

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 155 Seattle, WA 98101-3123

OFFICE OF AIR AND WASTE

JUL 1 7 2018

Bernard P. Leber, Jr.
Environmental Engineering Manager
Kaiser Aluminum Fabricated Products, LLC
PO Box 15108
Spokane Valley, Washington 99215

Re: Potential Hooding at Kaiser Trentwood in Spokane Valley, Washington

Dear Mr. Leber:

This letter responds to Kaiser Aluminum Fabricated Products, LLC's (Kaiser) request for a hooding impracticability determination submitted in letters dated August 19 and November 9, 2016 under 40 CFR, part 63, subpart RRR: *National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*. Kaiser's letters explain that it was contemplating the potential construction of one or more round top melting furnaces in its existing casting complex at its Trentwood facility in Spokane Valley, Washington. Kaiser requested the hooding impracticability determinations under 40 CFR 63.1512(e)(5) and (e)(6).

During an April 9, 2018 call with Geoffrey Glass of my staff, you indicated that, due to the recent court case striking down the Washington State Department of Ecology's newly promulgated carbon dioxide emission reduction requirements, Kaiser was considering various options other than replacement of furnaces with one or more round top melting furnaces. You further stated that Kaiser was only in the early planning stages of considering all potential options.

If Kaiser determines that installing new round top melting furnaces at its Trentwood facility is the preferred option, please advise Region 10 in writing once you have determined how to proceed with this plan. Once we hear from Kaiser and receive the information discussed below, we can respond to Kaiser's request.

Impracticability Determination

Based on the information provided in Kaiser's August 19 and November 9, 2016 letters, EPA understands that Kaiser's proposal had been to replace the melters currently located in the DC-2 and DC-8 complexes (four total melters) with two new round top furnaces (one at each of the two complexes). EPA does not currently have sufficient information, however, regarding any potential new furnaces to determine whether hooding is impractical at these potential new furnaces. If Kaiser's reevaluation of options results in this plan moving forward, please include the following information with your notice that Kaiser is continuing to move forward on the proposed project as discussed in its letters of August 19 and November 9, 2016:

- 1. Explain which existing furnaces will be removed, and the number of, and identifying information for, any new furnaces.
- 2. Provide plot plans of the cast house showing and identifying all melters and holders in place before the proposed project as well as after the proposed project. Highlight the locations where older furnaces will be replaced with new furnaces. Show the location and movement range of all overhead cranes on both plot plans.
- 3. Explain any differences between the new round top furnace Kaiser recently installed (DC-0) and the proposed new round top furnaces discussed in Kaiser's August 19 and November 9, 2016 letters, whether information submitted to EPA with respect to DC-0 is also relevant to the proposed new furnaces in the DC-2 and DC-8 casting complexes, and, if so, how.

We expect that a hooding impracticability determination for any proposed new furnaces in the DC-2 and DC-8 casting complexes would be based on the same considerations discussed in EPA's letter dated February 8, 2018 with respect to Unit DC-0.

Procedures for Minimizing Unmeasured Emissions During Testing

As provided in 40 CFR 63.1512(e)(5)(ii), with a request for a determination that hooding is impractical, the owner or operator of a furnace must propose testing procedures that will minimize unmeasured emissions during the performance test as provided in 40 CFR 63.1512(e)(7). Kaiser's August 19, 2016 letter discusses six measures out of the nonexclusive list of ten measures identified in 40 CFR 63.1512(e)(7). EPA agrees that these six measures are appropriate.

During EPA's December 2016 site visit, however, EPA engineers observed significant visible emissions escaping from melter furnaces at the Trentwood facility immediately after the burner firing rate was increased, at the start of the melt cycle. Facility personnel explained that the furnaces are held under very slight negative pressure or near atmospheric pressure during the melt cycle to avoid pulling excess ambient air into the furnace, which can increase dross production. Given that emissions that escape the furnace during the initial stage of the melt cycle will not be measured during performance testing, however, 40 CFR 63.1512(e)(5)(ii) and (7) require that Kaiser evaluate potential measures to minimize these emissions.

One option that Kaiser should consider is to temporarily increase the exhaust gas flow rate during the initial stage of the melt cycle. The purpose is to create sufficient negative pressure within the furnace such that emissions do not escape from the furnace into the building. Minimizing unmeasured emissions is particularly important during the initial stage of the melt cycle because any combustible materials on the surface of the scrap (such as oils, coatings, or other contaminants) would be expected to be volatilized and emitted during this period.

In summary, to meet the requirements of 40 CFR 63.1512(e)(5)(ii) and (7), Kaiser must describe proposed measures to minimize unmeasured emissions during the initial stage of the melt cycle described above. Submitting detailed information on the various options available and considered by Kaiser will facilitate EPA's response to Kaiser's request.

If we receive confirmation from Kaiser that it does intend to proceed with installing one or more round top melter furnaces at its Trentwood facility and provides the information set forth above, EPA will resume consideration of Kaiser's request. If you have any questions about this issue, please contact Geoffrey Glass of my staff at (206) 553-1847 or glass.geoffrey@epa.gov.

Sincerely,

Kelly McFadden, Manager

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Stationary Source Unit

Cc: Julie Oliver, Spokane Regional Clean Air Agency April Westby, Spokane Regional Clean Air Agency (email)