

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, Singatse Peak Services, LLP – via electronic mail
George Eliopoulos, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, Singatse Peak Services, LLP – via electronic mail
George Eliopoulos, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, 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
Lyon County Library System Central

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

October 9, 2012

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: September 2012 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 September 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

September 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- Wind Dancers were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond (LEP). The Wind Dancers at the PWS and the LEP (both currently dry) were removed from operation on September 28 in order to be brought into compliance with ARC's Integrity Management requirements.
- Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of Wind Dancers and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. In keeping with the Bird Mitigation SOP, and as a result of the evaporation of water in the pumpback and lined evaporation ponds, bird guard towers A, B and C remained inactive for the duration of the dry season. Start/stop times on all propane cannons continued to be adjusted to reflect the changing timing of sunrise and sunset. Bird identification refresher training was held on September 27.
- Water levels in all PWS Evaporation Pond cells continued to remain at 0 feet. Arimetco FMS pond levels: Phase 1 Pond = 3.19 feet; FMS Evaporation Pond = 8.99 feet; VLT Pond = 0 (under re-construction); Slot 2 Pond = 4.82 feet. Approximately 258,000 gallons of solution were pumped from the VLT Pond to the FMS Evaporation Pond to empty the VLT Pond prior to its re-construction. No transfers from the Slot Pond occurred in September. Approximately 28,023 gallons of solution were pumped from the leak detectors in September (primarily from SD1), bringing the cumulative 2012 total to 307,067 gallons (see attached monitoring data).

A BP affiliated company



September 2012 Activities - Continued

Site Security and O&M Activities - Continued

- The remaining freeboard in the FMS Evaporation Pond at the end of September was approximately 1.14 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) is assumed to have averaged approximately 10.5 gallons per minute (gpm) in September, as flows from the Phase IV VLT Heap Leach Pad (HLP) could not be measured (the Slot and Phase III HLPs had a combined average of approximately 7.2 gallons per minute; see attached monitoring data).
- ARC transferred O&M responsibilities of that portion of the FMS (i.e., conveyance of the Phase IV VLT HLP drain-down solutions to the FMS Evaporation Pond and bird observations and bird mitigation activities) to EPA during the VLT Pond liner re-construction period, which commenced on September 7. ARC, EPA, and SPS personnel met on September 17 to discuss the VLT re-construction project.

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained September 25-27.
- A pit lake water elevation of 4228.33 feet amsl was recorded on September 25, 2012 from the pressure transducer, a decrease of 0.008 feet since August 28, 2012. The pit lake elevation has risen 2.333 feet since September 25, 2011.
- No changes to the domestic well sampling program occurred in September.
- No changes to the Bottled Water Program occurred in September.
- Transmitted the 2Q 2012 Domestic Well Monitoring Report (DWMR) dated September 27, 2012.
- Continued to compile information for the 2Q 2012 Groundwater Monitoring Report (GMR).
- Prepared for 4Q groundwater monitoring activities in mid-October.
- Continued the compilation of field and laboratory data associated with the 2011 Monitor Well program, and the preparation of the Data Summary Report.
- Continued the preparation of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation (RI) Work Plan.
- Review of EPA meeting minutes for the August 29-30, 2012 groundwater technical meeting.
- Initiated revisions to the Background Groundwater Quality Assessment (BGQA) in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Initiated revisions to the Proposed Initial Bedrock Characterization Activities in response to EPA comments that were discussed during the August 29-30, 2012 technical meeting.
- Continued responses to EPA comments dated September 26, 2012 for the Aquifer Solids Testing Standard Operating Procedures (SOPs) dated August 14, 2012, and revisions to the SOPs.
- Coordination and tracking of hydrologic tracer data from the 2Q 2012 sampling event.
- Continued revisions to a technical memorandum dated August 15, 2012 that described the objectives and approach for groundwater modeling at the Site, based on discussions from the groundwater technical meeting held August 28-29.
- Continued the preparation of responses to comments and figure modifications as per EPA comments on the Technical Memorandum - Revision 2 for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Geophysical Investigation Results for Phase I Activities.
- Routine database management activities and support of Site investigations and reports.
- Modified the domestic well and groundwater monitor well database deliverables based on the August 14 meeting with EPA and data users for inclusion in the 2Q DWMR and 2Q GMR.

Planned October/November 2012 Activities

Site Security and O&M Activities

- EPA to continue FMS improvements including re-construction of the VLT Pond. Once completed, ARC will re-assume O&M responsibilities for that portion of the FMS.
- Continue routine Site O&M, security and bird deterrent activities.
- Ship approximately 10 cubic yards of petroleum-contaminated soils to the US Ecology landfill in Beatty NV as non-hazardous non-DOT regulated solid waste resulting from implementation of the VLT Transformer soil cleanup and the Process Areas sub-surface utility/dry well investigation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2012 GMR.
- Compile field and laboratory data for the 3Q 2012 domestic well and groundwater monitoring events. Prepare for and conduct the 4Q 2012 domestic and groundwater monitoring events.
- Continue responses to EPA comments on the Aquifer Test DSR dated April 19, 2012, and transmit the revised DSR with the responses.
- Complete and transmit the 2011 Monitor Well DSR.
- Transmit: 1) the revised technical memorandum that describes groundwater modeling objectives; 2) the revised letter that describes initial bedrock characterization activities and associated responses to comments; and 3) the revised Aquifer Solids Testing SOPs and associated responses to comments.
- Complete and transmit the revised Groundwater RI Work Plan that, in part, will include the revised BGQA and identify the following work scopes for future implementation: additional monitor wells, WDW019 borehole flow meter test, initial bedrock characterization activities, groundwater modeling activities, and an evaluation of 2Q 2012 hydrologic tracer data.
- Transmit responses to EPA comments dated June 14, 2012 on the Process Areas Sub-Surface Utility and Dry Well Geophysical Investigation Tech Memo, and requested figure modifications.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the September 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, 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
Rob Loveberg, Lyon County Planning Department – via electronic mail

Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, 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
Trey Harbert, Singatse Peak Services, LLP – via electronic mail
George Eliopoulos, 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
Lyon County Library System Central