



PATAGONIA AREA RESOURCE ALLIANCE

317 McKeown Ave
PO Box 1044
Patagonia, AZ 85624

www.patagoniaalliance.org

A non-profit community organization with volunteer members. Our volunteers bring skill sets and experience that include:

Geology
Business Management
Ecology
Academia
Artisan Mining
Fundraising
Webmaster Skills
Marketing
Legal Council & Advocacy

The Patagonia area has a heritage that includes ranching, farming, eco-tourism, and multiple uses on public lands that include the Coronado National Forest, Arizona State Parks and Trust Lands, and Bureau of Land Management lands. It is rich with natural resources as well as mineral resources. Working within the legal parameters of local, state and federal governments, PARA's goal is to prevent further environmental degradation as well as promote restoration efforts in order to maintain and preserve our public lands, private lands, our water, and our air for future generations.

"There are some things in the world we can't change--gravity, entropy, the speed of light, and our biological nature that requires clean air, clean water, clean soil, clean energy and biodiversity for our health and well being. Protecting the biosphere should be our highest priority or else we sicken and die."

David Suzuki
award winning scientist, environmentalist, broadcaster

November 23, 2020
VIA CM, RRR and Emails

Arizona Department of Environmental Quality

Attn: Trevor Baggione

Director, Water Quality Division

1110 W. Washington St.

Phoenix, AZ 85007

baggiore.trevor@azdeg.gov

Re: Request for ADEQ to Suspend Consideration of the Applications for an AZPDES & APP Permit Submitted by Arizona Minerals, Inc., Pending ADEQ's Issuance of A "Comprehensive Written Request for Additional Information" Pursuant to A.R.S. § 41-1075(A) and A.A.C. R18-1-504(C)-(D)

Dear Director Baggione:

As you know, the Patagonia Area Resource Alliance (PARA) is a nonprofit community watchdog organization that is focused on the environmental and economic health and vitality of the Patagonia region of Arizona. Accordingly, I am writing on behalf of PARA in reference to the following permit applications filed by Arizona Minerals, Inc. (AMI) with the Arizona Department of Environmental Quality (ADEQ) on August 14, 2020 (collectively, "the Applications"):

1. Application for Amendment of AZPDES Permit No. AZ0026387; and
2. Hermosa Project – Trench Camp Property, Aquifer Projection Permit, Significant Amendment Application, P-512235.

Given the substantial deficiencies in AMI's Applications recently identified by PARA's technical experts, PARA respectfully requests that ADEQ promptly serve AMI with a comprehensive written request for additional information as discussed below – information that PARA submits must be considered by ADEQ as part of the AZPDES and APP permit process. ADEQ should, simultaneous with this request for additional information, immediately suspend the substantive review phase for AMI's Applications pursuant to A.R.S. § 41-1075(A) and A.A.C. R18-1-504(C)-(D) pending receipt of the requested information by ADEQ.

PARA received copies of AMI's Applications through a public record request. Upon review, PARA immediately flagged several areas of concerns with the information included in the Applications which raised the question of whether the Applications are, in fact, "administratively complete" within the meaning of A.R.S. § 41-1074 and applicable law. In order to better understand the potential environmental, flooding, and water quality impacts resulting from AMI's planned mine discharges to Harshaw Creek, PARA retained Laurel Lacher, PhD, RG, with Lacher Hydrologic Consulting, and Bob Prucha, PhD, PE, with Integrated Hydro Systems, LLC, to perform an initial hydrologic evaluation of the underlying data, methodologies, and conclusions contained within AMI's Applications. Using the information contained in AMI's Applications, coupled with a comprehensive literature review, Lacher and Prucha developed a Conceptual Basin Flow Model for the Sonoita Creek Watershed using MIKESHE proprietary software by DHI. Their conclusions were presented to the Town of Patagonia Flood & Flow Committee and AMI on November 12, 2020. The presentation was also attended by ADEQ hydrologists, Lauren Beder and Wayne Harrison. I provided you with a copy of the Lacher and Prucha power point presentation and a link to the recording of the Flood & Flow Committee meeting in my email to you dated November 13, 2020.

Among other conclusions Lacher and Prucha outlined during their presentation, Lacher and Prucha explained that AMI's discharges from the proposed new Outfall will quickly saturate the shallow alluvial aquifer along Harshaw Creek, resulting in direct flows through the Town of Patagonia and a material risk of increased peak flows (including flooding) in the Town. Prucha and Lacher also concluded that contaminants above the new Outfall on Harshaw Creek could be transported downstream as a result of the AMI discharges into Harshaw and observed that the mine's dewatering activities could facilitate the movement of degraded water from the numerous historic mine adits in the region into Harshaw Creek.

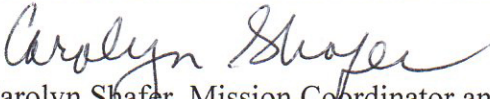
The work performed by Lacher and Prucha also revealed that AMI's permit Applications failed to analyze significant relevant data, including related to variable bedrock depths, variations in clay layers, a dynamic groundwater table, the Sonoita Creek inflows above the confluence of Harshaw Creek, distribution and dynamic of soil moisture, and stormwater runoff inflows along Harshaw upstream of the new proposed Outfall. A summary of the missing information identified by Lacher and Prucha can be found at slide 57 of their power point presentation, which I previously provided.

Based on the foregoing, ADEQ should not continue to process AMI's permit Applications as submitted. Rather, PARA urges ADEQ to suspend the substantive review phase for both the AZPDES and the APP Applications, until such time as AMI can address the deficiencies identified by Lacher and Prucha, which should be presented by ADEQ in a comprehensive written request for information as permitted by A.R.S. § 41-1075(A) and A.A.C. R18-1-504(C)-(D).

Please let me know if you have questions about PARA's request or if you would like to discuss this matter further. In addition, please let me know at your earliest convenience whether or not ADEQ is going to take the actions requested in this letter.

Thank you.

PATAGONIA AREA RESOURCE ALLIANCE, INC.


Carolyn Shafer, Mission Coordinator and Board Member

Cc: Vimal Chauhan, ADEQ Staff for APP (chauhan.vimal@azdeq.gov)
Jessica Kohls, ADEQ Staff for AZPDES (kohls.jessica@azdeq.gov)