

# Atlantic Richfield Company

**Jack Oman**  
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May 3, 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: April 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 April 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

### **April 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.
- The Wind Dancer at the Slot Pond remained in service, and the Wind Dancers at the Pumpback Well System (PWS) Pond remained partially out of service pending the supply of electrical power. An operational test of the new system commenced on April 22 to complete the evaluation of a new 230-volt wind dancer blower located near PW-6 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 April. Bird identification refresher training was held on April 11.
- No measurable water in the PWS Evaporation Pond cells was observed by the end of April.
- Arimetco FMS pond levels: Phase 1 Pond = 3.47 feet; FMS Evaporation Pond = 8.78 feet; VLT Pond = 11.56 feet; Slot 2 Pond = 10.97 feet. No solution transfers occurred in April.
- Completed and tested repairs to the wind-damaged Phase III-4X ditch on April 29.
- Approximately 230,798 gallons of solution were pumped from the leak detectors including 13,305 gallons from SD2 near the Slot Pond and approximately 217,000 gallons from VLTD1 at the VLT Pond (see attached monitoring data). A total of approximately 843,603 gallons of solution has been pumped from the leak detectors since January 1.
- Initiated repairs to the Slot Pond pump discharge pipe with Munson Pumps as the sub-contractor.
- Provided review comments to Singatse Peak Services LLC (SPS) for the FMS capacity study, which was prepared by SRK Consulting.

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## **April 2013 Activities - Continued**

### Site Characterization Activities

- Monthly groundwater elevation measurements were obtained April 22-24.
- A pit lake water elevation of 4229.99 feet above mean sea level (amsl) was recorded on April 22, 2013 from the pressure transducer, an increase of 0.34 feet since March 25, 2013. The pit lake elevation has risen 1.95 feet since March 25, 2012.
- No changes to the domestic well sampling program.
- Two residences (DW-35 and DW-183) declined participation in the bottled water program and two residences (DW-196 and DW-200) accepted participation in the bottled water program.
- Continued the compilation of 4Q 2012 groundwater monitoring data for inclusion in the annual report, which will include recommendations to: 1) reduce the list of analytes; 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.
- Initiated responses to EPA comments transmitted via e-mail on March 27 on the 2011 Annual Groundwater Monitoring Report.
- Initiated 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.
- Continued Initial Bedrock Characterization field activities including down hole video logging and geophysical logging for temperature, fluid conductivity, caliper and natural gamma in wells WW-3, WW-4, WW-10, WW-23 and W2B. The well rehabilitation phase of work, which commenced on April 11 and concluded on April 27, consisted of brushing and swabbing of the screen interval to remove any mineral buildup or growth that may have been occluding the screen perforations or slots (after a minimum of 48 hours, air lifting equipment was used to remove sediment/debris from the bottom of the wells).
- Continued modifications to the Revised Groundwater (OU-1) RI Work Plan based on EPA comments. Continued communications with EPA technical staff and subcontractor (CH2M Hill) on the Data Quality Objectives (DQOs) for the Work Plan. Continued development of the Additional Monitor Well Work Plan, which included a review of groundwater level fluctuations due to the pumping by high-capacity agricultural wells in the OU-1 Study Area.
- Continued the preparation of responses to EPA comments on the Groundwater Flow Model Work Plan, including a discussion with EPA technical staff.
- Initiated discussions with the Yerington Paiute Tribe (YPT) and their groundwater consultant on conducting an aquifer test of a to-be-selected YPT production well. Conducted a site visit to the well planned for testing on April 9.
- Evaluated water level and chemical data from YPT monitor wells regarding usability of the data.
- Continued Phase II field activities with sub-contractors Spectrum Geophysics and Desert Engineering (DE) for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Investigation. Spectrum completed their second and final mobilization on April 10. DE completed trenching and soil sampling support on April 15. Spectrum continued to analyze the geophysical data for anomalous features for additional trenching and soil sampling.
- Continued development of the Field Sampling and Analysis Plan (FSAP) required by the Process Areas (OU-3) RI Work Plan for the step-out sampling program. Attended a Site visit on April 9 with EPA and CH2M Hill to assess soil boring locations to be included in the FSAP. Per EPA request, initiated the development of cross sections beneath select OU-3 features. Discussed sampling methods for inactive well WW-10 with EPA technical staff.
- Routine database management activities and support of Site investigations and reports.

## Planned May/June 2013 Activities

### Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Complete the operational test of the new Wind Dancer bird deterrent system and return it to routine service.

### Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Complete and transmit the 2012 Annual Groundwater Monitoring Report, which will incorporate select modifications suggested by EPA comments on the 2011 Annual Groundwater Monitoring Report. The transmittal letter for the 2012 Annual Groundwater Monitoring Report will include ARC's responses to comments.
- Prepare for, and conduct, the 2Q 2013 groundwater monitoring and domestic well monitoring events.
- Continue the compilation of 1Q 2013 groundwater and domestic well data, and transmit the 1Q 2013 monitoring reports.
- Complete the Preliminary Bedrock Well field investigation in May by performing post-well development video logging. Initiate the Preliminary Bedrock Well Investigation Data Summary Report (DSR).
- Upon receipt of the complete set of hydrologic tracer data from the May 2012 sampling event, expected by June 1, 2013, continue work on the technical memo that summarizes the data.
- Continue to modify the revised Site-Wide Groundwater (OU-1) RI Work Plan Review based on EPA and YPT comments. Complete and transmit the Additional Monitor Well Work Plan for EPA review.
- Complete responses to EPA comments dated March 29 on the Groundwater Modeling Work Plan, and transmit the revised Work Plan.
- Complete remaining Phase II geophysical and soil investigations associated with sub-surface utilities in the Process Areas, and transmit a DSR for the investigations.
- 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](mailto:jack.oman@bp.com) if you have any questions or comments about the April 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  
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