



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

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April 27, 1999

Denise Dragoo, Resident Agent  
 Horizon Mining, LLC  
 c/o Snell & Wilmer  
 111 East Broadway, Suite 900  
 Salt Lake City, Utah 84111

Re: Results of Midterm Permit Review, Horizon Mining, LLC, Horizon Mine, ACT/007/020-MT99, Folder #3, Carbon County, Utah

Dear Ms. Dragoo:

The Division has conducted a Midterm Permit review of the Horizon Mine as indicated in our March 23, 1999 letter to you. The results of the Midterm review are discussed in the enclosed Technical Analysis and Findings document. You will note that a number of the findings indicate deficiencies in the plan and in the operation of the mine. In order to achieve compliance these deficiencies will need to be corrected. For those items that are associated with enforcement actions you will need to follow the prescribed abatement procedures and dates. For the remaining items, please provide the needed corrections as quickly as possible but no later than June 28, 1999.

You should also note that the Division has calculated a revised bond amount based on the information available. We have determined that the bond at the Horizon mine should be adjusted to \$1,081,000. We have enclosed a blank reclamation agreement which you will need to complete in order to bring your bond documents up to date. You will need to provide the additional bond and reclamation agreement by the June 28th date as well. If desired, you may request an informal conference on the bond adjustment pursuant to R645-301-830.422. Please call if you have any questions.

Sincerely,

Daron R. Haddock  
 Permit Supervisor

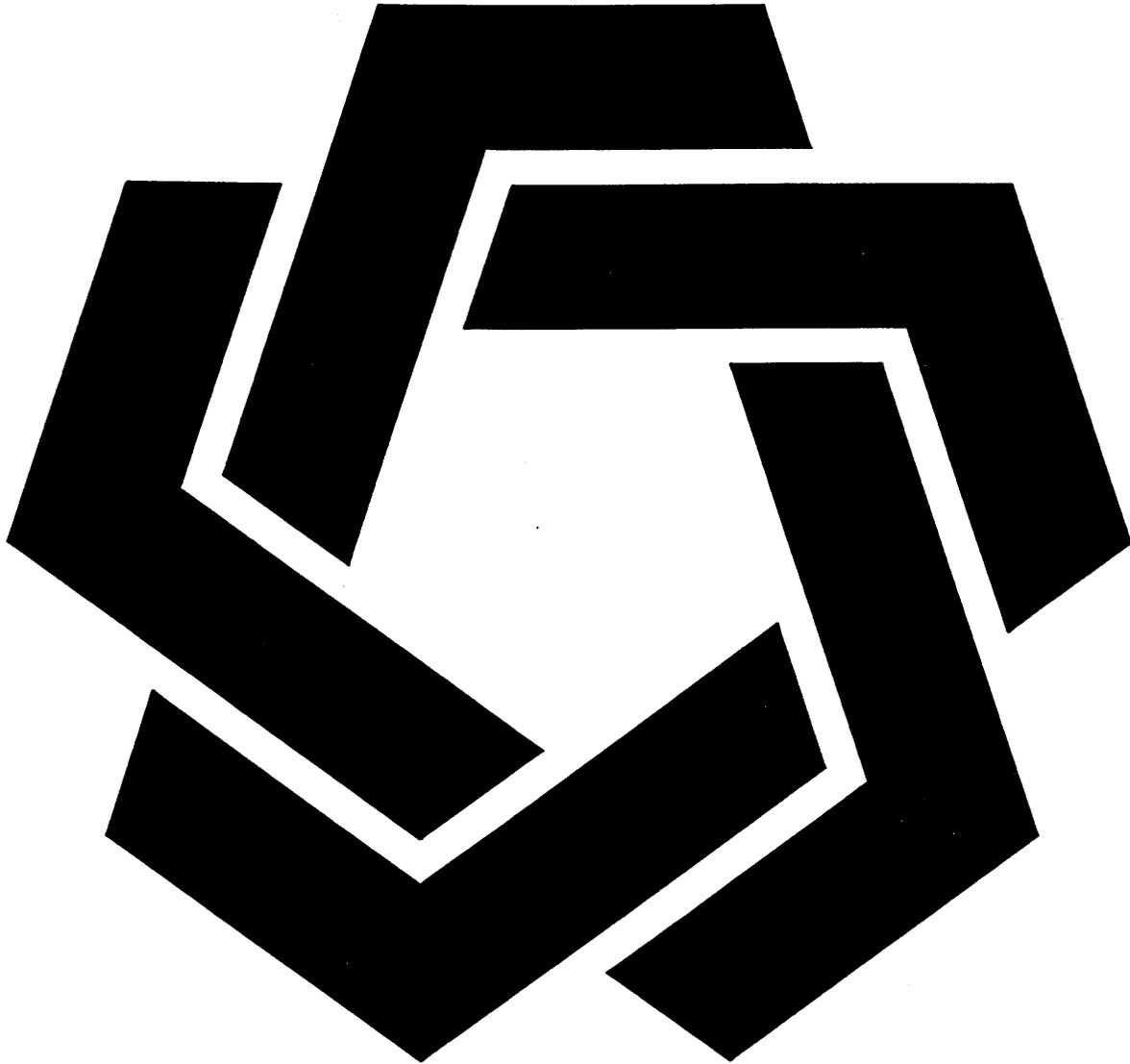
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enclosures

cc: Frontier Insurance Company w/o  
 Mary Ann Wright w/o  
 Joe Helfrich w/o  
 Price Field Office ta only

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State of Utah  
Division of Oil, Gas and Mining  
Utah Coal Regulatory Program



Technical Analysis and Findings for Midterm Review  
Horizon Mine  
ACT/007/020  
April 23, 1999

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## INTRODUCTION

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### INTRODUCTION

The Division is required to review each active permit during its term, in accordance with R645-303-211. This review is to take place at the midpoint of the permit term (April 10, 1999 for the Horizon Mine) and will cover pertinent elements that have been selected for review. The Midterm Review for the Horizon Mine has been conducted and the items chosen for review encompass the following:

1. An AVS check to ensure that Ownership and Control information is current and correct.
2. A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee-initiated plan changes are appropriately incorporated into the plan document. This is especially important in light of the February 25, 1999 Division Order dealing with coal mine waste disposal.
3. A review of the applicable portions of the permit to ensure that the plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
4. The Division will conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.
5. An evaluation of the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval.

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## MIDTERM PERMIT REVIEW

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# ADMINISTRATIVE FINDINGS

## PERMIT APPLICATION FORMAT AND CONTENT

Regulatory Reference: R645-301-120

### Analysis:

During the technical site visit it became apparent that the current site configuration does not match with many of the maps or plans in the Approved Mining and Reclamation Plan. Maps contain conflicting information. For example the map depicting the Surface facilities shows a different haul road alignment than the Haul road design map. It also shows a different disturbed area boundary than many of the other maps. The Surface facilities map also shows certain facilities that are not located as they are depicted (i.e., shop, fuel tanks, crusher). The drainage maps show a different surface configuration than the surface facilities map. In order for the mine to be in compliance, it must provide maps and text that are consistent and that correlate throughout the plan.

### Findings:

The midterm review has identified that the plan does not meet the requirements of this section. The permittee must provide the following in accordance with:

**R645-301-121**, Information in the plan that is current, clear and concise. In order for the mine to be in compliance, it must provide maps and text that are consistent and that correlate throughout the plan.

## PERMIT CONDITIONS

Regulatory Reference: R645-300-140

### Analysis:

Each permit issued by the Division will be subject to the following conditions:

- The permittee will conduct coal mining and reclamation operations only on those lands that are specifically designated as the permit area on the maps submitted with the application and authorized for the term of the permit and that are subject to the performance bond or other equivalent guarantee in effect pursuant to R645-301-800.

## **MIDTERM PERMIT REVIEW**

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- The permittee will conduct all coal mining and reclamation operations only as described in the approved application, except to the extent that the Division otherwise directs in the permit.
- The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.

At the present time there are outstanding enforcement actions that were issued primarily for conducting operations that were not authorized by the current permit. The permittee will need to insure that the enforcement actions are appropriately abated and that all future operations are conducted in accordance with the approved permit.

### **Findings:**

The midterm review has identified that the permittee has conducted activities not in compliance with the permit. The permittee must do the following in accordance with:

**R645-300-143**, The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program. The permittee will need to insure that the enforcement actions are appropriately abated and that all future operations are conducted in accordance with the approved permit.

## **ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR Sec. 783., et. al.

## **FISH AND WILDLIFE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.21; R645-301-322.

### **Analysis:**

The permit states (page 10-3) that "A macro invertebrate and fish study will be performed by Horizon in conjunction with UDOGM and DWR personnel in 1997 and in the year 2002. The studies will be upstream and downstream of the Horizon site, covering 500 meters (5 stations) on the North Fork of Gordon Creek." The results of this study could not be found in the permit or the 1997 Annual Report. Since this is considered baseline information, the Plan should include the reporting and results of this study as an appendix to Chapter 10.

## **MIDTERM PERMIT REVIEW**

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### **Findings:**

The midterm review has identified that the plan does not meet the requirements of this section. The permittee must provide the following in accordance with:

**R645-301-322**, a report to be included in the plan, produced by the persons or organization which conducted the macro invertebrate and fish study conducted in 1997.

## **OPERATION PLAN**

### **TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

### **Analysis:**

The Midterm Permit Review covers the following operational considerations for soil salvage and protection of the soil resource:

- Soil Salvage Updates

#### **Soil Salvage Updates**

A "Topsoil Stockpile Table" is included in Appendix 8-1 showing results for topsoil recovery and placement during 1996 and 1997. The current surveyed volume of soil in the stockpile is shown as 10,494 cy. Temporary stockpiles for both riparian and non-riparian soil are shown as 156 cy and 124 cy, respectively. Total salvaged soil is therefore 10,774 cy. With in-place soils in Areas 10 and 11, the volume of soil available for reclamation is 14,507 cy.

Plate A, Appendix 8-1, shows soil distribution within the disturbance area. These are correlated with the Table in Appendix 8-1 for topsoil recovery and placement as follows:

**MIDTERM PERMIT REVIEW**

SOIL SOURCE	CUBIC YARDS	PLATE A LEGEND
topsoil salvaged in 1996 by surveying topsoil stockpile	10,993	
topsoil redistributed (Area D) 1997 from stockpile	(499)	red & green
current stockpile 1998	10494	
Area E nonrip. soil placement 1998	90	purple
Area E temporary stockpiles 1998	190	purple
total salvaged soils	10774	
Areas 10 & 11 in-place soils	3733	
<b>Total soils available for final reclamation</b>	<b>14507</b>	
Imported soils Areas A, B, & C 1997	975	blue

The on-site visit associated with the Midterm Permit Review took place on April 20, 1999. Division personnel present included the Mine Inspector, Bill Malencik; Permit Supervisor, Daron Haddock; and Reclamation Specialists, Susan White, Wayne Western, Sharon Falvey, and Robert Davidson. Horizon Mining, LLC, was represented by EarthFax Engineering, Vicky Miller.

**Findings:**

The information provided does not meet the minimum regulatory requirements of this section. The permittee must provide the following, prior to approval, in accordance with the requirements of:

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## MIDTERM PERMIT REVIEW

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**R645-301-120, R645-301-130, R645-301-150 and R645-301-230,** The following inconsistencies are made in context with information presented in the plan and observations made in the field on April 20, 1999:

- Appendix 8-1, Plate A, needs to show and delineate the main Topsoil Stockpile.
- Appendix 8-1, Topsoil Stockpile Table, shows surveyed quantity of soil in the main Topsoil Stockpile as 10,993 cubic yards. The Mine Reclamation Plan (MRP) needs to be updated showing past surveys so that the Division can verify the surveyed quantity of Topsoil in the pile. The surveyed pile Information, both current and original, should include, but not be limited to, the following:
  - (1) Surveyed Pile specifics, dimensions
  - (2) Pile illustration showing surveyed pile configuration, and
  - (3) Pile cross sections.
- Appendix 8-1, Plate A, shows the temporary Riparian Topsoil stockpile on Area "E". On the ground, the temporary Riparian Topsoil stockpile has been relocated from Area "E" to the main Topsoil Stockpile. Plate A needs to be updated to show the current location of the Riparian Topsoil stockpile.
- Appendix 8-1, Plate B, shows areas that will require Topsoil during reclamation. On the ground, the northern temporary fan portal area, the temporary fan portal access road, and the northern refuse slope adjacent and above the main topsoil stockpile have been reclaimed. The following are needed:
  - (1) Update the all relevant MRP text, tables and maps, including Appendix 8-1.
  - (2) Dates that reclamation took place and who performed the reclamation.
  - (3) Identify the soil source, location, volumes and characterization of the soil resource used for reclamation.

## **MIDTERM PERMIT REVIEW**

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### **FISH AND WILDLIFE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

#### **Analysis:**

##### **Protection and Enhancement Plan.**

The Plan (page 10-35) states that Horizon will monitor road kills and report numbers weekly to the DWR; and remove killed deer and elk from the road between the Wildcat Coal Loadout and the mine site. A phone call to DWR during this midterm review concluded (although not conclusive) that road kill numbers have not been reported and road kills have not been removed from the road. The Operator should be reminded of the commitment for future reporting. Numbers of road kills and kills removed from the road should be recorded and then summarized in the Annual Reports.

The Operator has committed to fencing (page 9-7) an area 40 feet x 60 feet of preconstruction riparian vegetation below the sediment pond. No fence was observed during an on site inspection conducted April 20, 1999. Numerous cow pies were observed in the area, indicating that livestock had not been restricted as committed (page 10-38).

As part of a mitigation program the Operator was to recreate a riparian vegetative community along Jewkes Creek channel below the sediment pond to the road. The channel was reconstructed during road construction activities. During the site inspection, completed revegetation work was observed however, the success of that work could not be evaluated due to the early season.

#### **Findings:**

Information found in the plan and on site relevant to this midterm review have not been found to be consistent with the requirements of this section. The Operator should be reminded of the permit commitment to report and remove road kills. Numbers of road kills and kills removed from the road should be recorded and then summarized in the Annual Reports. The Operator has committed to fencing (page 9-7) an area 40 feet x 60 feet of preconstruction riparian vegetation below the sediment pond. No fence was observed during an on site inspection conducted April 20, 1999.

## MIDTERM PERMIT REVIEW

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### VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

#### Analysis:

The Operator had conducted interim site stabilization with vegetation in several areas above the facilities area and below the sediment pond. No noxious weeds were observed in the interim vegetation. Gordon Creek is known to have infestations of Musk thistle and the Operator should be observant not to let this species establish.

#### Findings:

Information found in the plan and on site relevant to this midterm review meet the minimum regulatory requirements of this section.

### HYDROLOGIC ANALYSES:

#### Does the Plan Meet Permit Terms and Conditions?

The permit has no attached stipulations. Conditions relating to hydrology under Sec. 14 states the permittee shall comply with the provisions for the Water Pollution Control Act (33 USC 1151 et seq.)

#### Water Quality Standards and Effluent Limitations.

The permittee provided a copy of the UPDES permit for the Horizon Coal Corporation in appendix 3-6. The permit is expired at midnight on April 30, 1998. The permit number UTG040019 is authorized for discharge at outfall 001, latitude 39°41'37" and longitude 111°02'58", to the North Fork of Gordon Creek.

The plan states excess underground water encountered is settled in underground sumps and discharges will be monitored to ensure that effluent limitations are met. Any such discharges will be monitored in accordance with the UPDES permit (Sections 3.4.3 and 3.4.3.2). The permit, currently allows only one discharge point from the sedimentation pond. The permittee has attempted to obtain an additional mine water discharge point. The total amount of TDS discharged from all mine water and decant operations is limited to one ton per day. To date, the applicant has not obtained a mine water discharge UPDES permit.

Conditions relating to hydrology under Sec. 10 states the permittee shall conduct operations in accordance with the terms of the permit. Based on the discussion presented below,

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## MIDTERM PERMIT REVIEW

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the operator is not following the provisions of the permit.

**Ensure plan contains commitments for BTCA to prevent additional contribution of suspended solids to stream flow outside the permit area.**

As a temporary measure the applicant was allowed to discharge water from the mine through the sedimentation pond. Currently, the permittee has not provided any adjustments to the pond design that allows for retaining the minewater runoff. The permittee needs to retain capacity for the calculated pond runoff from a 10-year, 24-hour precipitation event, 0.56 acre-feet in the pond above the sediment storage capacity so it can contain the runoff from a precipitation event. Areas adjacent to the disturbed area have been re-graded and change the pre-approved plan. Now additional adjacent areas contribute runoff to the sedimentation pond. These areas are not accounted for in the sedimentation pond design. Similarly, the sedimentation pond spillway is not shown to safely pass the peak flow with the additional minewater discharge. At the time of the site inspection associated with this review no runoff storage capacity was available in the pond.

Coal/coal waste accumulations are being air transported out of the disturbed area upstream of the bypass culvert on the North Fork of Gordon Creek (Jewkes Creek). Bill Malencik has previously informed the operator that methods should be employed to eliminate coal/coal waste transport into the disturbed area.

### **Hydrocarbons**

Horizon Coal Company indicates diesel fuel, oils, greases and hydrocarbon products will be stored above-ground and may be spilled in the mine and on the surface during mining operations. An above ground 5,000 gallon diesel fuel tank will be located between the coal stockpile and the truck turn around, as indicated on Plate 3-1. The area where these were located according to the reviewed map differs with the site location. The site location is directly adjacent to the drainage carrying minewater which reports to the sedimentation pond. The diesel fuel tank should be moved away from the ditch that drains directly to the sediment pond.

### **Status and Effectiveness of Operational Practices**

The site showed no visible evidence of contributions of sediment to streamflow outside the permit area other than the Coal/coal waste accumulations are being air transported out of the disturbed area upstream of the bypass culvert on the North Fork of Gordon Creek (Jewkes Creek).

The straw bales in the disturbed area below the sedimentation pond were decomposing.

## **MIDTERM PERMIT REVIEW**

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The straw bales in the disturbed area below the sedimentation pond need to be replaced as vegetation is not adequate to control erosion at this time. No visible signs of precipitation or sediment moving from this area were noted.

### **Findings:**

The operations are not considered adequate to meet the requirements identified for the midterm. The permittee must provide the following in accordance with:

**R645-300-142.** "The permittee will conduct all coal mining and reclamation operations only as described in the approved application."

## **RECLAMATION PLAN**

### **REVEGETATION**

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116;  
R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282,  
-302-283, -302-284.

### **Analysis:**

#### **General Requirements**

No reclamation or permanent revegetation has been conducted on site.

### **Findings:**

Information found in the plan and on site relevant to this midterm review meet the minimum regulatory requirements of this section.

## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: R645-301-800, et seq.

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## MIDTERM PERMIT REVIEW

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### Analysis:

#### Determination of bond amount.

The Division reviewed the reclamation cost estimates for the Horizon Mine as part of the midterm. The Division found several deficiencies in the reclamation cost estimate. Those deficiencies include but are not limited to:

The Permittee needs to give the Division detailed earthwork calculations. Those calculations must include haul distances, grades travel times, and material volumes. In addition the Permittee must include a detailed reclamation plan that lists the timing and sequence of all major earthwork activities. (The Permittee should refer to the OSM reclamation handbook for details or consult the Division.)

The Permittee must give the Division detailed demolition costs for all approved structures. The detailed demolition costs must include the type of material used to construct the structure, all concrete associated with the structure (such as floors, footers and foundations) and the disposal costs. The disposal costs must include the dump fee and haulage costs.

The Permittee must also include the disposal costs for the maximum amount of coal mine waste, and high ash coal that will be stored on site. The disposal costs must include haulage costs and dump fees.

The Division calculated the reclamation cost to reclaim the Horizon Mine as it existed on April 2, 1999. The Division determined the reclamation cost to be \$1,081,000 in 2001 dollars. See the attached sheets for details. The current bond amount is \$209,195.31 in 2000 dollars. Because the reclamation cost exceeds the bond amount by \$871,804.69 which is a 417% increase in the current bond the Permittee must increase the reclamation bond immediately. Other adjustments to the bond could occur then the detailed reclamation cost data are approved by the Division.

#### General Terms and Conditions of the Bond

The Division has record of the Reclamation Agreement for Horizon Coal Corporation with page 2 of the Reclamation Agreement revised to Horizon Mining, LLC and signed by Scott Kiscaden, Manager of Horizon Mining, LLC. As part of this revised Reclamation Agreement, there is a Surety Bond in the amount of \$209,200 issued by Frontier Insurance Company on July 17, 1998. The surety bond is also signed by Scott Kiscaden, Manager of Horizon Mining, LLC.

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## MIDTERM PERMIT REVIEW

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### 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:

**R645-301-820**, The Applicant will file with the Division, on a form prescribed and furnished by the Division, a bond for performance made payable to the Division and conditioned upon the faithful performance of all of the requirements of the state Program, the permit and the reclamation plan.

The applicant should refile the entire Reclamation Agreement (attached) to update all portions of the Agreement and the signature of the signing authority for Horizon Mining, LLC must be accompanied by minutes of the Board meeting and/or corporate resolution or bylaws that reflect he has the authority to sign surety bonds for Horizon Mining, LLC.

**R645-301-830**, The Permittee must provide the Division with a detailed reclamation cost estimate for the Horizon Mine. The detailed reclamation cost estimate must include:

Detailed earthwork calculations that include haul distances, grades travel times, and material volumes. In addition the Permittee must include a detailed reclamation plan that lists the timing and sequence of all major earthwork activities. (The Permittee should refer to the OSM reclamation handbook for details or consult the Division.)

Detailed demolition cost calculations that include the type of structures and the disposal costs. The detailed demolition costs must include the type of material used to construct the structure, all concrete associated with the structure (such as floors, footers and foundations) and the disposal costs. The disposal costs must include the dump fee and haulage costs.

The Permittee must also include the disposal costs for the maximum amount of coal mine waste, and high ash coal that will be stored on site. The disposal costs must include haulage costs and dump fees.

**R645-301-840**, The Permittee must increase the reclamation bond amount from \$209,195.31 to \$1,081,000.