STATE OF NEVADA

Department of Conservation & Natural Resources

Steve Sisolak, Governor Bradley Crowell, Director Greg Lovato, Administrator



May 4, 2021

Ms. Vida Keller, Chair **Lyon County Commission** P.O Box 201 Silver Springs, NV 89429

Mayor John Garry City of Yerington 14 E. Goldfield Avenue Yerington, NV 89447

RE: Anaconda Copper Mine Site Ms. Ginny Hatch, Chairwoman Yerington Paiute Tribe 171 Campbell Lane Yerington, NV 89447

Ms. Amber Torres, Chairwoman Walker River Paiute Tribe P.O. Box 220 Schurz, NV 89427

Dear Chair Keller, Chairwoman Hatch, Mayor Garry, Chairwoman Torres:

As you may be aware, a recent article published online by the Nevada Independent on April 25 has raised questions about the science and process used to establish the extent of mine related groundwater contamination from the Anaconda Copper Mine Site (Site) in the Final Remedial Investigation Report (final groundwater investigation report) approved by the Nevada Division of Environmental Protection (NDEP) in May 2020.

This letter provides critical information and context as to how and why NDEP revised the estimated extent of groundwater contamination attributable to historical Site activity from the estimate included in the November 2016 Background Groundwater Quality Assessment Report (BGQA Report), which was approved by the US Environmental Protection Agency (EPA) prior to Site deferral to State-lead in February 2018.

The estimated extent of mine related groundwater contamination approved by EPA in the BGOA Report noted mixing and contribution from naturally occurring mineralized areas and areas influenced by flood irrigation that altered geochemical conditions. The BGQA Report acknowledged that concentrations of elevated uranium and arsenic in the groundwater system to the north of the Site included contributions from multiple sources. However, the BGQA Report did not attempt to further segregate areas of the groundwater system with elevated uranium and arsenic groundwater contamination that could be reasonably attributed to each source of contamination: mine, naturally occurring, and agricultural influences.

After Site deferral in 2018 and looking ahead to completion of the final groundwater investigation report, NDEP recognized that selecting and enforcing a cleanup solution for groundwater in a multiple use and historically heavily pumped groundwater basin with multiple sources of elevated uranium and arsenic would be difficult and contested. Consistent with best practices, NDEP undertook a due diligence process making best use of all reasonable scientific lines of evidence to attribute, as accurately as possible, all sources of uranium and arsenic. Anaconda Copper Mine Site Page 2 May 4, 2021

Ultimately, NDEP must select a groundwater cleanup solution based on in-depth analysis that considers all reasonable explanations for elevated uranium and arsenic in groundwater.

Under NDEP oversight and direction, Atlantic Richfield Company (ARC) was required to analyze different and additional lines of evidence related to understanding the extent of Site related groundwater contamination. One of the key changes between the previous BGQA Report was fully analyzing new information about aquifer hydraulics that govern how fast groundwater has moved in the aquifer and carried contamination from the Site. The BGQA Report estimate of potentially mine related groundwater contamination primarily relied on analyzing the spatial distribution of arsenic, sulfate, and uranium concentrations in groundwater. Based on that additional analysis of aquifer hydraulics, including completion of the plume stability study that analyzed trends in groundwater concentrations over time, NDEP determined that a complete analysis of all the lines of evidence did not reasonably support the extent of mine related contamination included in the BGQA Report.

NDEP and its consultant team, with consideration of input from the US Bureau of Land Management (BLM) and technical representatives from the Yerington Paiute Tribe and Walker River Paiute Tribe, approved portions of the ARC analysis that were supportable and required ARC to change those that were not. A main source of contention between ARC and the other stakeholders was how ARC interpreted and analyzed the data related to a putative geothermal influence just north of the Site and how that affected the analysis of the source of elevated uranium and arsenic concentrations in groundwater. Eventually, in March 2020, NDEP issued written direction to ARC to correct the report. NDEP notified ARC that if they did not correct the report, NDEP would exercise work takeover and seek monetary penalties under applicable provisions of the enforceable agreement ARC previously signed with NDEP, as that agreement was incorporated into February 2018 Deferral Agreement between NDEP and EPA. In the end, the extent of mine related groundwater contamination in the approved report was less than in the EPA's previous estimate in the BGQA Report but more than what ARC was attempting to demonstrate.

While groundwater geochemistry and contaminant hydrology at the Site are complex, the process NDEP used to revise the estimated extent of groundwater with contamination from the mine is straightforward. As NDEP Administrator, drawing on my career of more than 14 years at US EPA and 15 years at NDEP, I stand behind it 100%.

The potential effect of the change in estimated extent of groundwater contamination from the mine on ARC responsibility has yet to be determined. It is not yet clear that the reduced extent of groundwater contamination attributed to mine activity will result in a different cleanup plan for this multiple use, interconnected aquifer system north of the former mine Site. NDEP must still oversee completion of human health and ecological risk assessments, engineering feasibility studies, propose a groundwater cleanup plan for public comment, and create a record of decision. That decision, including the proposed plan and final record of decision will be reviewed with EPA under the terms of the February 2018 Deferral Agreement between EPA and Nevada.

Anaconda Copper Mine Site Page 3 May 4, 2021

Looking ahead, NDEP is expects major construction on the first phase of the Site cleanup to begin later this summer. As called for in the Deferral Agreement with EPA, NDEP is on track to meet the targets below:

- Starting construction of Phase 1 remedy by 2019 (completed)
- Select Cleanup Plan for Phase 2 (groundwater and northern areas) by 2023 (on track)
- Completing Phase 1 construction by 2024 (on track)
- Select Cleanup Plan for Phase 3 (pit lake and southern areas) by 2024 (on track)
- Complete Phase 2 construction by 2028 (pending)
- Complete Phase 3 construction by 2029 (pending)

In closing, I assure you that NDEP takes its responsibility to steward Nevada's water quality and protect public health seriously. NDEP's resources and capabilities have expanded significantly over time to match the demands of addressing major environmental contamination issues from the myriad of past practices around the state. For an additional example of NDEP's current remediation capabilities, beyond the Anaconda Mine Site, NDEP continues to successfully manage an even larger investigation and cleanup effort at the Black Mountain Industrial Complex near Henderson, NV. NDEP is completing that work in coordination with and under active oversight from multiple project partners including the Southern Nevada Water Authority, Metropolitan Water District of Southern California, Central Arizona Project, and EPA. With the right resources, adherence to standards that meet or exceed requirements from the EPA Superfund program, and a dogged focus on making progress, I am confident NDEP will continue to deliver results for Nevadans.

Please contact me directly at <u>glovato@ndep.nv.gov</u> or at 775-687-9373 if you have any questions or would like to discuss this matter further. As always, information on the Anaconda project, including all Site documents are accessible through NDEP's website at https://ndep.nv.gov/land/abandoned-mine-lands/anaconda-home.

Sincerelm

Greg Lovate Administrator

cc:

Robert Switzer, City Manager, City of Yerington
Jeff Page, County Manager, Lyon County
Senator Fabian Donate, Chair, Senate Natural Resources Committee
Assemblyman Howard Watts, Chair, Assembly Natural Resources Committee
Senator James Settlemeyer, Senate District 17, Senate Minority Leader
Assemblywoman Robin L. Titus, Assembly District 38, Assembly Minority Floor Leader
Bradley Crowell, Director, Department of Conservation and Natural Resources
Tom Porta, Chair, State Environmental Commission
Jon Raby, Nevada State Director, US Bureau of Land Management
Deborah Jordan, Acting Regional Administrator, US EPA Pacific Southwest Region