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As a resident living (for over 45 years) approximately .09 miles directly east of the proposed ADI Aluminum Recycling Plant site (yet outside of the city limits for the City of Benson and thus having no voice or vote on decisions made by the Benson City Council), I strongly oppose issuance of a Class I Air Quality Permit for this facility on environmental, technical, and public health grounds. I am not alone in opposing issuance of this permit. Currently 2,890 people have signed a petition opposing the ADI plant (see https://www.change.org/p/save-our-health-our-river-from-industrial-harm-in-benson-az). As of the 2020 census, Benson had a population of 5,337 (see https://www.bensonaz.gov/departments/city_manager/index.php). While not everyone signing the petition is within the city limits, the opposition from those who would be directly impacted is clearly overwhelming and growing as the community starts to learn about deals made in secrecy.

1. Environmental Impact Study Requirement

Under current Arizona and federal law, an Environmental Impact Study (EIS) is typically required for major federal actions significantly affecting the quality of the human environment, under the National Environmental Policy Act (NEPA). However, permitting by ADEQ for air quality (including the Class I Air Quality permit the ADI plant seeks) is not always classified as a federal action, especially when delegated state agencies handle the permitting under federally approved programs. Unless another federal trigger exists, such as the involvement of a federal land agency, federal funding, or a federal permit other than Clean Air Act Title V, NEPA may not apply, and thus, an EIS is not mandatory. However, I believe that an EIS should be required.

Given the proximity of the proposed plant to the San Pedro River and the San Pedro Riparian National Conservation Area — a federally protected, ecologically unique corridor — the potential for environmental devastation is high. As reported on the official website for the federal Bureau of Land Management (https://www.blm.gov/visit/san-pedro): "The San Pedro riparian area, containing about 40 miles of the upper San Pedro River, was designated by Congress as a National Conservation Area (NCA) on November 18, 1988. The primary purpose for the designation is to protect and enhance the desert riparian ecosystem, a rare remnant of what was once an extensive network of similar riparian systems throughout the Southwest."

The proposed ADI (Aluminum Dynamics Inc.) Aluminum Recycling Plant in Benson is located at approximately 31° 57' 33.8" N, 110° 16' 56.4" W. The northern boundary of the San Pedro Riparian National Conservation Area (SPRNCA) is at about 31.5834° N, 110.1339° W—near St. David, Arizona. Direct (as-the-bird-flies) distance calculations between these coordinates show that the proposed plant site is roughly 5.7 miles west of the northern boundary of the SPRNCA. This proximity illustrates how close the industrial site would be to a federally protected, ecologically significant area.

Operations of this scale (processing over 300,000 tons/year, utilizing massive water extractions, estimated at 500,000 gallons daily, and emitting hazardous air pollutants including hydrogen chloride and other toxic byproducts from aluminum processing) constitute a significant threat to one of the Southwest's last free-flowing rivers and its ecosystem, which includes endangered species and migratory birds.

As reported by the Sierra Vista Herald Review on 9/12/2025: "A court-ordered groundwater monitoring well protecting federal water rights for Arizona's San Pedro Riparian National Conservation Area has run dry, according to new U.S. Geological Survey data.
The Summers monitoring well, located seven miles north of Fort Huachuca along the San Pedro River, recorded a "D" for dry reading on June 30, meaning the water table dropped below the well's depth. Two additional wells near the Army base also show declining water levels that violate court-ordered thresholds.
Seven of 13 required water levels and stream flows have been violated, with two more wells trending downward. The violations stem from historic cumulative groundwater pumping of approximately 2 million acre-feet, according to the Center for Biological Diversity."

The monitoring wells in the SPRNCA are south of the proposed ADI plant but it must be pointed out that the San Pedro River flows north. The Herald report casts the blame for the dropping water table on over-pumping from Fort Huachuca and Sierra Vista. I am not an hydrologist but common sense would indicate that if the upriver water table that is part of or feeding the water table in Benson is running dry, there is serious concern about the future of water in the Benson area for existing users, much less the impact of a massive new user. While this potential crisis is clearly not attributable to ADI, considering the intensive increase in projected water use from the proposed plant, it highlights the need for a comprehensive Environmental Impact Study to include hydrology studies of the impact of projected water availability over the next 100 years. See https://wrrc.arizona.edu/news/summary-isotope-research-sources-perennial-flow-san-pedro-river for one such study indicating concern for the water future of the San Pedro River. See also: https://az.childrenshealthdefense.org/environmental-issues/protect-the-san-pedro-riparian-corridor/ for additional arguments and concerns about potential pollution (air and water). I agree with those comments and hereby incorporate them by reference as part of my comments.

Despite the state's narrow permitting scope, the scale of potential air, water, and ecosystem impact clearly meets both the letter and the spirit of federal and state criteria for requiring a comprehensive EIS. The unique environmental sensitivity, cumulative hazard potential, and lack of integrated ecosystem analysis make a full EIS imperative before approval of any air permit. ADEQ should either require an EIS or formally refer the matter to EPA for federal NEPA oversight due to the likely "significant adverse environmental impacts."

2. Technical Objections to the Class I Air Quality Permit

a. Reliance on ADI-Provided Air Modeling Data: The core of the permit application relies on air emissions modeling data submitted by ADI itself, without adequate third-party validation or independent review. This introduces a critical risk of underestimating real emissions and downplaying hazardous air dispersal, especially given the company's vested interest in permit approval.

b. ADI and Parent Company Regulatory Non-Compliance: ADI and its parent company, Steel Dynamics, have documented histories of environmental violations and poor regulatory compliance at other facilities. ADEQ should fully account for this pattern of non-compliance when evaluating whether permit conditions and reporting will be followed reliably, especially given the high-risk location. This record of poor regulatory compliance must result in heightened regulatory scrutiny, more frequent independent inspections, and stronger permit conditions.

c. Toxic Air Pollutant Risks: The facility is expected to release hydrogen chloride, dioxins, particulate matter (PM2.5 and PM10), heavy metals, and other hazardous air pollutants typical of secondary aluminum production. Comprehensive third-party modeling must address cumulative health risks to downwind communities and sensitive wildlife. While cumulative health risks to people living in the San Pedro Valley are clearly paramount, the impact on the SPRNCA which is only 5.7 miles from the proposed plant must be addressed through an independent study (i.e., EIS), not on modeling from data provided by ADI, considering their vested interest and poor track record of compliance.

d. Smokestack Height and Air Dispersion: The application's provision for nearly 100-foot stacks is technically inadequate. Stack heights in confined valley environments often fail to disperse pollutants out of narrow river corridors like the San Pedro; instead, pollutants may circulate and settle within the valley, concentrating toxins for both residents and wildlife. There appears to be no transparent or independent modeling of topographic or meteorological worst-case scenarios.

e. Lack of Cumulative Impact Assessment: The permit fails to consider the combined impact of water withdrawals, effluent releases, and persistent air contaminant deposition on the San Pedro ecosystem's delicate balance, contravening best practices for public health and environmental protection.

3. Additional Comments

a. Inadequate Air Monitoring and Public Transparency. The draft permit lacks enforceable requirements for real-time, fence-line monitoring of hazardous air pollutants—including hydrogen chloride, dioxins, particulate matter, and heavy metals. Without continuous monitoring and prompt, public disclosure of air quality data, both compliance and community trust cannot be assured. Reference: EPA guidance on monitoring and transparency — https://www.epa.gov/air-emissions-monitoring-knowledge-base/air-emissions-monitoring-permits

b. Weak Pollution Limits and Lack of Strong Controls. The permit should mandate strict, legally binding emission limits for all hazardous air pollutants with automatic corrective actions and consequences for violations. Permits that rely on self-reporting or "best available practices" without independent enforcement have failed elsewhere in Arizona and nationally. See: https://biologicaldiversity.org/w/news/press-releases/epa-rejects-air-pollution-permit-for-mine-in-ariz

c. Regional Haze and Class I Protections. The plant's projected emissions will threaten visibility and air quality in and near the San Pedro Riparian National Conservation Area—a Class I protected area. The Regional Haze Rule and related State Implementation Plan requirements demand additional controls for any project that may degrade air quality near such areas.

d. Sensitive Populations at Risk. Nearby residents, schoolchildren, elderly, and visitors ("snowbirds") are at particular risk due to their health status and exposure patterns. Proximity to homes, schools, and recreation areas raises special concerns for public health and justifies greater scrutiny and protection.

e. Lack of Community Disclosure and Input. Many community members and local officials were not fully informed of the project's true scope, risks, or potential impacts. As seen at recent hearings,

gaps in communication and transparency undermine the legitimacy of this permit process. I request an extension of the public comment period and additional hearings to ensure thorough review and input.

f. Cumulative and Environmental Justice Impacts. No comprehensive review of cumulative impacts has occurred. ADEQ should require or conduct an assessment of this facility's potential to worsen cumulative air, water, and land degradation and to disproportionately impact low-income or marginalized residents.

g. Emergency Response Gaps. The permit and project plans do not provide adequate emergency procedures for spills, emissions accidents, or fires that may endanger nearby communities and sensitive environments.

4. Conclusion

Approval of this permit, in the absence of a comprehensive EIS and without addressing these core technical and compliance failures, places residents and a globally important river ecosystem at unacceptable risk. Without stringent, enforceable conditions, transparent oversight, and consideration of all community objections, the ADEQ should deny the air quality permit and require a full Environmental Impact Study, significant public input, and strict compliance with all health, safety, and environmental standards before any further consideration.