



# Oregon

Kate Brown, Governor

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March 29, 2023

Wolf Steel Foundry, Inc.  
6160 S. Whiskey Hill Rd.  
Hubbard, OR 97032  
*Sent via email only*

Bryan Rumpca,

DEQ received the initial submittal of the Cleaner Air Oregon (CAO) Emissions Inventory Form AQ520 (Inventory) for Wolf Steel Foundry, Inc in Hubbard, OR on May 2, 2022, and responded with comments on December 2, 2022. DEQ received a revised Inventory on January 12, 2023.

In accordance with Oregon Administrative Rule (OAR) 340-245-0030(2), DEQ has determined that, in order to approve the Emissions Inventory, the following additional information, corrections, and updates are required by **April 28, 2023**:

## General Comments

In order for baghouse capture and control device credits for Baghouse 4 (TEU ID MELT, PC, SHAK, MM, CM, CW, SBIN), Baghouse 5 (TEU ID ARC, TC), and Baghouse 6 and 7 (TEU ID GRND) to be included in the current Inventory, these devices must be installed and operating by **April 28, 2023**; otherwise DEQ will require the use of uncontrolled emission estimates for these activities. In the latter case, Wolf may at a later time revise and update the Inventory once it has demonstrated to DEQ that the controls have been installed and are operating correctly.

## Specific Comments

1. Revise the alloy composition of “average spec mild” and “average spec stainless” to be based on either the maximum fractions or a production weighted average.
2. For Pouring and Cooling emissions, use the site-specific alloy composition instead of HAP Content of PM from RTI International<sup>1</sup> to determine the TAC fractions of the PM emission factor (1.377 pounds PM per ton metal melted).
3. Provide an analysis for appropriately scaling the source testing data from a smaller induction furnace to develop the PM emission factor for melting activities; otherwise, use the 2.06 pounds PM per ton metal melted PM factor from the 2012 RTI International “Emission Estimation Protocol for Iron and Steel Foundries”<sup>2</sup>.
4. Without the background data to review for the 1972 Gutow article in Modern Casting, DEQ cannot approve Sand Handling, Scrap Handling, and Grinding emission factors based on this

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<sup>1</sup> RTI International, Emission Estimation Protocol for Iron and Steel Foundries (December, 2012), Table 5-5 Summary of HAP Content of PM from PCS Components

<sup>2</sup> RTI International, Emission Estimation Protocol for Iron and Steel Foundries (December, 2012), Table 3-3 "Summary of PM Emission Factors for Melting Furnace Operations".

reference. Use the relevant PM emission factors from the 2012 RTI International “Emission Estimation Protocol for Iron and Steel Foundries”<sup>3</sup> with the 50% building control from TCEQ<sup>4</sup> and no additional settling factor.

5. In the Sand Reclaimer (SREC) calculation, the fugitive “pre-ctrl EF” should multiply by (1-Capture Efficiency), rather than multiplying by Capture Efficiency.
6. Ratio of hexavalent chromium to total chromium:
  - a. Revise the Acute Melt emissions to be multiplied only once by the 12% ratio of hexavalent chromium to total chromium. This was being done twice in both the “Acute Fraction” and “Pre-ctrl Acute EF” columns.
  - b. This 12% ratio is being applied to both mild and stainless-steel melting, but if desired may be applied to only the stainless steel and apply 3% for mild steel.
7. If either site improvements related to increasing capture efficiency and/or Baghouse 4 (TEU ID MELT, PC, SHAK, MM, CM, CW, SBIN), Baghouse 5 (TEU ID ARC, TC), and Baghouse 6 and 7 (TEU ID GRND) have not been made nor have been installed and are operating by April 28, 2023, revise the Inventory to include the following:
  - a. Use uncontrolled emission factors; and
  - b. Use a baghouse capture efficiency of 50%.

DEQ is requesting that you submit additional information to complete your Inventory. If you think that any of that information is confidential, trade secret or otherwise exempt from disclosure, in whole or in part, you must comply with the requirements in OAR 340-214-0130 to identify this information. This includes clearly marking each page of the writing with a request for exemption from disclosure and stating the specific statutory provision under which you claim exemption. Emissions data is not exempt from disclosure.

DEQ remains available to discuss the information request with you and answer any questions you may have. Failure to provide additional information, corrections, or updates to DEQ by the deadlines above may result in a violation of OAR 340-245-0030(1).

If you have any questions regarding this letter, please contact me directly at (971-269-8163, Marissa.Meyer@deq.oregon.gov), and I look forward to your continued assistance with this process.

Sincerely,



3/29/2023

Marissa Meyer  
Cleaner Air Oregon  
New Business and Technical Assistance Coordinator

Cc: Travis Quarles, Bridgewater Group, Inc.

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<sup>3</sup> RTI International, Emission Estimation Protocol for Iron and Steel Foundries (December, 2012), Table 3-8, Table 4-5, and Table 6-2

<sup>4</sup> TCEQ, “Rock Crushing Facility Emission Rate Calculation Worksheet” – Control Factors Sheet, February 19, 2019, <https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/emiss-calcrock1.xlsx>

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