



April 18, 2019

Submitted Electronically

Utah Coal Program  
Utah Division of Oil, Gas, and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

**Subject: Amendment to Cottonwood/Wilberg Mine MRP, PacifiCorp, Cottonwood/Wilberg Mine C/015/0019, Emery County, Utah.**

PacifiCorp, by and through its wholly-owned subsidiary, Interwest Mining Company, "Interwest", as mine operator, hereby submits an amendment to amend the Cottonwood/Wilberg Mine MRP, to reflect hydrologic monitoring transitioning from post mine closure to reclamation, Annual Report reference:

- Volume 1, Part 2 Environmental Resources, Appendix A (replace entire section)
- Volume 9, Hydrologic Section Appendix A-2 (replace entire section)

PacifiCorp completed the final phase of reclamation on March 22, 2018. The final phase included complete land restoration of the Grimes Wash mine site, including removal of the sediment ponds and complete land restoration of the Old Waste Rock Storage Site.

This submittal includes revisions to Volume 1, Part 2, Appendix A and Volume 9 Hydrologic Section Appendix A-2, updating the Annual Report reference. The required C1/C2 forms are also included with this submittal.

If you have any questions concerning this submittal, please contact Dennis Oakley at 435-687-4825.

Sincerely,

Kenneth Fleck  
Geology and Environmental Affairs Manager

Cc: file

Encl. Volume 1, Part 2, Appendix A  
Volume 9 Hydrologic Section Appendix A-2  
C1/C2 Forms

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

Permittee: PacifiCorp

Mine: Wilberg/Cottonwood Mine

Permit Number: C/015/0019.

Title: Amendment to Cottonwood/Wilberg Mine MRP, PacifiCorp, Wilberg/Cottonwood Mine C/015/0019, Emery County, Utah.

Description, Include reason for application and timing required to implement:

Reflect hydrologic monitoring transitioning from post mine closure to reclamation, Annual Report reference

**Instructions:** If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes  No 1. Change in the size of the Permit Area? Acres: \_\_\_\_\_  increase  decrease.
- Yes  No 2. Is the application submitted as a result of a Division Order? DO# \_\_\_\_\_
- Yes  No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes  No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes  No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes  No 6. Does the application require or include public notice publication?
- Yes  No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes  No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes  No 9. Is the application submitted as a result of a Violation? NOV # \_\_\_\_\_
- Yes  No 10. Is the application submitted as a result of other laws or regulations or policies?  
*Explain:* \_\_\_\_\_
- Yes  No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes  No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes  No 13. Does the application require or include collection and reporting of any baseline information?
- Yes  No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes  No 15. Does the application require or include soil removal, storage or placement?
- Yes  No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes  No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes  No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes  No 19. Does the application require or include certified designs, maps or calculation?
- Yes  No 20. Does the application require or include subsidence control or monitoring?
- Yes  No 21. Have reclamation costs for bonding been provided?
- Yes  No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes  No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

**Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you.** (These numbers include a copy for the Price Field Office)

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.

Kenneth Fleck  
Print Name

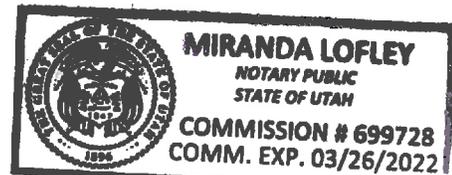
Kenneth S. Fleck  
Sign Name, Position, Date

Manager of Environmental Affairs APRIL 18, 2019

Subscribed and sworn to before me this 18<sup>th</sup> day of April, 2019

Miranda Lofley  
Notary Public

My commission Expires: 03-26, 2022  
Attest: State of Utah } } ss:  
County of Emery



<b>For Office Use Only:</b>     	<b>Assigned Tracking Number:</b>   	<b>Received by Oil, Gas &amp; Mining</b>   
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**PACIFICORP**  
**HYDROLOGIC MONITORING PROGRAM**  
**WILBERG/COTTONWOOD MINE**

**I. MONITORING LOCATIONS – WILBERG/COTTONWOOD MINE**

**A. Surface Water Hydrology** (for maps refer to Deer Creek, Wilberg/Cottonwood Mine: Volume 9 Map HM-1B)

**1. Cottonwood Creek Drainage System**

a. **Grimes Wash** (refer to Deer Creek and Wilberg/Cottonwood Mine: Volume 9 Map HM-1B)

(1) GWR01 - Right Fork:  
(Approximately 1500 feet upstream of reclaimed drainage) 550 feet North, 1500 feet West of the Southwest corner of Section 22, Township 17 South, Range 7 East.

(2) GWR02 - Left Fork:  
(Approximately 50 feet upstream of the reclaimed drainage) 200 feet South, 2350 feet East of the Northwest corner of Section 27, Township 17 South, Range 7 East.

(3) GWR03 - Below the mine:  
(Approximately 500 feet downstream of reclaimed drainage) 1770 feet South, 1820 feet West of the Northeast corner of Section 27, Township 17 South, Range 7 East.

**2. Reclamation Monitoring:** Following final reclamation, backfilling and grading monitoring will be conducted at points immediately above and below the reclaimed site.

**C. UPDES Monitoring Locations**

- a. **Wilberg/Cottonwood Mines**  
UPDES UT0022896  
001- Mine Discharge @ Cottonwood Canyon (TMA)

**PACIFICORP**  
**HYDROLOGIC MONITORING PROGRAM**  
**WILBERG/COTTONWOOD MINE**

**II. MONITORING SCHEDULE** (see enclosed monitoring schedules for operational, baseline, and reclamation monitoring)

**A. Field Measurements**

Field Measurements collected during quality sampling: Listed below are the sites which will be monitored by PacifiCorp - Energy West in accordance with the guidelines established by DOGM; i.e.

- Date and Time
- Flow
- pH
- Temperature
- Conductivity
- Dissolved oxygen (perennial streams only)

**Surface Monitoring**

Surface monitoring locations will be field monitored quarterly for all field parameters;

**1. Cottonwood Canyon Creek**

- a. Grimes Wash
  - (1) GWR01
  - (2) GWR02
  - (3) GWR03

**UPDES Monitoring**

**1. Wilberg/Cottonwood**

UPDES site 001, will be monitored as specified in the individual permits.

**Reclamation Monitoring**

Surface Water Resources: (see enclosed summary of operational, baseline, and reclamation monitoring schedules)

Surface monitoring locations will be field monitored monthly for flow and all field parameters quarterly until bond release.

UPDES: Sites will be monitored as specified in the individual permits.

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**HYDROLOGIC MONITORING PROGRAM**  
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**B. Quality Sampling** (Laboratory Measurements)

**1. Surface Water Hydrology:** Water samples will be collected and analyzed quarterly (one sample at low flow and high flow) during the first or second week of the quarter. Parameters analyzed are those listed in the DOGM Guidelines for Surface Water Quality (see Table 1-Surface Water Quality Parameter List). Quarterly sampling was initiated during March 1988 and will continue throughout the year; i.e., June, September, and December. Baseline analysis was performed in 2011 and will be repeated every five years there-after.

**a. Cottonwood Creek Drainage**

(1) Grimes Wash

- (a) GWR01
- (b) GWR02
- (c) GWR03

**Reclamation Monitoring - Surface Water Hydrology:** Water samples will be collected and analyzed quarterly (one sample at low flow and high flow) during the first or second week of the quarter. Parameters analyzed are those listed in the DOGM Guidelines for Surface Water Quality (see Table 1-Surface Water Quality Parameter List). Sampling will be conducted on a quarterly basis until bond release. Baseline analysis will be performed on the 5<sup>th</sup> and 9<sup>th</sup> years following reclamation. In no case will baseline sampling time frame exceed 5 years converting from operational to reclamation monitoring.

**2. UPDES Monitoring Sites**

**a. Wilberg/Cottonwood Mines**

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***III. ANNUAL REPORTS***

All hydrologic data collected regarding reclamation monitoring the hydrology of East Mountain will be summarized by the applicant in an annual Hydrologic Monitoring Report. Copies of the report will be submitted to the Utah State Division of Oil, Gas and Mining. In addition, any raw data collected will be submitted to the Utah State Division of Oil, Gas and Mining on a quarterly basis.

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