Atlantic Richfield Company

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June 30, 2015

Via Email

Greg Lovato
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RE: Yerington Mine Site, Arimetco Facilities Operable Unit (OU-8) Remedial Options
Response to NDEP Request for Input

Dear Greg:

This letter responds to your recent request for Atlantic Richfield Company ("Atlantic Richfield") to consider and describe under what conditions and limitations, and to what extent, it would participate in a long term remedial solution for the Arimetco Facilities Operable Unit, OU-8, at the Yerington Mine Site (the "Site"). We understand that NDEP is soliciting this information in connection with its desire to (i) develop a new project management approach and schedule for the Site cleanup effort, (ii) provide increased certainty and predictability about the scope and timing of future work, and thus (iii) encourage Atlantic Richfield and Singatse Peak Services ("SPS") to participate in the OU-8 remedy, notwithstanding their respective legal and factual defenses. We also understand that NDEP plans to use this information in weighing the pros and cons of placing the Site on the CERCLA National Priorities List ("NPL") so as to access CERCLA monies as a potential source of funding for future response actions.

Atlantic Richfield agrees it is in the involved parties' mutual interests to identify a more efficient and timely remedial solution for the Site. While we are willing to engage with NDEP in these discussions, the company is not admitting any liability with respect to Site conditions, including those relating to OU-8. Atlantic Richfield expressly reserves and does not waive all rights and defenses available under CERCLA and other state and federal laws. We are providing this letter to foster further discussion with NDEP, EPA, SPS, and others about the overall Site remedial approach. Please understand, however, that we cannot commit at this time to any specific expenditures or work obligations.

Atlantic Richfield's Perspective on OU-8

Atlantic Richfield has consistently maintained it is not responsible for any actual or threatened releases of hazardous substances from OU-8. OU-8 components likely to be addressed through CERCLA response actions or an NDEP-directed closure process include the five heap leach pads constructed by Arimetco and the associated process and fluid management ponds and facilities. The cleanup also will need to deal with the effects of the numerous and extensive documented chemical spills and releases resulting from Arimetco's operations. As acknowledged by EPA in the Draft Final Feasibility Report, Arimetco's operations and facilities within OU-8 have caused impacts that extend vertically down to groundwater. While theoretically characterized as part of the Site-wide Groundwater OU-1, Atlantic Richfield views these impacts as directly traceable to OU-8 and Arimetco's operations and facilities. This makes it difficult for us to agree to participate in or fund a substantial portion of the OU-8 remedy—at least without receiving substantial relief from obligations for response actions and response costs associated with other Site components.

We also recognize that SPS is developing mining plans for portions of the Site, including some or all of OU-8. Mine development offers a possible, cost-effective alternative path to CERCLA for the long-term management and stewardship of the Site. Atlantic Richfield is wary of committing to a remedial action approach that could foreclose or restrict the potential future use and development of the Site for mining.

Despite these concerns, we are encouraged by NDEP's initiative and its apparent willingness to assume a larger role in identifying a practical and mutually beneficial long-term solution for OU-8. This could serve as a model approach for addressing other operable units, including OU-1, which we believe should be evaluated in concert with OU-8 because of the associated impacts to groundwater.

Timing

NDEP has asked for information about when Atlantic Richfield will be prepared to decide on its participation in OU-8 response actions. Not surprisingly, Atlantic Richfield's response will depend on the timing and outcome of the remedial investigation, key remedy selection decisions pertaining to other operable units, SPS's mining plans, and other factors. Fundamentally, Atlantic Richfield needs to better understand the nature and scope of the OU-1 remedy—including whether or not active extraction and treatment of the off-site and deeper portions of the alluvial groundwater system will be required—before it can formulate a definitive position on OU-8. We would also like to see the remedy selection process streamlined as much possible, especially for operable units (such as OU-3) where there is little remaining uncertainty about required measures. And a determination should be made sooner rather than later about the technical practicability of intermediate-zone and deep-zone groundwater remediation. The results of RI/FS investigations suggest it will not be practicable

to achieve remedial action objectives in these groundwater zones either cost-effectively or within a reasonable timeframe.

This is not to say that a final Record of Decision first has to be issued for the OU-1 remedy or for the other operable units at the Site. But we do need to have a clearer sense of the remedial alternatives being considered—or at least the remedial action objectives and remediation goals—and the range of associated costs likely to be incurred for operable units for which Atlantic Richfield will be deemed at least partially responsible before we can consider participating in a remedial action for an operable unit for which we do not have liability. At a minimum, Atlantic Richfield would need some assurance that, for example, active groundwater extraction and treatment north of the mine site boundary will be deferred until after on-Site source control measures—such as those to be performed at OU-8 and OU-4a—are fully implemented. We would also want to make sure such measures will only be required if monitoring demonstrates an expanding mine-related impact, and if—despite the implementation of institutional and engineering controls—a complete human or ecological receptor exposure pathway is confirmed.

In addition, Atlantic Richfield must reserve any decision on participation in an OU-8 remedy until after we have more definitive information about SPS's and Freeport McMoRan's mining plans. We would not want to commit resources to an OU-8 response action, only to learn later that completed measures are inconsistent with, or may be damaged by, future mining activities. We also need to understand what role other parties will play in completing the OU-8 remedy, and what alternative sources of funding will be made available. It should come as no surprise that Atlantic Richfield does not intend to shoulder the majority of the costs or work obligations for OU-8.

In summary, the timing for an Atlantic Richfield decision about OU-8 depends in large part on the timing for other decisions about the OU-1 remedy and future mining activity at the Site. Atlantic Richfield is certainly willing to engage in discussions with NDEP, EPA, SPS, and other interested parties in the meantime, but it is difficult for us to see how a decision about OU-8 can occur before some of these other significant issues are resolved.

Threshold Conditions

NDEP has asked Atlantic Richfield to identify any necessary or threshold conditions for participating in a long-term solution for OU-8. This, again, is difficult to articulate with much specificity under the current circumstances, but some possible prerequisites include the following:

- OU-8/OU-1 Linkage. As noted above, Atlantic Richfield firmly believes there is a causal connection between Arimetco's OU-8 facilities and impacts to groundwater at the Site. NDEP and EPA need to recognize this connection and agree to investigate or collaborate in the investigation of the nature and extent of these impacts. There would also need to

be some commitment by the agencies and other parties to contribute funding to the OU-1 remedy in an amount commensurate with the groundwater impacts attributable to OU-8.

- OU-1 Active Remedy Deferral. As noted above, any OU-1 remedial action requiring active groundwater extraction and treatment, particularly in areas north of the mine site boundary, should be deferred until on-site response actions, including the OU-8 and OU-4a remedies, are completed, and until a determination can be made through ambient monitoring whether or not such actions succeed in stabilizing or shrinking the groundwater plume. In the meantime, it is important to reach consensus on remedial action objectives and remediation goals for the groundwater remedy.

- NDEP Lead. NDEP should assume a lead oversight role for the OU-8 remedy and perhaps other operable units. NDEP can invoke regulatory programs other than CERCLA, including mine site reclamation and closure, which may reduce the overall scope and cost of the cleanup. Based on Atlantic Richfield's experience at the Rio Tinto site in Elko County, Nevada, NDEP oversight can result in increased efficiency and reduced oversight costs.

- Joint Participation. Atlantic Richfield cannot agree to participate in the OU-8 remedy by itself. Work or funding assurances must also come from some or all of the following: SPS, Freeport McMoRan, NDEP, EPA, and BLM.

- Participation Constraints. Whatever participation Atlantic Richfield may agree to, if any, its total financial commitment to the OU-8 remedy should be capped at a pre-determined amount. Atlantic Richfield cannot agree to a participation percentage for an open-ended future expenditure. At a minimum, other sources of funding would need to be made available if total remediation costs exceed the initial estimates used in determining Atlantic Richfield's payment share. Atlantic Richfield will not provide financial assurance for the full amount of theOU-8 remedy.

- Consistency with Other Response Actions. Implementation of an OU-8 remedy should not interfere with remedial activities that may be required for other operable units at the Site. For example, placement of cover material on the OU-8 heap leach pads and excavation of the fluid management system ("FMS") ponds should not completely deplete available borrow material sources or repository capacity that may be needed for OU-4a or OU-3.

- Termination of FMS obligations. Atlantic Richfield is currently maintaining the OU-8 FMS, conducting bird deterrence, and performing Site security, all at a substantial cost (approximately $1 million per year). These obligations would have to be terminated or re-assigned as a condition of Atlantic Richfield's participation in an OU-8 remedy. In addition, Atlantic Richfield should receive some form of financial accommodation for its

out-of-pocket FMS-maintenance costs. This could come in the form of a partial credit against future agency oversight costs or other payment obligations.

- Institutional Controls. Appropriate institutional controls should be implemented as part of the OU-8 remedy to minimize or eliminate the potential for human exposure to hazardous substances. These may include prohibiting residential development and groundwater wells for domestic or potable uses. Implemented institutional controls should, in turn, be considered when performing risk assessment and evaluating remedial alternatives for other operable units.

- NPL Listing. NPL listing may provide the only viable means of ensuring an adequate source of funding for OU-8. If NDEP is considering deferring NPL listing of the Site while it oversees the OU-8 remedy,[1] there should at least be an agreement in place by which listing will not be challenged in the future if changed conditions or other unanticipated circumstances require it.

Liability Protections

NDEP also asked what liability protections Atlantic Richfield would request in consideration of its participation on an OU-8 remedy. At a minimum, we would need to receive standard covenants not to sue from Nevada and the United States relating to OU-8, including releases of hazardous substances to groundwater from OU-8. Any administrative settlement would need to provide for contribution protection under CERCLA Section 113(f)(2), 42 U.S.C. 9613(f)(2). Atlantic Richfield would also request a release and covenant not to sue for natural resource damages recoverable under CERCLA, the Clean Water Act, and state law. Finally, Atlantic Richfield would want to be identified as an additional insured on any insurance policies purchased in connection with the cleanup, including cost-cap insurance.

Scope of Participation

NDEP's last question concerns the extent to which Atlantic Richfield would be willing to participate in the remedial action described in SRK's March 2015 Conceptual Closure Plan for OU-8. SRK's preliminary planning cost estimate is approximately $30 million.

Before discussing how much of the OU-8 remedy Atlantic Richfield would be willing to participate in, the question first needs to be asked whether the Conceptual Closure Plan has identified the proper cleanup approach. Again, if the selected alternative will interfere with future mining development, it may need to be reconsidered. Similarly, managing the Site as an active mining operation, rather than a CERCLA remedy, may be a more cost-effective strategy.

[1] See EPA Guidance on Deferral of NPL Listing Determinations While States Oversee Response Actions, OSWER Dir. 9375.6-11 (May 3, 1995).

Even assuming for the purposes of discussion that the selected remedial alternative will be implemented and SRK's cost estimate is accurate, it still is extremely difficult for Atlantic Richfield to quantify its participation share. How much Atlantic Richfield would be willing to contribute towards OU-8 depends in large part on what it will be required to do and how much it will be required to spend elsewhere at the Site. The more reasonable the remedial action for OU-1, for example, the more we may be willing to participate at OU-8. But regardless of those other considerations, it is highly unlikely that Atlantic Richfield would ever willingly commit to a majority stake in a $30 million OU-8 remedy. We fail to see how the remedial alternative described in the Conceptual Closure Plan can be implemented without substantial contributions from other parties and funding sources.

Closing

Atlantic Richfield appreciates NDEP's attempts to push the Site remedial action process forward and accomplish a timely and workable solution for OU-8. We have tried to provide meaningful responses to NDEP's questions, which we hope will be useful as NDEP considers its funding options. As we have tried to explain, Atlantic Richfield's perspective on OU-8 depends in large part on the direction that EPA and NDEP are headed with OU-1 and some of the other operable units and how the CERCLA process comports with future mining operations at the Site.

We look forward to further discussions with NDEP on the issues addressed in this letter. In particular, we would welcome the opportunity to discuss the agencies' views on the OU-1 remedial strategy in the near future. Please let me know if you require any additional information or clarification.

Sincerely yours,

Benjamin Carl Harris for

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cc: Patricia Gallery, Atlantic Richfield
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