

Atlantic Richfield Company

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April 5, 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: March 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 March 2010.

March 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.
- Longer days and spring migration required increased hours to provide adequate coverage for bird mitigation requirements. ARC initiated a revised bird mitigation patrol schedule that includes a ten-minute stop at each of three designated observation points, three times per day. Conducted a bird identification workshop (conducted by Carolyn Meyers, PhD; Arcadis) on March 23 to calibrate observation procedures to enhance data and reporting consistency.
- PWS evaporation pond levels: North Cell 0.25 feet; Middle Cell = 0.29 feet; South Cell 0.42 feet. Continued to compile the conceptual design information for the re-lining of the north cell of the PWS evaporation pond.
- 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 = 14.5 feet; Slot 2 Pond = 16.5 feet.
- Road conditions on the Site have improved due to warmer weather, and muddy areas no longer present driving difficulties. Semi-annual road grading activities from March 11-26 improved driving conditions. The Site received approximately 0.3 inches of precipitation during the month, and total precipitation for 2010 has been approximately 1.75 inches.
- New bollards to protect the transformer at the VLT MMC were installed and painted. New bollards and piezometer well heads were painted safety yellow. As needed, reflector posts throughout the Site were painted and replaced to improve visibility during inclement weather.

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March 2010 Activities - Continued

Site O&M and Security - Continued

- The fence east of the former electric laydown yard was repaired to limit the potential for additional break-ins at that location.
- Developed a security and lighting plan for potential trespass entry onto the Site from Burch Drive.
- Repaired the FMS transmission line over the Slot HLP.
- Tested the performance of the pump and pipelines for the conveyance of fluids from the VLT pond to the top of the VLT heap.
- Developed a bridge inspection plan for the Burch Drive overpass to determine its load capacity and safety relative to the transite pipe removal action, and future remedial activities.
- Performed road improvements east of the PWS to accommodate monitor well access and the road between the LEP and UEP to improve safe driving conditions.

Other Site Activities

- CH2MHill personnel were on Site March 1-4 to conduct pond and monitor well sampling activities.
- The Yerington Community Action Group (YCAG) was on Site March 5 for a tour led by EPA.
- Yellow Jacket Drilling continued piezometer installation and development activities at the PWS through March 24.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained March 29-30.
- A pit lake water elevation of 4,221.04 feet amsl was recorded on March 24, 2010 from the pressure transducer, an increase of 0.41 feet since February 23, 2010. The pit lake elevation has risen 3.18 feet since March 24, 2009.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Continued work on the Human Health Risk Assessment for the Inhalation Pathway.
- Submitted the 2009 Annual Groundwater Monitoring Report.
- Responded to EPA March 9, 2010 comments on the Domestic Well Monitoring Plan (DWMP; QAPP Addendum) - Revision 1 dated February 12, 2009, and submitted the DWMP - Revision 2 dated March 17. Corresponded with EPA regarding additional minor edits to the DWMP.
- Continued follow-up phone calls and resident visits to obtain access agreements for the domestic well sampling program. As of the end of the month, 141 signed access agreements have been returned by domestic well owners.
- Conducted the 1Q 2010 domestic well sampling program (138 wells) from March 15-31, with EPA performing split sampling on 30 domestic wells.
- Conducted the 1Q 2010 Site-wide monitor well monitoring program (102 wells) from February 28 to March 12.
- Continued to review planned monitor well locations in the field, and followed up via phone calls and resident visits to obtain access agreements for the 2010 borehole characterization and monitor well installation program.
- Attended a meeting with EPA, NDEP and others on March 4 to discuss 2010 groundwater investigations including additional investigations on the Peri agricultural fields located adjacent to the Site. Continued pre-field activities (e.g., site access prep, ground clearance and community outreach). Selected Boart Longyear to perform the drilling and sampling activities for the 2010 groundwater investigations.
- Submitted the 2010 Monitor Well Work Plan - Revision 1, and the Draft Agricultural Fields Work Plan, to EPA on March 30. Conducted a core logging workshop on March 24 to provide consistent data and reporting during 2010 field activities by geologists working on the drill rigs.

March 2010 Activities - Continued

Site Characterization- Continued

- Completed piezometer installation and development activities in support of the PWS Characterization Work Plan Addendum aquifer tests. Obtained and tested flow monitoring equipment, and obtained pressure transducers/data loggers, for the aquifer tests.
- Received updated EPA and YPT comments from EPA on March 16 pertaining to the conceptual site model (CSM), and initiated responses to comments.
- Discussed options for the approach to develop a revised Process Areas RI Work Plan during the March 4 meeting with EPA.
- 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

- Attended a technical meeting with EPA on March 4 to discuss interim cover materials for the evaporation ponds removal action. Received subsequent correspondence from EPA regarding this removal action, and initiated the development of a draft Cover Materials Work Plan requested by EPA. Requested an extension for the submittal of the draft Cover Materials Work Plan pending further discussions with EPA.
- Completed Phase 1b of the Electrical Hazards Removal Action, which included the trenching and burial of electrical cables currently on the ground surface. Initiated Phase 2 of the Electrical Hazards Removal Action (substation isolation and removal phase) by completing all design plans required by NV Energy. Selected contractors to perform the Phase 2 activities.
- Received comments from EPA on March 18 on the Process Areas Radiological Materials Characterization Work Plan. Requested an extension for the submittal of a revised work plan on March 23 pending further discussions with EPA on the approach to the characterization activities.

Site Issues

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

Planned April/May 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.
- Compile field and laboratory data, as available, from 1Q 2010 monitor well and domestic well sampling events. Provide updates to EPA for domestic well access agreements.
- Survey installed piezometers, install pressure transducers/data loggers in the piezometers and pumpback wells, install pumps in pumpback wells, and initiate aquifer testing of the pumpback wells in early April.
- Continue communications with property owners who have not returned access agreements for the 2010 monitor well program. Provide updates to EPA for these access agreements.
- Initiate borehole drilling, zonal sampling and monitor well installations pursuant to the revised 2010 Monitor Well Installation Work Plan, including locations on the agricultural fields adjacent to the Site. Implement work plan modifications as requested by EPA.
- Continue to discuss technical elements of the revised Site-Wide Groundwater RI Work Plan with EPA, as requested.

Planned April/May 2010 Activities – Continued

Site Characterization - Continued

- Review with EPA progress on achieving access agreements with property owners within the planned drilling program and community outreach efforts.
- Continue to discuss technical elements of the Draft Process Areas Vadose Zone Work Plan and Draft Process Areas RI Work Plan with EPA, as requested.
- Discuss the approach to updating the CSM with EPA and others on April 5.

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. Develop North Cell Reline Project Work Plan.
- Discuss the Draft Transite Pipe Removal Action Plan (RAP) with EPA on April 8 and, as appropriate, prepare the final RAP for implementation of the removal action.
- Implement Phase 2 (installation of new power service to replace the Site substation) of the Electrical Hazards Removal Action.
- Discuss with EPA the requested draft Cover Materials Work Plan and select Evaporation Pond Removal Action activities, including the implementation of the XRF Work Plan in the VLT borrow source area.
- Discuss comments received in March on the Process Areas Radiological Characterization Work Plan - Revision 1 with EPA, and 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.

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
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
Chairman Sammaripa, WRPT – via electronic mail
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