

## Julie Holding

I request that ADEQ deny the application for an Arizona Pollutant Discharge Elimination Permit, No. AZ0026387, for the South 32 Hermosa Project mine in the Patagonia Mountains.

The proposed permit would allow mine waste water to be discharged into Harshaw Creek, Alum Gulch, and Sonoita Creek. As a resident of the Town of Patagonia who drinks water provided by Town municipal wells, I am concerned to learn that the surface waters of Sonoita Creek are already impaired by zinc pollution. I am concerned that requirements of the Clean Water Act to meet existing surface water quality standards in Sonoita Creek have not been met, specifically, that ADEQ is required to prepare Total Maximum Daily Load (TMDL) studies for Sonoita Creek and has not done so.

I am concerned about reports that ADEQ has allowed mine waste water to be discharged into Harshaw Creek, for months, even though the last permit for surface pollutant discharge expired months ago. I am concerned that this mine waste water currently being discharged, and proposed future mine waste water, may contain manganese, sulfates, arsenic, cyanide, cadmium, lead, mercury, and uranium. I am concerned that these pollutants discharged into Harshaw Creek may make their way into Sonoita Creek, and may infiltrate the Town of Patagonia's water wells and the water that my neighbors and I drink.

I am also concerned that ADEQ plans to issue a permit that would not require monthly, or more frequent, water monitoring for elevated contaminants such as manganese, sulfates, arsenic, cyanide, cadmium, lead, mercury, and uranium.

Finally, I do not understand why the historic Trench Camp mine tailings would be allowed to discharge into Alum Gulch—up to 172,000 gallons of mine waste water per day. I do not understand why surface water pollution from a historic mine is not being fully abated to improve water quality. And I do not understand why a permit is proposed to be issued for a new mine to pollute surface waters of Harshaw Creek and Sonoita Creek with up to 6.48 million gallons of mine waste water per day.

Patagonia Area Resource Alliance's comments about this application are attached and included as part of my comments. Thank you for this opportunity to submit my comments.

**Summary of Proposed Comments to ADEQ On Proposed Renewal of AZPDES  
Discharge Permit No. AZ0026387 to South32 Hermosa, Inc.**

The Patagonia Area Resource Alliance (PARA) objects to the proposal from Arizona Department of Environmental Quality (ADEQ) to renew the Arizona Pollutant Discharge Elimination Permit (AZPDES) No. AZ0026387 for South32's Hermosa Project mine. A summary of PARA's primary objections to the Permit are listed below.

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 Arizona's laws relating to surface water quality. The issuance of the Permit, as written, is also contrary to ADEQ's own statutory duties which require, among other things, that ADEQ "act to protect the environment", promote "the protection and enhancement of the quality of water resources", provide for the "prevention and abatement of all water and air pollution"; and "[e]nsure the preservation and enhancement of natural beauty" in our state. A.R.S. § 49-204(A)(1), (7), (9) and (10).

Instead of doing its job to enforce the discharge provisions of the Clean Water Act to protect human health and the environment as required by law, ADEQ appears to have instead spent a great deal of time and effort during permit drafting attempting to avoid these core obligations and responsibilities.

Under controlling law, the Permit cannot issue until, among other things, ADEQ updates or first prepares the Total Maximum Daily Load (TMDL) studies and necessary waste load allocations required by the 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. Section 303(d) of the Clean Water Act requires states to identify waters that are impaired by pollution, even after application of pollution controls. For those waters, states must establish a TMDL of pollutants to ensure that water quality standards can be attained. A TMDL is both a quantitative assessment of pollution sources and pollutant reductions needed to restore and protect U.S. waters and a planning process for attaining water quality standards. 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. ADEQ's concerted efforts to avoid or trivialize its TMDL obligations in the Permit is astounding.

**HARSHAW CREEK**

The AZPDES Permit would allow discharge of up to 6.48 million gallons of mine water per day into Upper Harshaw Creek. This water will be produced from deep and destructive mine dewatering wells, and it will include historic and new seepage from the mine's tailings piles, core cuttings, and potentially acid-generating (PAG) rock from mine shaft development. The waters of Upper Harshaw Creek are impaired (contaminated) with elevated levels of copper, and low pH (acidity) that can result in heavy metal contamination. Despite documented impairments in the receiving waters of Harshaw Creek, ADEQ takes the position that it need not prepare a TMDL analysis to regulate South32's discharges into these impaired surface waters so that water quality standards can be achieved. This violates the Clean Water Act.