



Oregon

Kate Brown, Governor

Department of Environmental Quality
Agency Headquarters
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5696
FAX (503) 229-6124
TTY 711

October 19, 2021

Sherry Uchytel
PCC Structural, Inc.
4600 SE Harney Drive
Portland, OR 97206

Ms. Uchytel,

DEQ received the submittal of the revised Cleaner Air Oregon (CAO) Emissions Inventory and supporting information for the PCC Structural, Inc. Large Parts Campus (PCC-LPC) in Portland, Oregon. DEQ received submittals from PCC-LPC on June 15, 2020; August 28, 2020; and October 10, 2020 and has completed our review.

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

1. **Baghouse dust analytical data is not sufficient to be considered representative of baghouse emissions.** DEQ requires you to perform representative source testing of baghouses by January 31, 2022 to verify assumed control efficiencies. There are several baghouses at this facility, some baghouses are equipped with additional filtration devices (e.g., HEPA or ULPA), and process operating conditions (e.g., temperature) that may impact removal efficiencies for some toxic air contaminants (TACs). Some baghouses may control substantially similar processes, so please consider operating parameters (e.g., materials processed, unit operations controlled, exhaust temperature, etc.) in preparing your source test plan. Work with DEQ to determine representative testing scenarios. Complete source testing using the following testing methods:
 - a. Method 29 or otherwise approved method by DEQ – test for the following Toxic Air Contaminants (TACs):
 - i. Aluminum (CAS No. 7429-90-5)
 - ii. Antimony (CAS No. 7440-36-0)
 - iii. Arsenic (CAS No. 7440-38-2)
 - iv. Beryllium (CAS No. 7440-41-7)
 - v. Cadmium (CAS No. 7440-43-9)
 - vi. Chromium (CAS No. 7440-47-3)
 - vii. Cobalt (CAS No. 7440-48-4)
 - viii. Copper (CAS No. 7440-50-8)
 - ix. Lead (CAS No. 7439-92-1)
 - x. Manganese (CAS No. 7439-96-5)
 - xi. Mercury (CAS No. 7439-97-6)
 - xii. Nickel (CAS No. 7440-02-0)
 - xiii. Phosphorus (CAS No. 7723-14-0)

- xiv. Selenium (CAS No. 7782-49-2)
 - xv. Vanadium (CAS No. 7440-62-2)
 - xvi. Zinc (CAS No. 7440-66-0)
- b. EPA SW-846 Method 0061 or a similar method upon DEQ approval, must be used to sample for hexavalent chromium (CAS No. 18540-29-9), or the permittee may assume all chromium measured from Method 29 testing is hexavalent chromium.
2. **Narrative descriptions are not sufficient to support numerical assumptions.** Please provide the requested data that supports assumptions quoted below by no later than December 15, 2021:
- a. Conventional steel contains metals, some of which are reportable TACs, including, but not limited to, chromium, cadmium, lead, zinc, and nickel. Include estimates for reportable TAC emissions from this process, or complete testing to verify assumption that no TACs are emitted from this process: *“Baghouse 6419 – Decontamination sandblast cyclone and cutting station does not process product. Only conventional steel is processed.”*
 - b. Provide supporting calculation(s) for DEQ review: *“Emissions from acid etch tanks were made using a pool evaporation calculation.”*
 - c. The percentage of emissions being emitted from specified emission points must be supported by exhaust system design documents, engineering testing, or other supporting data for the following comments:
 - i. *“Dust collection records for baghouse 0585 and baghouse 1807 are combined. All dust is tracked and all emissions are accounted for. The 50% split is based on engineering judgement and exhaust configuration.”*
 - ii. *“Please refer to the updated emission inventory submitted September 3, 2020 for air casting calculations. Percentage of emissions routed to the baghouse is based on operator observation and engineering judgement based on the exhaust configuration.”*
 - iii. *“PTE annual production is based on the facility projections from historical production activities. Please refer to the updated emissions inventory submitted September 3, 2020 for air casting calculations. Baghouse filter specifications were submitted to DEQ on June 15, 2020.”* Please provide the requested information to support the percentage of emissions assumed to be emitted from specified emission points.
 - iv. *“The building contains minimal venting aside from venting to the baghouses. 75% of welding emissions routed to the baghouses is based on observation of process, and the most likely airflow is through baghouses.”*
 - v. *“The furnace uses two types of vacuum pumps. The dry pumps vent to a baghouse, the other pumps vent to atmosphere. Emissions are assumed to be split evenly among the two pump types.”*
 - vi. *“The estimated emissions represent commingled emissions within the building envelope. Emissions are estimated for the TEU's in the emissions inventory, so estimating 1% of emissions from TEUs with baghouses as being commingled emissions within the building is a conservative estimate.”*
 - d. Emissions estimates made on a percentage of usage basis must be accompanied by supporting data or engineering testing for the following comments:
 - i. *“Vacuum processes will result in minimal oxidation of elemental metals due to the lack of oxygen in the process. Oxidation is considered an impurity to the final product, and the facility works to mitigate oxidation as much as possible. The percentage of elemental metals oxidized in vacuum processes is assumed to be 3%.”*

- ii. *“HCl is used to modulate the pH of the slurry to ensure the slurry has the correct consistency for shell building. The acid is not a volatile constituent (such as an alcohol), and is not intended to flash off, but reacts after it is added into the slurry. Therefore, emissions were conservatively assumed to be 5% of usage.”*
- iii. *“Hot Top is the "molten metal insulation" applied after casting. The purpose of the hot top is to melt and create an insulative layer on openings in the mold after casting by way of a thermite reaction. Some smoke is generated by the instantaneous reaction, and it is conservatively estimated that this smoke represents 1% of the total mass of hot top used.”*

3. **Requested information must be provided for DEQ review. In-person, onsite review is not sufficient for DEQ approval.** Please provide the following information regarding alloys and Safety Data Sheets claimed to be Confidential Business Information by December 15, 2021.

- a. Alloy composition data, including specific alloy content(s)
- b. Autoclave & Wax Reclaim engineering testing data/bench scale test report(s)
- c. Wax Safety Data Sheet(s)
- d. Acid Etch Line Safety Data Sheet(s)
- e. Welding rod, wire, etc. Safety Data Sheet(s)
- f. Titanium alloy composition data, including specific alloy content(s)

DEQ is requesting that you submit additional information to complete your Emissions 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 503-866-8741 or kenzie.billings@deq.state.or.us, and I look forward to your continued assistance with this process.

Sincerely,

Kenzie Billings
Air Toxics Project Manager

Cc: Brian McCampbell, PCC
Brian Eagle, MFA
Tom Wood, Stoel Rives
David Graiver, DEQ
Matthew Davis, DEQ
Keith Johnson, DEQ
J.R. Giska, DEQ
File