

Atlantic Richfield Company

Jack Oman
Project Manager

4 Centerpointe Drive
LaPalma, CA. 90623-1066
(714) 228-6774 office
(714) 670-5195 fax
jack.oman@bp.com

July 5, 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: June 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 June 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

June 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 were in operation including the unit at the Unlined Evaporation Pond (UEP). Completed an evaluation of the 230-volt wind dancer motor for bird mitigation at the PWS Pond. 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 accommodate daylight hours. Birdgard towers 'A', 'B' and 'C' around the PWS and Lined Evaporation Pond were not in operation during June in accordance with approved operating procedures.
- No measurable water in the PWS Evaporation Pond cells was observed in June.
- Arimetco FMS pond levels: Phase 1 Pond = 3.50 feet; FMS Evaporation Pond = 8.86 feet; VLT Pond = 10.01 feet; Slot 2 Pond = 11.24 feet. Approximately 543,019 gallons of solution were transferred from the VLT pond to the FMS Evaporation Pond, with no additional fluid transfers. See attached monitoring data.
- A test of the new VLT pump was performed by pumping solutions from the VLT Pond to the top of the VLT heap leach pad (HLP). Approximately 33,494 gallons of solution were pumped, and the valves and lines were inspected, with no problem areas identified.
- Approximately 106,058 gallons of solution were pumped from the leak detectors including 10,518 gallons from SD2 near the Slot Pond and approximately 95,216 gallons from VLTD1 at the VLT Pond (see attached monitoring data). A total of approximately 1,147,162 gallons of solution has been pumped from the leak detectors since January 1. See attached monitoring data.

A BP affiliated company



June 2013 Activities - Continued

Site Security and O&M Activities - Continued

- Transmitted water balance information and preliminary design concepts and capital costs to EPA and the Nevada Division of Environmental Protection (NDEP) on June 27 for short- and long-term capacity for the Arimetco FMS. Participated in conference calls on June 26 and 28, 2013 with EPA and NDEP to discuss short-term contingency measures and long-term approaches to increase FMS capacity.
- Continued to review EPA's VLT Pond Repair Construction, Operation and Maintenance Report.
- Desert Engineering initiated modifications to the wash pad, which was constructed for past removal actions, to accommodate future Site characterization activities (e.g., monitor well drilling, Process Areas and Evaporation Ponds investigations). The work occurred on June 26-28.
- Initiated the plan to perform dust suppression activities on the Lined and Unlined Evaporation Ponds, which is scheduled for mid-July.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained June 25-27.
- A pit lake water elevation of 4230.14 feet amsl was recorded on June 25, 2013 from the pressure transducer, an increase of less than 0.01 feet since May 25, 2013. The pit lake elevation has risen 1.81 feet since June 25, 2012.
- A new residence (DW-147) was added to the bottled water program. A new residence (DW-122) became eligible for the program and was notified, but has not yet responded. Although eligible based on 1Q 2013 and previous results, the owner of DW-183 continued to decline participation in the bottled water program pending the results from future quarterly monitoring.
- One residence (DW-35) requested to be removed from the domestic well sampling program.
- Prepared for and performed the 2Q 2013 domestic well monitoring event, which occurred June 10-12 (a total of 57 domestic wells were sampled).
- A signed access agreement was received for DW-120 (this well was included in the 2Q 2013 sampling event). No other changes to the domestic well sampling program occurred.
- Completed and transmitted the 1Q 2013 domestic well monitoring report on June 20.
- Continued the compilation of 1Q 2013 groundwater monitor well data, and initiated the compilation of 2Q 2013 data.
- 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. Initiated the preparation of the Draft Hydrologic Tracer Data Summary Report (DSR).
- Initiated geochemical modeling of 2Q 2012 groundwater quality data to support an interpretation of hydrologic tracer data and potential support of future fate and transport analysis.
- Coordinated with Hazen Labs to contract for future aquifer solids testing.
- Continued modifications to the Revised Groundwater (OU-1) RI Work Plan based on EPA comments, including Data Quality Objectives (DQOs) for the Work Plan.
- Completed and transmitted the Draft Additional Monitor Well Work Plan dated June 26, 2013.
- Continued field activities for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Investigation as follows: 1) June 11-14, Spectrum marked anomalies from previous EM-31/-61 surveys and traced/located underground utilities; and 2) June 17-21, Desert Engineering excavated anomalies at the Solution Tanks, Truck Wash/Paint Shop; the former Garage/Filling Station #5, and a portion of the Sulfide Plant. Continued to evaluate Phase II field activities and compile field and analytical data for inclusion in the 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. Participated in conference calls on June 20 and 26, 2013 with EPA and NDEP to discuss select FSAP elements.
- Attended a meeting with EPA on June 6 to discuss future characterization and remedial activities for the Evaporation Ponds.
- Routine database management activities and support of Site investigations and reports.

Planned July/August 2013 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Develop conceptual layouts for extending 240-volt power to the PWS Pond for the wind dancer.
- Complete the transition to ARC for VLT Pond operations based on EPA's confirmation of O&M activities, and baseline conditions, related to recent FMS improvements.
- Participate in a conference call with EPA and NDEP on July 11 to discuss long-term FMS capacity alternatives.
- Perform dust suppression activities on the Lined and Unlined Evaporation Ponds, scheduled for mid-July. Provide EPA with a summary of these activities.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 1Q 2013 groundwater monitoring report.
- Continue to compile data for inclusion in the 2Q 2013 groundwater and domestic well monitoring reports.
- Continue to prepare the Preliminary Bedrock Well Investigation DSR.
- Continue to summarize hydrologic tracer data from the May 2012 sampling event in a technical memo for transmittal to EPA.
- Continue to modify the revised Site-Wide Groundwater (OU-1) RI Work Plan and prepare responses to EPA comments.
- Upon receipt of review comments on the Draft Additional Monitor Well Work Plan, respond to EPA comments, modify the Work Plan and initiate FSAP activities.
- Continue geochemical modeling activities in support an interpretation of hydrologic tracer data and potential support of future fate and transport analysis.
- Continue aquifer solids testing activities.
- Continue to develop a Work Plan for supplemental characterization activities for the Evaporation Ponds and the northern portion of the Calcine Ditch.
- 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 when all geophysical and analytical data become available.
- Complete and transmit the draft FSAP for the OU-3 RI Work Plan for EPA review.
- 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 June 2013 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

Ms. Jere Johnson
Yerington Monthly Report
July 5, 2013
Page 4 of 4

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
Ron Halsey, Atlantic Richfield Company – via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Marc Ferries, Atlantic Richfield Company – via electronic mail
Brian Johnson, Atlantic Richfield Company – via electronic mail
John Batchelder, EnviroSolve – via electronic mail
Jim Chatham, Atlantic Richfield Company – via electronic mail
Rich Curley, Curley and Associates, LLC – via electronic mail
Bill Duffy, Davis Graham & Stubbs – via electronic mail
Tom Patton, Singatse Peak Services, LLP – via electronic mail
Steve Dischler, Singatse Peak Services, LLP – via electronic mail
George Eliopoulos, Singatse Peak Services, LLP – via electronic mail
Taurus Massey, Singatse Peak Services, LLP – via electronic mail
David Peri, Peri and Sons – via electronic mail
Ken Greene, CH2M Hill – via electronic mail
Victor Early, Tetra Tech – via electronic mail
Colin Lee, Tetra Tech – via electronic mail
Peggy Pauly, YCAG – via electronic mail
Lyon County Library System Central