



June 11, 2019

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 Task #5926.

PacifiCorp, by and through its wholly-owned subsidiary, Interwest Mining Company, "Interwest", as mine operator, hereby submits clean copies of an amendment to 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)

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 C2 form is 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
C2 Form

RECEIVED

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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.

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C. UPDES Monitoring Locations

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a. Wilberg/Cottonwood Mines

UPDES UT0022896

001- Mine Discharge @ Cottonwood Canyon (TMA)

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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.

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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
WILBERG/COTTONWOOD MINE

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

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2. UPDES Monitoring Sites

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a. Wilberg/Cottonwood Mines

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

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III. ANNUAL REPORTS

All hydrologic data collected regarding reclamation monitoring will be submitted to the Utah State Division of Oil, Gas and Mining on a quarterly basis.

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