



GARY R. HERBERT
Governor

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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

October 17, 2017

David Hibbs, President
West Ridge Resources, Inc.
P. O. Box 910
East Carbon, Utah 84520-0910

Subject: 2nd Technical Review and Deficiencies in Post Mining Land Use Change and Revision of MRP to Remove Gob Vent Hole Project ("GVH Project"), West Ridge Resources, Inc., West Ridge Mine, C/007/0041, Task #5464

Dear Mr. Hibbs:

The above-referenced revision has been reviewed a second time and still found to be deficient. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter. The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise.

It appears that most of the issues dealing with the Post Mining Land Use change and Bond Release have been addressed, with the exception of three items. It is our hope that you will be able to correct the remaining three deficiencies by November 3, 2017 which is the end of the public comment period. Assuming that the issues get addressed and that we do not receive any further comments we should be able to move forward with our decision document, which will be forwarded to OSM for their concurrence.

In order to complete the processing of this revision, please provide a response to the remaining deficiencies by no later than November 3, 2017. The Division will continue to coordinate with other agencies and incorporate their comments if any into our review process. Issues raised will need to be resolved prior to final approval. The replacement reclamation bond will also need to be posted with SITLA prior to our releasing the Murray Energy bond.

If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs
cc: Denise Drago
Enclosure
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Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0070041
TaskID: 5464
Mine Name: WEST RIDGE MINE
Title: REMOVE GVH PROJECT/ALTERNATIVE PMLU

General Contents

Right of Entry

Analysis:

The amendment meets the State of Utah R645 requirements for Right of Entry.

The Permittee proposes the complete removal of the Gob Vent Holes (GVH) from the current MRP in order to facilitate a sale of the GVH Project to Global Carbon Strategies Corporation. This transaction is conditioned on the approval from the Division for an alternative postmining land use.

A previous deficiency pointed out that in Table 1-7 of the Right of Entry Information it stated that the total disturbed area was 31.24 acres. But that total was taking into account the 0.36 acres for the Gob Vent Holes which are supposed to be removed from the permit. The Permittee has since removed the 0.36 acres of proposed GVH disturbed acreage, and the total corrected acreage now stands at 30.88.

jeatchel

Maps and Plans

Analysis:

The amendment does not meet the State of Utah R645 requirements for Maps and Plans.

The Permittee proposes the complete removal of the Gob Vent Holes (GVH) from the current MRP in order to facilitate a sale of the GVH Project to Global Carbon Strategies Corporation. This transaction is conditioned upon approval from the Division for an alternative postmining land use. This necessarily requires that the Permittee delete all implications of ownership and jurisdiction throughout the entirety of the MRP.

Previously, during the time that West Ridge Resources was actively producing coal from the West Ridge Mine, they were leasing the surface and subsurface rights from several different entities. In the area where the GVH site is located, West Ridge Resources was leasing the surface and sub-surface rights from SITLA. These leases will eventually be transferred to GCS.

The maps submitted in this amendment make no reference to the occlusion or removal of the 0.36 acres for the Gob Vent Holes from within WRR's Permit Area. All mine maps that depict the West Ridge Mine permit areas should illustrate this. The proposed 0.36 acres that will become the sole property of Global Carbon Strategies Corporation should be clearly delineated. Otherwise, the maps incorrectly reflect a scenario where Global Carbon Strategies Corporation will be operating on leases belonging to West Ridge Resources.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Maps and Plans. The following deficiency must be addressed prior to final approval:

R645-301-521: The Permittee must designate the location of the 0.36 acres for the GVH Project on maps 1-0 (Permit Map) and Map 4-1.

jeatchel

Environmental Resource Information

Probable Hydrologic Consequences Determination

Analysis:

The amendment does not meet the State of Utah R645 requirements for Probable Hydrologic Consequences Determination.

The Permittee proposes the deletion of portions of the Probable Hydrologic Consequences (PHC) determination in section R645-301-728. The text identified for deletion discusses the probable hydrologic consequences of coal mining and reclamation activity in the Bear Canyon drainage. As the Bear Canyon drainage was extensively mined during active operations of the West Ridge Mine (See Map 5-4a, Mining Projections), the information presented on pages 7-24 thru 7-26 that discusses potential hydrologic impacts in Bear Canyon as a result of mining are still germane and required per R645-301-728. As indicated in the text proposed for deletion, "The canyon is unique because it is within the right fork of this drainage that the cover over the longwall subsidence zone is the shallowest of anywhere in the entire permit area". The proposed removal of the GVH facility from the West Ridge Mine MRP does not necessitate the removal of this section of the PHC determination.

The Permittee must maintain the Bear Canyon PHC discussion on pages 7-24 thru 7-26. The area was extensively mined and as such, the PHC discussion relative to Bear Canyon is germane and required information for retention in the approved Mining and Reclamation Plan (MRP).

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Probable Hydrologic Consequences Determination. The following deficiency must be addressed prior to final approval:

R645-301-728: The Permittee must maintain the Bear Canyon PHC discussion on pages 7-24 thru 7-26. The area was extensively mined and as such, the PHC discussion relative to Bear Canyon is germane and required information for retention in the approved Mining and Reclamation Plan (MRP).

schriste

Operation Plan

Air Pollution Control Plan

Analysis:

The Alternate Postmining Land-Use amendment meets the State of Utah R645 requirements for the Air Pollution Control Plan at R645-301-420. In March of 2017 Utah American Energy submitted an application to DEQ to have their air quality permit separated into two permits, one for coal operations and one for degasification. Once UEI and GCS complete the slaes agreement DEQ will move forward with the approval the degasification permit to include flaring methane. SITLA will be the responsible entity for ensuring that GCS has approval from DEQ's air quality division to flare the methane as they are the surface management agency.

jhelfric

Hydrologic General

Analysis:

The amendment meets the State of Utah R645 requirements for General Hydrologic Information requirements.

The Permittee is proposing to remove the gob gas vent hole facility (GVH) in its entirety from the West Ridge Mining and Reclamation Plan (MRP). In terms of the revisions to the hydrologic information contained in the approved MRP, the Permittee has simply deleted all references to the GVH facility within the main text of Chapter 7, all supporting reports and calculations related to the GVH facility and have removed the depiction of the GVH facility from all of the hydrology maps in which it was depicted.

Appendix 7-11, Bear Canyon Gob Vent Hole Hydrology Report and Appendix 7-12, Bear Canyon Drainage Control Plan will be removed from the MRP. Appendix 7-11 is the probable hydrologic consequences determination (PHC). Appendix 7-12 is the drainage control plan. As the GVH facility will be removed with this amendment, it follows that these appendices and the information therein would no longer be required for inclusion in the MRP. However, the more generalized PHC discussion of the Bear Canyon drainage contained in the main text must be maintained in the MRP.

The Permittee has revised all hydrology maps that depicted the location of the GVH facility. The following maps were revised: Map 7-3 Water Rights, Map 7-5 Seep/Spring Survey Map, Map 7-6 Hydrologic Monitoring Map (Historical Monitoring Locations), Map 7-7 Operational monitoring Locations and map 7-8 Whitmore Canyon Watershed Map.

schriste

Reclamation Plan

General Requirements

Analysis:

The Alternate Postmining Land-Use amendment meets the State of Utah R645 requirements for the Reclamation Plan at R645-301-231, 233, 322, 323, 331, 333, 341 and 342;

There are no wildlife or vegetation requirements that apply to this permitting action. GCS will retain the surface facilities for flaring methane gas. The area will be bonded for reclamation under the direction of SITLA.

jhelfric

PostMining Land Use

Analysis:

The amendment meets the State of Utah R645 requirements for the Alternate Postmining Land-Use at R645-301-412, 413 and 414;

West Ridge Resources has submitted an application for an alternative postmining land use to remove the gob vent hole project from the West Ridge MRP. The application notes that, *Revisions change text in Chapter 4, as well as eliminate Appendices 5-14 and 5-14a, which describe the GVH Project. WRR has entered into an agreement, dated February 27, 2017, to sell the GVH Project to Global Carbon Strategies Corporation ("GCS"). The sale is conditioned on the Division's approval of an alternative postmining land use for the GVH Project. GCS will modify the GVH Project and operate the facilities as a commercial methane destruction project, independent of any coal mining and reclamation operations. To facilitate its operations, GCS has entered into a lease with the School and Institutional Trust Lands Administration ("SITLA") to allow GCS to use the SITLA owned surface lands to extract and destroy coal mine methane also owned by SITLA. Upon approval of the application for alternative postmining land use by the Utah Division of Oil, Gas and Mining, SITLA will assume responsibility for regulating GCS's project pursuant to the terms of the SITLA lease. GCS will post a reclamation bond with SITLA and will submit a operation and reclamation plan for approval by SITLA.*

At the request by the Division for additional information on highest and best use as described in R645-301-413.120 from Denise Drago; Collon Kennedy of GCS provided this information on August 17th, 2017. The theory that flaring has less of an impact on ozone than venting methane from gob vent holes holds true when equal volumes of methane are compared. The information presented is somewhat anecdotal and there is no data presented that would accurately quantify the effects of ozone degradation from methane seepage. Given the normal course of analysis and findings this information lacks a quantifiable demonstration of highest and best use for this proposal. Realizing that no matter what the circumstances are the highest and best use determination will be fairly subjective. Given that it is most likely in the best interest of management to make that decision.

jhefric

Topsoil and Subsoil

Analysis:

The application meets the requirements of the Bear Canyon soils reclamation plan performance standards, because SITLA will require a \$75,000 reclamation bond to assure proper plugging and abandonment (i.e. reclamation) of the GVH Wells proposed for assignment from West Ridge Resources, Inc to Global Carbon Strategies (correspondence from SITLA to Dana Dean dated 7/10/2017, p. 2).

The soils reclamation plan is described in Appendix 14 and 14A of the MRP. These appendices were adopted by Global Carbon Strategies Corporation (CGS) and incorporated as Exhibit A and Exhibit B in the ER Projects Permits and Approvals (Correspondence from Dave Hibbs 6/8/2017, p. 6 and p. 12, item #3.) The Bear Canyon Gob Vent Hole (GVH) site will be reclaimed in accordance with Exhibits A & B under a reclamation agreement with the State & Institutional Trust Lands Administration (p. 2&3 of correspondence from SITLA to Dana Dean dated 7/10/2017). Reclamation as prescribed by DOGM is referenced in Item 6.4 of the Lease (p. 8, SITLA 7/10/2017). SITLA states that they will hold a \$75,000 bond for this purpose (p. 2, SITLA, 7/10/2017).

Item 8, Bonding, of the executed lease describes only a \$15,000 bond (p.8 SITLA, 7/10/2017). The referenced \$15,000 bond covers lease rentals and payments, not reclamation liability. The executed lease does not include the bond required for the described reclamation. However "R645-301-820.100 provides the direction for when a bond must be posted. Essentially, the application can be approved and then the bond is posted before a permit is issued. In this case, we most likely will approve the application and then GCS will need to post the replacement bond with SITLA before we release the Murray Energy bond." (personal communication from D. Haddock, 10/16/2017).

pburton

Bonding Determination of Amount

Analysis:

The amendment does not meet the State of Utah R645 requirements for Determination of Bonding Amount.

The Permittee proposes the complete removal of the Gob Vent Holes (GVH) from the current MRP in order to facilitate a sale of the GVH Project to Global Carbon Strategies Corporation. This transaction is conditioned on the approval from the Division for an alternative postmining land use. This necessarily requires that the Permittee delete all implications of ownership and jurisdiction throughout the entirety of the MRP.

The narrative throughout the amendment makes it clear that the GVH Project will be completely turned over to Global Carbon Strategies Corporation, although there is no mention of this anywhere in the bonding section. The bonding section must include redline strikeout in the detailed bonding calculations to reflect the decreased reclamation liability as a result of the permanent removal of the GVH Project.

The bond totals look adequate. The only items that are missing are the original line items for the "Gob Gas Vent Hole" in the original bonding calculations. If those items are restored along with the approved redline strikeout then the amendment should satisfy the R645 requirements.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Determination of Bonding Amount. The following deficiency must be addressed prior to final approval:

R645-301-830: The Permittee must include redlined strikeout in the detailed bonding calculations to reflect the removal

of the Gob Vent Holes from the permit area.

jeatchel

Bonding Determination of Amount

Analysis:

R645-303-323 Transfer, Assignment or Sale of Permit Rights Obtain appropriate performance bond coverage in an amount sufficient to cover the proposed operations, as required under R645-301-800.

R645-301-800 The GVH Project/Alternative PMLU meets the Determination of Bond Amount and is recommended for approval. The permittee has shown that they are providing SITLA \$75,000 bond for reclamation of the GVH sites. This amount is sufficient for reclamation of the current GVH's in the MRP, and includes the addition of equipment that is to be added after the sale. The Division will remove the GVH from the current bonding calculations. The amount has not been provided to the Division at this time. If no amount is provided we will adjust according to our specifications in the bonding details.

bwiser