

Atlantic Richfield Company

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October 2, 2009

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: September 2009 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), please note the following monthly status report for Atlantic Richfield Company (ARC) RI/FS and removal action activities at the Yerington Mine Site (Site) during September 2009.

September 2009 Activities

Operations, Maintenance and Site 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. Investigated, documented and repaired the vandalized Bird Tower C, and installed locks on the device to prevent a recurrence.
- The pumpback well system (PWS) planned 1-year shutdown for hydrogeologic characterization continued. PWS evaporation pond levels: North Cell <1.00 feet (minimum staff gauge level recorded April 16, 2009); Middle Cell = 0 feet; South Cell < 0.1 feet. Uncorrected pan evaporation for the month of September was 11.40 inches; the Site received 0.0 inches of precipitation.
- Arimetco heap leach fluid management system (FMS): 1) total estimated gallons transferred from VLTSP Pond to Evaporation Pond = 131,000 gallons; slot sediment pond (SSP) to Evaporation Pond = 121,800 gallons; SSP Pond to VLT Pond = 72,000 gallons. Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Pond levels: Phase 1 Pond = <1.0 foot; Evaporation Pond = 5 feet; VLT Pond = 2.0 feet; Slot 2 Pond = 14.25 feet. Additional flow (about 72,000 gallons) was temporarily directed to the VLT pond to re-position the transfer pump discharge line. The re-positioned transfer pump discharge line was secured for continued operation.



September 2009 Activities - Continued

Operations, Maintenance and Site Security – Continued

- Installed and commissioned the replacement pump at the SSP. Cleaned and repaired the suction line check valve. The discharge pressure readings indicate the new SSP pump is operating at approximately 200 gpm.
- Graded the primary access roads on the Site.
- Provided the new safety orientation for Site visitors and workers.

Other Site Activities

- Ilka Dinkelman (CH2MHill) was on Site with WDC personnel the week of September 1 for sampling five new CH2MHill monitor wells, which were subsequently surveyed.
- Jim Harvey and James Harter (USFWS) inspected the Site during the week of September 7. Dietrick McGinnis and Justin Whitesides (YPT) were on Site on September 8 to observe this activity.
- Roger Fawcett of Fawcett Electric was on Site September 11 to wire the slot pond pump.
- CH2MHill and Clean Harbors were on Site September 15 to clean up the residual drill cuttings from the 5 wells CH2MHill drilled. The cuttings were removed to the Slot HLP adjacent to EPA's bio project.
- Mark Willow and Patrick Lassiter (SRK) were on Site September 17 to update a Phase1 ESA for Quatterra.
- Tom Dunkelman (EPA) and Lisa Monroe (LM&A) were on Site September 21 for a demolition assessment of the administration building.
- Black Eagle was on site September 23 for geotechnical sampling in Sub Area A and recently accessible areas of the Anaconda lined evaporation pond, supported by Desert Engineering.
- Tri-State surveyors were on Site September 24 surveying Sub Area A.
- Nadia Holland-Burke, Jacquelyn Hayes and Sue Haud (EPA) toured the Site on September 24.
- Attended a "Community Meeting on Groundwater" hosted by EPA in Yerington on September 24.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained on September 28-30.
- A pit lake water elevation of 4218.57 feet amsl was recorded on September 24 from the pressure transducer, a decrease of 0.08 feet over a 30 day period (since August 24). This is the first recorded decrease in pit lake water level since installation of the transducer. The pit lake elevation has risen 2.72 feet since September 24, 2008.
- Conducted the 3Q 2009 groundwater monitoring event between September 13-28, including domestic wells along Locust Drive and Luzier Lane. Submitted analytical results from 2Q 2009 domestic well sampling to EPA for subsequent distribution to the well owners.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Submitted the Air Quality Monitoring Program Data Summary Report (AQM DSR) to EPA on September 3, 2009.
- Submitted the final Human Health Risk Assessment Work Plan for the Inhalation Pathway (HHRA Work Plan) to EPA on September 4. Provided a list of chemicals without inhalation toxicity factors to EPA for input into the HHRA.
- Completed the first two steps in developing list of plants potentially used by the Yerington and Walker River Paiute Tribes for tribal lifeways practices, to be included in a future CSM revision.
- Continued compilation of groundwater monitoring data, including monitor and domestic wells, and submitted the 2Q 2009 Groundwater Monitoring Report to EPA on September 24, 2009.

September 2009 Activities - Continued

Site Characterization - Continued

- Continued the evaluation of groundwater data generated from the Shallow Zone Characterization Work Plan. Submitted the Shallow Zone Data Summary Report to EPA on September 15, 2009.
- Continued the evaluation of groundwater data generated from the PWS Characterization Work Plan. Submitted the PWS Characterization Work Plan Addendum to EPA on September 23, 2009. The Addendum describes well rehabilitation, piezometer drilling, aquifer testing and analysis of pumpback well hydraulics and capture zones.
- Initiated the Process Areas Vadose Zone Characterization Work Plan, which will serve as the next phase of the remedial investigation for OU-3. Conducted a tour of the Process Areas to confirm borehole locations and visited the Site archives to fill background data gaps (both in the company of CH2M Hill).
- Continued Site wildlife surveys, maintenance of wildlife observation database and preparation of monthly wildlife observation report. Met with US Fish and Wildlife Service to discuss upcoming plans for USFWS wildlife monitoring.

AOC Removal Actions

- Continued engineering design work for the removal actions associated with the inactive Anaconda Evaporation Ponds. Lack of precipitation and drying of saturated areas allowed Black Eagle Consulting to conduct additional geotechnical testing within Sub Area A and portions of the LEP 'wet areas', and Tri State Surveying to complete the base grid survey for Sub Area A. Restricted access in the remaining LEP 'wet areas' will require conservative fill estimates for the pond covers in these areas. A draft specification for dust control and air monitoring for the removal action was prepared.
- Submitted the clarification letter requested by EPA on September 15, 2009 as the final step for EPA approval of the Potential Electrical Hazards Removal Action Work Plan dated July 24, 2009. Initiated discussions with NV Energy to kick-off the removal action.
- Submitted the clarification letter requested by EPA on September 16, 2009 as the final step for EPA approval of the Transite Pipe Removal Action Work Plan - Revision 1 dated August 19, 2009. Conducted the field inspection, radiometric survey and sampling of pipe materials for asbestos content and radiochemical concentration September 27-29.
- Submitted responses to September 11, 2009 EPA comments on September 25, 2009 for the Anaconda Evaporation Ponds Removal Action Characterization Data Summary Report (RAC DSR) dated June 12, 2009. Requested an extension of the submittal of the RAC DSR from October 2 to October 19, 2009.
- Submitted the work plan to perform X-ray fluorescence (XRF Work Plan) screening of VLT materials to EPA on September 16, 2009.
- Submitted the draft Process Areas Radiological Characterization Work Plan - Revision 1 dated September 28, 2009.

Site Issues

- Non-Routine pumping continues from the Slot Pond leak detection sump at a rate of approximately 1.2 gallons per minute (no surface expression of leak evident).
- Approximately 107 tires in the LEP will need to be removed prior to the evaporation pond removal action (these tires could be removed as part of the EPA removal action).

Planned October/November 2009 Activities

- Continue routine O&M, site security, and bird deterrent activities.
- Perform the 3Q 2009 groundwater monitoring event in November, which will include the sampling of domestic wells from residences along Locust Drive and Luzier Lane.
- Continue engineering activities associated with the removal action for the inactive Anaconda Evaporation Ponds, including Sub-Area A, and the design for on-Site landfill cells for the management of transite pipe and other Site C&D materials.
- As received, respond to EPA comments to the draft versions, and prepare final versions of the following AOC/SOW deliverables: 1) Site O&M Plan; 2) Draft Process Areas Radiological Characterization Work Plan – Revision 1; and 3) Draft XRF Work Plan.
- Submit the revised Anaconda Evaporation Ponds Removal Action Characterization Data Summary Report (RAC DSR).
- Submit the Process Areas Vadose Zone Characterization and Monitor Well Work Plan to EPA.
- Compile results of the transite pipe inspection and characterization activities.
- Provide EPA with a landfill design for the placement of tires and administration building debris, as part of a removal action to be conducted by EPA.
- Compile data for the 3Q 2009 Groundwater Monitoring Report.
- As received, respond to EPA comments on the Shallow Zone Characterization DSR and the Draft PWS Characterization Work Plan Addendum.
- Attend a technical groundwater meeting with EPA and other stakeholders.
- Continue groundwater elevation and pit lake level monitoring. Continue meteorological monitoring at AM-6.

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,

A handwritten signature in black ink, appearing to read "Jack Oman" with a stylized flourish at the end.

Jack Oman
Project Manager

cc: Dave Seter, EPA – via electronic mail
Mike Montgomery, 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, Lyon County Commissioner – via electronic mail

Dennis Stark, Lyon County Manager – via electronic mail
Justin Whitesides, YPT – via electronic mail
Chairman Emm, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Chairman Reymus, 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
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
Peggy Pauley, YCAG – via electronic mail
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