

Hermosa Taylor Drilling Project  
Comments on Proposed Plan of Operations  
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The Coronado National Forest (CNF) is considering a request by Arizona Minerals, Inc. (AMI) for approval of a Plan of Operations (PoO) to implement a mineral exploration project, the Hermosa Taylor Drilling Project (Project) on National Forest Service (NFS) land in the Patagonia Mountains. AMI is a subsidiary of Arizona Mining, Inc., a Canadian corporation. I am a full-time resident of Patagonia, AZ and am submitting these comments in response to the Legal Notice of Opportunity to Comment on the PoO for the Project.

The Project proposed activities include conducting exploratory drilling activities, construction of temporary low-standard access roads, construction of three drill pads for drilling eight exploration holes, digging mud pits for storage of cuttings and drill mud, installing 5,000 gallon water tanks, removing 234 trees from the Project site, and pumping hundreds of thousands of gallons of groundwater from a local aquifer.

The CNF must prepare an environmental impact statement (EIS) and fully analyze the significant impacts - direct, indirect, and cumulative impacts - of this harmful project.

Issues/Resources to be Significantly Affected

1. Cumulative Effects

- Cumulative effects of the Project must be considered by the CNF in evaluating the PoO. (40 CFR 1508.7 and 1508.8)
- The Project must be considered in conjunction with other past, present, and reasonably foreseeable future actions (40 CFR 1508.7).
- Significant in the Patagonia Mountains are the presence of numerous abandoned mining sites, many of which continue to leak water that is highly acidic and laced with toxic metals. The composition of this acid mine drainage must be determined through laboratory testing and the cumulative



effects of the drainage from these old mining sites, including identification of drainage flow paths in Patagonia Mountains, must be considered in addition to the effect of the Project on water quality.

- The Project must be considered in conjunction with efforts to remediate leaking abandoned mines that will occur during the Project period and afterward if later remediation is reasonably foreseeable. The effects of this remediation must be calculated and added to the cumulative impacts of the Project on the CNF.
- The Project must be considered in conjunction with the Voluntary Remediation Program (VRP) agreement between AMI and the Arizona Department of Environmental Quality (ADEQ) wherein AMI agreed to remediate the Trench Mine/January Adit property. As a condition of acting upon the PoO, the CNF must obtain and analyze all environmental data in the possession of either party to the VRP and include this data when determining the cumulative effects of the Project.
- The Project must be considered in conjunction with all other proposed mining activities in Southern Arizona, including the Rosemont Mine and other proposed mining projects in the CNF. The cumulative effect of all these projects on resources must be considered, not solely the Hermosa Taylor Project.
- The CNF must satisfy its mandate under 40 CFR 1508.7 to consider the project in conjunction with "reasonably foreseeable future actions". For example, AMI statements of future proposals for mining-related activities in the Patagonia Mountains, at the Hermosa Taylor Drilling Project or elsewhere, must be evaluated by the CNF and a determination made whether these activities are reasonably foreseeable. If yes, such statements must be included when the CNF is calculating the cumulative impacts of the Project as required by 40 CFR 1508.7. AMI public documents such as reports to stock exchanges, shareholders, or investors and press/publicity releases certainly would meet the definition of reasonably foreseeable future actions. Any statement of reasonably foreseeable future actions in the Patagonia Mountains from any other source also must be included as the CNF determines cumulative impacts.



- Other cumulative actions and their effect on the environment that must be considered by the CNF include past, present and future border security efforts and climate change.

## 2. Affected Area:

- The Forest Service Handbook 1909.15\_15.2 states that, "Spacial boundaries define the affected area for each resource indicator. The affected area is the area in which a specific resource may be affected by management actions." Further, "Because affected areas are resource dependent, they generally have boundaries that are physical or biological rather than political."
- The boundaries of the affected area of the Project must be determined by the CNF. The affected area at a minimum should include the Harshaw Creek, Alum Gulch and Sonoita Creek watersheds, Lake Patagonia and the Santa Cruz River based upon water resources; and the Sky Islands of Southern Arizona and Northern Sonora, including the entire Patagonia Mountains and San Rafael Valley and any other geographical area involved in migratory patterns to or through the Patagonia Mountains, based upon biological resources.
- The boundaries of the affected area of the Project must include the land holdings of AMI and other mining interests. This area would include the staging area on AMI land for the proposed Project, the current sites of AMI exploratory drilling, the Trench Mine/January Adit property subject to the VRP agreement between AMI and ADEQ, and patented and unpatented claims of AMI and any other entity in the affected area.

## 3. Water Resources:

- AMI estimates that it will use approximately 440,000 gallons of water for the Project (20,000 gallons per week over five months). The effect of drawing this amount of water by the Project must be examined by the CNF for its effect on groundwater supplies.
- The Project does not address the need for an objective and comprehensive study of the quantity of water flowing in the Harshaw Creek, Alum Gulch, and Sonoita Creek watersheds. An independent, third-party groundwater



study is necessary for the CNF to determine the cumulative impacts of the Project and other activities on groundwater supplies.

- Page 10 of the PoO notes regarding the 440,000 gallons of water to be used for the project that, "This is within the range of water use for drilling programs that AMI has completed on their private land over the past 8 years and, as such, would not constitute a substantial change from existing conditions." Rather than considering past water usage by AMI as a given to be discounted as the new normal usage standard, the amount of water drawn by AMI for drilling programs over the past eight years must be added by the CNF to the 440,000 gallons to be used for the Project to determine the cumulative impacts on water resources.
- The amount and effects of unplanned discharge or spillage of contaminated water, petroleum products, and other substances (see Appendix B for detail on the substances, many toxic, to be used by AMI for this project) must be determined by the CNF and added to ongoing acid mine leakage from old mines and the effect of remediation efforts in the Patagonia Mountains to determine the cumulative effects on water quality.

#### 4. Vehicular Traffic:

- Primary access to the project will be via the Town of Patagonia and Harshaw Road (portions of which are maintained by both the county and the Forest Service). The project would utilize numerous vehicles that would dramatically increase traffic through Patagonia and along Harshaw Road, including drill rigs, drilling supply trucks, pump support trucks, sanitation and waste removal vehicles, 5,000 gallon water trucks, delivery trucks, 4WD pickup trucks, office trailers, and earth working equipment.
- The increased traffic from the project will have an adverse effect on air quality, recreation, and other economic activity such as tourism, hiking, biking and birding. The CNF must quantify such increased vehicle traffic and consider the effects of this increased traffic on other non-mining businesses in the Patagonia region, public safety, and air quality.



## 5. Drilling Activities:

- Drilling /excavating for the Project will occur 24 hours a day, 7 days a week at a total of eight exploration holes using diamond core drilling. The drilling is in addition to all site preparation and support activities that would be conducted by AMI if the Project were to proceed.
- In addition to other previously noted impacts, these drilling activities must be evaluated by the CNF for the impact on air quality, dark skies, visual resources and scenic values, and recreation.
- The CNF must evaluate the impact of the Project on homeowners and landowners in the vicinity of the project. The PoO understates these impacts and is inadequate in this regard.
- The PoO states that the Project will comply with the Santa Cruz County dark skies ordinance on outdoor lighting. However, AMI recent and current drilling operations on private land have not complied with the ordinance, as is readily discoverable by the CNF through nighttime inspection of AMI's ongoing drilling. The CNF must evaluate AMI's current practices regarding lighting of drilling operations and determine why AMI would comply with the ordinance for this Project when it has not done so for past and current operations in the Patagonia Mountains.
- Lighting from the Project would have a negative impact on astronomy facilities in the Patagonia Mountains that depend upon dark skies. The CNF must examine these impacts of the Project.
- The PoO at page 15 states regarding visual impact and scenic values that, "Historical and recent mining activity on adjacent private lands is part of the landscape within which the Project will occur, so the addition of the three drill sites for approximately 5 months will not be a drastic change to the landscape." Historical mining activity near the Project site occurred over 50 years ago. The recent mining activity was conducted by AMI. Rather than considering past AMI blight on the landscape as a given to be discounted, the visual impact of AMI drilling programs over the past eight years must be added by the CNF to the visual impacts of the Project to determine the cumulative impacts of the Project.



#### 6. Wildlife and Habitat:

- The CNF must consider the cumulative impacts of the Project on wildlife and habitat.
- The Project is located within critical habitat for both the endangered jaguar and the threatened Mexican spotted owl and is likely to adversely modify this habitat and potentially jeopardize these species. The Project will compromise a critical cross-border wildlife corridor, adversely modify critical habitat for the jaguar and the Mexican spotted owl.
- The Project is likely to have significant impacts on the 100+ other special status species known to occur in the Patagonia Mountains.
- The Project is likely to compromise a critical cross-border wildlife corridor, severing connectivity to Mexico for the endangered jaguar and ocelot, as well as other wide-ranging native species.
- The Project drilling activities must be evaluated by the CNF based upon more recent data for the impact on wildlife and habitat. Most of the studies and surveys cited in the PoO were done in 2012 and 2013, making them out-of-date and inadequate to determine the Project's impacts on wildlife.
- Assumptions about the effects of noise and light from the Project reach suspect conclusions that seem to be unduly favorable to the interests of AMI. The CNF must closely examine all impacts of the Project on wildlife and habitat using more recent data.

#### 7. Recreation:

- Recreation in the Patagonia Mountains will be greatly impacted from the continuous industrial activity of the Project. 24 hour per day, 7 day per week noise, lights and traffic will make birding, camping, hiking, cycling, mountain biking, star-gazing, hunting, horse-back riding, and enjoying peace and quiet in this area of the CNF and nearby areas nearly impossible.
- The Arizona Trail, a National Scenic Trail, follows Harshaw Road for three miles into the Town of Patagonia, an Arizona Trail Gateway Community. Harshaw Road is a winding, rural road and the main access road to this Project.
- The Project must be evaluated by the CNF for its impact on recreation.



8. Socioeconomic Impacts:

- Intrusive and ongoing effects from project activities would have a negative effect on other economic activity in the area. Tourism, recreation, birding, hunting, hiking and biking currently support many jobs in the area. Project activities would eliminate or drastically curtail many of these jobs, as people will choose to spend their tourism dollars in other places where the traffic, noise and pollution from the project and other AMI activities are not present. Any estimates by AMI of jobs created by the Project or related mining activities will be more than offset by other jobs lost due to the project activities.
- The Project will have a negative effect on housing values in the Patagonia area due to increased noise and pollution and the threat to the water supply.
- The Project must be evaluated by the CNF for its cumulative impact on these socioeconomic factors. All other past and current AMI mining-related activities, including on private land, also are required by regulation to be considered and analyzed by the CNF.

Thank you for the opportunity to comment.

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