

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

March 24, 2020

TO: Internal File

THRU: Steve Christensen, Coal Program Manager



FROM: Amanda Daniels, Environmental Scientist



RE: 2019 3rd Quarter Water Monitoring, Price River Terminal, LLC. Wellington Preparation Plant, C/007/0012, Task ID #6040

Water-monitoring requirements are in Sections 7.23 and 7.31.2 through 7.31.22 of the MRP.

1. On what date does the MRP require a five-year re-sampling of baseline water data.

Baseline parameters are collected in the year preceding permit renewal. Baseline collection to place during this quarter (3rd quarter of 2019).

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

All required monitoring sites were sampled and requisite data obtained.

Streams and Ponds

YES NO

The surface water monitoring plan requires sampling of nine surface water sites (SW-1, SW-2, SW-2A, SW-3, SW-4, SW-5, SW-6, SW-7 and SW-8). The required water quality parameters are provided in Table 7.31.2-4 with the exception of SW-2. Flow is the only data collected at monitoring site SW-2. Four of the sites are retention ponds (SW-5, SW-6, SW-7 and SW-8).

Data was submitted for all surface water monitoring sites that produced a measurable flow. Of the nine surface water monitoring sites, SW-1 and SW-2 produced a measurable flow.

Wells

YES NO

The Permittee is required to monitor 16 well sites. GW-1, GW-3, GW-4, GW-6, GW-7, GW-8, GW-9, GW-9B, GW-10, GW-13, GW-14, GW-15A, GW-15B, GW-16, and GW-17 for the parameters in Table 7.31.2-3, and to measure depth only at GW-2.

Data was submitted for all of the required monitoring well sites. Monitoring wells GW-3

was reported as dry.

UPDES

YES NO

Six UPDES permitted outfalls at the Wellington Preparation Plant are monitored monthly: #UTG040010-003, 004, 005, 006, 007, and 008. None of the UPDES discharge points reported a discharge this quarter.

3. Were all required parameters reported for each site?

Streams and Ponds

YES NO

Wells

YES NO

UPDES

YES NO

4. Were any irregularities found in the data?

The following sites reported parameters more than two standard deviations from the mean:

Wells

GW1: Conductivity
SO4
GW-13: Nitrate
GW-6: Bicarbonate
GW-7: Dissolved Iron
Dissolved Calcium
Dissolved Magnesium
Dissolved Potassium
GW-8: Dissolved Selenium

The high Nitrates found in well GW-13 was found as part of the expanded baseline testing, this value will be investigated further with the Permittee.

Elevated total selenium concentrations (T-Se) were reported in 3rd and 4th quarters for 2017. Upon discussions with the Permittee, the lab that receives the Wellington Prep Plant samples has undergone a significant amount of turnover in recent months. The Permittee was directed to have the lab re-analyze the samples for 4th quarter 2017. However; the lab had already discarded the samples and was unable to do so. The Permittee indicated that the samples obtained for 1st quarter 2018 were also showing elevated concentrations of T-Se. In the case of the 1st quarter 2018 samples, the lab was able to re-run the samples.

The Permittee reported to the Division that the results of which indicated non-detect levels for T-Se. The Permittee has since changed laboratories for the water quality analysis and indicated that the results for 2nd quarter 2018 also produced T-Se concentrations below the detection limit.

...No elevated T-Se concentrations were reported from any (i.e. ground and surface water) of the water monitoring sites for 2nd, 3rd, 4th quarter 2018, and 1st, 2nd or 3rd quarter 2019.

5. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements?

YES NO

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

NA

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

As the Permittee has changed the laboratories for water quality analysis, continued monitoring and evaluation of T-Se concentrations will fortify the hypothesis that lab error produced the elevated readings in previous quarters. As indicated previously, no samples reported elevated T-Se concentrations for 2nd, 3rd, 4th quarter 2018, and 1st, 2nd or 3rd quarter 2019.