Bryan Campbell

January 11, 2024

Good afternoon,

I am writing to the ADEQ to register my concerns over the proposed renewal of AZPDES Discharge Permit No. AZ0026387 for South32's Hermosa Project Mine. The proposed permit would allow for dangerous discharges of mine water to Harshaw Creek, Alum Gulch, and Sonoita Creek, threatening the health of local residents and the environment in violation of the Federal Clean Water Act and the State of Arizona's laws relating to surface water quality. The permit, as currently written, is also contrary to ADEQ's own statutory duties, which require, that ADEQ "act to protect the environment" and to promote "the protection and enhancement of the quality of water resources" and to provide for the "prevention and abatement of all water and air pollution"; and to "[e]nsure the preservation and enhancement of the natural beauty" in our state.

Under controlling law, that ADEQ is subject to, the permit cannot issue, among other things, ADEQ updates or first prepares the Total Maximum Daily Load (TMDL) studies and necessary waste load calculations required by the Federal Clean Water Act so that the impaired (contaminated) surface waters of Harshaw Creek, Alum Gulch, and Sonoita Creek can finally be returned to good health. The TMDL program is a core element of overall efforts to protect and restore water quality to surface waters across the United States and here in Arizona.

I have enclosed a file that summarizes my comments that are based on Patagonia Area Resources Alliance that are broken out under the Harshaw Creek, Alum Gulch, and Sonoita Creek discharges.

In addition, it contains my comments that this mine is a NEW mine that predicates that ADEQ must consider any proposed permit issuance with a "new source" analysis for the entire site, which has been modified very significantly over the last 10 years compared to the historic mine site, which was very small, compared to the site that has been built.

Lastly it contains my comments of the fact that manganese and sulfate must be monitored frequently, at least once a month and reported on.

Thanks you for your consideration and answers.

Bryan Campbell

SUMMARY OF COMMENTS - ALL OF WHICH REQUIRE AN ANSWER:

HARSHAW CREEK

COMMENT 1: ADEQ claims without basis that the discharge location (Outfall 002) is in Lower Harshaw Creek. However, PARA (Patagonia Area Resource Reliance) has provided ADEQ with extensive evidence and documentation showing that Outfall 002 is actually constructed in Upper Harshaw Creek which is listed as impaired for various pollutants under Arizona's Clean Water Act 303(d) list. Accordingly, ADEQ must revise its grossly outdated TMDL for Upper Harshaw Creek before issuing this renewed Permit.

COMMENT 2: ADEQ must acknowledge the impairments in Lower Harshaw Creek and prepare a TMDL for Lower Harshaw before it can issue the proposed AZPDES permit.

COMMENT 3: ADEQ must acknowledge the true extent of the ongoing discharge to Harshaw and revise this Permit accordingly to include this discharge data in calculating permit limits – before issuing this renewed permit.

ALUM GULCH

COMMENT 4: The outdated TMDL must be updated and a new TMDL study must be completed on the new lead impairment in Alum Gulch – before ADEQ issues the renewed Permit.

COMMENT 5: ADEQ's workaround proposal to only allow discharge from "historic tailings" into Alum Gulch is preposterous. It ignores documented facts about how South32 has operated this mine site for years. It also disregards the well-known fact documented by both South32 and ADEQ that the tailings pile and mine seepage from this pile includes dangerous new sources of pollutants. Indeed, the tailings pile has, for years, been used by South32 to hold many tons of new waste rock, exploration rock, treatment plant waste, and potentially acid-generating material. ADEQ's supposed analysis and conclusion that the only mine seepage that will be discharged to Alum Gulch from the tailings pile will come from historic tailings is wildly inaccurate and misleading to the public. ADEQ must revise this provision – before issuing this renewed Permit.

SONOITA CREEK

COMMENT 6: ADEQ must complete a TMDL for the zinc impairment in Sonoita Creek – before issuing this renewed Permit.

COMMENT 7: ADEQ must perform a waste load allocation for the discharges to Sonoita Creek. This is required by the Clean Water Act so that South32's discharges will not further contaminate or degrade these downstream surface waters but rather can support the future restoration of water quality in the Creek.

THE HERMOSA PROJECT IS A BRAND-NEW MINE

COMMENT 8: ADEQ must determine these new facilities to be legal "new sources" of discharge – before issuing this renewed Permit.

COMMENT 9: ADEQ must revise the Permit to acknowledge that this mine is expected to go into production during the life of this Permit.

COMMENT 10: As a new source, the mine is subject to all modern performance standards and requirements of the Clean Water Act.

MANGANESE AND SULFATE MUST BE MONITORED

COMMENT 11: ADEQ must revise the Draft Permit to require monitoring for manganese and sulfate in order to protect human health and the drinking water systems and infrastructure of the Town of Patagonia and residents of the area – before issuing this renewed Permit.

MONITORING MUST BE DONE MORE FREQUENTLY

COMMENT 12: ADEQ must revise the Draft Permit to require this important monitoring be done at least monthly.