



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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September 28, 2000

Mike Glasson, Environmental Coordinator  
West Ridge Resources, Inc.  
PO Box 902  
Price, Utah 84501

Re: Findings for Permitting Pump House, West Ridge Resources, Inc., West Ridge Mine,  
ACT/007/041-AM00G, Outgoing File

Dear Mr. Glasson:

The above-referenced amendment has been reviewed and there are deficiencies that must be adequately addressed prior to approval. A copy of our technical analysis is enclosed for your information. Please respond to these deficiencies by November 1, 2000. Failure to do so may result in enforcement action.

If you have any questions, please feel free to call Pete Hess at (435) 613-5622, or me at (801) 538-5325.

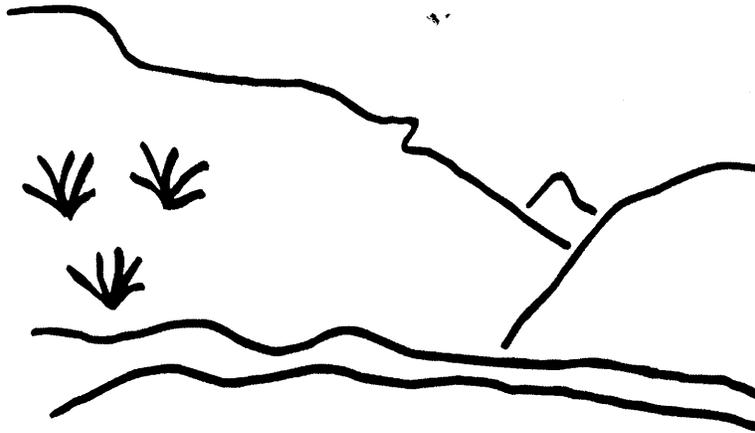
Sincerely,

A handwritten signature in cursive script that reads "Daron R. Haddock".

Daron R. Haddock  
Permit Supervisor

sd  
Enclosure:  
cc: Price Field Office  
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# State of Utah



## Utah Oil Gas and Mining

### Coal Regulatory Program

West Ridge Mine  
Permitting of Pump House  
ACT/007/041-AM00G  
Technical Analysis  
September 26, 2000

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INTRODUCTION

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## INTRODUCTION

During the February, 2000 inspection of the West Ridge Mine, mine personnel were questioned relative to the ownership of the pump house which had been built on the East Carbon City six-inch water supply line. The installation was built to provide adequate water pressures and volumes for both fire fighting capability and mine usage. Thus, it was built by the permittee.

Although two pump houses are mentioned in the U.S. Department of the Interiors Bureau of Land Management's environmental assessment (completed in May, '98), only one pump house has been constructed (in Section 21, R13E, T14S). Since it was known that a pump house(s) would be constructed, the only question remaining was relative to the ownership of the facility. This was confirmed during the February 2000 inspection, per Mr. Dave Shaver, who indicated that the pump house belonged to West Ridge Resources, Inc. At that time, the permittee was instructed to permit the facility.

The permittee's initial response was received by the UDNR/OGM on March 27, 2000, and returned as deficient on April 3, 2000. Due to excessive workload, the permittee's second response was not received until August 31, 2000. This technical analysis is a review of that submittal.

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September 26, 2000

**INTRODUCTION**

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SUMMARY OF OUTSTANDING DEFICIENCIES

**SUMMARY OF OUTSTANDING DEFICIENCIES (Draft TA Only)**

The Technical Analysis regarding the proposed permit changes is not complete at this time, pending submittal of additional information by the Permittee and further review by the Division, to address outstanding deficiencies in the proposal. A summary of those outstanding deficiencies is provided below. Additional comments, concerns, and deficiencies may also be found within the analysis and finding make in the Draft Technical Analysis which have not been presented in this summary. Upon finalization of this review, any outstanding deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the Division, result in denial of the proposed permit changes, or may result in other executive or enforcement actions as deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

- R645-301-542.300 and 310;** the permittee must provide a final surface configuration map with cross sections which supports the approved post mining land use. The map must be P.E. certified to meet the requirements of R645-301-512. . . . . 11
  
- R645-301-553.150;** The permittee needs to provide a contour map with cross sections of the reclaimed area showing how the disturbance of the pump house area will be regraded to meet the requirements of the approved post mining land use. . . . . 10
  
- R645-301-731.720;** as noted in previous text, Map 5-14 contains several deficiencies which must be corrected. The revised map must be P.E. certified to meet the requirements of R645-301-512. . . . . 8
  
- R645-301-742.231;** the permittee must provide a demonstration which shows that the means of sediment control which has been implemented (gravel) will effectively treat the ten year, 24 hour precipitation event, such that the effluent limitations of R645-301-751 will be met. If the initial demonstration (which reflects gravel as the treatment) does not show that effluent limitations can be effectively met, new methods of treatment must be designed and submitted to the Division, with adequate documentation that supports the redesigned treatment method. . . . . 10
  
- R645-301-742.411;** the permittee needs to submit an engineering design analysis for the 18-inch culvert which routes drainage under the junction of the pump house access road and the Carbon County "C" Canyon road. . . . . 10
  
- R645-301-830.140;** the permittee must give the Division detailed earthwork calculations for all earthwork costs associated with the reclamation of the pump house. See the OSM Reclamation Handbook for details or contact the Division for help. . . . . 12

**SUMMARY OF OUTSTANDING DEFICIENCIES**

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OPERATION PLAN

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## OPERATION PLAN

### SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

#### Analysis:

The utility installations description, as provided in Volume 2, Chapter 5, Engineering, page 5-30, of the West Ridge Resources mining and reclamation plan adequately addresses the requirements of the aforementioned regulations.

Volume 2, Chapter 5, page 5-30, paragraph two under R645-301-526.200 Utility Installation and Support Facilities of the West Ridge Resources mining and reclamation plan indicates that "the support facilities will be operated and maintained in accordance with the permit issued for the Mine." The requirements of -526.221 and -526.222 are also addressed in this same paragraph.

The pump house which has been constructed in conjunction with the East Carbon City six-inch water supply line has been constructed in Salt Lake Meridian, T 14 S, R 13 E, Section 21, NE1/4NE1/4. Section 21, NE1/4NE1/4., is 1.45 miles down-canyon of the "C" Canyon County road/Mine security gate. The location is outside of the Mine's permit area, and is within jurisdiction of the Bureau of Land Management, as confirmed from West Ridge Resources MRP Map #5-2, Surface Ownership Map, and Plate IV, of the BLM's environmental assessment dated May, 1998.

As part of the permittee's submittal, an amended right-of-way UTU-77120 and a temporary use permit UTU-77120-1 as granted by the Bureau of Land Management have been included. These were applied for by the permittee on April 19, 1999 and approved by the surface management agency on June 21, 1999. This BLM document includes a legal description (page two) of the authorized area on which the permittee has approval to construct a pumping station in Salt Lake Meridian, T 14 S, R 13 E, Section 21, NE1/4NE1/4. The dimension of this site is 100' x 100' and encompasses 0.23 acres.

The permittee's application includes three revised pages (5-5, 5-9, and 5-29) with necessary text changes to include the pump house within the site's mining and reclamation plan, upon Division approval.

The text of page 5-5, (R645-301-520/521, OPERATION PLAN/GENERAL) discusses the addition of the 0.09 acres to the disturbed area acreage for the site. With the addition of the 1.10 acres of Carbon County road up-canyon of the security gate, and the minimal new acreage included as part of this amendment, the total disturbed area is now 26.19 acres.

The text change of Page 5-9 indicates that the pump house facility being described in AM00G is shown on Plates 1-1 and 5-14. Plate or Map 1-1 shows the pump house location, as it exists in Section 21 of T14 S, R 13 E, Salt Lake Meridian. This location, is as previously described, is 1.45 miles down-canyon of the Mine's security gate. Plate or Map 5-14 shows a plan view for the pump house permit area and its associated details.

As shown on Map 5-14, the access road off of the Carbon County "C" Canyon road is 32 feet in length and 14 feet wide. Although the access will see frequent use, it is felt that the requirements which must be addressed relative to primary roads do not need to be addressed due to the very short length of the access.

Map 5-14 contains some inaccuracies, as determined by a field check of the area on September 5, 2000. These are as follows:

- 1) A riprapped ditch exits the NW side of what is designated as the pump station permit boundary area. The ditch drains a concrete drainage box which provides pressure relief for the water pumps. Neither the ditch, nor the riprap, is shown on Map 5-14. Although this flow reports to the 18 inch corrugated metal pipe under the access road junction, it is felt that these flows will, at worst, be minimal, and therefore, no designs for the ditch or the riprap are felt to be necessary.
- 2) The 18-inch culvert mentioned in #1 is not shown on Map 5-14. As it lies under the permittees access road, the responsibility of maintaining same is that of the permittee. This culvert needs to be sized through engineering analysis, and that information should be included with the next deficiency response.
- 3) The area which the permittee is proposing to permit as the pump station ASCA shows contour lines which correlate with the surrounding topography. Although these lines were accurate at one time, they do not represent the current drainage pattern of the pad area due to the fact that the permittee has installed gravel over same (within the fenced area) as a means of erosion control. The flow patterns which are indicated by the blue arrows on Map 5-14 can not be correct, due to the extreme flatness of the area. There are no diversions in place to direct water to these flow patterns.
- 4) Map 5-14 contains several notes which indicate "ASCA OR ALTERNATE SEDIMENT CONTROL (SILT FENCE) AS NEEDED." **This is an already constructed facility which is being permitted after the fact.** Sediment control should be shown for the "as-built" condition of the facility, and not "as needed". The field condition method of sediment control does not correlate with the text of the submittal. Since the gravel is accepted to be the means of sediment control for the area, silt fences will not be needed. The permittee has installed a silt fence steel mesh frame both up-channel and down-channel from the access road junction, with straw bales. Although the intent of the silt

OPERATION PLAN

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fences is well appreciated, it is doubtful that any runoff would actually report to the fences, due to the lack of relief and berms to divert sheet flow to the fences. The gravel is considered to be the means of sediment control; therefore, it is not necessary to treat the runoff from the area. It is not necessary to treat runoff from the access road.

The use of gravel on the pump house pad for erosion control purposes is not designated on Map 5-14.

- 5) The pump station pad area exists at the base of a slope. The area immediately behind and to the SE of the pump house pad has been denuded of vegetation by construction activities. This area is about 2.5 feet higher in elevation, than is the pump house pad. As the area currently exists, there is no diversion in place to redirect the undisturbed flows away from the pump house pad. The general area is known to experience high intensity storms on occasion. It may be wise for the permittee to install a diversion berm about the outside fence perimeter to prevent flows from washing across the pad area. The berm should be designed through engineering analysis, and will keep undisturbed and disturbed flows segregated. The ASCA, as it currently exists, does not have adequate treatment methods in place to handle the disturbed area as well as undisturbed area runoff. All methods of treatment for an ASCA must be within the permit area such that they can be maintained, it appears that the permittee should expand the area to be permitted, as shown on Map or Plate 5-14.
- 6) There is a Carbon County under-road culvert (24-inch diameter) north of the pump house permitted area which is not shown on Map 5-14.
- 7) Page 5-29, which has been included as part of this submittal, designates the pump house pad area as an ASCA. R645-301-742.231, under Other Treatment Facilities requires that other treatment facilities will be **“designed to treat the 10-year, 24-hour precipitation event.....and a demonstration by the operator that the effluent limitations of R645-301-751 will be met.”** As noted above, there are inherent problems with the design, and a demonstration to verify that effluent limitations can be met has not been included with the submittal.

**Findings:**

The requirements of **R645-301-526.200** and **526.210** have been adequately addressed.

**R645-301-731.720**; as noted in previous text, Map 5-14 contains several deficiencies which must be corrected. The revised map must be P.E. certified to meet the requirements of R645-301-512.



## RECLAMATION PLAN

### APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

#### Analysis:

Page 1 of Appendix 5-7, West Ridge Mine Pump House Reclamation and Sedimentation Control, paragraph (f) briefly mentions grading and ripping of the pad road area. The area is very nearly flat, and to what extent grading will be performed is not understood. Although Map 5-14 shows contours within the disturbed area, it is unclear as to whether the area will be reclaimed to this configuration, although that can probably be safely assumed. Map 5-14 is for the operational stage of the pump house, and can not be considered a valid contour map to show the surface configuration for the reclaimed area. The requirements of R645-301-553.150 have not been met.

#### Findings:

**R645-301-553.150;** The permittee needs to provide a contour map with cross sections of the reclaimed area showing how the disturbance of the pump house area will be regraded to meet the requirements of the approved post mining land use.

**R645-301-742.231;** the permittee must provide a demonstration which shows that the means of sediment control which has been implemented (gravel) will effectively treat the ten-year, 24 hour precipitation event, such that the effluent limitations of R645-301-751 will be met. If the initial demonstration (which reflects gravel as the treatment) does not show that effluent limitations can be effectively met, new methods of treatment must be designed and submitted to the Division, with adequate documentation that supports the redesigned treatment method.

**R645-301-742.411;** the permittee needs to submit an engineering design analysis for the 18-inch culvert which routes drainage under the junction of the pump house access road and the Carbon County "C" Canyon road.

### MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

**Analysis:**

**Final Surface Configuration Maps**

The application does not contain a contour map of the proposed reclamation for the pump house area or cross-sections.

In accordance with **R645-301-542.300 and 310** the permittee must provide maps and cross-sections which will show the anticipated final surface configuration for the affected pump house area.

**Findings:**

**R645-301-542.300 and 310;** the permittee must provide a final surface configuration map with cross sections which supports the approved post mining land use. The map must be P.E. certified to meet the requirements of R645-301-512.

**BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

**Analysis:**

**Determination of Bond Amount**

The Division reviewed the reclamation cost estimate for the West Ridge Mine pump house. The Division found that the information which was submitted for the demolition and revegetation costs were adequate. Information for the earthwork costs was not adequate. Earthwork costs must include productivity data and material volume data as outlined in the OSM Reclamation Handbook.

The permittee stated the following:

The reclamation cost estimate for the pump house area is \$6193.52, which is less than 0.31% of the existing bond, and well within the contingency; therefore, no increase in the bond should be necessary to cover the reclamation costs for the pump house area.

The contingency fund is for items that will occur during reclamation but have not yet been identified. Since reclamation of the pump house is an identifiable expense, the reclamation for the site must be a line item cost.

The Division has an unofficial policy that the bond will not be increased if the cumulative reclamation costs increases are less than 5% of the bond amount. Since the cumulative

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RECLAMATION PLAN

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increase is less than 5% of the bond, the Division will not increase the bond at this time.

**Findings:**

Information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Prior to approval, the permittee must provide the following in accordance with:

**R645-301-830.140;** the permittee must give the Division detailed earthwork calculations for all earthwork costs associated with the reclamation of the pump house. See the OSM Reclamation Handbook for details or contact the Division for help.

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