

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

June 23rd, 2015

TO: Internal File
THRU: Daron Haddock, Coal Program Manager
FROM: Steve Christensen, Environmental Scientist



RE: 2015 4th Quarter Water Monitoring (WQ14-4), Price River Terminal, LLC., Wellington Preparation Plant, C/007/0012, Task ID #4753

The Wellington Preparation Plant is currently in temporary cessation of coal mining or reclamation operations. However; trans-loading of oil is currently being conducted at the site by Price River Terminal, LLC (the Permittee). Water-monitoring requirements are in Sections 7.23 and 7.31.2 through 7.31.22, and Tables 7.24-2 and 7.24-5 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. The next scheduled permit renewal for the Wellington Preparation Plant is November 30, 2014. Historically, baseline sampling has occurred during the 1st quarter of the permit renewal year. However; the Division and the Permittee have discussed that data obtained during late 2nd quarter or 3rd quarter would be more representative of baseline conditions. As a result, the Permittee collected baseline data in 3rd quarter of 2014. The next baseline collection event would be in the 3rd quarter of 2019.

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

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 7.24.5 with the exception of SW-2. Flow is the only data collected at monitoring site SW-2. Surface water monitoring sites are no longer monitored for BTEX-N. The reduction in monitoring at these sites was the result of inactivity at the site (Task ID #4253). Four of the sites are retention ponds (SW-5, SW-6, SW-7 and SW-8).

Water quality data was obtained from three sites: SW-1, SW-2 and SW-2A. The remaining monitoring locations reported no flow.

Wells

YES NO

The Permittee is required to analyze samples quarterly from 16 well sites. GW-12 is no longer required for monitoring (since 1st quarter 2012. Mid-term). 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 7.24-2, and to measure depth only at GW-2.

Monitoring well GW-12 is no longer an actively monitored site. It was dropped during the most recent mid-term review (Task ID #4253). It was last sampled during the 4th quarter of 2012.

Data was submitted for all of the required monitoring well sites. Monitoring well GW-3, did not have enough water to collect a sample (i.e. they were reported dry).

UPDES

YES NO

Six UPDES permitted outfalls at the Wellington Preparation Plant are monitored monthly: #UTG040010-003, 004, 005, 006, 007, and 008. Outfall 007 discharged on December 6th, 2015. The remaining outfalls did not report a discharge this quarter. The required UPDES water equality parameters were sampled for and provided to the Division.

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?

Streams and Ponds

YES NO

Surface water monitoring site SW-1 had reported an elevated chloride (Cl) concentration outside of two standard deviations from the mean in the 1st quarter of 2014 and slightly elevated nitrate levels the 3rd quarter of 2014. No irregularities were reported for SW-1 this quarter.

Surface water monitoring site SW-2A had produced several parameters slightly outside of two standard deviations from the mean during the 1st quarter of 2014: dissolved calcium (D-Ca) 265.9 ppm, dissolved magnesium (D-Mg) 164.12 ppm, Cl 113 ppm, sulfate (SO4) 1,725 ppm, total hardness (T-Hardns) 1,340 ppm, total dissolved solids (TDS) 3,096 ppm and total anions (T-Anis) of 45.81 milliequivalents per liter (meq/l). All of the concentrations for the aforementioned parameters were back to within two standard deviations from the in the 2nd quarter of 2014. An elevated specific conductance concentration was reported during the 3rd

quarter of 2014. No irregularities were reported for SW-2A this quarter.

Wells

YES NO

Monitoring well GW-1 reported slightly elevated concentrations for D-K, Cl and TDS this quarter.

Monitoring well GW-10 reported a slightly elevated concentration for total selenium. The reported concentration of 60 ug/l is 3 standard deviations from the mean of 21.47 ug/l.

Monitoring well GW-13 reported a slight reduction in D-Na and an increase in concentration for D-K.

Monitoring well GW-14 reported elevated concentrations outside of two standard deviations from the mean for D-K, T-Alk, CaCO₃ and T-Se.

Monitoring well GW-3 has not had a measurable water level since June of 2009.

Elevated concentrations for Cl and T-Alkalinity were reported for monitoring well GW-15A.

Numerous parameters reported reduced concentrations for monitoring well GW-16. D-Mg, D-Na, SO₄, T-Hardness and bicarbonate were outside of two standard deviations from the mean.

Monitoring well GW-4 had previously reported a decrease in dissolved calcium (D-Ca), dissolved magnesium (D-Mg) and Total Anions (T-Anis) in the 1st quarter of 2014. A reduction in bicarbonate (CaCO₃) was during the 2nd quarter of 2014. A reduced concentration for dissolved calcium has now been reported for the last two quarters (3rd and 4th quarter of 2014).

A slightly elevated concentration of CaCO₃ was reported for monitoring well GW-6.

An increase in total selenium was reported for monitoring well GW-7. The average T-Se value for this monitoring well is 23.29 ug/L. A concentration of 50 ug/L was reported this quarter.

A reduction in D-Na and CaCO₃ was reported for monitoring well GW-9.

Monitoring well GW-9B reported a reduction in concentration for D-Mg, dissolved sodium (D-Na) and total cations (T-Cats) during the 3rd quarter of 2014. A continued reduction in D-Na was produced this quarter. Additionally, a reduced concentration for D-Na was reported.

UPDES

YES NO

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?

NA