier, breaking the costs down into the three separate categories can be somewhat of an arbitrary judgement call. The capital costs are further broken down to reflect the R & D nature of the project to date.

3) These costs are subject to change in the near future. We are still making improvements to the mechanical plant, including more efficient piping and bulk material

handling. We are also in the process of upgrading the electrical controls and monitoring system for increased reliability. And work continues on improving the sludge cleaning process. We are also considering test trials of other treatment chemicals, in particular, to eliminate or reduce the amount of aluminum chloride. All of these changes and improvements are complicated by the fact that we must constantly stay in compliance with UPDES discharge parameters on a 24/365 basis, while at the same time trying to convert to upgraded facilities and conduct new testing trials without being able to shut the existing facility down for more than a few minutes at a time. In short, the facility has been and still is a work in progress. Once the improvements have been completed, all costs will certainly drop lower and stabilize. It should be pointed out however, that the facility, even in its evolving and current form, has been able to keep the discharge water in compliance with all state and federal requirements for the past ten months since March, 2010.

4) As stated in previous correspondence with the Division, these past costs associated with the current treatment facility cannot be construed as representative of any future treatment costs, especially given the emergency, "trial-and-error", R and D nature of the development of the facility to date, and given the uncertainty of the necessity of long-term water treatment requirements in the future. For the same reasons these historic costs are not considered representative of even the short-term operational costs. Only after the facility is in its final operating configuration and with much more operating experience under our belts can any cost information be deemed meaningful.

Bullet Item 2.....Update Appendix 7-65

Response: Appendix 7-65 has been updated in the November 30, 2010 submittal, and also again in the December 14, 2010 submittal as referenced above. Additional clarification to Appendix 7-65 has been subsequently supplied to the Division in a second submittal of December 14, 2010, entitled "Response to Division Order DO10A, Task # 3703, Bullet Items 3 and 5", which makes reference to still another submittal (also made on December 14) for a change to the Centennial (Tower) MRP entitled "Utilization of Sediment Pond A for Storage of Crandall Mine Iron Sludge Material". As the title implies, that submittal addresses the option for storing the iron sludge at the Tower mine rather than at the Wildcat Loadout. In addition, included in this present submittal is an As-Built Mine Water Treatment Flow Diagram which is to be added at this time to Appendix 7-65 as additional information.

Bullet Item 3.....Identify specific treatment chemicals and their application rates.

Response: The chemicals used for treatment are a coagulant injected ahead of the oxidizer unit and a flocculant injected after the oxidizer unit. These chemicals were described in the December 14, 2010 submittal, along with complete MSDS sheets for each. To re-cap, the coagulant is a Nalco brand Ultrion 8187 polyaluminum chloride. The Flocculant is a Nalco brand Nalclear 7763 polyacrylamide. The dosage rate for the coagulant is currently about 38

Dana Dean, P.E.
December 23, 2010
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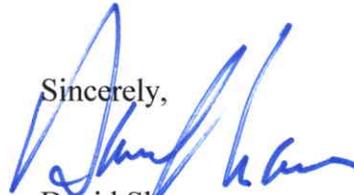
ppm. The dosage rate for the flocculant is estimated at about 5 ppm. We will soon be installing a fresh-water make-up supply and an automated variable rate flow-control pump which should allow the dosage rate of both the coagulant and flocculant to be more closely regulated and reduced. It should be noted that the residual aluminum in the outflow is consistently below state/federal water quality limits for cold water fisheries, as Crandall Creek is designated. We hope in the near future to conduct test trials on alternatives to this aluminum-based coagulant. Also, we have recently implemented a laboratory procedure for testing the residual polymer (floc) in the discharge water. Test results to date have shown the polymer at non-detect levels (less than 0.1 ppm). This is important because the NSF 60 limit for drinking water treatment plants for Nalco 8187 is 1 ppm, and the Huntington Creek drainage is classified as a municipal watershed. These chemicals and dosage rates are reflected on the As-Built Flow diagram referenced above.

In summary, enclosed with this response submittal are the following:

- 1) Amended (categorized) capital, operating and maintenance costs.
- 2) Six (6 each) copies of the As-Built Flow Diagram for inclusion in Appendix 7-65 of the MRP.
- 3) An extra copy of the complete December 14, 2010 (previous) submittal.

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

Sincerely,



David Shaver
Resident Agent

cc: Denise Dragoo, Esq.

APPLICATION FOR PERMIT PROCESSING

<input type="checkbox"/> Permit Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: 015/032
Title of Proposal Response to Division Order DO10A, Letter of Dec. 21, 2010						Mine: Crandall Canyon Mines
Bullet items 1,2 and 3						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 checked="" type="checkbox"/> Yes	<input 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 checked="" type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<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 type="checkbox"/> Yes	<input checked="" 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 - Name - Position - Date

Subscribed and sworn to before me this 30th day of December 2010

My Commission Expires: STATE OF COUNTY OF

Linda Kerns
Notary Public
Utah
March 27, 2013
Carbon



12/30/2010

Received by Oil, Gas & Mining

RECEIVED

JAN 06 2011

DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER

