Atlantic Richfield Company

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December 9, 2013

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: **November 2013 Monthly Report, Yerington Mi ne Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 96200760005; Administrative Order on Consent, CERCLA Docket No. 096200960010**

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by t he U.S. Environmental Protection Agency " Region 9 (EPA), Atlantic Richfield Company (ARC) has prepare d this November 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

November 2013 Activities

Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent ac tivities. Cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) in dicated no activity of concern.
- As directed by EPA, a Bird Wailer deterrent system was placed on the berm between the two new evaporation ponds (Fluid Management System [FMS] B and C). Three wind dancers and three bird deterrent flags have also been deployed around these two new ponds. Wind dancers, bird deterrent flags and Bird Gard towers remained deplo yed around the Pumpback Well System (PWS) Evaporation Pond and the Lined Evaporation Po nd (LEP). Propane cannons remained deployed around the FMS Evaporation Pond A and the Slot Pond. To reduce birds becoming habituated to wind dancers and flags remaining in o ne location, these bird mitigation devices were re"located as needed, based on observations by Site O&M personnel.
- Modifications to the electric lines and power conn ections around the LEP were completed to allow the 230"volt wind dancers to receive line power.
- Water levels in the PWS Evaporation Pond at the en d of September were as follows: North Cell = 0.0 feet; Middle Cell = 0.0 feet; South Cell = 0.0 feet. Incidental (but not measurable) rain water remained in the South Cell of the PWS Evaporation P ond.
- Arimetco FMS pond levels: Phase 1 Pond = 3.73 feet ; FMS Evaporation Pond A = 9.17 feet; FMS Evaporation Pond B = 1.52 feet; FMS Evaporation Pon d C = 1.53 feet; VLT Pond = 12.32 feet; Slot 2 Pond = 12.39 feet. A total of 33,483 gallon s of solutions were pumped from the VLT Pond to FMS Evaporation Pond B on November 4, and 126,42 0 gallons of solution were pumped from the Slot Pond to FMS Evaporation Pond C on November 1 and 5. See attached monitoring data.

November 2013 Activities 6 Continued

Site Security and O&M Activities " Continued

- Approximately 20,026 gallons of solution were pump ed from the leak detectors including 10,428 gallons from SD2 near the Slot Pond and 6,598 gallo ns from VLTD1 at the VLT Pond. Approximately 1,303,378 gallons of solution have be en pumped from the leak detectors since January 1. See attached monitoring data.
- A meeting was held on November 20 with EPA, the Ne vada Division of Environmental Protection (NDEP), the U.S Bureau of Land Management (BLM), Si ngatse Peak Services (SPS), the U.S. Fish and Wildlife Service (USFWS) and the Yerington Paiute Tribe (YPT) to discuss FMS operations for the two new evaporation ponds, and c onfirm EPA's direction for associated bird mitigation activities and devices. The meeting inc luded a discussion of an effort by ARC in the first half of 2014 to evaluate the replacement of p ropane cannons with safer Wetland Wailer devices.
- Performed Site"wide road grading activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were ob tained November 24"26.
- A pit lake water elevation of 4230.14 feet amsl wa s recorded on November 25 from the pressure transducer, an increase of 0.14 feet since October 25. The pit lake elevation has risen 1.78 feet since November 25, 2012.
- Performed the 4Q 2013 domestic well sampling event November 4"6.
- Domestic wells DW"69 and DW"200 were removed from the domestic well sampling program, as both locations were hooked up to the Yerington Paiu te Tribe (YPT) public water supply system.
- The owner of DW"183 continued to decline participa tion in the Bottled Water Program. Two wells (DW"201 and DW"202) did not qualify for bottled wat er based on recent chemical results.
- Continued the compilation of 3Q 2013 groundwater a nd domestic well monitoring data for inclusion in quarterly monitoring reports.
- The Additional Monitor Well Installation Work Plan continued with the installation of monitor wells HLP"03S, HLP"03I, FMS"06S, FMS"07S, B/W"27B, B/W"59 S, B/W"59D2, B/W"82RS, B/W"82RI and B/W"82RB. Zonal samples were collected at B/W" 27, B/W"50 and B/W"59.
- Upon receipt of EPA's approval on November 22 to a bandon groundwater monitor well B/W"14S (property owner's request), the pump was removed fr om this well on November 25.
- Transmitted the Draft Preliminary Bedrock Characte rization Data Summary Report (DSR) to EPA on November 20.
- Continued the preparation of a draft work plan for Single"Step Chemical Extraction (Leach) Tests, as requested by EPA in Comment #44 on the Revised G roundwater (OU"1) RI Work Plan.
- Continued preparation of the draft report summariz ing initial groundwater flow modeling results.
- Continued work on the DSR for the OU"3 sub"surface utility and dry well investigations.
- Continued the characterization of Process Areas so ils " 44 borings were completed for a total of 1,440 feet of drilling at the following PA" locatio ns: JJJ1, JJJ2, JJJ3, UT23A, UT23C, W1B, W1C, W1D, X4, Z1D, EX01A, EX01B, EX01C, EX04A, EX04B, E X04C, I1B, I1C, K4C, K5B, K5C, K5D, K8B, K8C, K9B, K9C, K9D, O2B, O2C, O2D, OO3A, OO3C, OO3D, OO5, OO6, TR1A, TR1B, TR1C, UT05A, UT05B, UT05C, UT07A, UT07B and U T07C. A total of 417 samples were collected (335 normal samples and 82 quality contro l samples). Spectrum Geophysics continued utility location services and Desert Engineering co ntinued site preparation in support of the program.
- Routine database management activities in support of Site investigations and monitoring.

Planned December 2013/January 2014 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deter rent activities.
- Incorporate stage"volume"surface area relationship s for the two new evaporation ponds into the calibrated water balance model for Arimetco heap le ach pad drain"down projections.

Planned December 2013/January 2014 Activities 6 Con tinued

Site Characterization Activities " Continued

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 3Q 2013 Domestic Well Monitoring Repo rt (DWMR) and the 3Q 2013 Groundwater Monitoring Report (GMR).
- Transmit the Preliminary Bedrock Well Investigatio n DSR.
- Transmit the revised Site"Wide Groundwater (OU"1) RI Work Plan and responses to comments.
- Continue field work associated with the Additional Monitor Well Work Plan.
- Continue aquifer solids testing activities in supp ort of future fate and transport analysis, includin g the development of a Draft Chemical Extraction Test Work Plan.
- Transmit a draft work plan for supplemental charac terization activities for the Evaporation Ponds and the northern portion of the Calcine Ditch.
- Transmit the DSR for the Phase II geophysical and soil investigations associated with sub" surface utilities in the Process Areas.
- Continue field work associated with the Process Ar eas Step"Out Drilling Program including the prioritization of select boreholes that may be requ ired to be extended beyond the depths presented in the Final OU"3 RI Work Plan.
- Attend a groundwater technical meeting on December 10.
- Attend a Community Meeting in January (date to be established).
- Review data quality objectives for the Wabuska Dra in (OU"7) RI Work Plan when received.

Please contact me at (714) 228"6774 or via e"mail a t jack.oman@bp.com if you have any questions or comments about the November 2013 monthly report.

Sincerely,

Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Harry Ball, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic ma il
Phyllis Hunewill – via electronic mail
Virgil Arellano, Lyon County Commissioner – via ele ctronic mail
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Chairwoman Howard, YPT – via electronic mail
John Mosely, YPT – via electronic mail
Deborah Dunn, 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
Tad Williams, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Marc Ferries, Atlantic Richfield Company – via electronic mail
Brian Johnson, 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
Steve Dischler, Singatse Peak Services, LLP – via electronic mail
George Eliopulos, Singatse Peak Services, LLP – via electronic mail
Taurus Massey, 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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