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VIA FEDEX AND EMAIL

Mr. Dave Seter
Remedial Project Manager
U.S. Environmental Protection Agency - Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

Subject: Yerington Mine Site, Lyon County, Nevada, Site ID #09GU
Request to Modify Domestic Well Monitoring and Bottled Water Program

Dear Mr. Seter:

Atlantic Richfield Company ("ARC") is submitting this letter to document completion of its efforts to extend City of Yerington Water System service to certain residences and domestic water users located north of the Yerington Mine Site (the "Site"). We are also requesting that EPA confirm that ARC will no longer be required under the Unilateral Administrative Order for Initial Response Activities, Docket No. 9-2005-0011(the "2005 Order") and the Administrative Order on Consent and Settlement Agreement for Removal Action and Past Response Costs, Docket No. 09-2009-0010 (the "2009 Order") to perform domestic well monitoring or provide bottled water at/to any property that is now receiving City of Yerington municipal water service or is receiving treated domestic water from the Yerington Paiute Tribe ("YPT") public water system.

Domestic Well Monitoring Program (DWMP)

ARC has been conducting domestic well monitoring north of the Site since 2003. Under Paragraphs 15(e) and 15(f) of the 2005 Order, EPA required that ARC "continue Annual Domestic Well Monitoring for NDEP Profile 2 Analytes," and "implement the ongoing … quarterly sampling of domestic wells for radiological contaminants." Section 6.0 of the Statement of Work attached to the Administrative Order for Remedial Investigation and Feasibility, Docket No. 9-2007-0005 ("2007 Order), also called for "periodic … monitoring of … drinking water supply wels."

Domestic well monitoring is performed in accordance with the July 1, 2010 Domestic Well Monitoring Plan, Revision 3 (prepared as an addendum to the Site-Wide Quality Assurance Project Plan) (the "DWMP Plan"). Results have been used to characterize the quality of groundwater used for drinking water north of the Site and in determining eligibility for receiving bottled water as part of an interim response action. For multiple reasons, however, including where domestic wells are located and how they were constructed, domestic well monitoring data are not used for groundwater characterization, plume delineation, or quantitative human health risk assessment in the OU-1 Remedial Investigation. Data and other information used for those purposes comes from the more comprehensive sampling program performed in accordance with the July 19, 2012 Site-Wide Groundwater Monitoring Plan – Revision 2.

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According to the 2015 Annual Domestic Well Monitoring Report (Feb 19, 2016), there were 209 wells (162 well owners) in the domestic well monitoring program as of the end of 2015. Certain wells in the program cannot be sampled because property owners have failed to execute access agreements, the wells are inoperable, properties are vacant without power, or the wells have been disconnected from service. The actual numbers of wells sampled, by quarter, in 2015 were: Q1-154, Q2-55, Q3-165, and Q4-47. According to the DWMP Plan, wells on properties receiving bottled water are sampled semi-annually, and wells on properties not receiving bottled water are sampled quarterly. Water samples are analyzed for 13 physical parameters and major ions, 25 metals/metalloids (unfiltered, or total concentrations), and 4 radiochemicals. The costs of this program have been substantial. In 2015, ARC spent approximately $520,000 on domestic well monitoring.

Bottled Water Program (BWP)

ARC has been providing bottled water to eligible residents north of the Site since early 2004. Under Paragraph 15(f) of the 2005 Order, EPA required that ARC "continue to implement the ongoing … provision of bottled water on request for those domestic and tribal supply wells reasonably within the extent of groundwater contamination from the Site that exceed Maximum Contaminant Levels until interim mitigation measures are approved." As stated in the DWMP Plan, residents are eligible to receive bottled water if uranium concentrations measured during domestic well monitoring exceed 25 µg/L.

As of Q2 2016, owners of 129 domestic wells/properties were receiving bottled water. Eleven well owners were deemed eligible to receive bottled water, but they have declined it for various reasons. Three well owners that are currently included in the DWMP and receiving bottled water — 45 E. Loop Road (DW-69), 160 E. Loop Road (DW-200), and 171 Campbell Lane (TW-6) — are currently receiving domestic water from the YPT municipal system. In addition, ARC provides bottled water to approximately 93 residences and the YPT tribal office that do not have on-site domestic wells but receive treated domestic water supplied by the YPT system pumped from production Well 4, which is included in the DWMP. Two well owners located outside the *Roeder* class area — 162 Campbell Lane (DW-80), and 10 Cardon Lane (EDW-01) — receive bottled water program despite their well not being included in the DWMP, because they were included in the program before the eligibility criterion was established.

As with the domestic well monitoring program, the bottled water program is expensive. In 2015, ARC spent approximately $180,000 on bottled water deliveries.

City of Yerington Water System Service Extension

On October 21, 2013, the United States District for the District of Nevada approved the Amended Class Settlement Agreement in the class action lawsuit *Roeder et al. v. Atlantic Richfield Company et al.*, D. Nev., Case No. 3:11-cv-00105-RCJ-WGC. The "*Roeder* Settlement Agreement" resolved claims asserted against ARC by certain residents and owners of property located north of the Site, who alleged that their properties and the underlying groundwater had been contaminated as a result of releases of hazardous substances from the Site. Among other things, the *Roeder* Settlement Agreement required that ARC provide funding to the City of Yerington to extend municipal water service to then-existing residences located within that part of the settlement class area that was also within the City's projected future service area. The settlement class area included an estimated 578 real property parcels, of which approximately 294 parcels were private residential properties, and on which up to 177 of the homes were known to be served by an on-site groundwater well for domestic water supply. Under the terms of the Settlement Agreement, well owners who connected to the City Water System could elect to either abandon their well or apply for a NDWR-issued permit to authorize withdrawals of groundwater for outdoor domestic purposes (such as landscape watering) only. Each residential property owner who received a connection to the City Water System executed and recorded an environmental covenant and access agreement. Those who abandoned their wells are prohibited from constructing a water well or developing groundwater beneath their property for domestic use purposes. For those well owners who received a NDWR permit, wells were disconnected from the residence, and outdoor use of groundwater is

limited to that authorized by their permit. These use restrictions are binding upon successor owners of each property.

The City of Yerington retained Farr West Engineering to design and oversee construction of the City Water System expansion and related service connections to residences. Construction work began in the fall of 2014 and the construction of new mains and service connections was essentially completed in June 2016. Well abandonments and system testing were completed as of August 1, 2016. The water system is now functional, and domestic wells for all participating property owners have been abandoned or disconnected from the residence within the expansion area. As of the writing of this letter, 158 residences were disconnected from private domestic wells and received service connections from the City Water System.

Effect of City Water Service Extension and YPT Water Deliveries on the DWMP and BWP

Of the properties now receiving City of Yerington Water System water for domestic use pursuant to the *Roeder* Settlement Agreement, 136 properties have (or had) a domestic well that was being monitored as part of the DWMP, and 95 properties were receiving bottled water under the BWP. Forty-four of those domestic wells have now been permanently abandoned, and 92 remain in service for outdoor use only. The well location numbers in each category are listed in Attachment 1.

As noted above, there are also numerous properties included in the DWMP and BWP that are currently receiving treated domestic water from the YPT municipal system. This includes three properties with domestic wells that are monitored as part of the DWMP and approximately 93 other properties served with YPT treated water pumped from Well 4.

It is not reasonable or necessary to require continued domestic well monitoring for these properties. Continued monitoring will not serve the data quality objectives in the DWMP Plan; it will not aid in the identification of the source or nature of any release or threat of release of hazardous substances; it will not address an actual or potential exposure to nearby human populations; it will not contribute to the efficient performance of any anticipated long-term remedial action; and it is not necessary to characterize the Site for the purpose of developing and evaluating effective remedial alternatives. To the extent additional data are needed for groundwater characterization and plume tracking in the areas where these wells are located, that information need is being addressed by the OU-1 groundwater monitoring program, which includes multiple monitoring wells in the same vicinity. As stated in the DWMP Plan, domestic well monitoring is neither intended nor suitable for quantitative groundwater quality characterization or plume delineation.

Requiring continued delivery of bottled water to these residents also is not consistent with the NCP. *See* 40 C.F.R. § 300.415(e)(9) (providing an alternative water is only appropriate "where necessary immediately to reduce exposure to contaminated household water and continuing until such time as local authorities can satisfy the need for a permanent remedy"); *Artesian Water Co. v. Gov't of New Castle Cty.*, 659 F. Supp. 1269, 1289 (D. Del. 1987)), aff'd 851 F.2d 643 (3d Cir. 1988) (alternative water supply unnecessary where contaminants were no longer threatening drinking water); *Warren v. Matthey*, No. 2:15-cv-01919-GJP, 2016 WL 215232 at *5 (E.D. Pa. Jan. 19, 2016) (bottled water costs not recoverable under CERCLA when home was receiving water meeting drinking water standards from a water treatment filtration system).

Termination of Domestic Well Monitoring and Bottled Water Deliveries

Beginning with Q2 2016 and continuing with Q3 2016, ARC field personnel did not collect DWMP samples from wells at any property that had been connected to the City Water System under the *Roeder* settlement and that was receiving City water at the time quarterly sampling occurred. ARC also has been gradually terminating bottled water deliveries and removing bottled water dispensers from these residences. ARC requests confirmation from EPA that domestic well monitoring and deliveries of bottled

water may be terminated in accordance with the 2005 Order and the 2009 Order for all properties identified as now receiving City water for domestic use.

ARC is also requesting confirmation from EPA that it may discontinue domestic well monitoring and bottled water deliveries for any property currently receiving domestic water from the YPT municipal system. This would include the three properties in the DWMP (45 E. Loop Road (DW-69), 160 E. Loop Road (DW-200), and 171 Campbell Lane (TW-6)) and the approximately 93 other properties that do not have on-site domestic wells but receive treated domestic water supplied by the YPT system pumped from production Well 4.

According to ARC's records, there are currently 16 properties included in the DWMP and/or the BWP that are located within the *Roeder* class areas but, for various reasons, have not accepted City Water System extensions (and that also are not receiving YPT Water). ARC will continue to monitor the domestic wells at these properties and provide bottled water to residents currently receiving bottled water service through at least the end of calendar year 2016. ARC recently contacted most of these property owners, and we will attempt to obtain supplemental agreements for City Water System service extensions and domestic well abandonments or conversions to outdoor use in 2017. If such agreements are executed with the property owners and the wells are taken out of domestic service, ARC will terminate domestic well monitoring and bottled water deliveries for these properties at that time. If agreements cannot be reached within a reasonable period, ARC will consult with EPA and NDEP about appropriate next steps.

There are 25 wells/properties that are currently included in the DWMP and/or the BWP but located outside the *Roeder* class area and not receiving either City water or YPT water. ARC will also continue to perform domestic monitoring at these wells and provide bottled water to residences currently receiving bottled water through at least the end of calendar year 2016. Once final consensus is reached on the Background Water Quality Assessment and delineation of the extent of mine-impacted groundwater, ARC may request that domestic monitoring at these wells and bottled water deliveries at these residences be discontinued as well.

Conclusion/Summary

ARC is requesting EPA confirmation that domestic monitoring and bottled water deliveries may be terminated in accordance with the 2005 Order and the 2009 Order for: (i) all properties (= 136) identified as now receiving City water for domestic use pursuant to the *Roeder* settlement, and (ii) all properties (approximately 95) receiving treated domestic water from the YPT municipal system.

For the time being, ARC will continue to perform domestic monitoring and provide bottled water to a limited number of properties that are either located outside the *Roeder* class boundary or that are located inside that boundary but not receiving City water service. ARC will work with the property owners and EPA over the next year to determine when it is appropriate to discontinue further monitoring and bottled water deliveries to these properties.

Please contact me at (657) 529-4581 or via e-mail at jack.oman@bp.com if you have any questions or comments about this letter. We look forward to receiving EPA's timely response.

Sincerely,

Jack Oman
Project Manager

cc: Harry Ball, EPA – via electronic mail
Dante Rodriguez, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Jeff Collins, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
Nathan Block, Atlantic Richfield Company – via electronic mail
Patricia Gallery, Atlantic Richfield Company – via electronic mail
Brian Johnson, Atlantic Richfield Company – via electronic mail
Adam Cohen, Davis Graham & Stubbs – via electronic mail
Chuck Zimmerman, Brown and Caldwell – via electronic mail
Dan Ferriter, Copper Environmental – via electronic mail
John Batchelder – EnviroSolve – via electronic mail

LocationName	Sampling Group Frequency	In Domestic Well Sampling Program?	In Bottled Water Program?	Signed Environmental Covenant?	City Water Hooked Up	Well Kept or Abandoned
DW-110	Q	Yes	No	Yes	YES	A
DW-1	Q	Yes	No	Yes	YES	K
DW-102	Q	Yes	No	Yes	YES	K
DW-103	Q	Yes	No	Yes	YES	K
DW-104	SA	Yes	Yes	Yes	YES	A
DW-105	SA	Yes	Yes	Yes	YES	K
DW-107	SA	Yes	Yes	Yes	YES	K
DW-108	SA	Yes	Yes	Yes	YES	K
DW-11	Q	Yes	No	Yes	YES	K
DW-112	SA	Yes	Yes	Yes	YES	K
DW-113	Q	Yes	No	Yes	YES	A
DW-114	Q	Yes	No	Yes	YES	A
DW-115	Q	Yes	No	Yes	YES	K
DW-116	Q	Yes	No	Yes	YES	K
DW-117	SA	Yes	Yes	Yes	YES	A
DW-118	Q	Yes	No	Yes	YES	A
DW-119	SA	Yes	Yes	Yes	YES	K
DW-12	Q	Yes	No	Yes	YES	K
DW-120	SA	Yes	Yes	Yes	YES	K
DW-122	SA	Yes	Yes	Yes	YES	K
DW-123	SA	Yes	Yes	Yes	YES	K
DW-124	Q	Yes	No	Yes	YES	K
DW-125	SA	Yes	Yes	Yes	YES	K
DW-126	Q	Yes	No	Yes	YES	K
DW-128	SA	Yes	Yes	Yes	YES	K
DW-129	SA	Yes	Yes	Yes	YES	K
DW-13	SA	Yes	Yes	Yes	YES	K
DW-130	SA	Yes	Yes	Yes	YES	K
DW-132	Q	Yes	No	Yes	YES	A
DW-133	Q	Yes	No	Yes	YES	A
DW-134	SA	Yes	Yes	Yes	YES	K
DW-135	SA	Yes	Yes	Yes	YES	K
DW-136	SA	Yes	Yes	Yes	YES	A
DW-138	SA	Yes	Yes	Yes	YES	K
DW-14	SA	Yes	Yes	Yes	YES	A
DW-142	Q	Yes	No	Yes	YES	K
DW-143	Q	Yes	No	Yes	YES	K
DW-147	Q	Yes	No	Yes	YES	K
DW-148	SA	Yes	Yes	Yes	YES	K
DW-149	Q	Yes	No	Yes	YES	A
DW-15	SA	Yes	Yes	Yes	YES	K
DW-151	Q	Yes	No	Yes	YES	K
DW-153	SA	Yes	Yes	Yes	YES	A
DW-154	SA	Yes	Yes	Yes	YES	A
DW-157	SA	Yes	Yes	Yes	YES	K
DW-159	SA	Yes	Yes	Yes	YES	K
DW-16	SA	Yes	Yes	Yes	YES	A
DW-160	SA	Yes	Yes	Yes	YES	K
DW-162	SA	Yes	Yes	Yes	YES	A
DW-163	SA	Yes	Yes	Yes	YES	K
DW-164	SA	Yes	Yes	Yes	YES	K

LocationName	Sampling Group Frequency	In Domestic Well Sampling Program?	In Bottled Water Program?	Signed Environmental Covenant?	City Water Hooked Up	Well Kept or Abandoned
DW-165	Q	Yes	No	Yes	YES	K
DW-166	Q	Yes	No	Yes	YES	K
DW-17	SA	Yes	Yes	Yes	YES	K
DW-170	Q	Yes	No	Yes	YES	A
DW-173	Q	Yes	No	Yes	YES	A
DW-178	SA	Yes	Yes	Yes	YES	K
DW-18	SA	Yes	Yes	Yes	YES	A
DW-181	SA	Yes	Yes	Yes	YES	K
DW-183	Q	Yes	No	Yes	YES	K
DW-184	SA	Yes	Yes	Yes	YES	A
DW-186	SA	Yes	Yes	Yes	YES	K
DW-187	Q	Yes	No	Yes	YES	K
DW-19	SA	Yes	Yes	Yes	YES	A
DW-193	SA	Yes	Yes	Yes	YES	A
DW-194	SA	Yes	Yes	Yes	YES	K
DW-195	SA	Yes	Yes	Yes	YES	A
DW-196	SA	Yes	Yes	Yes	YES	A
DW-198	Q	Yes	No	Yes	YES	A
DW-199	SA	Yes	Yes	Yes	YES	K
DW-2	SA	Yes	Yes	Yes	YES	K
DW-20	Q	Yes	No	Yes	YES	A
DW-202	Q	Yes	No	Yes	YES	K
DW-22	SA	Yes	Yes	Yes	YES	K
DW-23	SA	Yes	Yes	Yes	YES	K
DW-24	SA	Yes	Yes	Yes	YES	K
DW-25	SA	Yes	Yes	Yes	YES	K
DW-26	SA	Yes	Yes	Yes	YES	K
DW-27	SA	Yes	Yes	Yes	YES	K
DW-28	SA	Yes	Yes	Yes	YES	A
DW-29	SA	Yes	Yes	Yes	YES	K
DW-3	SA	Yes	Yes	Yes	YES	K
DW-30	SA	Yes	Yes	Yes	YES	A
DW-31	Q	Yes	No	Yes	YES	K
DW-32	Q	Yes	No	Yes	YES	K
DW-34	SA	Yes	Yes	Yes	YES	A
DW-36	SA	Yes	Yes	Yes	YES	K
DW-37	Q	Yes	No	Yes	YES	A
DW-38	SA	Yes	Yes	Yes	YES	K
DW-39	Q	Yes	No	Yes	YES	K
DW-4	SA	Yes	Yes	Yes	YES	A
DW-40	SA	Yes	Yes	Yes	YES	A
DW-41	SA	Yes	Yes	Yes	YES	K
DW-42	SA	Yes	Yes	Yes	YES	K
DW-43	SA	Yes	Yes	Yes	YES	K
DW-44	SA	Yes	Yes	Yes	YES	K
DW-45	SA	Yes	Yes	Yes	YES	K
DW-46	SA	Yes	Yes	Yes	YES	A
DW-47	SA	Yes	Yes	Yes	YES	K
DW-48	SA	Yes	Yes	Yes	YES	K
DW-49	Q	Yes	No	Yes	YES	K
DW-5	SA	Yes	Yes	Yes	YES	K

LocationName	Sampling Group Frequency	In Domestic Well Sampling Program?	In Bottled Water Program?	Signed Environmental Covenant?	City Water Hooked Up	Well Kept or Abandoned
DW-50	SA	Yes	Yes	Yes	YES	K
DW-51	Q	Yes	No	Yes	YES	K
DW-53	SA	Yes	Yes	Yes	YES	K
DW-54	SA	Yes	Yes	Yes	YES	K
DW-57	SA	Yes	Yes	Yes	YES	A
DW-6	SA	Yes	Yes	Yes	YES	K
DW-62	SA	Yes	Yes	Yes	YES	K
DW-63	SA	Yes	Yes	Yes	YES	K
DW-64	SA	Yes	Yes	Yes	YES	K
DW-67	Q	Yes	No	Yes	YES	K
DW-68	Q	Yes	No	Yes	YES	A
DW-7	SA	Yes	Yes	Yes	YES	A
DW-70	SA	Yes	Yes	Yes	YES	K
DW-72	SA	Yes	Yes	Yes	YES	K
DW-73	SA	Yes	Yes	Yes	YES	K
DW-74	Q	Yes	No	Yes	YES	A
DW-75	SA	Yes	Yes	Yes	YES	A
DW-76	Q	Yes	No	Yes	YES	A
DW-77	SA	Yes	Yes	Yes	YES	A
DW-78	SA	Yes	Yes	Yes	YES	K
DW-85	SA	Yes	Yes	Yes	YES	A
DW-86	SA	Yes	Yes	Yes	YES	A
DW-87	SA	Yes	Yes	Yes	YES	K
DW-88	SA	Yes	Yes	Yes	YES	K
DW-89	SA	Yes	Yes	Yes	YES	K
DW-9	SA	Yes	Yes	Yes	YES	A
DW-90	SA	Yes	Yes	Yes	YES	K
DW-91	Q	Yes	No	Yes	YES	A
DW-94	SA	Yes	Yes	Yes	YES	K
DW-95	Q	Yes	No	Yes	YES	A
DW-96	SA	Yes	Yes	Yes	YES	K
DW-98	Q	Yes	No	Yes	YES	K
WDW017	Q	Yes	No	Yes	YES	K
WDW018	SA	Yes	Yes	Yes	YES	K
Yes Count:		136	93	136	136	
Abandon						44
Keep						92

Q=Quarterly Sampling Frequency
SA=Semiannual Sampling Frequency: N/A=Not Applicable