

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

June 7, 2010

CERTIFIED – RETURN RECEIPT REQUESTED

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

Subject: May 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 May 2010.

May 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 31,000 gallons; slot sediment pond (SSP) to the FMS Evaporation Pond = approximately 48,000 gallons. Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Pond levels: Phase 1 Pond = 3.5 feet; Evaporation Pond = 6.50 feet; VLT Pond = 14.75 feet; Slot 2 Pond = 16.5 feet.
- The Site received approximately 0.19 inches of precipitation during the month of May, and total precipitation for 2010 has been approximately 2.67 inches.
- Fawcett Electric completed an evaluation of security lighting, and will recommend upgrades.
- Repaired and strengthened the fence adjacent to the electric lay down yard.



May 2010 Activities - Continued

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained May 25 - 27.
- A pit lake water elevation of 4221.639 feet above mean sea level (amsl) was recorded on May 27, 2010 from the pressure transducer, an increase of 0.136 feet since April 26, 2010. The pit lake elevation has risen 3.17 feet since May 27, 2009.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Submitted the Human Health Risk Assessment Report for the Inhalation Pathway on May 17.
- Continued 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 PWS aquifer testing. To date, aquifer tests have been completed for PWS-1, PWS-2, PWS-3, PWS-5, PWS-6, PWS-7, PWS-8, PWS-9, PWS-10 and PWS-11. Initiated analyses of aquifer test data.
- Completed ground clearance activities for the 2010 monitor well program, and a third sonic core rig mobilized to the Site on May 18. The new rig is "hands free" (i.e., the drill crew does not need to physically handle any drill steel) with a mechanical arm that picks the rods and casing up from a horizontal position and attaches them to the drill head via remote control. Borehole characterization activities were completed at B/W-37 and B/W-1B, and a new borehole was started at the B/W-37 location. The following monitor wells were installed: B/W-37B and B/W-1B.
- Initiated discussions with EPA regarding aquifer solids testing procedures and developed a technical memorandum to be submitted to EPA for review.
- Submitted a revised Ag Fields Work Plan, including more specific information for the hydraulic characterization of the Peri agricultural well, on May 17.
- Continued to discuss revisions to the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan with EPA contractor CH2M Hill and develop the revised Work Plan, which will include subsurface delineation of underground utilities and dry wells.
- Uploaded EDDs for quarterly and monthly sampling and performed database maintenance.
- Attended a Stakeholders Meeting on May 4.
- Continued Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.

AOC Removal Actions

- Continued field work on Phase 2 of the Electrical Hazards Removal Action (substation isolation and removal phase). Fawcett Electric and Desert Engineering personnel took delivery of and installed the new transformers and switch gear. Coordination with NV Energy personnel to make final connections (by mid-June).
- In coordination with the Phase 2 of the Electrical Hazards Removal Action, removed the electrical power and power panel from the administration building. The power panel was re-mounted on the power pole adjacent to the EPA temporary trailer offices, as requested by EPA.
- Continued discussions with EPA about the Supplemental Scale Sampling and Analysis Plan for the Transite Pipe Removal Action Plan, and added additional sample locations.
- Attended a Site visit and meeting with EPA on May 3 to discuss elements of the Draft Cover Materials Work Plan, and continued development of this work plan.
- Attended a Site visit and meeting with EPA on May 5 to discuss the to-be-revised Process Areas Radiological Materials Characterization Work Plan, and developed the approach to a revised sampling and analysis plan.

May 2010 Activities - Continued

AOC Removal Actions - Continued

- Discussed revisions to the Draft Implementation Work Plan for the Evaporation Ponds Removal Action with EPA, and developed a revised preliminary schedule for this removal action. Completed the field activities associated with the VLT XRF Characterization Work Plan in support of the use of VLT materials for the interim covers for the Thumb Pond and Sub-Area A. Conducted geotechnical testing of VLT materials in new borrow areas for the removal action. A survey was performed of the centerline of the revised haul road alignment for the Sub Area A removal action.
- EPA and Environmental Quality Management (EQM) were onsite conducting removal action activities related to, 1) the demolition of the administration building and 2) the FMS. Based on the absence of the past surface expression of the leak adjacent to the Slot Pond, the preliminary indication is that the leak was repaired by EQM. Brown and Caldwell on-Site security personnel attended the EPA/EQM safety tailgate meetings to share daily operational safety information.

Site Issues

- Non-Routine pumping continued from the Slot Pond leak detection sump at a rate of approximately 1.5 gallons per minute.
- Appropriate notifications and reports were submitted to USFWS in response to the deaths of two birds at the: 1) Arimetco/EPA 4-acre FMS pond (May 24-25); and 2) on the berm between the south and middle cells of the PWS pond, not associated with any water in the pond cells (May 26). Site personnel made all possible efforts to haze the birds away from the Site areas.

Planned June/July 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 1Q 2010 groundwater monitoring and domestic well monitoring reports to EPA.
- Conduct a WEBEX for the project database on June 2.
- Provide updates to EPA for domestic well access agreements.
- Perform 2Q 2010 domestic well and groundwater monitor well monitoring activities, including EPA split-sampling of domestic wells, in June.
- The final PWS aquifer test will be conducted on PWS-4 will begin on June 7, and the analyses of aquifer parameters will be completed by the end of June.
- Continue borehole drilling, zonal sampling and monitor well installations pursuant to the revised 2010 Monitor Well and Ag Fields Work Plans. 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.
- Attend a groundwater technical meeting on June 24.
- Submit the revised Process Areas Vadose Zone and Groundwater Characterization Work Plan by July 15.

Planned June/July 2010 Activities - Continued

AOC Removal Actions

- Continue routine O&M, site security, and bird deterrent activities.
- Continue flow monitoring and water balance calculations for the Arimetco FMS.
- A detailed topographic survey of the north cell of the PWS evaporation pond will be completed in June in support of the relining project. Geotechnical and geochemical characterization of sub-grade materials (mineral salt precipitates and native materials) will begin as soon as equipment can access the cell (late June or early July).
- Perform the field activities for the Supplemental Scale Sampling and Analysis Plan (SAP) in support of the Transite Pipe Removal Action during the first week in June. Submit a revised Removal Action Plan based on the results of the SAP by July 9. Continue to meet with EPA to discuss outstanding issues associated with the removal action.
- Submit the Draft Cover Materials Work Plan by June 25.
- Complete Phase 2 (installation of new power service to replace the Site substation) of the Electrical Hazards Removal Action.
- Submit the revised Evaporation Pond Removal Action Implementation Work Plan for interim covers on the Thumb Pond and Sub-Area A by June 18. Submit the VLT XRF Characterization Data Summary Report in late July.
- Continue to discuss outstanding issues associated with the Process Areas Radiological Characterization Work Plan. If appropriate, submit 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.

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 Blank, 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
Steve Dischler, 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
Colin Lee, Tetra Tech – via electronic mail
Peggy Pauley, YCAG – via electronic mail
Lyon County Library System Central