UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 24, 2017

Mr. Anthony R. Brown
Environmental Manager
Atlantic Richfield Company
4 Centerpointe Drive, LPR 4-435
La Palma, CA 90623-1066

Re: E PA Conditional Approval of Atlantic Richfield's On-Property Focused Remedial Investigation Work Plan Amendment No. 12, Supplement No. 1—Task Sampling and Analysis Plan for Camp Isbell Hydrocarbon Investigation, Leviathan Mine Site, Alpine County, California, dated May 1, 2017

Dear Mr. Brown,

EPA has completed its review of Atlantic Richfield Company's (ARC) May 1, 2017 Response to EPA Comments on the On-Property Focused Remedial Investigation Work Plan Amendment No. 12, Supplement No. 1—Task Sampling and Analysis Plan for Camp Isbell Hydrocarbon Investigation, Leviathan Mine Site, Alpine County, California (TSAP). The TSAP was provided in partial fulfillment of the requirements of the Statement of Work attached to the Administrative Order for Remedial Investigation and Feasibility Study (Unilateral Administrative Order), Comprehensive Environmental Response, Compensation, and Liability Act Docket No. 2008-18 issued by the U.S. Environmental Protection Agency (U.S. EPA) on June 23, 2008.

Background: The TSAP was prepared as an amendment to the August 2010 On Property Focused Remedial Investigation Work Plan. Investigation for hydrocarbon constituents in mine waste had not been previously performed at the site; however, during mine waste sampling in 2014 a black tar-like substance was observed in three hand auger boreholes. The first report of this tar-like substance and hydrocarbon smell was located at WP-003 on the southeast side of Pond 1. Nine boreholes surrounding WP-003 were sampled in which the tar like substance was observed. Through conversations with field staff and review of sampling records, two additional sampling locations were identified as possibly being affected by hydrocarbon contamination (WP-050 and WP-066).

EPA requested via electronic mail (email) on September 12, 2014, for ARC to conduct sampling and analysis from the area where the tar like substance was found. In an October 12, 2014 email, ARC's consultant noted that "Given the locations and depths at which the hydrocarbon like materials were observed, it is suspected that they may be associated with past mining operations and as such warrant additional consideration and planning in order to implement a defensible sampling program."

On February 26, 2016 ARC submitted a Sampling plan in response to EPA requests for characterization of the tar like substance to confirm that it was related to asphalt pavement and ensure that hazardous substances from hydrocarbons associated with mining activities are not present at the site.

On April 29, 2016, EPA provided comments on the TSAP and directed ARC to:

- Sample at locations where the RWQCB have identified additional areas of former equipment maintenance activities and revise the DQO Summary Problem Statement to include sampling in these areas,
- Sample beyond the depth and spread of the sampling design plot if the extent of the hydrocarbon contamination is not defined by the current design, and
- Specify Acceptance Criteria for assessing the suitability for use of the data.

On June 1, 2016 ARC submitted a Response to Comments with a revised version of the TSAP.

In the interim, On November 4, 2016, ARC emailed the RWQCB and reported encountering soil potentially contaminated by hydrocarbon on September 6, 2016, during baseline soil sampling in support of the Revegetation Treatability Study. Work was stopped and the borehole was covered, but not backfilled, until they could return with field equipment. The email stated that after conducting investigations with a flame ionization detector (FID) and a photoionization detector (PID) on September 15, 2016, no significant detection of hydrocarbon was observed in the headspace of the sample. The email stated that "if the soil were affected by hydrocarbons in the past, the residuals are highly weathered as both of these readings are very low." The borehole was backfilled on September 23, 2016.

The RWQCB alerted EPA of the activity on November 7, 2016. Email correspondence between EPA and ARC regarding this incident was initiated by EPA on November 30, 2016. ARC responded with a summary of the activity; however, ARC notes that the RWQCB is the landowner; but fails to discuss why EPA wasn't informed as ARC agreed to in their June 1, 2016 Response to comments: "the US EPA will be notified, and the need for additional investigation can be determined at that time."

On March 17, 2017 ARC and EPA had a conference call to discuss the status of the TPH investigation. During this call, EPA restated its earlier comments and continued to request that a limited number of samples be collected in the maintenance and equipment areas. And discussed a 1950s photograph that was provided (Attached). ARC requested that EPA follow-up the call with written comments.

EPA provided written comments on March 19, 2017. Directing ARC to provide a samplin g locations map within the historical equipment maintenance area, and a table showing the requested TPH thresholds for determining the need for additional investigation and to complete this field sampling and associated reporting b y June 30, 2017. On May 1, 2017, ARC provided a sampling plan for EPA's consideration.

EPA has completed its review and finds that the response is adequate. EPA conditionally approves the document, conditional on these comments:

- **Add Sampling to Assess for Underground Storage Tank:** During our May 19, 2006 EPA site visit we identified a vent exhaust and stand pipe, that may indicate the presence of an underground storage tank in the former Isabel Camp area. Photo in Attachment 1. Please provide a full assessment, including samples and recommendations to ensure full assessment of the nature and extent of any associated contamination.

- **Document all TPH Findings:** In the Site Characterization Report, please ensure a full assessment of hydrocarbons that may have been associated with past mining operations. Please review all field notes and confirm that all reports of any tar-like substance and hydrocarbon smells have been reported to EPA. Further, the locations and dates of those reported locations should be indicated on a map (i.e. but not limited to: 2WP-003, WP-050, WP-066 in 2014; and also include any similar findings in the revegetation plot in 2016)

- **EPA Notification:** Both reported findings were unplanned and accidental. Please ensure a process in place, per ARC procedures, if evidence of suspected petroleum release become evident during field activities: the US EPA will be notified, and the need for additional investigation can be determined at that

time.

In advance of sampling, or during sampling, please provide for EPA and Waterboard review of the proposed sampling locations. EPA directs ARC to complete the sampling prior to the end of the 2017 field season.

In addition, EPA requests that ARC assess the area of disturbed soil. As discussed during our in person meeting on May 23, 2015: EPA was conducting a site visit to the Isabel Camp area on May 19, 2017 when we identified a disturbed area of soil that appears to be a shallow excavation at the former Camp Isbell area. Photo in Attachment 2. Please provide a full assessment, including historical sample concentrations of the soils in this area, and final placement of these disturbed soils within the next thirty (30) days or by June 24, 2017.

If you have any questions, please feel free to contact me at (415) 947-4183 or Deschambault.lynda@epa.gov.

Sincerely,

Lynda Deschambault

Remedial Project Manager

Cc by electronic Email:

Neil Mortimer, Washoe Tribe of Nevada and California
Michelle Hochrein, Washoe Tribe of Nevada and California
Douglas Carey, California Regional Water Quality Control Board, Lahontan Region
David Friedman, Nevada Department of Environmental Protection
Kenneth Maas, United States Forest Service
Tom Maurer, United States Fish and Wildlife Service
Toby McBride, United States Fish and Wildlife Service
Steve Hampton, California Department of Fish and Wildlife
Marc Lombardi, AMEC

Attachment A: Photo 6131. View to northwest of two pipes that possibly indicated the presence of an underground tank at the former Camp Isbell area.

Attachment B: Photo 6133: View to north of a disturbed area of soil that appears to be a shallow excavation at the former Camp Isbell area.