OGMCOAL - Wellington Prep Plan First Quarter 2011 Water Quality Report

From: April Abate
To: Patrick Collins
Date: 10/19/2011 11:33 AM
Subject: Wellington Prep Plan First Quarter 2011 Water Quality Report
CC: OGMCOAL@utah.gov
Attachments: 09012011.pdf; April Abate.vcf

Hello Patrick,

Here is the 1st Quarter 2011 Water Quality Report for your reading pleasure.

Thanks very much,
April

April A. Abate
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114-5801
T: 801.538.5214
M: 801.232.1339
Starting Tuesday, September 6, 2011, our agency hours will be
8am-5pm, Monday-Friday.

#3764
OK

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

September 1, 2011

TO: Internal File

THRU: Steve Christensen, Permit Supervisor

FROM: April A. Abate, Environmental Scientist III

RE: 2011 First Quarter Water Monitoring, Nevada Electric Investment Corporation, Wellington Preparation Plant, C/007/0012, Task ID #3764

The Wellington Preparation Plant is currently in temporary cessation. No mining or coal processing activities currently take place there. The site is currently in negotiations to transfer the permit from Nevada Electric Investment Company to Wellington Industries LLC with the ultimate goal of commercially developing the property. 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.

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

Streams and Ponds YES ☒ NO ☐

The Permittee is required to analyze samples from streams at SW-1, SW-2A, SW-3, and SW-4 and from ponds at SW-5, SW-6, SW-7, and SW-8 for the parameters in Table 7.24-5, and to measure flow only at SW-2. In addition, samples from SW-4 and SW-5 are to also be analyzed for benzene, toluene, ethylbenzene, xylene, and naphthalene (BTEXN) and propylene glycol. Monitoring is done quarterly.

During the first quarter 2011, samples were collected from SW-1 and SW-2A. Flow only was measured from SW-2. None of the other monitoring locations reported flow. None of the pond samples reported any water during this monitoring period.

Wells YES ☒ NO ☐

The Permittee is required to analyze samples quarterly from GW-1, GW-3, GW-4, GW-6,

GW-7, GW-8, GW-9, GW-9B, GW-10, GW-12, 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.

Wells GW-3, GW-13 and GW-17 were not sampled. GW-3 was reported as dry and GW-13 and GW-17 were gauged for water level but reported as not having enough water in it to monitor. These three wells have consistently been reported as dry or not producing enough water to collect samples and are not meeting the objectives of the groundwater sampling program.

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 sites reported flow during the first quarter 2011.

3. Were all required parameters reported for each site?

Streams and Ponds YES ☒ NO ☐

Wells YES ☒ NO ☐

UPDES YES ☐ NO ☐

Not applicable

4. Were any irregularities found in the data?

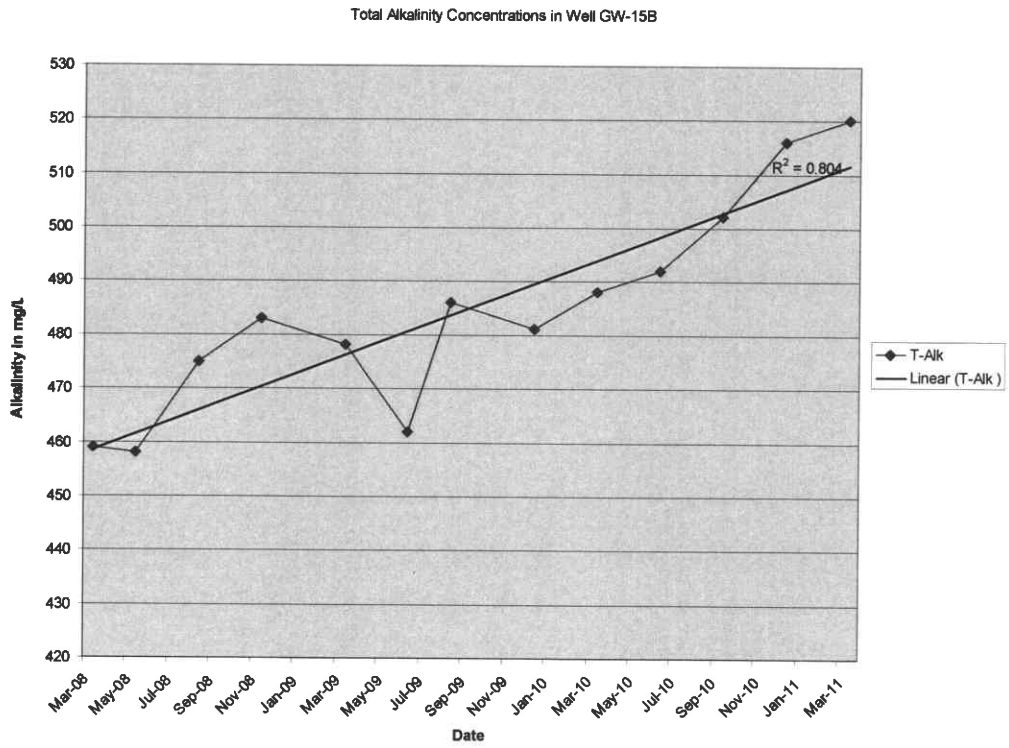
Streams and Ponds YES ☐ NO ☒

Wells YES ☒ NO ☐

Parameters that were flagged as being outside two standard deviations were the typical parameters associated with hard water and salt. In general, these were the groundwater samples that have historically shown indicators of poor groundwater quality. The groundwater quality in the area is considered poor given the abundant sedimentary rock and the high concentrations of total dissolved solids (TDS) found along this reach of the Price River. Groundwater monitoring wells GW-15A and GW-15B were intended to be representative of alluvial groundwater from upgradient areas of the permit boundary.

GW-15A: conductivity (both lab and field measurements) were higher than usual and the reliability check of ratio between conductivity: TDS were outside the normally acceptable range percentages of 0.55 – 0.75. Dissolved magnesium, hardness, TDS, sodium, chloride, and sulfate were all at 3-year highest concentrations.

GW-15B: bicarbonate/alkalinity have been showing an upward trend based on the past 3 years of data (see chart below).



UPDES YES ☐ NO ☐

Not Applicable. No discharges were reported from any of the UPDES monitoring locations.

5. Did the Permittee make a timely submittal of all data, including initially missing data, and satisfactorily explain irregular data? YES ☒ NO ☐

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

The Permittee has discussed making some modifications to wells that do not meet the objectives of the Probable Hydrologic Consequences (PHC) section of the Wellington water monitoring program. The Division would like to request a status update as to the progress of any modifications to the groundwater monitoring wells.

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

The Division made the following recommendations last quarter regarding several wells that do not appear to be producing adequate water quality data:

- Monitoring wells GW-12 is frequently inundated with surface water, GW-3 is usually dry and GW-13 and GW-17 typically do not yield enough water to sample. Since these wells are not performing as they were intended, the quality of the data when provided is questionable. The Division recommends that these wells be reevaluated for their usefulness and suggests properly abandoning wells that do not appear to be meeting the objectives of the PHC and current water monitoring plan in the Wellington Mining and Reclamation plan.

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

Please contact the Division with the current status of the permit transfer and any modifications planned for the water monitoring program.

O:\007012.WEL\Water Quality\WG3764.doc