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January 10, 2019

Kelly McFadden, Manager
Stationary Source Unit
US Environmental Protection Agency
1200 6th Avenue (OAW-150)
Seattle, WA 98101

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

Dear Ms. McFadden:

The following responds to U.S.EPA Region 10's ("EPA's) letter dated July 17, 2018 regarding Kaiser Aluminum Fabricated Products, LLC's ("Kaiser" or the "Company") prior hooding impracticability determination request. Kaiser and EPA held a conference call on September 5, 2018 to further discuss EPA's July 17th letter.

Based on Kaiser's conversations with EPA, the Company seeks clarification related to the following two topics.

**New Round Top Furnace Project and Timing for a Specific Impracticability Determination:**

Kaiser wants to clarify that installing a new round top melting furnace at its Trentwood facility is still a real possibility but timing will depend on status of, among other things, the ongoing litigation challenging Washington's carbon dioxide emissions reduction requirements. If Washington's carbon dioxide regulations are upheld by the Washington Supreme Court, conversion or replacement of old round top furnaces with new round top furnaces may be necessary to meet future carbon emissions requirements.

*In light of these timing* issues, EPA has requested that Kaiser provide additional information when the specifics of the proposed project come into focus. Namely, EPA has asked for: 1) an explanation of the existing furnaces to be removed and identifying information for the new furnaces; 2) plot plans of the cast house before and after replacement with an explanation regarding location and movement of furnaces and overhead cranes; and 3) an explanation of differences between the new planned round-top furnace and the recently installed DC-0.

Although, Kaiser can provide more specific information when available, the Company has already provided the necessary information for Region 10 to make its determination in its August 19, 2016 letter regardless of additional specifics. Regardless of the existing furnace to be replaced, any new furnace will be placed in a cast house with other furnaces, so the idea of using a cast house as an "enclosure" is not an option.

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Regardless of the specific plot plans of the cast house before and after replacement, the necessary movement and position of overhead cranes will make the use of hooding impracticable because hooding will impede the movement of cranes needed to charge the round top furnace(s) with heavy gauge aluminum scrap. Finally, regardless of the existing furnaces to be replaced, any new furnace(s) will have specifications similar to DC-0 (the recently installed round-top furnace thoroughly described in Kaiser's August 19, 2016 letter). To the extent that EPA indicated in its July 17, 2018 letter that, "We expect that a hooding impracticability determination for any proposed new furnaces in the DC-2 and DC-8 complexes would be based on the same consideration discussed in EPA's letter dated February 8, 2018 with respect to DC-0" – Kaiser is confident a new round top furnace replacement project at DC-2 and or DC-8, will meet all the same "impracticability" criteria as DC-0.

As Kaiser discussed with EPA during the September 5 conference call, Kaiser's chief timing concern with any specific impracticability determination, relates to the fact that the Company would need such a final determination prior to any submittal of a "Notice of Construction" ("NOC") application because doing so would be essential for the local air agency (the "Spokane Region Clean Air Agency" ("SRCAA") to determine emission limits for the source that is being permitted. For this reason, Kaiser seeks to clarify that EPA could issue such a timely, specific impracticability determination prior to a NOC application and construction of any new furnace. As Kaiser has explained in prior communications, an impracticability determination issued after construction could lead to permitting problems and costly retrofitting if EPA does not grant the impracticability determination or alters the proposed procedures to minimize unmeasured emissions during testing.

**Clarification for Procedures to Minimize Unmeasured Emissions during Testing:**

In its July 17, 2018 letter, EPA confirmed that the six measures that Kaiser proposed to minimize unmeasured emissions during testing were "appropriate." However, EPA cited a concern with visible emissions escaping a melter furnace after the burner fire rate was increased (during the melting cycle) observed during a December 2016 site visit. As a result, EPA suggested an additional "option" of "temporarily increasing the exhaust gas flow rate during the initial stage of the melt cycle" … "to create sufficient negative pressure with the furnace such that emissions do not escape."

Although Kaiser has not witnessed any "significant visible emissions" escaping its furnaces during the melting cycle, as the Company explained during the September 5 meeting, at the time of the initial compliance test for a new round top furnace, the furnace top ring and ceramic fiber seal would be new and the potential for leakage very minimal. Also, creating negative pressure inside the furnace during the melting cycle, as suggested, is not technically feasible because of the need to limit oxygen entering into the furnace other than through the burners due to both the need to minimize oxidation of molten metal and the concurrent requirement for compliance with combustion related emission limitations (carbon monoxide and nitrogen oxides). As we discussed in our September 5 conference call, however, Kaiser minimizes emissions by operating the furnaces at near neutral pressure (0.02" of water column positive pressure). The Company continuously monitors and controls this pressure set point during the melting cycle with dampers located in the exhaust stack.

Because operating a new round top furnace under negative pressure during the melt cycle is technically infeasible, Kaiser requests that Region 10 clarify that the two steps proposed by Kaiser during our September 5 conference call and described above (use of a new top ring and ceramic seal and operating the furnace at near neutral pressure), along with the 6 measures approved in your July 17, 2018 letter - are sufficient under 40 CFR 63.1512(e)(5)(ii) and (7) to minimize unmeasured emissions during testing.

Kaiser appreciates EPA's continued support and guidance in this matter. As we have explained, clearly understanding the requirements, process and timing for obtaining an "impracticability determination" and establishing the procedures necessary to minimize unmeasured emissions during testing, are essential during the planning phase of any new round top furnace project. For this reason, we respectfully request that EPA respond to this letter to confirm:

1. A specific impracticability determination request can be issued quickly once further details of Kaiser's project become clear and the requested information has been forwarded to EPA.

2. An impracticability determination can be issued timely prior to construction and before an NOC application is submitted by Kaiser to the local air permitting agency.

3. The six measures for minimizing unmeasured emissions from Kaiser's August 16, 2016 letter, along with the two measures proposed above (use of a new top ring and ceramic seal and operating at near neutral pressure) are sufficient under 40 CFR 63.1512(e)(5)(ii) and (7).

Please feel free to contact me at (509) 927-6554 should you have any questions or if it is helpful to discuss this matter further.

Sincerely,

Bernard P. Leber, Jr.
Environmental Engineering Manager
Kaiser Aluminum Washington, LLC

cc: Geoff Glass, Environmental Protection Agency, Region 10
Julie Oliver, Spokane Regional Clean Air Agency
April Westby, Spokane Regional Clean Air Agency
Roger Crawford, Kaiser Aluminum