

Atlantic Richfield Company

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June 8, 2011

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 2011 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 monthly report for RI/FS and removal action activities at the Yerington Mine Site (Site) during May 2011.

May 2011 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras installed at various locations around the main gate, Arimetco gate and at the entrances to buildings indicated no activity of concern. Site personnel observed footprints on the northeast corner of the sulfide tailings on May 9 (a person apparently crossed the fence and walked around the area).
- BirdGard® towers remained active around the pumpback well system (PWS) evaporation pond. A second "Wind Dancer" was installed on the berm between the north and middle cells of the PWS evaporation pond. The first "Wind Dancer" remains on the berm between the north and middle cells of the Lined Evaporation Pond (locations will vary periodically). A new cannon was installed at the southwest corner of the FMS Evaporation Pond (EPA 4-acre Pond). The former northeast location was impacted by spray from the pond during high wind events. A second cannon was also purchased as a back-up. Cannons were operated at Arimetco ponds except the VLT Pond, as directed by EPA.
- No ponded water was present in the PWS evaporation pond cells: North Cell = 0.0 feet; Middle Cell = 0.00 feet; South Cell 0.00 feet.
- Arimetco heap leach fluid management system (FMS) pond levels (see attachment): Phase 1 Pond = 4.50 feet; FMS Pond = 7.00 feet; VLT Pond = 7.00 feet; Slot 2 Pond = 13.50 feet. Approximately 302,546 and 177,790 gallons of drain-down solution, were measured at the VLT Pond and Slot Pond weirs, respectively. Approximately 208,916 gallons of solution were transferred from the VLT Sediment Pond (VLTSP) to the FMS Pond in May. No solutions were transferred from the Slot Sediment Pond (SSP) or the Phase 1 Pond to the FMS Pond. Approximately 31,684 gallons of solution was pumped from the leak detectors (approximately 180,801 gallons of solution has been pumped from the leak detectors since January 1, 2011). A leaking gasket on the Slot Pond 12-inch line near the Phase 1 pond was noted and repaired.

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May 2011 Activities - Continued

Other Site Activities

- Quaterra personnel worked in their core storage area.
- Tom Dunkelman (EPA) and Joe Sawyer (NDEP) met with B.V. Nevada and Quaterra personnel on May 5. B.V. Nevada continued demolition and salvage activities, including the demolition of the former Arimetco plant. Joe Sawyer (NDEP) met with B.V. Nevada personnel on May 19 to discuss the remaining pipe to be salvaged.
- Arcadis and EnviroSolve personnel conducted a Site visit on May 6 to evaluate potential improvements to the bird mitigation program. Site personnel participated in a refresher for bird identification.
- Sierra Electronics personnel conducted a Site visit on May 26 to evaluate locations for a radio repeater tower to improve on-Site communications.
- Desert Engineering assisted with the installation of concrete barriers to prevent vehicles from entering the FMS Pond.
- Fawcett Electric installed new light switches at the Sample Support Building.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained May 23-26. Surface water sampling of the Walker River and West Campbell Ditch was conducted on May 25, and the final surface water sampling event was performed pursuant to Section 3.3 of the Agricultural Fields Characterization Work Plan - Revision 2 (completing a 12-month period of such sampling).
- A pit lake water elevation of 4225.142 feet amsl was recorded on May 26 from the pressure transducer, an increase of 0.218 feet since April 26, 2011. The pit lake level has risen 3.53 feet since May 26, 2010.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- One residence (DW-161) was added to the Bottled Water Program during May.
- One residence (DW-183) was added to the domestic well sampling program during May.
- Completed the re-development of 18 monitor wells (1 alluvial and 17 bedrock wells) that were installed as part of the 2010 Monitor Well Installation and Ag Fields investigations.
- Participated in a teleconference call with EPA and others on May 16 to discuss: 1) the 2011 on-Site monitor well installation program; and 2) groundwater modeling associated with the RI/FS for the Site-Wide Groundwater Operable Unit. Pursuant to EPA correspondence dated May 19, 2011, developed a revised scope of work and solicited bids from drilling companies to perform the 2011 on-Site monitor well installation program that incorporates modifications requested by EPA. Initiated planning for pre-drilling activities associated with the 2011 on-Site monitor well installation program.
- Continued the compilation of field and laboratory data for inclusion in the Data Summary Report for the 2010 Well Installation and Ag Field Characterization investigations. Continued the evaluation of available hydrologic tracer data obtained pursuant to the 2010 Monitor Well Installation and Ag Field Characterization field investigations, along with historic data. Continued the compilation of data for the Background Groundwater Quality Assessment for inclusion in a future Background Investigation Work Plan, as requested by EPA.
- Conducted a walk-through of the Process Areas with EPA and Quaterra personnel on May 18 to discuss the next phase (Phase 2) of geophysical and intrusive investigations associated with potential dry well locations and sub-surface utilities. Participated in a follow-up conference call with CH2M Hill (EPA contractor) to discuss the Phase 2 activities.
- Continued routine database management activities.
- Continued Site wildlife surveys, data management and wildlife observation reports.

May 2011 Activities - Continued

AOC Removal Actions

- 2Q 2011 sampling of the FMS ponds was performed on May 23 and 24.
- Further discussions with EPA regarding comments on the Dust Suppression Plan (DSP) for Inactive Evaporation Ponds were conducted. Pursuant to EPA correspondence dated May 17, 2011, the preparation of responses to comments and revised DSP (Revision 2) was deferred to allow EPA additional time to confirm the type of polymer to be used for dust suppression.
- Continued the preparation of the 2010 Annual FMS O&M Report.
- Continued the compilation of data for inclusion in the Sub-Area A Sub-Surface Investigation Data Summary Report, performed as part of the Sub-Area A interim cover removal action.

Planned June/July 2011 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Pending further discussions with EPA, repair the Phase III and IV HLP peripheral ditch liners that have been wind-damaged.
- Complete limited road grading on the main Site roads.
- Complete the installation of a door and insulation in the Sample Support Building.
- Evaluate the results of the Site radio communication survey and, as appropriate, install equipment to improve Site communications during simultaneous operations.
- Complete the design drawings for water and sewer service to the new on-Site field office trailer to be located at the site of the former Administration Building.
- Complete an agreement with Weed Heights Development for utility services for the planned office trailer and the Sample Support Building.

Site Characterization

- Continue Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.
- Continue groundwater elevation, pit lake water level monitoring and meteorological monitoring.
- Transmit the 1Q 2011 monitor well and domestic well monitoring reports. Initiate the compilation of data for inclusion in the 2Q 2011 monitor well and domestic well monitoring reports.
- Continue to compile data and transmit the data summary report for the 2010 Monitor Well and Ag Fields Characterization programs.
- Continue the evaluation and compilation of available hydrogeologic and groundwater chemical data in Mason Valley, and hydrologic tracer data, in support of the Background Groundwater Quality Assessment. These data and identified data gaps will provide the basis for a future Background Investigation Work Plan.
- Solicited bids from qualified drilling contractors and, pending EPA approval, initiate the 2011 on-Site monitor well program, to include drilling and lithologic logging, zonal sampling and the installation of up to 48 groundwater monitor wells.
- Attend a teleconference on June 3 to discuss groundwater model inputs and related topics.
- Support aquifer solids testing activities, as required.
- Pending EPA approval of the Phase 2 scope of work, initiate this next phase of geophysical surveys and related sub-surface utility investigations in the Process Areas.
- Initiate the copying of Site archives, under the supervision of CH2M Hill (EPA contractor).
- Initiate the aerial mapping/photogrammetry survey to improve on-Site and off-Site base maps for RI/FS purposes (schedule dependent on aerial survey consultant availability).

Planned June/July 2011 Activities - Continued

AOC Removal Actions

- Install a V-Notch Weir inside the 14-inch diameter HDPE pipe from the Phase III Mega Sumps, and purchase and install a Radar Level Sensor above the weir to record the depth of flow in the pipe (to calculate flow rates).
- Pending EPA approval, implement the application of dust suppressant on the former Anaconda Evaporation Ponds and select portions of the Process Areas that were subjected to the removal of radiological soils.
- Continue to compile characterization data for inclusion in the Sub-Area A Sub-Surface Investigation Data Summary Report, and initiate vadose zone modeling.

If you have any questions or comments about the May 2011 monthly report, please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Jacquelyn Hayes, EPA – via electronic mail
Roberta Blank, 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 – via electronic mail
Virgil Arellano, Lyon County Commissioner – 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
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairwoman McFalls, WRPT – via electronic mail
Vicky Moyle, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Steve Dischler, Atlantic Richfield Company – via electronic mail
Marc Ferries, 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
Bill Duffy, Davis Graham & Stubbs – via electronic mail
Tom Patton, Singatse Peak Services, LLP – via electronic mail
George Eliopoulos, 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
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