



Great Basin Resource Watch

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Working with Communities to Protect Their Land, Air, and Water

November 18, 2021

Natasha Zittel
Staff Engineer
Division of Environmental Protection
Bureau of Mining Regulation and Reclamation
901 South Stewart Street, Room 4001
Carson City, Nevada 90701-5249

Re: *WPCP NEV87061 renewal for the Fortitude/Reona-Phoenix Project*

Dear Ms. Zittel,

Great Basin Resource Watch (GBRW) appreciates the assistance of NDEP staff in our acquiring data on this project and taking time to discuss the permit renewal.

GBRW remains concerned about the evolution of the Phoenix mine and did not support the major modification from 2018. Our conclusion from our 2018 letter was:

“Great Basin Resource Watch cannot at this time support the major modification proposed by Newmont on the Phoenix mine due to the lack of regulatory clarity for permitting the site, lack of complete analysis, and no analysis on the comparison of the current plan of operations versus the proposed if there is a failure of the treatment system.”

Our position has not changed and we will be reviewing the updated analysis as it comes available. We also understand that the mine remains in Phase IV with no increase in extraction for this renewal. Given that the mine will be treating water pollution indefinitely GBRW would not support any expansion or other change in the mine plan that would result in more water pollution and/or of greater toxicity to be treated in perpetuity.

Long-term “perpetuity treatment” at the Phoenix site

The Phoenix mine is arguably the most acid generating mine site in Nevada with ~80% waste rock being considered acid generating.¹ Currently, Nevada Gold Mines is proposing to treat mine acidified toxic drainage and mine impacted groundwater for potentially hundreds of years. To our knowledge there is no end date for the treatment of the toxic water. Nevada regulations do not define perpetuity treatment, but it would be reasonable to consider the Phoenix mine a perpetuity treatment site. Therefore, the site will never really be closed in a practical sense.

¹ Geomega, *Hydrochemical Characterization Report for the Greater Phoenix Project*, February 19, 2015.

The fact sheet² that accompanied the permit does not mention that there is no end date for treatment. It does indicate that the mine life is to be increased to 2063 (p.5), and then there is a section titled, “GPP Tentative Plan For Permanent Closure:” However, there is no discussion of the long-term treatment expectation, which currently has no end-date for treatment. The fact sheet is not accurately representing the situation at the site. The fact sheet needs to contain more information for the public to understand the situation at the mine site. There should be information on how contaminated the water is and how much will need to be treated on an annual basis. Given that the long-term nature of the closure plan it is vital that the fact sheet provide more detail on how the treatment is to proceed.

The treatment in perpetuity aspect of Phoenix mine creates a lack of clarity on the “Permanent Closure” of the mine. Nevada regulation (NAC 445A.446) states, “Permanent closure is complete when the requirements contained in NAC 445A.429, 445A.430 and 445A.431 have been achieved.” NAC 445A.429 requires that, “The holder of the permit must institute appropriate procedures to ensure that all mined areas do not release contaminants that have the potential to degrade the waters of the State.” Under both the existing plan and the proposed there will be “mined areas” that will result in degrading the waters of the State unless actively treated. GBRW seriously questions whether Nevada Gold Mines can “ensure” that there will be no release of contaminants when there is no end-date for active treatment. There is no example of sustained treatment for hundreds of years, and GBRW assumes (given the likely time scale for active treatment) that significant interruptions and failure of the active treatment system will occur and thus degrade the waters of the State. In our view this mine falls outside of the ability of the state of Nevada to regulate and thus cannot be properly permitted.

GBRW recognizes that long-term and even perpetual treatment may be the only recourse. However, we oppose any changes to the mine plan that will result in a greater amount of waste or toxic solutions that will require treatment in perpetuity. In our view it is irresponsible and should be illegal for a mining operation (or any facility) to propose an expansion or other change resulting in an increased burden to future untold generations with no end in sight.

GBRW considers the “closure plan” proposed by Nevada gold Mines or any perpetuity plan as purely theoretical. As a public interest organization we must assume that the treatment operations will fail before the toxic drainage ceases. GBRW has asked that analysis be done pertaining to the affect on the regional environment and communities assuming treatment interruption and failure occur in the future after 100 years, 200 years, and so on. If interruption/failure occurs will the effect on the environment and communities be more severe under the current plan of operations or under the proposed Phase V and “life of mine” mine plans? Nevada Gold Mines uses proprietary software tailored for the Phoenix site, so the public does not have the ability to run that kind of analysis, so NDEP needs to require as a schedule of compliance item the analysis discussed above.

Alternatives to Perpetuity Treatment are Needed

Mining projects like the Fortitude/Reona (Phoenix)/Greater Phoenix Project Action, which explicitly anticipates very long-term (perpetual, by the BLM definition of 500 years or more) active management as virtually certain outcome, are inherently controversial. Explicit engineering plans to capture and treat water, funded by a diversified financial trust, leaves the public

² Nevada Department of Environmental Protection, Bureau of Mining Regulation and Reclamation, “Fortitude/Reona (Phoenix) Project NEV0087061 (Renewal 2021, Fact Sheet Rev. 040).”

uncomfortable with the cross-generational obligations. There is good reason for this, since the status of governments, laws, and financial institutions are not guaranteed in perpetuity.

At its core, the Phoenix Mine permit provides a private mining entity with short-term profit while leaving to society an obligation to maintain for centuries an active treatment system amidst the unavoidable uncertainty in future institutional stability.

Nowhere in the permit application is there a stated goal to eventually close the Phoenix Mine in a manner that allows compliance with water-quality regulations that is passive, or at least minimally active. GBRW finds this unacceptable. NDEP must compel Nevada Gold Mines to aggressively pursue detailed analysis of approaches to close the mine site without the need for perpetual treatment, even if these alternatives seem infeasible on the surface. It is important for the public to be informed about this option (in the NDEP factsheet as well) and decide for themselves if perpetual care is acceptable.

Content and Structure of the Fact Sheet

The fact sheet should include a map that shows layout of mine operations and the monitoring locations, which are listed in the permit.

GBRW also recommends that NDEP modify the factsheet to include a section identified as “Mining Impacted Waters” as defined in regulations. Within this section the public will be able to see in one place more clearly how much water is being polluted by the mine, the average exceedences, how the water pollution is being managed, and some sense of how long active treatment is expected. Some of this information is in the factsheet, but scattered a bit throughout the document. A primary public concern is whether the mine is a source of water pollution and how it threatens the environment.

The factsheet should indicate whether the chloride plume being managed by a pumpback system as a result of the gold tailings dump is expanding or being reduced, or if unclear describe what is needed to determine the evolution of the plume.

GBRW is available for continued discussions on the Phoenix mine.

A handwritten signature in black ink that reads "John Hadder". The signature is written in a cursive, flowing style with a large initial "J" and "H".

John Hadder
Director, Great Basin Resource Watch