

Atlantic Richfield Company

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June 7, 2013

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Jere Johnson
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

Subject: May 2013 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this May 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

May 2013 Activities

Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- With the exception of the Pumpback Well System (PWS) Evaporation Pond, all wind dancers operated during May. The wind dancer at PW-6 continued to be evaluated after the installation of a sub-meter/data recorder. Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds with the exception of the VLT Pond, as directed by EPA, with start/stop times adjusted to reflect the timing of sunrise and sunset. Birdgard towers 'A', 'B' and 'C' around the PWS and Lined Evaporation Pond were in operation during May.
- No measurable water in the PWS Evaporation Pond cells was observed in May.
- Arimetco FMS pond levels: Phase 1 Pond = 3.46 feet; FMS Evaporation Pond = 8.84 feet; VLT Pond = 11.82 feet; Slot 2 Pond = 11.23 feet. Approximately 105,000 gallons of solution were transferred from the VLT pond to the FMS Evaporation Pond from testing a new VLT Pond pump, which was installed by EPA on May 21. See attached monitoring data.
- ARC assisted EPA with the installation of the flow meter on the new VLT pump discharge line on May 24. EPA submitted the *VLT Pond Repair Construction, Operation and Maintenance Report* for ARC's review.
- Approximately 197,501 gallons of solution were pumped from the leak detectors including 11,672 gallons from SD2 near the Slot Pond and approximately 185,473 gallons from VLTD1 at the VLT Pond (see attached monitoring data). A total of approximately 1,041,104 gallons of solution has been pumped from the leak detectors since January 1. See attached monitoring data.

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May 2013 Activities - Continued

Site Security and O&M Activities - Continued

- Attended a meeting and Site visit on May 6 to review FMS alternatives. Transmitted review comments to EPA on May 31 regarding the FMS capacity study, which was prepared in April by SRK Consulting on behalf of Singatse Peak Services LLC (SPS).
- Desert Engineering performed semi-annual road grading activities on May 9, 10 and 13.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained May 28-31.
- A pit lake water elevation of 4231.13 feet above mean sea level (amsl) was recorded on May 29, 2013 from the pressure transducer, an increase of 0.14 feet since April 22, 2013. The pit lake elevation has risen 1.80 feet since May 29, 2012.
- There were no changes to the Bottled Water Program in May 2013.
- One residence (DW-35) requested to be removed from the domestic well sampling program.
- Completed the compilation of 4Q 2012 groundwater monitoring data, and transmitted the 2012 Annual Groundwater Monitoring Report (GMR) on May 9. The GMR included recommendations to: 1) reduce the analyte list; 2) reduce the frequency of sample collection at select monitor wells; and 3) eliminate monthly water level monitoring from 33 piezometers associated with PWS wells.
- Completed responses to EPA comments transmitted via e-mail on March 27 on the 2011 Annual Groundwater Monitoring Report, which were attached to the 2012 Annual GMR.
- Prepared for and performed the 2Q 2013 groundwater monitoring event, which occurred from May 5-22 (a total of 288 samples were collected). A quality control audit of groundwater sampling procedures was performed on May 8 by Environmental Standards, Inc. (ESI) during the event.
- Continued the compilation of 1Q 2013 groundwater monitoring and domestic well data for inclusion in future quarterly reports.
- Continued coordination and tracking of hydrologic tracer data from 2Q 2012 samples, and the development of maps and cross-sections that present the analytical results.
- The second round of geophysical and video logging activities for Initial Bedrock Characterization Activities occurred from May 29 through the end of the month. Post well development video logging was performed in wells WW-4, WW-10, WW-23 and W2B.
- Continued modifications to the Revised Groundwater (OU-1) RI Work Plan based on EPA comments, including Data Quality Objectives (DQOs) for the Work Plan.
- Continued development of the Additional Monitor Well Work Plan.
- Completed responses to EPA comments on the draft Groundwater Flow Model Work Plan, and transmitted the responses to comments and the revised Work Plan (Revision 1) on May 21.
- Evaluated the results for Phase II field activities for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Investigation, and planned additional field work. Initiated the compilation of field and analytical data for inclusion in a data summary report (DSR).
- Continued development of the Field Sampling and Analysis Plan (FSAP) required by the Process Areas (OU-3) RI Work Plan for the step-out soil sampling program. To assist in finalizing the FSAP, completed the development of, and transmitted to EPA on May 28: 1) cross-sections that show angle drilling penetration depths beneath the former Acid Plan (buried beneath the Arimetco Phase III heap leach pad (HLP) and the inactive vat leach tanks in the Process Areas; and 2) selenium (Se) concentration maps that show the distribution of Se in alluvial and bedrock flow systems around the Process Areas.
- Routine database management activities and support of Site investigations and reports.

Planned June/July 2013 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities. ARC will resume bird mitigation activities at the VLT Pond in June.
- Complete the transition to ARC for VLT Pond operations based on EPA's confirmation of O&M activities related to recent FMS improvements.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Prepare for, and conduct, the 2Q 2013 domestic well monitoring event.
- Continue the compilation of 1Q 2013 groundwater and domestic well data, and transmit the 1Q 2013 monitoring reports.
- Initiate the Preliminary Bedrock Well Investigation Data Summary Report (DSR), and collect groundwater grab samples from W-10.
- Upon receipt of the complete set of hydrologic tracer data from the May 2012 sampling event, continue to summarize the data in a technical memo to be transmitted to EPA.
- Continue to modify the revised Site-Wide Groundwater (OU-1) RI Work Plan and prepare responses to EPA comments.
- Complete and transmit the draft Additional Monitor Well Work Plan for EPA review. Respond to any questions or comments regarding the Work Plan.
- Attend a meeting with EPA on June 6 to discuss future characterization and remedial activities for the Evaporation Ponds.
- Complete remaining Phase II geophysical and soil investigations associated with sub-surface utilities in the Process Areas, and continue to compile the data. Complete and transmit a DSR for the investigation if all geophysical data are available.
- Complete and transmit the draft FSAP for the OU-3 RI Work Plan for EPA review. Participate in a conference call on June 20 to discuss FSAP elements with EPA and NDEP.
- Review data quality objectives for the Wabuska Drain (OU-7) RI Work Plan when received.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the May 2013 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Harry Ball, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill – via electronic mail
Virgil Arellano, Lyon County Commissioner – via electronic mail
Rob Loveberg, Lyon County Planning Department – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairman Stevens, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairwoman McFalls, WRPT – via electronic mail
Tad Williams, WRPT – via electronic mail
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Marc Ferries, Atlantic Richfield Company – via electronic mail
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