

Todd Rallison

Public Comments of Todd Rallison, 1260 E. Fenway Drive, Benson, AZ 85602
on ADEQ Class I Draft Air Quality Permit for
Aluminum Dynamics, Inc.—Draft Permit No. 106233

DRAFT PERMIT CONDITIONS:

Attachment B: Specific Conditions, II. Secondary Aluminum Processing Equipment Requirements, G. Hydrogen Chloride (HCl), 2. Performance Testing, condition d:

Condition d. relaxes the HCl performance testing requirements if as “the result of eight (8) consecutive performance tests required by Condition II.G.1.a and b above respectively is less than or equal to 50% of the applicable emission limitation.” This relaxation of the performance testing requirements for HCl should be conditioned on the Permittee demonstrating that the facility and the applicable baghouses were operating at 90% of their maximum operational capacity during each of the eight (8) consecutive performance tests. Otherwise, the reduction in performance testing may not capture “worst case” conditions and could reduce testing while the facility is ramping production, thereby reducing performance testing before the facility’s HCL emissions peak or reach a “steady state.” ADEQ’s inclusion of eight (8) consecutive performance testing clearly is intended to capture “steady state” production, but the Permittee should demonstrate that it is at steady state during those eight (8) performance tests before reduction in the frequency of the tests is warranted.

Attachment B: Specific Conditions, XI. Ambient Air Monitoring Requirements, A. General Requirements, condition 1.:

Condition 1. requires the Permittee to submit to ADEQ for approval “a written quality assurance project plan (QAPP) for the meteorological and HCl monitoring network.” Nowhere does the permit allow public comment or input on the content of the QAPP. Since the public are the people most directly impacted by the content and quality of the QAPP, the permit should allow for public review and comment on the QAPP. Moreover, the one hundred and twenty (120) days prior to startup provided are likely not sufficient time to allow for a robust public comment period. As such, the QAPP submittal should be required at least one hundred eighty (180) days prior to startup, allowing for a 60-day public comment period.

Attachment B: Specific Conditions, XI. Ambient Air Monitoring Requirements, D. Action Levels and Response Procedures for Ambient HCl Concentrations Above Action Levels, conditions 2. and 3.:

Conditions 2. and 3. require investigation at an average hourly ambient HCl concentration of 2.0 mg per cubic meter and cessation of all HCl-generating activities at an average hourly HCl concentration greater than 2.5 mg per cubic meter, respectively. However, the Permittee's modelled HCl emissions are predicted to cause average hourly ambient HCl concentrations orders of magnitude less than 2.0 and 2.5 mg per cubic meter. And, these ADEQ proposed levels are just below the AEGL-1 of 2.7 mg per cubic meter.

Why is ADEQ setting the investigation and cessation levels so close to those predicted to cause health problems for at least sensitive populations, particularly since there is a long-term care facility directly across the street from the Permittee's facility and residences on the fence line. While operational flexibility is important for any manufacturer, if the Permittee and ADEQ are confident in their modeling numbers, why not set the investigation and cessation thresholds much lower? For example, do ADEQ and the Permittee not believe they'll be able to operate if the thresholds were set at 0.5 and 1 mg per cubic meter, respectively?

While over 50% lower than the levels proposed by ADEQ, these levels are still orders of magnitude higher than the concentrations predicted by the Permittee's and ADEQ's modeling. These lower levels should provide adequate operational flexibility for the Permittee while providing increased assurance that the community will not suffer adverse HCl impacts for the operation of Permittee's facility. As a "major source" of HCl, Permittee must recognize that it depends to at least some degree on community good will to operate successfully within the City of Benson.

DRAFT TECHNICAL SUPPORT DOCUMENT:

Section X. Ambient Air Impact Analysis, C. Source Inputs, 5. Offsite Sources and H. Background Concentrations, 3. Background Concentrations for NO₂:

The draft Technical Support Documents states in Section X.C.5 and X.H.3 that NO_x and NO₂ emissions from the Apache Generating Station and Apache Nitrogen Products Inc, two large industrial sources located near proposed Permittee's facility, were "explicitly included in the NAAQS modeling analysis for 1-hour NO₂." However, nowhere in the Technical Support Document are those numbers or the included calculations referenced so the public can verify that the background emission numbers used by ADEQ are actually representative of the

background ambient air concentrations at the Permittee's site. Nor is it clear those data were included in any of the other documents provided for public review. Since those background data points are used by ADEQ to demonstrate that the Permittee's facility will not cause or contribute to a violation of the NAAQS, particularly the PM10, PM2.5, and the NO2 NAAQS, the very least ADEQ could have done is provide the data relied on to the public to verify the accuracy of ADEQ's representations.

ADEQ also never mentions in the Technical Support Document or any other document the contribution of PM10, PM2.5, NOx, or NO2 emitted by the rail line that runs alongside the Permittee's property, or how the permittee's operation could increase or change the emission profile of trains operating on that rail line (e.g., increased trains, longer trains, longer idling time associated with aluminum scrap or ingot loading and unloading). It is highly unlikely that the background emission points ADEQ considered for PM10, PM2.5, and NO2 from the Tucson area and elsewhere have such a significant source of emissions from diesel locomotives (including their current operational frequency) since the rail lines in Benson carry loads 24/7, much more than would be expected or accommodated within a city like Tucson. While the railroad is a mobile source, arguably outside of ADEQ's stationary source permitting program, ADEQ must account for the railroad's impact on the ambient air quality background concentrations in the City of Benson in the vicinity of the Permittee's site.

Moreover, part of the reason ADEQ must rely on alternative ambient air monitoring data is because ADEQ has never placed an ambient air monitor in the Benson area. In light of the predicted ambient concentrations for criteria pollutants, particularly PM2.5 and NO2 based on this permitting action, it is high time for ADEQ to install an ambient air quality monitor in the Benson area so it no longer has to rely on extrapolations from EPA models and data for sites in Sierra Vista, Tucson, or Yuma in the event another "major" source moves into the area (or an existing source decides to expand). ADEQ should not be able to hide behind Benson's "unclassifiable" status when it is ADEQ's failure to install a monitoring station so its NAAQS attainment status can be verified. It may be that NAAQS standards are violated in Benson at this time. ADEQ simply does not know for sure. But that could be remedied with ambient air monitoring beyond the meteorological and HCl ambient monitoring already proposed in the draft air permit.