Oregon
Kate Brown, Governor

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March 11, 2021

Andrew Willis
Covanta Marion, Inc.
4850 Brookdale Rd. NE
Brooks, OR 97305

Mr. Willis,

DEQ received the Cleaner Air Oregon (CAO) Air Toxics Emissions Inventory Form AQ405CAO (Inventory) for the Covanta Marion, Inc. (Covanta) facility in Brooks, OR dated November 24, 2020. Based on our review, DEQ has determined the Inventory to be incomplete. DEQ requires Covanta to conduct source testing on both municipal waste combustors 1 and 2 (MWC-1 and MWC-2) by June 21, 2021, pursuant to OAR 340-212-0120, in order to provide a complete and approvable Emissions Inventory for the purposes of the CAO program under OAR 340-245-0040(1).

DEQ acknowledges the challenges in establishing an accurate inventory for this facility. Filling these data gaps is a high priority for further work, and having an accurate representation of current and potential future emissions at this facility will allow DEQ to approve the final risk assessment.

Covanta's two onsite combustors are permitted to incinerate a variable waste feedstock that includes, but is not limited to, municipal and medical waste. The emissions from waste combustion may include, but are not limited to, acid gases, metals, organic compounds, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and polychlorinated dioxins and furans (PCDD/Fs), and perfluoroalkylated substances (PFAS). The facility's current Title V Operating Permit requires the facility to test for particulate matter, cadmium, lead, mercury, sulfur dioxide, hydrogen chloride, and dioxins/furans on an annual basis.

One of CAO's primary goals is to develop a comprehensive inventory of emissions of all reportable toxic air contaminants (TACs) for each facility called in to the program. On May 7, 2020, DEQ learned about upcoming source testing for which Covanta was preparing. On June 4, 2020, DEQ notified Covanta that additional source testing, beyond what is required in Covanta's current Title V Permit, would likely be required for the upcoming CAO risk assessment. Covanta indicated that they would be unable to fulfill DEQ's request for additional analyses during annual source testing completed in August 2020.

I. Specific Comments

Covanta submitted facility-specific source testing data for several reportable TACs (please see attached table summarizing source test data sources). For the remaining reportable TACs for which site-specific data was not available, Covanta used the historical maximum value from a single source test from one of several "sister facilities" referenced in the attached table. The sister facility testing data provided was collected between 1991 and 2020.

DEQ cannot approve the use of source testing data Covanta presented in the Inventory submitted on November 24, 2020 from sister facilities due to a number of operational factors that vary among facility operations, including:

1. Waste stream changes over time
2. Combustor type
3. Pollution controls used at other sites
4. Level of control during testing (e.g., quantity of lime and/or ammonia injected, etc.)
5. Regulations applicable at other sites that do not apply to Covanta's facility in Brooks, and vice versa
6. Type of waste incinerated during source tests (e.g., municipal, construction, medical waste, plastics, etc.)

II. Source Testing

Pursuant to ORS 468A.070 and OAR 340-212-0120(1)(a), DEQ requires Covanta to test both municipal waste combustors MWC-1 and MWC-2 by June 21, 2021 as follows:

1. The following sampling methods must be performed:
    a. EPA Method 23 must be used to sample for the following TACs listed in OAR 340-245-8020 Table 2. Please use the Proposed EPA Method 23 Revisions provided in the Revised EPA Method 23, attached.
        i. Each dioxin and furan congener, as well as totals for each class of congeners (e.g., Total tetrachlorodibenzo-p-dioxins, Total hexachlorodibenzofurans).
        ii. Each PCB congener.
        iii. Each PAH and PAH-derivative.
        iv. Chlorobenzene and chlorophenol.
    b. EPA Method 29, or similar method upon DEQ approval, must be used to sample for molybdenum. Please report all molybdenum emissions as molybdenum trioxide.
    c. EPA Method 26, or similar method upon DEQ approval, must be used to sample for the following TACs:
        i. Bromine
        ii. Chlorine
        iii. Hydrogen bromide
        iv. Hydrogen chloride
        v. Hydrogen fluoride
    d. EPA SW-846 Method 0061, or similar method upon DEQ approval, must be used to sample for hexavalent chromium, or the permittee may assume all chromium measured from Method 29 testing is hexavalent chromium.
    e. Bay Area Air Quality Management District Source Test Procedure ST-1B, or similar method upon DEQ approval, must be used to sample for ammonia.
    f. EPA Method 323, or similar method upon DEQ approval, must be used to sample for formaldehyde.
    g. EPA Method SW-846 Method 0031, or similar method upon DEQ approval, must be used to sample for all reportable TACs listed in OAR 340-245-8020 Table 2 that are detectable using this method, including:
        i. Acrylonitrile
        ii. Benzene
        iii. Bromodichloromethane

iv. Carbon disulfide
v. Chlorodibromomethane, or dibromochloromethane
vi. Chloroform
vii. Chloroprene
viii. 1,1-dichloroethane
ix. 1,2-dichloroethane
x. trans-1,2-dichloroethene
xi. 1,2-dichloropropane
xii. 1,3-dichloropropene
xiii. Methylene chloride
xiv. Tetrachloroethene
xv. Toluene
xvi. 1,1,1-trichloroethane
xvii. 1,1,2-trichloroethane
xviii. Trichloroethene
xix. Trichlorofluoromethane
xx. Bromomethane
xxi. Chloroethane
xxii. Vinyl bromide
xxiii. Vinyl chloride

h. PFAS sampling will not be required at this time, but may be required in future sampling events.

2. Consistent with section 2.3 of the DEQ Source Sampling Manual, Covanta must provide the source test plan at least 30 days before conducting the source test. Please review sections 2.7 and 2.8 of the sampling manual when proposing a minimum sample volume for each test method. Please consult with DEQ prior to submittal of the test plan if you have any concerns regarding sample volumes and/or analytical detection limits.
3. Work with DEQ to determine representative testing conditions; this may require multiple combustion scenarios. To establish the ratio(s) of medical waste to municipal waste combusted during source testing, provide records of the waste combusted in MWC-1 and MWC-2 for the last 24 months to ensure representative testing scenarios are provided in the source sampling plan. Please include amounts of different types of medical waste combusted (e.g., pharmaceutical, general, infectious, etc.).
4. Source test results are due to DEQ within 60 days after the test is completed and must include the information required in Appendix A of the Source Sampling Manual.

Confidential or trade secret information submitted to DEQ

DEQ is requesting that you submit the above additional information to complete your Toxic Air Contaminant 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.

Submittal Deadlines

Please communicate any questions or clarifications regarding the above comments proactively in order to provide timely submittals. Your submittal due dates are summarized below:

1. Conduct source testing of the municipal waste combustors, analyzing for TACs as specified above by June 21, 2021. The source test plan is due to DEQ 30 days before the test; the source test results are due to DEQ 60 days after completing the test.
2. Submit your revised Inventory to DEQ no later than 30 days after receiving DEQ approval of the source test results.

DEQ remains available during this timeframe to discuss the submittal with you and answer any questions you may have. Failure to provide additional information or corrections required by DEQ by this date may result in a violation of OAR 340-245-0030(1) and OAR 340-245-0040(1).

Please contact me directly at 503.229.5247, billings.kenzie@deq.state.or.us, and we look forward to your continued assistance with this process.

Sincerely,

Kenzie Billings

Digitally signed by Kenzie Billings
Date: 2021.03.11 10:25:43 -08'00'

Kenzie Billings
DEQ CAO Project Manager

Cc: Kirk Little, Covanta Marion, Inc.
Jesse Gonzalez, Trinity Consultants
Suzanne Blackburn, DEQ
Claudia Davis, DEQ
Mike Eisele, DEQ
J.R. Giska, DEQ
Keith Johnson, DEQ
Thomas Rhodes, DEQ

Attachments: Summary of Source Testing Data Sources for Covanta Marion, Inc.

EPA Method 23 – Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources

Summary of Source Testing Data Sources for Covanta Marion, Inc.
Alexandria
2020
Hydrogen bromide
Burnaby
2020
3-Methylcholanthrene
5-Methylchrysene
7,12-Dimethylbenz[a]anthracene
7H-Dibenzo[c,g]carbazole
Dibenz[a,h]acridine
Dibenz[a,j]acridine
Dibenzo(a,i)pyrene
Dibenzo[a,e]fluoranthene
Dibenzo[a,e]pyrene
Dibenzo[a,h]pyrene
Dibenzo[a,l]pyrene
Quinoline
Durham
2019
Molybdenum and compounds
Essex
2020
Carbon Tetrachloride
Trichloroethylene
Marion
2009
2-Methyl naphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[e]pyrene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenz[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
PCB 105 [2,3,3',4,4'-pentachlorobiphenyl]
PCB 114 [2,3,4,4',5-pentachlorobiphenyl]

PCB 118 [2,3',4,4',5-pentachlorobiphenyl]
PCB 123 [2,3',4,4',5'-pentachlorobiphenyl]
PCB 126 [3,3',4,4',5-pentachlorobiphenyl]
PCB 156 [2,3,3',4,4',5-hexachlorobiphenyl]
PCB 157 [2,3,3',4,4',5'-hexachlorobiphenyl]
PCB 167 [2,3',4,4',5,5'-hexachlorobiphenyl]
PCB 169 [3,3',4,4',5,5'-hexachlorobiphenyl]
PCB 189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]
PCB 77 [3,3',4,4'-tetrachlorobiphenyl]
PCB 81 [3,4,4',5-tetrachlorobiphenyl]
Perylene
Phenanthrene
Pyrene
2019 (MWC-1) & 2020 (MWC-2)
Polychlorinated dibenzo-p-dioxins (PCDDs) & dibenzofurans (PCDFs) TEQ
2020
Aluminum and compounds
Antimony and compounds
Arsenic and compounds
Barium and compounds
Beryllium and compounds
Chromium VI, chromate, and dichromate particulate
Cobalt and compounds
Copper and compounds
Manganese and compounds
Nickel and compounds
Phosphorus and compounds
Selenium and compounds
Silver and compounds
Thallium and compounds
Vanadium (fume or dust)
Zinc and compounds
2018-2020
Cadmium and compounds
Hydrochloric acid
Lead and compounds
Mercury and compounds

Stanislaus
1991
Benzene
1993
Formaldehyde Vinyl chloride
2020
Hydrogen fluoride Permit Max Ammonia

Note: Data reference cited was used for both MWC-1 and MWC-2 unless otherwise noted.