

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

May 6, 2010

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Nadia Hollan Burke
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-8-2
San Francisco, CA 94105

Subject: April 2010 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study, EPA Docket No. 9-2007-0005; Administrative Order on Consent, EPA Docket No. 09-2009-0010

Dear Ms. Hollan Burke:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared the following monthly report for RI/FS and removal action activities at the Yerington Mine Site (Site) during April 2010.

April 2010 Activities

Site O&M and Security

- Continued routine Site O&M, security and bird deterrent activities including operation of the propane cannons for the Arimetco ponds (with the exception of the VLT Pond, as directed by EPA). The bird guard towers are active due to meteoric water remaining in the ponds.
- Replaced the battery at Bird Gard tower C, and installed and began monitoring the evaporation pan located near PW6.
- PWS evaporation pond levels: North Cell 0.0 feet; Middle Cell = 0.0 feet; South Cell 0.0 feet. The volume of water conveyed to the Middle Cell during PWS well rehabilitation and the start of aquifer testing, plus incident precipitation, was insufficient to measure.
- Arimetco heap leach fluid management system (FMS): 1) total estimated gallons transferred from VLTSP Pond to the FMS Evaporation Pond = approximately 0 gallons; slot sediment pond (SSP) to the FMS Evaporation Pond = approximately 0 gallons. Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Pond levels: Phase 1 Pond = 3.5 feet; Evaporation Pond = 6.75 feet; VLT Pond = 15.0 feet; Slot 2 Pond = 16.5 feet. Provided EPA with observed current conditions and a projection of salt precipitate accumulation in the new EPA (4-acre) evaporation pond.
- The Site received approximately 0.73 inches of precipitation during the month of April, and total precipitation for 2010 has been approximately 2.48 inches.
- Repositioned and secured with sandbags the FMS transmission line at the VLT pond to lessen the movement of the line caused by temperature fluctuations.
- Completed the bridge inspection for the Burch Drive overpass to determine its load capacity and safety relative to the transite pipe removal action, and future remedial activities.
- Completed road grading activities, and repaired hinges on main gate damaged by high winds.
- Completed installation of GFI outlets at the pumpback wells to support flow monitoring during the aquifer test. Relocated the electrical service at the administration building and EPA trailer.



April 2010 Activities - Continued

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained April 20-22.
- A pit lake water elevation of 4221.503 feet amsl was recorded on April 26, 2010 from the pressure transducer, an increase of 0.435 feet since March 24, 2010. The pit lake elevation has risen 3.34 feet since April 26, 2009.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Initiated the compilation of monitoring data for the 1Q 2010 Groundwater Monitoring Report (GMR) and the 1Q 2010 Domestic Well Monitoring Report (DWMR). Continued seeking access agreements for the domestic well sampling program.
- Continued testing of flow monitoring equipment, and installed pressure transducers/data loggers in the pumpback wells and piezometers, for the aquifer tests. Surveyed new piezometers.
- Initiated PWS aquifer testing on April 12. Due to pump, flow meter and valve issues, the first pair of tests were interrupted or invalid. These issues were corrected by ordering a new low-flow pump and new check valves, and repairing a short circuit in the flow meter wiring. Successful aquifer tests for PW-9 (1.4 gpm) and PW-11 (0.7 gpm) were completed the week of April 26.
- Continued ground clearance, community outreach and pursuing outstanding access agreements for the monitor well program.
- Boart Longyear mobilized to the Site on April 5 and initiated borehole drilling and zonal sampling with a sonic core rig at B/W-1 on April 7. This borehole reached a depth of approximately 550 feet bgs and 7 zonal samples were collected by the end of the April.
- A second sonic core rig mobilized to the Site on April 12 and started the drilling and installation of a bedrock monitor well (screen interval at 260-280 feet bgs) at the BW/6 location on April 14. The second sonic core rig then set up on B/W-22 and drilled to approximately 155 feet, with no zonal samples collected (unsaturated conditions to that depth), by the end of April.
- Discussed outstanding CSM issues with EPA on April 5.
- Conducted field surveys of potential source areas, and initiated the development of a Cover Materials Work Plan. Participated in a conference call with EPA on this Work Plan on April 26.
- Discussed revisions to the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan with EPA contractor CH2M Hill on April 28, and developed a preliminary schedule for submittal of the revised work plan in July.
- Uploaded EDDs for quarterly and monthly sampling and performed database maintenance.
- Continued Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.

AOC Removal Actions

- Continued Phase 2 of the Electrical Hazards Removal Action (substation isolation and new service phase) by grading the area and trenching transformer connections.
- Submitted responses to EPA comments on the draft Transite Pipe Removal Action Plan. Attended a meeting (April 8) and a Site visit (April 13) with EPA, NDEP and Nevada Department of Health and Human Services (NDHHS) to discuss outstanding issues associated with the Transite Pipe Removal Action. Based on the Site visit, ARC developed a Draft Supplemental Scale Sampling and Analysis Plan, submitted to EPA on April 23, to further determine the radiological character of observed localized scale occurrences within individual pipe sections and potential occurrences within long runs of connected pipe sections.
- Pending further discussions with EPA on the interim covers for the Thumb Pond and Sub-Area A, the elements of the Evaporation Ponds Removal Action, identified revised VLT borrow source areas for the covers.
- Discussed the XRF field characterization approach with EPA on April 23 in support of the use of VLT materials for the interim covers for the Thumb Pond and Sub-Area A, and agreed on the number of sample locations presented in the XRF Work Plan dated November 13, 2009.

April 2010 Activities - Continued

Site Issues

- Non-Routine pumping continues from the Slot Pond leak detection sump at a rate of approximately 1.5 gallons per minute.

Planned May/June 2010 Activities

Site Characterization

- Continue Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.
- Continue groundwater elevation and pit lake level monitoring. Continue meteorological monitoring at AM-6.
- Continue to compile laboratory data from the 1Q 2010 monitor well and domestic well sampling events. Submit the 1Q2010 GMR and DWMR to EPA. Provide analytical results for distribution to individual well owners.
- Provide updates to EPA for domestic well access agreements.
- Continue PWS aquifer test program.
- Continue borehole drilling, zonal sampling and monitor well installations pursuant to the revised 2010 Monitor Well Installation Work Plan, including locations on agricultural fields adjacent to the Site. Add a third sonic core rig. As required, review progress with EPA on obtaining property owner access agreements for the 2010 drilling program and implement work plan modifications requested by EPA.
- Implement revisions to the Draft Process Areas Vadose Zone Work Plan.
- Develop and submit the Cover Materials Work Plan following a May 5 on-Site meeting with EPA.

AOC Removal Actions

- Continue routine O&M, site security, and bird deterrent activities.
- Continue flow monitoring and water balance calculations for the Arimetco FMS.
- If accessible, implement surveying, sampling and testing in the PWS evaporation pond north cell. Continue to develop North Cell Reline Project Work Plan.
- Implement the Supplemental Scale Sampling and Analysis Plan in support of the Transite Pipe Removal Action. Continue to meet with EPA to discuss outstanding issues associated with the removal action.
- Continue to work on Phase 2 (installation of new power service to replace the Site substation) of the Electrical Hazards Removal Action.
- Continue to develop the draft Cover Materials Work Plan.
- Discuss with EPA the planned Evaporation Pond Removal Action activities for interim covers on the Thumb Pond and Sub-Area A. Implement the XRF Work Plan in the VLT borrow source area per the November 2009 Work Plan.
- Discuss outstanding issues associated with the Process Areas Radiological Characterization Work Plan - Revision 1, and attend a meeting and Site visit on May 5, with EPA. Subsequently, initiate a revised work plan pending agreement on the scope of characterization activities.
- Upon receipt of revised EPA comments, provide responses to comments to the Draft Site O&M Plan and a revised O&M Plan.
- Attend May 4 Stakeholder's meeting.

If you have any questions or comments, please feel free to contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com.

Ms. Nadia Hollan Burke
Yerington Monthly Report
May 6, 2010
Page 4 of 4

Sincerely,



Jack Oman
Project Manager

cc: Dave Seter, EPA – via electronic mail
Jacquelyn Hayes, EPA – via electronic mail
Svetlana Zenkin, EPA – via electronic mail
Roberta Bland, EPA – via electronic mail
Claire Trombadore, EPA – via electronic mail
Jere Johnson, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Joe Sawyer, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill, Lyon County Commissioner – via electronic mail
Dennis Stark, Lyon County Manager – via electronic mail
Richard Faber, Lyon County Facilities Engineering – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Justin Whitesides, YPT – via electronic mail
Chairman Emm, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Sheila Fleming, Ridolfi, Inc. – via electronic mail
Chairman Sammaripa, WRPT – via electronic mail
Roxanne Ellingson, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company - via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Roy Thun, Atlantic Richfield Company – via electronic mail
Robin Bullock, Atlantic Richfield Company – via electronic mail
Don Pratt, 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
David Peri, Peri and Sons – via electronic mail
Ken Greene, CH2M Hill – via electronic mail
Victor Early, Tetra Tech – via electronic mail
Peggy Pauley, YCAG – via electronic mail
Lyon County Library System Central