ATTACHMENT: SUPPORT DOCUMENT ON
ADDITION OF ANACONDA COPPER MINE TO NPL

The Anaconda Copper Mine was operated by the Anaconda Copper Company from 1953 to 1978, which was acquired by Atlantic Richfield Company ("ARC") in 1977. From 1988 until 2000, the Site was operated by Arimetco, Inc. During ARC's operations, Site activities included open-pit ore extraction, metals extraction with sulfuric acid, and the disposal of tailings, process fluid, and waste rock. This 25-year period generated 189 million tons of tailings, much of it disposed on-Site in both lined and unlined ponds. After Arimetco bought the mine property in 1988 it began operating a new copper extraction process that employed a sulfuric acid solution to leach metals from both the former Anaconda tailings and fresh ore from the nearby MacArthur Mine. The Arimetco fluid management system utilized several lined ponds. In 2000, Arimetco abandoned the Site without closing the heaps or the fluid management system as required by Nevada law. Thereafter, Nevada's Division of Environmental Protection ("NDEP") assumed the responsibility for emergency management of Arimetco's acidic heap leach fluid system.

EPA initially proposed adding the Site to the NPL in December 2000, after conducting an expanded assessment of the Site. Then-Governor Guinn declined to support listing, noting the desire to persuade ARC and Arimetco to manage the Site in a manner that might avoid the need for federal support. To facilitate an alternative to listing, EPA, NDEP and BLM entered into a 2002 memorandum of understanding ("MOU"), which provided interagency coordination and positioned NDEP as the lead agency. The United States sought to obtain funding for the Site through the Arimetco 1998 bankruptcy case but ultimately found that potential source depleted.

In 2003, the agencies became aware of significant radiological concerns in soil and groundwater at the Site. In 2004, NDEP and EPA began discussions about the effectiveness of the MOU process and whether, given the complexity of the radiologic concerns, NDEP had sufficient resources to continue as the functional lead. On December 10, 2004, NDEP sent EPA a letter requesting that EPA formally assume the lead role at the Site. On December 20, 2004, EPA accepted the lead role.

To respond to acute hazards, on March 31, 2005, EPA issued to ARC a unilateral administrative order that required ARC to operate the Arimetco fluid management system, incorporating the requirement from a previous NDEP consent order with ARC. On January 12, 2007, EPA issued another unilateral order to ARC, directing it to conduct a remedial investigation and feasibility study for remedial options for all parts of the Site except the above-ground Arimetco facilities. In 2009, EPA and ARC executed an administrative order on consent wherein ARC agreed to operate and maintain the Arimetco fluid management system. ARC's commitment does not include more significant repairs to the system, nor does it include decommissioning the system.

Funds to repair and maintain the integrity of the Arimetco fluid management system have been obtained ad hoc among EPA, NDEP, ARC and the current Site owner, Singatse Peak Services ("SPS"). No funding other than federal remedial action funding has been

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identified for a permanent solution to the Arimetco heaps and the fluid management system. EPA completed a remedial investigation and feasibility study in May 2012, which would support selection of a final remedy for the Arimetco heaps and fluid management system. Although EPA already had incurred at least $11 million on interim costs toward the Arimetco fluid management system, EPA agreed to delay selection of such final remedy at the request of NDEP to allow for the exploration of re-mining options or other sources of private funding to permanently close the ponds and heaps. In 2015, NDEP completed its conceptual closure plan for the ponds and heaps to supplement the EPA feasibility study, which identified a similar remedial plan as had EPA's feasibility study, still with a projected capital cost of approximately $30 million.

EPA and NDEP have explored remining options for the Site since at least 2009, when SPS acquired the Site through the Arimetco bankruptcy in a deal based on future royalties (with little potential to provide funding for response actions at the Site). EPA then agreed, at NDEP's request, to postpone a proposal to add the Site to the NPL to allow SPS to conduct mine exploration and potentially put the mine back into use in a manner that might mitigate environmental exposures. In June 2014, SPS announced an interest in acquisition by Freeport Nevada, a subsidiary of the global mining company Freeport McMoRan, which may conduct additional mining at the Site. Nonetheless, EPA understands that Freeport Nevada will not complete the acquisition until first completing three phases of diligence. All of the parties agree that remining at the Site still would not occur for approximately ten more years. Even then, there is no certainty that remining will occur in a manner to mitigate existing conditions at the Site and address the Fluid Management System problem at hand.

NDEP's latest effort to find alternative funding to address the Site in lieu of adding the Site to the NPL was presented in its August 26, 2015 letter proposing to ARC and SPS a state-oversight response that they fund, without federal involvement or covenants. EPA understands that neither company believes that adding the Site to the NPL is a compelling reason to assume additional obligations at the Site. No information available to EPA suggests that either ARC or SPS will change its operations if the Site is added to the NPL. Regardless, any negotiated alternative to listing must determine a remedy in a manner consistent with the National Contingency Plan ("NCP") process if the parties intend to obtain complete federal covenants.

Separately, ARC has asserted that it believes itself not to be wholly responsible for the groundwater contamination at the Site. EPA and NDEP have discussed that by all technical and legal standards, ARC should be jointly and severally liable for the groundwater contamination, but ARC's current assertion leaves the groundwater also without a certain and comprehensive means of remedial action.

To date, EPA has spent at least $21 million in response costs, more than half of which went toward stop-gap measures for the Arimetco fluid system that have not advanced that portion of the Site significantly closer to a final remedy. ARC continues to conduct Site investigations and to maintain the Arimetco fluid management system pursuant to its obligations to EPA. Because ARC is not committed to do more than maintain the fluid

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management system to prevent overflows, the ponds continue to precipitate hazardous salts that fill in the evaporation ponds. EPA and NDEP anticipate that these precipitates will reduce the capacity of the fluid system until the ponds begin to overflow, and that major construction of system improvements must begin by summer 2019 to avert this release. To date, neither company has made a proposal that contributes sufficient or timely resources to provide a remedy for the Arimetco heaps and fluid management system.

Since we have not secured private funding, it is time to pursue the option of public funding to address this problem. The only way to access federal funding is by proposing the Site to the NPL. We must move forward now, well before the current pond capacity is exceeded, so that the listing and funding process will be complete and funds may be available for final and permanent remedial action.

After proposing the Site to the NPL, EPA may defer final listing of the Site to the NPL at the request of the State, either informally or in a formal manner pursuant to Section 105(h) of CERCLA, 42 U.S.C. § 9605(h). In the formal process, EPA generally must defer final listing at the request of the State if the State or another party under an agreement with or order from the State provides for the long-term protection of human health and the environment in compliance with a State program that governs the response action. In the formal deferral process, after one year EPA would determine whether the State is making reasonable progress toward completing the response action. EPA may provide an additional 180 days for the State to enter into an agreement with another party to conduct the response action. An agreement that provides 100 percent private funding of a response under Nevada law likely would satisfy this progress requirement. If such progress were achieved, the formal deferral would continue. However, EPA may finalize the listing if insufficient progress is made toward the response action or conditions warrant the issuance of a federal health advisory.

Under the less formal process, if the State obtained any commitment to remediate the Site that provided a compelling alternative to listing, EPA simply could make a decision to not complete the final listing process. The informal approach is flexible in that regard, but would not necessarily bind EPA against listing for the 18 month period mandated by the formal deferral process. Under either the formal or informal approach, a commitment for a phased response may be a reasonable start, leaving EPA to evaluate progress through the course of the respective phases.

In addition, EPA has, by policy, created a "Superfund Alternative" approach that could provide both a state-lead response and federal covenants. This approach has been used successfully at the Rio Tinto Mine Site, in Elko County, Nevada. To obtain federal covenants as a Superfund Alternative site, there must be 100 percent private funding of the remedial action, which must adhere to NCP standards.

We are concerned that a gap in resources at the Site may result in discharges from the Arimetco fluid system that significantly elevate the groundwater contamination levels in the Mason Valley Groundwater Basin. The Office of the State Engineer of the State of

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Nevada concluded that the groundwater resources of the Mason Valley are being depleted at an alarming rate and it is essential for the welfare of the area that immediate action be initiated to protect these groundwater resources. Protecting resources from contamination is more efficient than removing contamination once it exists, and establishing a comprehensive remedy for groundwater will prevent further migration of contaminants from the Site. Groundwater resources statewide should be protected to ensure beneficial uses for agriculture, livestock watering, and residents with individual domestic wells.

The groundwater beneath the Site and extending to the north and west of the Site already contains levels of arsenic, uranium, and other heavy metals above state and federal drinking water standards. While prediction of future movement of site-related contaminants in groundwater is not an exact science, in the past year, consultants to Atlantic Richfield Company produced documentation showing that mine impacted groundwater has traveled more than halfway from the Site property toward the Yerington Paiute Tribe Reservation. The Yerington Paiute Tribe have installed a treatment system to address elevated levels of arsenic and uranium in Tribal wells, but it remains uncertain whether the system would be able to address any additional loading of arsenic, uranium, and other heavy metals that may occur. A comprehensive remedy will alleviate the impacts to the Yerington Paiute Tribe, particularly as increased contaminant concentrations may challenge the Yerington Paiute Tribe treatment system.

In addition, more than 100 households near the Site currently receive bottled water under a program that has continued for more than a decade. A pending municipal water line extension, resulting from private litigation against ARC, is not anticipated to be installed until later this winter, and not all well owners agreed to this settlement. Those residences not hooked up to the municipal water line will continue to be impacted or threatened by groundwater contamination if the groundwater resource is not restored.

Some community sectors have stated a concern with an alleged "stigma" from adding a site to the NPL. In EPA's experience, adding a site to the NPL demonstrates that the site is being managed and is not uncontrolled, and generates data to demonstrate that any potential exposure pathways are mitigated. By not adding the Site to the NPL, local industry such as nearby onion farms are at continued risk that competition will allege that local products are tainted, as happened in 2009. At that time, EPA provided data that was available because of its activities at the Site, which demonstrated that local produce was safe and not tainted. EPA will continue to act as it has to dispel statements that inaccurately link the Site to the quality of agricultural products, but without developing a comprehensive remedy, appropriate assurances may not be available in the future.

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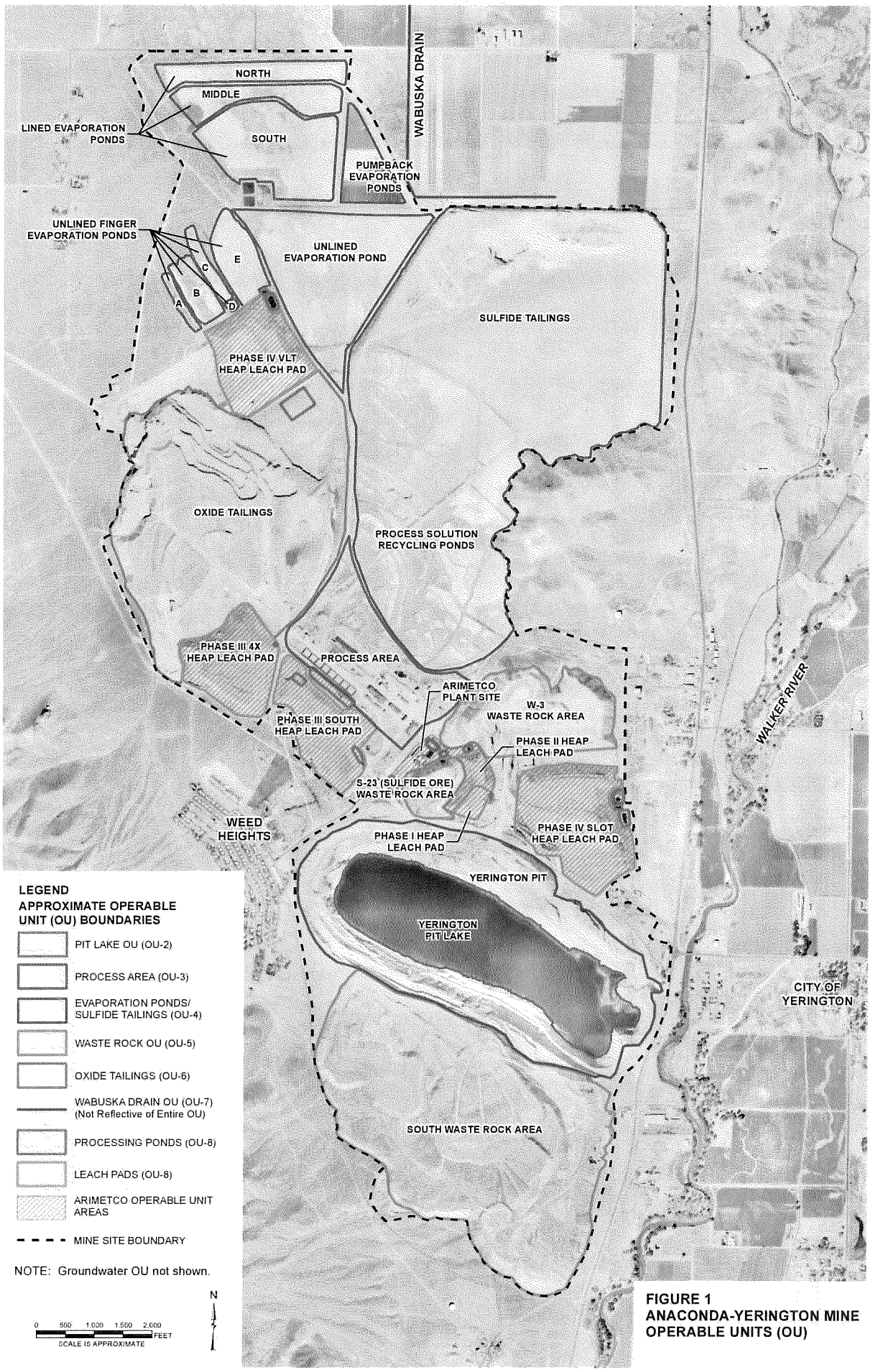

FIGURE 1
ANACONDA-YERINGTON MINE OPERABLE UNITS (OU)