

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of:

Covanta Plymouth Renewable Energy, LLC
1155 Conshohocken Road
Conshohocken, PA 19428

Re: Operating Permit and 3rd, 4th Quarter 2019 and
2nd Quarter 2020 CEMS Violations

CONSENT ASSESSMENT OF CIVIL PENALTY

This Consent Assessment of Civil Penalty (“CACP”) is entered into this 26th day of January 2021, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection (“DEP”), and Covanta Plymouth Renewable Energy, LLC (“Covanta Plymouth”).

DEP has found and determined the following:

A. DEP is the agency with the duty and authority to administer and enforce the Air Pollution Control Act, Act of January 8, 1960, P.L. 2119 (1959), as amended, 35 P.S. §§ 4001 et seq. (“Air Pollution Control Act”), Section 1917-A of the Administrative Code 1929, The Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510-17 (“Administrative Code”), and the regulations promulgated thereunder.

B. Covanta Plymouth is a Delaware Limited Liability Company that owns and operates a waste to energy plant located at 1155 Conshohocken Road, Conshohocken, Plymouth Township, Pennsylvania.

C. Covanta Plymouth is currently permitted to operate a number of air contamination sources, as defined in the Air Pollution Control Act and 25 Pa. Code § 121.1, including Source IDs: 001 - MWI Unit 1 (“Source ID: 001”) and Source ID: 002 - MWI Unit 2 (“Source ID: 002”) under Air Quality Title V Operating Permit 46-00010 (“TVOP 46-00010”), issued on November 21, 2017 and expiring on November 21, 2022. Source ID: 001 and Source ID: 002 are equipped with continuous emission monitoring systems (“CEMS”).

D. Pursuant to 25 Pa. Code § 121.7 and TVOP 46-00010, Section B, Condition #002, and Section C, Condition #001, no person may permit air pollution as that term is defined in the Air Pollution Control Act.

E. Pursuant to 25 Pa. Code § 123.1 and TVOP 46-00010, Section C, Condition #002, no person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than those listed in § 123.1(a)(1)-(9).

F. Pursuant to 25 Pa. Code § 123.31(b) and TVOP 46-00010, Section C, Condition #004, “[a] person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source, in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.”

G. Pursuant to 25 Pa. Code § 127.444, “[a] person may not cause or permit the operation of a source subject to this article unless the source and air cleaning devices identified

in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with the specifications in the application and conditions in the plan approval and operating permit issued the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.”

H. Pursuant to 25 Pa. Code § 127.705 and TVOP 46-00010, Section B, Condition #018(b), the owner or operator of a Title V facility shall pay an annual Title V emission fee for each ton of a regulated pollutant actually emitted from the facility.

I. Pursuant to the Continuous Source Monitoring Manual (Document No. 274-0300-001), Section I.B.6.a.i., Delinquency of acceptable submittals, “submittals to resolve unacceptability that are received, and subsequently determined by the Bureau to be acceptable, more than 30 days after the end of the reporting period will be considered delinquent and may be subject to delinquency penalties in accordance with an appropriate compliance assurance policy or enforcement policy.”

J. Pursuant to TVOP 46-00010, Section C, Condition #012(a)(1), the permittee shall report to DEP malfunctions that pose an imminent danger to the public health, safety, welfare and the environment no later than (2) two hours after the permittee becomes aware.

K. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #002(j), carbon monoxide (“CO”) emissions per combustor shall not exceed 100 parts per million dry volume (“ppmvd”), calculated as a 4-hour block arithmetic average, corrected to 7% oxygen on a dry basis.

L. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #005(a), “[a]ir emissions from each combustor are controlled by individual selective non-catalytic reduction (SNCR) system to reduce NOx emissions, acid gas scrubbers (quench reactor) to control acid gases, a carbon adsorption process (powdered activated carbon) to control emissions of toxic pollutants, and a baghouse to control particulate matter emissions.”

M. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #005(c), “[t]he combustion gases in the combustion chamber shall be maintained at a temperature greater than 1800°F, for at least one (1) second. To verify compliance, a temperature sensor shall be located at the furnace roof position approved by the Department. The temperature at this location shall be maintained at greater than 1100°F (a Department approved reference temperature which corresponds to 1800°F) for at least one second. The combustor(s) auxiliary burners shall be manually or automatically controlled to maintain the combustion gases temperature at the aforementioned condition whenever refuse is being combusted.”

N. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #007(c), “[t]he continuous monitoring system to be operated and maintained to achieve the following data availability standards:

1. CO and temperature: 100% valid hours/day, where a valid hour is defined as greater than or equal to 90% valid readings (54 minutes)”.

O. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #011(c)(2), “[a]ll air pollution control devices shall be operated and maintained in accordance with manufacturers’ specifications and good air pollution control practices.”

P. Pursuant to TVOP 46-00010, Section E, Source ID: 001 and Source ID: 002, Condition #012(b)(1), the permittee shall comply with “the Department's Air Quality Compliance Assurance Policy for Municipal Waste Incinerators (CAP for MWI), finalized and signed by the Department on July 12, 1989 (updated on May 24, 1996), and its latest amendments, except where otherwise provided in this permit...”

Q. Covanta Plymouth submitted their 3rd Quarter 2019 CEMs report to DEP which was postmarked on November 6, 2019. A revised report was submitted on December 4, 2019, which contained corrected data for Unit 2 HCl Reduction and SO₂ Reduction. The reports documented the following:

1. Source ID: 001 had one excess invalid hour for CO during the quarter.
2. Source ID: 002 had a 4-hour CO average of 123 ppm on September 19, 2019 and two excess invalid hours for CO during the quarter.
3. Source ID: 002 had a 1-hour average temperature of 1,788°F on September 19, 2019.

R. On June 10, 2019, at approximately 8:15 a.m., Covanta Plymouth lost power to the entire plant due to an electrical malfunction. This sudden and unintentional event caused Covanta Plymouth’s turbines, Source ID: 001 and Source ID: 002, and all emission control equipment to go offline and not all flue gasses passed through the baghouse. Air emissions from Source ID: 001 and Source ID: 002 were not controlled by the SNCR, acid gas scrubbers, carbon adsorption process or fully controlled by the baghouse. Until the combustion waste was extinguished, the combustion gases in the combustion chamber may not have been maintained at a temperature at or greater than 1,800°F. As a result, emissions were not fully controlled when released into the outdoor atmosphere.

S. On June 11, 2019 between 4:00 and 5:00 a.m., while re-starting Source ID: 001, operators deviated from Covanta Plymouth start-up procedures in an attempt to over-control NO_x emissions by injecting an air pollution reagent (urea) prior to the introduction of waste. The early introduction of reagents contributed to increased nitrogen dioxide (NO₂), visible and odorous emissions.

T. On October 15, 2019, at approximately 2 a.m., Covanta Plymouth lost power to the entire plant due to an electrical breaker malfunction. This sudden and unintentional event caused Covanta Plymouth’s turbines, Source ID: 001 and Source ID: 002, and, except for a portion of flue gas flows through the baghouse, emission control equipment to go offline.

U. On October 15, 2019 at 7:15 a.m., Covanta Plymouth notified DEP of the malfunction.

V. On October 15, 2019 between 9:30 and 10:00 a.m., a DEP representative observed fugitive emissions emanating from the roof of the boiler building that houses Source ID: 001 and Source ID: 002.

W. On October 15, 2019, air emissions from Source ID: 001 and Source ID: 002 were not controlled by the SNCR, acid gas scrubbers, carbon adsorption process and not all flue gasses passed through the baghouse. Until the combustion waste was extinguished, the combustion gases in the combustion chamber were not maintained at a temperature at or greater than 1,800° F. As a result, emissions were not fully controlled when released into the outdoor atmosphere.

X. On October 16, 2019, a DEP representative met with several citizens in the Colwell Lane area of Conshohocken between 8:40 and 9:15 p.m. The citizens claimed that the “burning plastic” odor they were detecting caused them annoyance and discomfort. The DEP representative detected the same odor and determined it to be objectionable to the public. The DEP representative determined that the odor was coming from Covanta Plymouth. Covanta Plymouth does not agree with the DEP determination that the odor was coming from Covanta Plymouth.

Y. On October 17, 2019, DEP issued a Notice of Violation to Covanta Plymouth for the violations indicated in Paragraphs U, V, W, and X.

Z. On October 19, 2019, a DEP representative met with several citizens in the Colwell Lane area of Conshohocken at approximately 11:05 a.m. The citizens claimed that a variety of odors, including a “chemical-like” odor caused them annoyance and discomfort. The DEP representative detected the same odor and determined it to be objectionable to the public. Covanta reports that the facility was operating normally and no exceedances were noted on the CEMS data. The DEP representative determined that this odor was coming from Covanta Plymouth. Covanta Plymouth does not agree with the DEP determination that the odor was coming from Covanta Plymouth.

AA. On October 24, 2019, DEP issued a Notice of Violation to Covanta Plymouth for the violation indicated in Paragraph Z.

BB. On December 15, 2019, a DEP representative met with several citizens in the Colwell Lane area of Conshohocken at approximately 1:15 p.m. The citizens claimed that a variety of odors, including a burning plastic odor caused them annoyance and discomfort. The DEP representative detected the same odor and determined it to be objectionable to the public. Covanta reports that the facility was operating normally and no exceedances were noted on the CEMS data. The DEP representative determined that this odor was coming from Covanta Plymouth. The odor was still detectable at 1:35 p.m. when the DEP representative departed the area. Covanta Plymouth does not agree with the DEP determination that the odor was coming from Covanta Plymouth.

CC. On December 23, 2019, DEP issued a Notice of Violation to Covanta Plymouth for the violations indicated in Paragraph BB.

DD. Covanta Plymouth submitted their 4th Quarter 2019 CEMs report to DEP which was postmarked on February 4, 2020. The report documented the following:

1. Source ID: 001 had two excess invalid hours for CO during the quarter.
2. Source ID: 002 had a 4-hour CO average of 131 ppm on October 24, 2019.
3. Source ID: 002 had three excess invalid hours for CO during the quarter.
4. Source ID: 002 had a 1-hour average temperature of 0°F on October 15, 2019.

EE. On June 15, 2020, at approximately 7:30 a.m., Covanta Plymouth lost power to the entire plant due to an electrical failure. This sudden and unintentional event caused Covanta Plymouth's turbines, Source ID: 001 and Source ID: 002, and all emission control equipment to go offline.

FF. On June 15, 2020, between 11:00 and 11:20 a.m., a DEP representative observed fugitive emissions emanating from the roof of the boiler building that houses Source ID: 001 and Source ID: 002.

GG. On June 15, 2020, air emissions from Source ID: 001 and Source ID: 002 were not controlled by the SNCR, acid gas scrubbers, carbon adsorption process and not all flue gasses passed through the baghouse. Until the combustion waste was extinguished, the combustion gases in the combustion chamber may not have been maintained at a temperature at or greater than 1,800°F. As a result, emissions were not fully controlled when released into the outdoor atmosphere.

HH. On June 24, 2020, DEP issued a Notice of Violation to Covanta Plymouth for the violations indicated in Paragraphs FF, and GG.

II. On September 22, 2020, a DEP representative met with citizens in the Colwell Lane area of Conshohocken between 3:00 p.m. and 4:15 p.m. The citizens claimed that a strong odor they were detecting caused them annoyance and discomfort. The DEP representative detected the same odor and determined it to be objectionable to the public. Covanta reports that the facility was operating normally and no exceedances were noted on the CEMS data. The DEP representative determined that the odor was coming from Covanta Plymouth. Covanta Plymouth does not agree with the DEP determination that the odor was coming from Covanta Plymouth.

JJ. On October 1, 2020 DEP issued a Notice of Violation to Covanta Plymouth for the violation indicated in Paragraph II.

KK. Covanta Plymouth submitted their 2nd Quarter 2020 CEMs report to DEP which was postmarked on July 29, 2020. The report documented the following:

1. Source ID: 001 had two excess invalid hours for CO during the quarter.
2. Source ID: 002 had one excess invalid hour for CO during the quarter.

LL. Covanta Plymouth paid most of their annual Title V emission fees but did not include fees for NOx emissions during warm-up and cool-down periods from 2014 to 2018.

Upon request, Covanta Plymouth submitted revised Annual Emission Statements for the periods in question.

MM. The findings of facts described in Paragraphs Q through X, Z, BB, DD through GG, II, KK and LL are contrary to TVOP 46-00010 and are violations of 25 Pa. Code § 127.444. The findings of facts described in Paragraphs V and FF are also violations of 25 Pa. Code § 123.1, Paragraphs X, Z, BB and II are also violations of 25 Pa. Code § 123.31, Paragraphs R, S, W and GG are also violations of 25 Pa. Code § 121.7 and Paragraph LL is also a violation of 25 Pa. Code § 127.705.

NN. The violations asserted in Paragraph MM constitute unlawful conduct under Section 8 of the Air Pollution Control Act, 35 P.S. § 4008, and subject Covanta Plymouth to a claim for civil penalties under Section 9.1 of the Air Pollution Control Act, 35 P.S. § 4009.1.

OO. Covanta Plymouth has continued to cooperate with the DEP to address the causes of the malfunctions identified in Paragraphs R, T and EE and is implementing a series of specific corrective actions as communicated with the DEP.

After full and complete negotiation of all matters set forth in this CACP and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby **ASSESSED** by DEP and **AGREED** to by Covanta Plymouth as follows:

1. **Assessment.** In resolution of DEP's claim for civil penalties, which DEP is authorized to pursue under Section 9.1 of the Air Pollution Control Act, 35 P.S. § 4009.1, DEP hereby assesses a civil penalty of **TWO HUNDRED EIGHTEEN THOUSAND AND THREE HUNDRED AND NINETY THREE DOLLARS (\$218,393)**, which Covanta Plymouth hereby agrees to pay.

2. **Civil Penalty Settlement.** Within 15 days of receipt of a signed copy of this CACP, Covanta Plymouth shall pay the civil penalty assessed in Paragraph 1. This payment is in settlement of DEP's claim for civil penalties for the violations set forth in Paragraph MM, for the dates set forth in Paragraph Q through X, Z, BB, DD through GG, II, KK and LL. The payment shall be by corporate check or the like, made payable to the "COMMONWEALTH OF PENNSYLVANIA, CLEAN AIR FUND" and sent to the Air Quality Compliance Specialist, Pennsylvania Department of Environmental Protection, Air Quality, 2 East Main Street, Norristown, PA 19401. Payment shall be accompanied by Form No. ER-AQ-3, a copy of which is enclosed.

3. **Findings.**
a. Covanta Plymouth agrees that the findings in Paragraphs A through LL and OO are true and correct and, in any matter or proceeding involving Covanta Plymouth and DEP, Covanta Plymouth shall not challenge the accuracy or validity of these findings.

b. The parties do not authorize any other persons to use the findings in this CACP in any matter or proceeding.

4. **Reservation of Rights.** DEP reserves all other rights with respect to any matter addressed by this CACP, including the right to require abatement of any conditions resulting from the events described in the Findings. Covanta Plymouth reserves the right to challenge any action which DEP may take but waives the right to challenge the content or validity of this CACP.

