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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 23, 2020

Dennis Oakley, Senior Mining Engineer  
c/o Thermal Generation Environmental Services  
1407 W. North Temple, Suite 210  
Salt Lake City, Utah 84116

Subject: Phase II and III Bond Release of Truck Turnaround Area, PacifiCorp,  
Cottonwood/Wilberg Mine, C/015/0019, Task #6084

Dear Mr. Oakley:

The Division of Oil, Gas and Mining (the Division) has reviewed the Phase II and III bond release application for the truck turnaround area and completed a field inspection of the site. As we've discussed previously, the cut slope created by the construction of the truck turnaround has raised stability issues/deficiencies that must be addressed prior to proceeding with the bond release application. The deficiencies are listed as an attachment to this letter.

An amendment to the Mining and Reclamation Plan (MRP) will need to be submitted to the Division that addresses the deficiencies identified with the cut slope. Once the amendment receives final approval, the approved stabilization measures for the cut slope will need to be completed and verified by the Division. At that point, the bond release process can be revisited. Whether the bond release process can be simply re-initiated or the bond release process must begin anew will be dependent on the approved language, legal description etc. in the aforementioned amendment.

If you have any questions, please call me at (385) 290-9937.

Sincerely,

Steve Christensen  
Coal Program Manager

SKC/sqs  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0150019  
**TaskID:** 6084  
**Mine Name:** COTTONWOOD/ WILBERG  
**Title:** PHASE II & III BOND RELEASE TRUCK TURNAROUND

#### Reclamation Plan

##### Backfill and Grading General

###### Analysis:

The application does not meet the State of Utah R645 requirements for Backfilling and Grading.

The application does not satisfy the requirements of R645-301-553 because a portion of the cutslope inside the disturbed area boundary appears to exceed a 2:1 slope and lacks stabilization. The 0.04-acre truck turnaround is enclosed by a range of cutslopes, with the steepest section occurring to the east for an approximate distance of 50 feet. The truck turnaround was constructed in December 2019 by Emery County, and the steepest cutslopes do not appear likely to maintain long term stability without stabilization.

###### Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Backfilling and Grading. The following deficiency must be addressed prior to final approval:

R645-301-553.130: Permittee must propose a method for stabilizing the cutslopes within the vicinity of the constructed truck turnaround.

jeatchel

##### Topsoil and Subsoil

###### Analysis:

This application for bond release of 0.04 acres for the Cottonwood truck turnaround does not meet the State of Utah R645 requirements for Bonding and Insurance: Requirement to Release Performance Bonds At the Completion of Phase III.

Phase I bond release of the 0.04 acre truck turnaround adjacent to Emery County Road 506 (SW/4 NE/4 Sec 25 T17 S, R 6 E) was part of the 1.86 acre TMA and belt portal area within the larger 29.37 acre Cottonwood Mine site bond release reviewed in May 2019 as Task 5869.

The truck turnaround easement was provided by Pacificorps in August 2019. The turnaround was constructed by Emery County in December 2019.

Location of the truck turnaround is shown on the map in Attachment 4 of the Phase III application.

Attachment 5 describes and installation of 70 feet length of 18 inch culvert, removal of existing riprap and boulders, grading and placement of 6 in of roadbase. A ten foot cut for a distance of approximately 50 feet is shown on East side of the turnaround (Map Attachment A of Attachment 5). Less severe cuts exist to the North and South.

Attachment 6 provides a history of the site.

Attachment 7 provides bonding information for the site.

There is no Attachment 8.

Attachment 9 describes the use and maintenance of a straw wattle for sediment control.

There is no calculation of volume of soil removed. There is no indication of final placement and redistribution of the soil. This cut soil must be stabilized.

*Deficiencies Details:*

DEF

The application does not meet the State of Utah R645 requirements for Topsoil Redistribution. The following deficiency must be addressed prior to final approval:

R645-301-880.330 and R645-301-251, Please state the volume of soil removed and provide information on its final placement or redistribution location. This cut soil must be stabilized.

**pburton**

## **Hydrological Information Reclamation Plan**

*Analysis:*

The application does not meet the State of Utah R645 requirements for Hydrological Information: Reclamation.

As part of the turn-around, a culvert was installed to ensure proper drainage from the upstream watershed. Volume 2 Part 4, Appendix I provides the hydrologic calculations and drawings to support the sizing of the culvert. The installed culvert is considered a permanent diversion and will allow for peak runoff of a 100-year, 6-hour precipitation event to pass safely. The data and accompanying calculations to support the required storm event are provided in Appendix I Volume 2 Part 4.

The truck-turn around area meets the requirement of the design which calls for a 70 foot, 18" CMP, and the surface of the turn-around to be covered with 6" of untreated base course. However, the steep cut slope will erode and needs to be stabilized to prevent suspended solids from running on and off the site.

*Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Hydrological Reclamation. The following deficiency must be addressed prior to final approval:

R645-301-762.200: Permittee must propose a method for stabilizing the cut to complement the drianage pattern and to minimize erosion and suspended solids from running on and off the site.

**khinton**

## **Revegetation Standards for Success**

*Analysis:*

The application meets the State of Utah R645-301-356 requirements for Revegetation Standards of Success. Based on the submitted application, no revegetation was completed as the entire bond release area was to be graveled surface. In the course of reviewing this proposal, however, other Division reviewers raised concerns regarding the stability of the cut slope at the turn around. Based on their deficiencies, further stabilization may be required and should this stabilization involve revegetation, these revegetation findings may be revamped.

**tmiller**

## Stabilization of Surface Areas

### Analysis:

This application for Phase III Bond Release of 0.04 acres for the Cottonwood truck turnaround does not meet the State of Utah R645 requirement for Bonding and Insurance: Requirement to Release Performance Bonds At the Completion of Phase III.

The 0.04 acre truck turnaround adjacent to Emery County Road 506 (SW/4 NE/4 Sec 25 T17 S, R 6 E) was part of the 1.86 acre TMA and belt portal area within the larger 29.37 acre Cottonwood Mine site bond release reviewed in May 2019 as Task 5869.

Location of the truck turnaround is shown on the map in Attachment 4 of the Phase III application. The small 0.04 acres area was removed from the surrounding 1.86 acre Phase I disturbed area boundary to facilitate snow removal. The remaining Phase I disturbed area is 1.82 acres. Whether the boundary of the remaining Phase I area is at the toe of the cut or at the top of the cut is not explicitly stated, although it is shown on maps in Attachment 4. Regardless, the cut slope needs stabilization. This may involve placement of boulders at the base of the cut and hydroseeding with hydromulch and tackifier.

The 0.04 acre reduction in Phase I area will not change, because the distance between the toe and top off the cut is within the margin of error of the measurement.

A general history of the site is provided in Attachment 6 of the application.

The truck turnaround easement was provided by Pacificorps in August 2019. The turnaround was constructed by Emery County in December 2019. Attachment 5 describes and installation of 70 feet length of 18 inch culvert, removal of existing riprap and boulders, grading and placement of 6 in of roadbase (Attachment 5).

Attachment 9 describes the use and maintenance of a straw wattle for sediment control on the turnaround

### Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Reclamation Plan: Soil Stabilization. The following deficiency must be addressed prior to final approval:

R645-301-244.100, The cut slope must be stabilized. The cut soil must be stabilized.

R645-301-121.200, Please clearly state the location of the boundary of the Phase I bond release area as at the toe of the cut.

pburton

## Maps Reclamation Backfilling and Grading

### Analysis:

The application does not meet the State of Utah R645 requirements for Reclamation Backfilling and Grading Maps.

The application does not satisfy the State of Utah Coal Rules for Reclamation Backfilling and Grading Maps because the Permittee has not submitted maps or cross-sections that sufficiently portray the anticipated reclamation surface within the constructed 0.04-acre truck turnaround. A portion of the cutslope adjacent to the truck turnaround appears to exceed a 2:1 slope. The truck turnaround is enclosed by a range of cutslopes, with the steepest section occurring to the east for an approximate distance of 50 feet. The narrative in Part 4, Page 29 of the current Mining and Reclamation Plan states that all cutslopes will be created with a gradient that does not exceed a 2 horizontal to 1 vertical slope. The Attachment A within the submitted application does not offer a cross-section view of the cutslopes, so an exact determination of the slope angles is not known. In addition to the plan view maps that have been included in the current bond release application, additional cross-section views must be included to demonstrate that the cutslopes within the truck turnaround have not exceeded unsafe and/or unstable conditions.

### Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Reclamation Backfilling and Grading Maps. The

following deficiency must to addressed prior to final approval:

R645-301-521.150 and -542.200 thru 300: The Permittee must submit cross-sectional views that demonstrate the cutslopes within the truck turnaround have not exceeded unsafe and/or unstable conditions. The maps must be prepared and certified as per R645-301-512.

jeatchel



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## Inspection Report

Permit Number:	<b>C0150019</b>
Inspection Type:	BOND RELEASE
Inspection Date:	Tuesday, March 24, 2020
Start Date/Time:	3/24/2020 10:00:00 AM
End Date/Time:	3/24/2020 2:00:00 PM
Last Inspection:	Tuesday, February 11, 2020

Representatives Present During the Inspection:	
Company	Dennis Oakley
OGM	Steve Demczak

Inspector: Steve Demczak

Weather: Cloudy, 30's

InspectionID Report Number: 6657

Accepted by: SCHRISTE

3/31/2020

Permitee: **PACIFICORP**  
 Operator: **INTERWEST MINING CO**  
 Site: **COTTONWOOD/ WILBERG**  
 Address: **PO BOX 310, HUNTINGTON UT 84528**  
 County: **EMERY**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **ACTIVE**

### Current Acreages

4,092.00	<b>Total Permitted</b>
29.37	<b>Total Disturbed</b>
21.30	<b>Phase I</b>
21.30	<b>Phase II</b>
21.30	<b>Phase III</b>

### Mineral Ownership

- Federal
- State
- County
- Fee
- Other

### Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

### Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

This is an inspection for a Phase II and III Bond Release of 0.08 acres. The 0.08 acres will be used as an Emery County truck turn around. This area will be used mostly in the winter time for snow plows to turn and go back down the road. This area did receive Phase 1 Bond Release on May 7, 2019. However, this area's contours have been changed from it's Phase 1 constructed hillside into a level area for a truck turnaround. The Division approved construction of the truck turn-around on October 24, 2019. Emery County Road Department did the construction of the turn-around. All designs and calculations were done by Johansen and Tuttle Engineering.

Stephen J. Demczak

Inspector's Signature:

Steve Demczak,  
Inspector ID Number: 39

Date Tuesday, March 24, 2020



**Note:** This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining. telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov

**REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS**

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
  - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
  - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS check	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **1. Permits, Change, Transfer, Renewal, Sale**

On March 3, 2020 the Division received an application by Interwest Mining Company for a Phase II and III bond Release of 0.080 acres for a truck turnaround area. Once approved by the Division and Office of Surface Mining (OSM) this area will be removed from the Cottonwood permit area. This are received Division approval on October 24, 2019 for construction of the turnaround. The construction work has been completed. See photos

## **2. Signs and Markers**

The road department has installed a sign stating "Snow Plow Turn around". See Photo

## **3. Topsoil**

The Emery County removed any topsoil, subsoil and rocks from this turnaround of 0.08 acres. Road base was laid down and compacted. See Photos

### **4.a Hydrologic Balance: Diversions**

The permittee installed an 18 inch culvert between the turnaround and the main road. The culvert will transport water from the hillside and the main road. The culvert replaced the road diversion in this area. It enables trucks to turn around easily without going in to a ditch. The inlet side of the culvert is protected by rocks. See Photos

### **4.c Hydrologic Balance: Other Sediment Control Measures**

The road base/gravel can be considered as sediment treatment for this 0.080 acres. I did not see any offsite impacts. The turn around was stable. Offsite impacts or evidence of erosion were not observed at the time of the inspection. However, the cutslope could erode during a rainstorm. The cutslope has not been stabilized. See Section 10 for more detail.

## **10. Slides and Other Damage**

The turnaround was developed by removing the material from the hillside. A greater than 2:1 slope was formed with no stabilization measures in place. It is likely that erosion will occur on and above this cutslope after a rainstorm. The area above the cutslope is currently in year 6 of the liability period. Rills will likely form in the Phase I bond released area above the cutslope. If rills are formed in the Phase I area; it is unlikely the permittee will receive Phase II and III bond release. It is recommended that additional action be taken to prevent erosion of the Phase I area above the turnaround or reduce the cutslope angle to 2:1.

## **12. Backfilling And Grading**

The 0.080 acres is graded flat and has compacted with road base material.

**13. Revegetation**

Revegetation measures on the cutslope were not observed during the inspection.

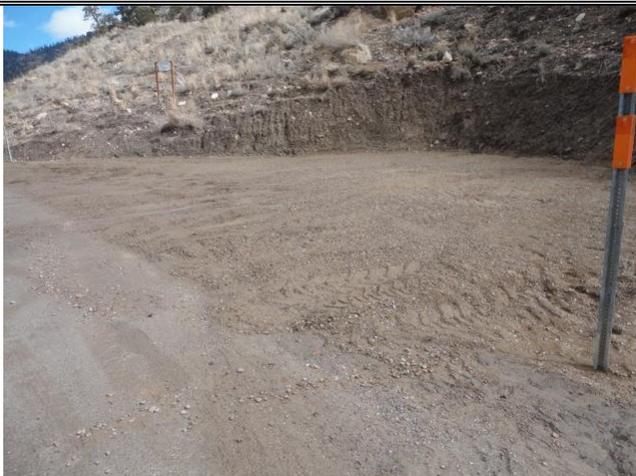
**16.b Roads: Drainage Controls**

An 18 inch culvert has been installed along the road for the length of the road turn around.

**21. Bonding and Insurance**

The bond release money will be available upon DOGM and OSM approval of Phase III Bond release.

**ATTACHMENT A – Photos Cottonwood Turn around**



**PHOTO 1**  
Cutslopes Turn around



**PHOTO 2**  
Wide Angle of Turn around



**PHOTO 3**  
Turn around



**PHOTO 4**  
Back of Leach Field

**ATTACHMENT A – Cottonwood Turn around**



**PHOTO 5**

Sign Stating Turn-A-Round



**PHOTO 6**

New culvert (outlet) for Road Drainage.



**PHOTO 7**

Overview of Turn-A-Around



**PHOTO 8**

Culvert Inlet Rocked