

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

JUL 11 2012

Dave Phelps, Supervisor, Construction Permit Section Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, Iowa 50324

RE: Alcoa Project 12-035 Prevention of Significant Deterioration Permit Comments

Dear Mr. Phelps:

On June 18, 2012, the United States Environmental Protection Agency (EPA) Region 7 received notification of the Iowa Department of Natural Resources' (IDNR) intent to issue a Prevention of Significant Deterioration (PSD) construction permit to Alcoa for the heater project at its existing facility in Riverdale, Iowa. We have completed our review of the draft permits and have the following comments.

Comment #1 – Page 3 of the Technical Support Document (TSD), Purpose of This Document Section: IDNR refers to "50 CFR 124". EPA believes this regulatory citation to be an error. IDNR may be referring to 40 CFR Part 124. EPA recommends IDNR confirm that this citation is correct.

Comment #2 – Page 4 of the TSD, Table 2 – Important Dates: IDNR indicates that the application was received on January 25, 2012 and that the completed application was received on January 3, 2012. If the "Application Received Date" is the date that the application was first received and the "Completed Application" is the date that all information was received, it would appear that the "Application Received Date" should occur prior to the "Completed Application". EPA requests clarification of the meaning of these two dates.

Comment #3 – Page 12 of the TSD, Solubility Trapping Section: IDNR indicates that "the nearest oilfield using EOR appears to be the Williston basin in the Dakotas, approximately 900 miles from Ottumwa, IA". EPA recommends that IDNR review this section to ensure that it is correct for this project.

Comment #4 – Page 7, Section 14, Paragraph A of Permits 12A-OilHouseHeater2 through 12A-OilHouseHeater5: There is a reference to "PHeat01". EPA recommends that IDNR review and correct (if appropriate) paragraph A of these permits.

Comment #5 – Page 7, Section 15, Paragraph C(iii) of Permit 12A-HeatFurn: EPA understands IDNR's attempt to minimize the cost and other concerns associated with monitoring the natural gas usage by allowing Alcoa to monitor at least 25% but not all of the units. However, if Alcoa uses paragraph (iii), it is possible that the units that are equipped with flow meters will be used less than units that are not equipped with flow meters and therefore the actual natural gas usage may be more than what was monitored. EPA requests clarification on how, if Alcoa uses paragraph (iii), IDNR will be assured that



the actual natural gas usage is not more than what was recorded. EPA understands that these units are relatively small and the total  $NO_x$  emissions from these units at their permitted usage limit are slightly above one ton per year. However, with the project  $NO_x$  limit established just below 40 tons per year, a slight increase could put the actual emissions above the PSD significance threshold.

Comment #6 – Page 7, Section 14, Paragraph C of Permit 12A-IRHeat: There is a requirement for "EU-MUA" which EPA assumes was meant to be "EU-IRHt". EPA recommends reviewing and correcting (if appropriate) this paragraph.

Comment #7 – Page 7, Section 14, Paragraph A of Permits 12A-Boiler2 and 12A-Boiler 3: There is a requirement for "BOIL01". EPA assumes that IDNR meant the requirement to apply to boiler #2 and boiler #3. EPA recommends reviewing and correcting (if appropriate) these paragraphs.

We appreciate the opportunity to provide what we hope you will find to be constructive comments. Please contact David Peter at (913) 551-7397 if you have any questions or comments regarding this letter.

Sincerely,

Mauhl. Q.D.

Mark A. Smith, Chief Air Permitting and Compliance Branch Air and Waste Management Division