

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

September 29, 2017

TO: Internal File

THRU: Steve Christensen, Permit Supervisor 

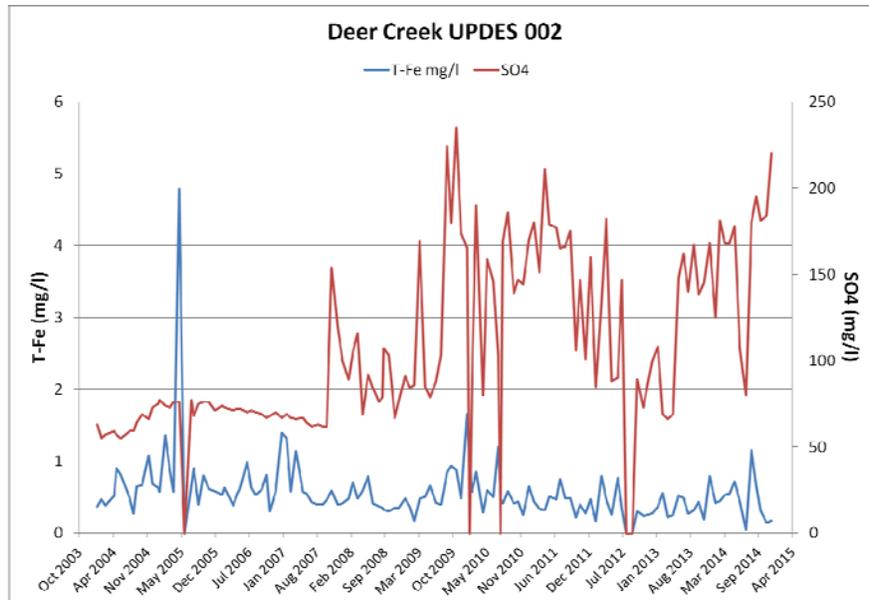
FROM: Keenan Storrar, Hydrologist 

RE: First Quarter 2017 Water Monitoring, PacifiCorp, Deer Creek Mine.
C/015/0018, Task ID #5471

The Deer Creek Mine monitoring plan is in Appendix A-1 of Volume 9 of the MRP. The mine closed January 2015 and is transitioning towards reclamation. The Permittee will pipe mine-water gravity discharge from Rilda Right portals to the Raw Water Holding Pond of the Huntington Power Plant.

- | | | | |
|----|---|---|--|
| 1. | Were data submitted for all of the MRP required sites? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| 2. | Were all required parameters reported for each site? | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| | Springs | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| | Streams | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| | Wells | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| | UPDES | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| 3. | Were any irregularities found in the data? | | |
| | Listed parameters are more than two standard deviations above the mean. | | |
| | Springs | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| | Streams | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| | Wells | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| | UPDES | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |

Mine water discharge at the Deer Creek portals UPDES outfall has ceased. Mine pools are developing in the Southern Deer Creek workings and the Mill Fork area workings. Once these areas fill to capacity they will gravity discharge at the Deer Creek and Rilda Right portals. Since there is no discharge from the Deer Creek mine portals the graph below is not applicable. Once gravity drainage reaches the Deer Creek and Rilda Right portals this graph should be reinitiated.



Wells

YES NO

The Deer Creek Waste Rock well has been dropping since 2006 (following a small rise in 2004-2005). These changes are probably from factors other than disposal of waste rock at this site: a similar drop in water level is seen at WCWR1 at the Cottonwood/Wilberg Mine Waste Rock Disposal Site.

4. **On what date does the MRP require a five-year resampling of baseline water data.**
 Baseline analyses were performed in 2001, 2006, 2011, and 2016, repeating every 5 years. The next baseline analyses will be conducted in 2021.
5. **Based on your review, what further actions, if any, do you recommend?**
 There is no indication of trends or extremes in any of the parameter values. No further action recommended 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 the missing and/or irregular data (datum)?**
 NA.