

Joan Davenport

I am a resident of Benson, Arizona, where my family and I have lived for over 45 years. I am writing to express serious concerns about the proposed Aluminum Dynamics, Inc. facility and the risks it poses to public health and our environment.

Aluminum manufacturing has a documented history of generating harmful emissions including fine particulate matter (PM_{2.5} and PM₁₀), nitrogen oxides (NO_x), sulfur oxides (SO_x), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs) such as fluorides, PAHs, and heavy metals like aluminum dust and lead. EPA's Integrated Science Assessment for Particulate Matter (2020) clearly links PM_{2.5} exposure to increased respiratory illness, cardiovascular disease, and premature mortality, with the greatest risks to children, seniors, and those with pre-existing conditions.

Unfortunately, other communities near aluminum and metal-processing plants have already experienced these impacts:

Sebree, Kentucky (2015) – Century Aluminum was fined after repeated exceedances of hydrogen fluoride emissions, which corrode crops and damage respiratory health.

Massena, New York (2013) – An Alcoa aluminum smelter reported excess emissions of fluorides and sulfur dioxide, contributing to local air quality concerns and requiring costly federally mandated upgrades.

New Madrid, Missouri (2017) – An aluminum production facility's closure was partially related to the high costs of meeting air quality and emissions compliance under Clean Air Act standards, demonstrating how challenging it is for such plants to operate without putting communities at risk.

These are not hypothetical concerns—facilities of this type often produce harmful emissions even when controls are in place.

For these reasons, I respectfully request that ADEQ:

Require a full Health Risk Assessment (HRA) consistent with EPA's Air Toxics Risk Assessment Guidance (2004).

Disclose all modeled emissions for criteria pollutants and HAPs, following the transparency obligations of the Title V permitting program (40 CFR Part 70).

Mandate Best Available Control Technology (BACT) for PM, NO_x, SO₂, and HAPs, as required by the Prevention of Significant Deterioration (PSD) program (40 CFR §52.21).

Evaluate cumulative impacts using the EPA EJScreen Tool and ADEQ Environmental Justice guidance, ensuring protection for sensitive populations.

Implement continuous ambient monitoring around the plant, with publicly accessible, real-time data.

Benson has thrived for decades on its clean air and safe environment. As residents, we should not be asked to accept the same risks that communities in Kentucky, New York, and Missouri have already faced from similar operations. Protecting our children, grandchildren, and future generations must come first.

Thank you for carefully weighing these concerns in your decision-making.