Via Electronic Mail (Thomas.rhodes@deq.state.or.us)
February 12, 2021

Thomas Rhodes
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite #600
Portland, OR 97232

Re: Hydro Extrusion Portland, Inc
Cleaner Air Oregon Emissions Inventory Submittal

Dear Mr. Rhodes:

On October 15, 2020, Hydro Extrusion Portland, Inc. (Hydro) received a letter from the Oregon Department of Environmental Quality (DEQ) providing a written notice pursuant to Oregon Administrative Rule (OAR) 340-245-0050 that Hydro was being called into the Cleaner Air Oregon (CAO) risk assessment process. OAR 340-245-0030(1)(a)(A) specifies that an emissions inventory must be submitted to DEQ no later than 90 days after the DEQ notice date (i.e., January 13, 2021) and OAR 340-245-0040(1) specifies that the inventory must be submitted electronically. Hydro received a 30-day extension approval letter from DEQ on January 13, 2021, specifying that the emissions inventory should be submitted no later than February 12, 2021. The email to which this letter is attached constitutes our timely CAO emissions inventory submittal.

In preparing this inventory we employed pragmatic engineering knowledge to generate an estimate of the 2019 actual emissions and potential to emit (PTE) for the toxic air contaminants (TACs) listed in OAR 340-245-8020, Table 2 for applicable sources covered by Air Contaminant Discharge Permit No. 26-3241-ST-01. We have endeavored to develop the most accurate and representative TAC emissions inventory possible while meeting the submission deadline. However, please understand that these estimates may be revised as additional information becomes available.

The Hydro facility typically operates an average of 10 hours per day, 5 days per week. Where processes can vary, we have conservatively estimated short term emissions based on reasonable worst-case operations. Emission calculation methodologies rely on what we consider the best available data and use conservative assumptions as applicable. Such conservative assumptions may be revised in the event more accurate data becomes available.

A toxicity-weighted emission rate ranking system was developed as part of the TAC emissions inventory process. For each coating, the toxicity weighted emissions rate was developed by taking the quotient of

the TAC composition and the risk-based concentrations in OAR 340-245-8040, Table 4, and summing the resulting quotients to calculate a "toxicity-weighted emission rate" for the overall product. Because our operation relies on the ability to use a wide variety of coatings, each with a unique blend of compounds, this unique ranking strategy is proposed to help ensure our emissions are based on an overall risk ranking for products generally, and not a specific mix of products.

Acute risk-based concentration (RBC) toxicity-weighted emissions rates were used to determine the 2019 operational day with maximum risk based on actual production data. The usage data from this date was used as the basis for "maximum daily" emissions estimate for 2019. Annual emissions estimates for the calendar year 2019 were estimated based on actual usages on a product-by-product basis, and did not rely on the toxicity-weighted ranking process.

PTE emissions estimates for coating operations were developed for each risk/hazard category. The toxicity-weighted emission rates were used to rank the coatings based on the highest risk/hazard in each RBC category. Those coatings containing chromate were separated from the non-chromate containing coatings based on typical usage activity. Emissions were calculated using the worst-case, or topped ranked toxicity-weighted product, chromite coating, and the worst-case non-chromate coating. Because the top-ranked coating varied among the multiple risk/hazard categories (e.g. cancer, chronic noncancer, and acute noncancer), three separate PTE emissions scenarios were developed, each with emissions estimates based on usage of the chromate and non-chromate containing coating with the highest risk/hazard ranking in the specified category. PTE material usage in AQ405 Table 4 and emission estimates in AQ405 Table 5 are separated into cancer, chronic and acute datasets. While we are reporting a PTE usage for specific products, these products represent a worst-case usage in terms of risk rather than mass emission rates of specific TACs. As a result, we expect to be able to demonstrate that all other coatings used to be ranked equal to or lower than the product(s) identified on an ongoing basis. Usage of solvents is consistent across the three PTE emissions scenarios.

Emissions of chromium (both total and hexavalent) for horizontal and vertical pre-treat were estimated using emission factors developed from 2017 source testing.

Hydro operates a wastewater treatment system for pH adjustment and solids removal prior to discharge to the City of Portland sanitary system. Most of the process water is within the pH discharge range and receives no treatment prior to discharge. A press-filter removes densified sludge, which is stored in a covered container prior to being hauled off for proper disposal. The only known TACs used in the wastewater treatment process (i.e., hydrochloric acid and sodium hydroxide) are used for pH adjustment and are involved in neutralization reactions, thus neither are expected to volatilize. As a result, there are no TAC emissions quantified nor expected from wastewater treatment.

Please do not hesitate to contact me if you have any questions after reviewing our inventory. We look forward to scheduling a meeting to review the submittal and discuss your questions in detail. Please let me know when it would be convenient to hold this meeting.
Sincerely,

Hydro Extrusion Portland, Inc.

Ruth Glass
HSE Manager

cc: Leslie Riley (Maul Foster & Alongi)