a Radius Recycling company

August 2, 2024

Ms. Julia DeGagné via email: Julia.degagne@deq.state.or.us

Air Toxics Project Manager
Oregon Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Cascade Steel Rolling Mills, Inc.
CAO L4 RAWP and Emissions Inventory Update

Dear Ms. DeGagné:

Today we are submitting our Cleaner Air Oregon ("CAO") Level 4 Risk Assessment Work Plan ("L4 RAWP") for the Department's review and approval. In addition, we are submitting required updates to our CAO air toxics emissions inventory ("Inventory"). The required updates to the Inventory are as follows:

- F/HF Emissions: As you are aware, CSRM conducted Fluoride and Hydrogen Fluoride source testing at our facility in August 2023 and again in February 2024. We have updated the Inventory to utilize the baghouse emission factors derived from that testing (as finalized in the Department's memorandum, "Source Test Review Report - Melt Shop Baghouse Testing", dated May 29, 2024).

- Effectiveness of Slag Pile Oxidizing Agent: As described in our April 5, 2024 letter to the Department[1], we conducted hydrogen sulfide (H2S) testing of the air above our slag handling pile and did not detect hydrogen sulfide above a method reporting limit of 7.1 ppbv. Accordingly, and as discussed with you during our April 24, 2024 meeting, we have updated the oxidizing agent effectiveness from 75% to 90% to estimate H2S emissions from slag handling.

- Manganese Concentrations in Slag and Material Handling: As part of the Level 4 Risk Assessment Work Plan development we analyzed representative samples[2] of dust from the slag handling pile and the SiMn stockpile. More specifically, we analyzed the smaller size fraction (e.g., < 75um, the size fraction that could conceivably be emitted off the piles into the ambient air) and found the concentrations in these smaller size fractions to be lower than the bulk materials. Accordingly, we have modified the concentrations of manganese used to estimate emissions from these two sources as follows:

[1] Jim Spahr to Mike Eisele, April 4, 2024. *Information Request for Total Reduced Sulfur (TRS), Hydrogen Sulfide (H2S) or Sulfuric Acid Mist (SAM)*
[2] The details of this sample collection effort is provided in the L4 RAWP, Appendix A, Attachment B.

Source	Previous Mn Concentration in Bulk Material (mg/kg)	Mn Concentration in <75um Size Fraction (mg/kg)[3]
Slag Handling	29,000	11,000
SiMn Stockpile	755,000	560,000

- As described in our CAO Modeling Protocol the updated Inventory includes a previously removed unpaved road segment, SCRAP2. We have determined that it is not feasible to maintain this section of roadway as a fully paved road at this time.

Please don't hesitate to contact me should you have any questions related to today's submittal.

Sincerely,

Jim Spahr

Jim Spahr

CC: Geoff Tichenor
John Browning, P.E.
JR Giska

[3] Analytical results are provided in the L4 RAWP, Appendix A, Attachment E.