WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

April 3, 2018

TO: Internal File

THRU: Steve Christensen, Permit Supervisor

FROM: Keenan Storrar, Hydrologist

RE: Third Quarter 2017 Water Monitoring, PacifiCorp, Cottonwood/Wilberg Mine, C/015/0019, Task ID #5576

The Cottonwood/Wilberg Mine monitoring plan is described in Appendix A-2 of Volume 9 of the MRP. The site is currently in the Reclamation Sampling monitoring phase. There are no springs monitored at this site. In-mine monitoring discontinued when the mine was sealed May 10, 2001. Deer Creek and Cottonwood monitoring programs are found in Volume 9 appendices A-1 and A-2. They are in the same MRP volume because they fall within PacifiCorp's East Mountain PHC.

1. Were data submitted for all of the MRP required sites?

Streams YES ☒ NO ☐

UPDES YES ☒ NO ☐

2. Were all required parameters reported for each site?

Streams YES ☒ NO ☐

UPDES YES ☒ NO ☐

The UPDES outfall UT0022896-001 steadily discharged during Q3 2017. This site is perpetually fed by a fracture extending to the surface ~100-200 yards inby the sealed portal.

3. Were any irregularities found in the data?

Streams YES ☐ NO ☒

UPDES YES ☒ NO ☐

D-K was high in August and September. Overall, everything else looks fine.

4. On what date does the MRP require a five-year resampling of baseline water data.

The Division renewed the permit on July 6, 2009. Baseline analyses were performed in 2006, 2011, and 2016. Baseline analyses will be due in 2021.

5. Based on your review, what further actions, if any, do you recommend?

No further action is required at this time.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES ☐ NO ☒

7. Follow-up from last quarter, if necessary.

None.

8. Did the Mine Operator submit all missing and/or irregular data?

NA

O:\015019.CWW\Water Quality\Cottonwood_WQ17-3.docx