## **Commonwealth of Pennsylvania** Department of Environmental Protection Bureau of Air Quality 04/10/2024

- Subject: Title V Operating Permit Technical Review Memo (Renewal) TVOP 46-00010 Covanta Plymouth Renewable Energy LLC 1155 Conshohocken Road Conshohocken, PA 19428-1028 Plymouth Township, Montgomery County APS ID 870112; Authorization ID No. 1397753; PF ID: 523397
  To: James D. Rebarchak Regional Air Quality Program Manager
- Southeast Regional Office
- From: Gary Walls Engineering Specialist New Source Review Section
- Through: James A. Beach, P.E. Environmental Engineer Manager New Source Review Section

# I. INTRODUCTION/FACILITY DESCRIPTION

On May 23, 2022, the Department of Environmental Protect (DEP) received an application from Covanta Plymouth Renewable Energy LLC (CPRE) for the renewal of their Title V operating permit (TVOP) for its facility located at 1155 Conshohocken Road, Plymouth Township, Montgomery County. The application was received electronically, along with copies of the municipal and county notifications and compliance review form.

The application was considered administratively complete on May 25, 2022. The current operating permit (Authorization ID No. 1161400) expired on November 21, 2022.

The CPRE site is a major emitting facility for CO, NOx, SOx, HCl and total hazardous air pollutants (HAP) emissions. The site is a minor source of PM and VOC emissions.

Using the DEP EJ Viewer Tool, the facility is located in an Environmental Justice (EJ) area. DEP considered this as an opt-in application based on the concerns of the surrounding community. DEP will use the enhanced public participation process in accordance with the Environmental Justice Policy effective September 16, 2023.

## **Facility Description**

The CPRE facility is a waste-to-energy facility that takes non-hazardous waste, otherwise destined for landfill, and combusts it, generating steam for electricity production. The facility processes over 400,000 tons of waste and generates 32 megawatts of electricity on a daily basis. The ash byproduct is processed to recover metal for recycling.

## II. OVERVIEW OF SOURCES, GROUPINGS AND EMISSIONS

#### **Overview of Sources**

The emission sources at the CPRE facility consist of two municipal waste combustors (MWC), storage silos and a diesel-fired internal combustion engine that drives an emergency generator. A description of the emission sources listed below are provided in Appendix 1.

- MWI Units 1 and 2 (Source IDs 001 and 002)
- Emergency Generator (Source ID 101)
- Lime Silo (Source ID 103)
- Powdered Activated Carbon Silo (Source ID 104)

#### Emissions

The potential emissions for the majority of the pollutants emitted by the facility's operations have not changed, with the exception of NOx emissions. The potential NOx emissions for the MWC units will change from 477.4 tons to 256.2 tons based on the new RACT III NOx emission level<sup>1</sup> for MWCs. The facility-wide potential emissions are presented in Table 1.

Table 1 – Potential Emissions

СО	NOx	PM	SOx	VOC
246.3	520.3	53.1	163.2	24.99

#### III. REGULATORY ANALYSIS

Operations at the facility are subject to Federal and state requirements. The Federal and state source-specific requirements for the facility are as follows:

 40 C.F.R. § 52.46 – What are the requirements of the Federal Implementation Plans (FIPs) relating to ozone season emissions of nitrogen oxides from Municipal Waste Combustors

<sup>&</sup>lt;sup>1</sup> On December 15, 2022, CPRE a RACT III Compliance Submittal was provided to DEP stating that the MWCs are subject to the presumptive RACT III requirement under 25 Pa. Code § 129.112(f) which is that the MWCs will meet the emission limit of 110 ppmvd NO<sub>x</sub> @ 7% oxygen. This corresponds to 256.2 tons on an annualized basis. The previous NOx emission limit of 477.4 tons per MWC was based on the emission limit of 205 ppmvd NO<sub>x</sub> @ 7% oxygen established under RACT I, although the short-term limit of 180 ppmvd NO<sub>x</sub> @ 7% oxygen.

- 40 C.F.R. Part 60, Subpart Cb Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That are Constructed on or Before September 20, 1994
- 40 C.F.R. Part 61, Subpart C National Emission Standard for Beryllium
- 40 C.F.R. Part 62, Subpart NN Approval and Promulgation of State Plans for Designated Facilities and Pollutants Pennsylvania
- 40 C.F.R. Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 25 Pa. Code §123.13 Particulate Matter Emissions Processes
- 25 Pa. Code § 123.21- Sulfur Compound Emissions General
- 25 Pa. Code § 123.41 Visible Emissions Limitations
- 25 Pa. Code § 123.42 Visible Emissions Exceptions
- 25 Pa Code §§ 129.111-129.115 Additional RACT Requirements for Major Sources of NOx and VOCs for the 2015 Ozone NAAQS

A brief explanation of the applicable regulations is provided in Appendix 2. Additionally, a discussion of non-applicable regulations are provided in Appendix 2 where emission sources at the facility appear to closely resemble affected emission sources under certain regulations; however, do not meet the criteria of an affected emission source and therefore, not included in the operating permit.

# IV. STREAMLINING OF REQUIREMENTS

The operating permit contains three streamlined conditions that simplifies the operating permit and compliance demonstrations for the facility. The streamlined conditions were established in the renewal operating permit issued under Authorization ID No. 1151689. The streamlined conditions in the operating permit are summarized as follows:

## Emission Source 101

- The operating hour conditions under 40 C.F.R. § 63.6640 are more stringent than the 500 hours per 12 month rolling period under RACT; therefore, compliance with the requirements under 40 C.F.R. § 63.6640 assures compliance with the RACT condition.
- The operation and maintenance condition under 40 C.F.R. § 63.6625 is at least as stringent as the RACT condition that states that this generator shall be operated and maintained in accordance with the manufacturer's specifications and good operating practices. Compliance with 40 C.F.R. § 63.6625(e) assures compliance with 25 Pa. Code § 129.112(c) for the emergency engine/generator. The work practice requirement under 40 C.F.R. § 63.6625 assures compliance with good operating practices under RACT III (25 Pa. Code § 129.112(c)).
- The visible emissions limitation established under BAT assures compliance with the visible emissions limitation under 25 Pa. Code § 123.41.
- The state-only fuel sulfur content limitation of 15 parts per million assures compliance with the  $SO_x$  emissions requirement under 25 Pa. Code § 123.21.

## Emission Sources 001 and 002

- The presumptive NOx emission limit of 110 ppmdv @ 7% O2 assures compliance with the NOx emission limit of 205 ppmdv established under the 40 C.F.R. 60.33b(d).
- Compliance with the SO2 emission limitations under 40 C.F.R. § 60.33b(3)(i) assures compliance with 25 Pa. Code § 123.21.
- Compliance with the BAT limit for beryllium assures compliance with the emission limit of 10 gram per 24-hr period under the 40 C.F.R. Part 61, Subpart C (National Emission Standard for Beryllium)
- The BAT limit for cadmium assures compliance with 40 C.F.R. § 60.33b(a)(2).
- The BAT limit for lead and lead compounds assures compliance with 40 C.F.R. § 60.33b(a)(4).
- Compliance with the opacity standard under 40 C.F.R. § 60.33b(a)(1)(iii) assures compliance with 25 Pa. Code §§ 123.41-42 and BAT.

# V. MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

CPRE shall continue to adhere to the recordkeeping, monitoring and reporting requirements established in prior operating permits.

# VI. OPERATING PERMIT MODIFICATIONS

Modifications to the operating permit were made to incorporate DEP standardized permit language in Section C, moving conditions from one section to another, removal of obsolete or redundant conditions, to incorporate changes requested by CPRE (were appropriate) and streamlining requirements (as previously identified under Section IV of this memo).

Additionally, changes to the operating permit were made to incorporate RACT III requirements under 25 Pa. Code §§ 129.111 through 129.115 for the MWCs and the emergency generator. For the MWCs, the following changes have occurred:

- Changed the NOx emission level from 180 ppmvd @ % O2 to 110 ppmvd @ 7% O2
- Changed the 12-month emission level from 477.4 tons to 256 tons<sup>2</sup>
- Eliminated the startup, shutdown and malfunction exemption previously allowed under 40 C.F.R. § 60.38b for NOx emissions since under RACT the presumptive NOx emission limit applies at all times<sup>2</sup>

CPRE requested that the following changes for the renewal review operating permit in the application submitted to DEP:

• The following RFDs were approved post November 16, 2016.

<sup>&</sup>lt;sup>2</sup> This is a RACT strengthening condition.

- An RFD was approved on February 13, 2018, for the like-kind replacement of auxiliary burner.
- An RFD was approved on November 18, 2021 for boiler fire suppression system.
- Additional requested changes included:
  - Responsible Official Change. Frank Capobianco (email: fcapobianco@covanta.com), Facility Manager, assumed Responsible Official duties and responsibilities on January 17, 2020. Written notification was submitted to the Southeast Office on the same day.
  - Section E.I.006(m), please modify the condition to reflect that the Department no longer wishes to receive hardcopy source test reports.
  - Section E.V.(c), please modify the condition to reflect that the Department no longer wishes to receive hardcopy MACT compliance reports; and that storage of reports electronically is acceptable.

Additional details on these changes are presented in Section VII of this memo and Appendix 3.

## VII. INSIGNIFICANT ACTIVITIES/SOURCES

The following projects were granted plan approval exemptions through submission of request for determination (RFD) applications to DEP during the existing operating permit authorization (Authorization ID No. 1161400):

- RFD 7325 was approved on October 9, 2018, to authorize an insignificant emission increase as a result from a Solid Waste permit modification of the types of residual wastes that are accepted at the facility.
- RFD 8431 was approved April 10, 2020, to allow CPRE to conduct a field test of the application of a fire suppression foam onto waste remaining on the combustion grate as a result of potential unit trip in order to accelerate termination of combustion and associated generation of fugitive emissions from the MWCs.
- RFD 9247 was approved November 18, 2021, to allow CPRE to install and operate a boiler fire suppression system on both MWC units. This system will mitigate fugitive emissions resulting from a complete loss of power at the facility.

## **Appendix 1 – Emission Sources**

#### Combustors (Source IDs 001 and 002)

The combustors, manufactured by L&C Steinmuller, are mass burn waterwall units installed in 1991. Each combustor has a nominal rated capacity of 600 tons/day of municipal solid waste (MSW), and a maximum continuous output capacity rating of 162,000 lb/hr steam.

The waste is fed to a charging hopper by the crane, then slides though the shaft to the feeder, which pushes the waste onto the grate. The combustors include two combustion chambers and are fueled with No. 2 fuel oil. The heat, generated from burning the waste and/or No. 2 fuel oil, is recovered by waterwall boilers to produce steam that powers a steam turbine to generate electricity which is exported to the local grid.

Each MWC has an air pollution control train that consists of the following equipment or technology in series: a urea-based, selective non-catalytic reduction (SNCR) for NOx control; acid gas scrubbers, using lime, for HCl and other acid gases, PAC injection system for mercury control, and baghouses for PM control.

#### Emergency Generator (Source ID 101)

The emergency generator is powered by a 300-horsepower compression ignition engine manufactured by Cummins (model number NT-855). The engine/emergency generator was installed in 1991. The engine is a source of products of combustion (POC) emissions.

#### Lime Silo (Source ID 103)

The Lime Silo is equipped with a fabric filter to control PM during loading. The silo has a storage capacity of 93 tons of lime. The fabric filter is equipped with a pressure differential (PD) indicator to measure performance during loading. The loading operation is a source of PM emissions.

#### Powdered Activated Carbon (Source ID 104)

The powdered activated carbon (PAC) silo was manufactured by Norit Americas, Inc. The silo is equipped with fabric filter to minimize PM emissions during the loading of PAC into the silo. The fabric filter is equipped with a PD indicator to measure performance during loading. The loading operation is a source of PM emissions.

## Appendix 2 – Regulatory Review

A brief explanation of each source-specific Federal and state applicable requirements is provided below.

- 40 C.F.R. § 52.46 What are the requirements of the Federal Implementation Plans (FIPs) relating to ozone season emissions of nitrogen oxides from Municipal Waste Combustors
- 40 C.F.R. Part 60, Subpart Cb Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That are Constructed on or Before September 20, 1994
- 40 C.F.R. Part 63, Subpart ZZZZ
- 25 Pa. Code §123.13 Particulate Matter Emissions Processes
- 25 Pa. Code § 123.21- Sulfur Compound Emissions General
- 25 Pa. Code § 123.41 Visible Emissions Limitations
- 25 Pa. Code § 123.42 Visible Emissions Exceptions
- 25 Pa Code §§ 129.111-129.115 Additional RACT Requirements for Major Sources of NOx and VOCs for the 2015 Ozone NAAQS

## <u>40 C.F.R. § 52.46 – What are the requirements of the Federal Implementation Plans (FIPs)</u> relating to ozone season emissions of nitrogen oxides from Municipal Waste Combustors

The requirements of this section apply to each new or existing MWC unit with a combustion capacity greater than 250 tons per day of municipal solid waste (MSW) and which is located within any of the states listed in 40 C.F.R. § 52.40(c)(2), including Indian country located within the borders of any such state(s). This applies to the MWCs at CPRE since each unit has a combustion capacity greater than 250 tons per day of MSW and Pennsylvania is one of the states identified in 40 C.F.R. § 52.40(c)(2). CPRE shall begin demonstrating compliance with these requirements starting in the 2026 ozone season; however, the effective date of 40 C.F.R. § 52.46 was August 4, 2023; therefore, DEP will include the requirements in this operating permit to avoid opening the operating permit at a later date.

<u>40 C.F.R. Part 60, Subpart Cb – Emissions Guidelines and Compliance Times for Large</u> <u>Municipal Waste Combustors That are Constructed on or Before September 20, 1994</u>

Under the EPA-approved Section 111(d)/129 Plan, PA adopted and implemented the emissions guidelines under 40 C.F.R. Part 60, Subpart Cb. Subpart Cb provides emission limitation and standards for metals, acid gases, organics, nitrogen oxides and operating practices for large MWCs.

## 40 C.F.R. Part 61, Subpart C - National Emission Standard for Beryllium

This regulation applies to extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste. The MWCs are incinerators; therefore, the facility must achieve compliance with the emission standard under Subpart C.

## <u>40 C.F.R. Part 63, Subpart ZZZZ – National Emissions Standards for Stationary Reciprocating</u> Internal Combustion Engines

Subpart ZZZZ applies since the facility operates a stationary RICE at an area source of HAP emissions (63.6585) and the emergency generator is an existing stationary RICE since the affected source was constructed before June 12, 2006 (63.6590(a)(1)(iii)).

#### 25 Pa. Code §123.13 Particulate Matter Emissions - Processes

This regulation applies to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks. This applies to the Lime and PAC Silos. PM emissions from the silos must meet a PM emission limit of 0.04 gr/dscf since the effluent gas volume is less than 150,000 dry standard cubic feet. A one-time compliance demonstration was provided in the past showing that the limit cannot be exceeded.

#### 25 Pa. Code § 123.21- Sulfur Compound Emissions - General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis. This rule applies to sources except those subject to other provisions under Title 25 Pa. Code, with respect to the control of sulfur compound emissions. This applies to the MWCs and the emergency generator at CPRE.

#### 25 Pa. Code § 123.41 - Visible Emissions - Limitations

CPRE must meet the opacity standards in accordance with 25 Pa. Code § 123.41. This applies to all emission sources at the facility.

# 25 Pa Code §§ 129.111-129.115 – Additional RACT Requirements for Major Sources of NOx and VOCs for the 2015 Ozone NAAQS (RACT III)

These requirements apply to the owner and operator of a major NO<sub>x</sub> and/or VOC emitting facility that commenced operation on or before August 3, 2018, where requirements or emission limitations, or both, have not been established in 25 Pa. Code §§ 129.51, 129.52(a)—(k) and Table I categories 1—11, 129.52a—129.52e, 129.54—129.63a, 129.64—129.69, 129.71—129.75, 129.77 and 129.101—129.107. CPRE is subject to the NOx RACT III requirements since the facility is a major NOx emitting facility. The MWCs and emergency generator shall meet the NOx RACT III requirements under 25 Pa Code §§ 129.111-129.115.

A brief explanation of non-applicable requirements for the facility is provided below.

#### 40 C.F.R. Part 61, Subpart E - National Emission Standard for Mercury

This regulation applies to stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or

dry wastewater treatment plant sludge. CPRE does not engage in any of the activities mentioned; therefore, this regulation does not apply.

## <u>40 C.F.R. Part 62, Subpart FFF – Federal Plan Requirements for Large Municipal Waste</u> Combustors Constructed on or Before September 20, 1994

This regulation applies to MWCs with a capacity to combust greater than 250 tons per day of MSW for which construction was commenced on or before September 20, 1994 that is not regulated by an EPA-approved and currently effective State or Tribal plan. The MWCs at CPRE are regulated by an EPA-approved State Plan; therefore, this regulation does not apply to CPRE.

## 40 C.F.R. Part 64 - Compliance Assurance Monitoring

The compliance assurance monitoring (CAM) requirements apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of Subpart 64;
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in 40 C.F.R. § 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

There are emission limitations or standards that exempt CAM requirements from a pollutantspecific emissions unit at a major source:

- Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.
- Stratospheric ozone protection requirements under title VI of the Act.
- Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.
- Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources.
- An emissions cap that meets the requirements specified in 40 C.F.R. § 70.4(b)(12) or § 71.6(a)(13)(iii) of this chapter.
- Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 C.F.R. § 64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method

includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).

The potential pre-control device emissions of an applicable regulated air pollutant that are equal to or greater than the annuals emissions classified as a major source for the MWCs at CPRE are: PM, SO<sub>2</sub>, HCl, CO, and NOx. There are emission limitations under 40 C.F.R. Part 60, <u>Subpart</u> Cb, which was promulgated on September 20, 1994, for particulate matter, HCl, SO2, NOx and CO emissions; therefore, the emissions of theses pollutants from the MWCs are exempt from CAM requirements.

### Appendix 3 - Operating Permit Modifications

The following operating permit conditions were changed:

## **SECTION C**

- Revisions were made to operating permit conditions to conform with current DEP standard language.
  - Condition #002
  - Condition #003
  - Condition #006
  - Condition #010
  - Condition #014
  - Condition #015
  - Condition #017
- Condition #008 was added to the operating permit to limit NOx emissions from internal combustion engines exempt from plan approval requirements which are used at the facility.
- Condition #013 was added to the operating permit as the recordkeeping requirement for NOx emissions from exempt internal combustion engines used at the facility.
- Deleted Condition #014 from the current operating permit since the reporting requirements under 25 Pa. Code §135.3 are now listed in Section B (Condition #031).
- Deleted Condition #018 which read: Comply with 25 Pa. Code §129.97(f) according to 25 PA. Code §129.97(a)(1). (01-Jan-17)

Since the RACT II conditions have been replaced with RACT III requirements that are incorporated in the operating permit.

## **SECTION D**

#### Emission Source 101

- Deleted Condition #002 (under existing operating permit, Authorization ID No. 1161400) (40 C.F.R. § 63.6604) because the existing emergency engine is not operated for nonemergency situations to supply power as part of a financial arrangement with another entity (40 C.F.R. § 63.6640(f)(4)(ii)); however, DEP will retain the fuel sulfur limit of 15 ppm as a state-only gap-filling condition.
- Expanded Condition #003 to include the requirements under 40 C.F.R. § 63.6640 that apply to an emergency generator located at a facility that is major source of HAPs. Additionally, streamlined the presumptive RACT condition that an engine shall operate less than 500 hours in a 12-month rolling period to compliance with the conditions under 40 C.F.R. §63.6640 assures compliance with the presumptive RACT condition.

• Previous Condition #009 (25 Pa. Code § 127.441) which read

"This generator shall be operated and maintained in accordance with the manufacturer's specifications and good air pollution control practices."

was deleted/streamlined since compliance with the condition is achieved by meeting the requirement under Condition #009 (40 C.F.R. §63.6625 - Work Practice Requirements). Additionally, under Condition #009 the RACT II citation (129.97(c)) was replaced with the RACT III citation (129.112(c)).

## Section E<sup>3</sup>

#### <u>1 – Municipal Waste Combustors</u>

- Deleted the 25 Pa. Code § 123.42 condition since the requirements under Condition #007 for opacity is more stringent. It is stated in Condition #007 that compliance with the stated requirement assures compliance with 25 Pa. Code § 123.42. Additionally, 25 Pa. Code § 123.42 remains in Section C (Condition #006) to address other emission sources at the facility.
- The following changes were made to NOx requirements under Condition #001. The citation was changed since 25 Pa. Code § 129.111 now supersedes 25 Pa. Code § 129.97 in accordance with the RACT III requirements under 25 Pa. Code §§ 129.111 through 129.115.
  - Replaced the following language "(i) \*[Additional authority of this NOx emission limit is also derived from 25 Pa. Code §§129.97(f) and 129.100(a)(3). ] 180 ppmvd averaged daily corrected to 7% oxygen;" with "(i) 110 ppmvd averaged daily corrected to 7% oxygen;" based on new presumptive RACT limit
  - Modified (ii) from "477.4 tons" to "256.2 tons" based on the new presumptive NOx RACT limit for MWCs. The emission limit in tons was changed from 477.4 to 256.2 in accordance with the change in the NOx concentration limit. The emission limit in tons should have changed in RACT II from 477.4 to 419.2 but was not done.
  - Deleted paragraph (2) which read:

"The NOx limit (in ppmvd) applies at all times when municipal wastes are combusted, including during periods of startup, shutdown, and malfunction provided that the duration of the start-up or shut-down shall not exceed three (3) hours per occurrence."

And replaced with "The NOx limit (in ppmvd) applies at all times." The NOx limit under RACT applies at all times; therefore, the language previously authorized under

<sup>&</sup>lt;sup>3</sup> These conditions were previously in Section D under Authorization ID No. 1161400. The consolidated emission limits under Condition #002 of Authorization ID No. 1161400 were separated, based on pollutant or activity-type to accommodate the addition of applicable citations.

The RACT III limit accepted by CPRE must be met on a daily basis. This is more stringent than the requirements under BAT and Subpart Cb. There were comments and response about the inclusion or exclusion of SSM conditions in RACT II, with both cases presented. However, then and now, SSM exemptions are not allowed under the presumptive RACT condition. CPRE did not present a case-by-case RACT to offer emission levels during SSM events. DEP established the RACT III emission level on a daily basis to assure achievement of the NAAQS. Montgomery Resource Recovery Facility, a waste to energy facility in Maryland has a permit that specifies mass hourly emissions during SSM events. This was done to assure that detriment to the NAAQS does not occur.

• Added the note

[Additional authority of paragraph (1)(i) of this condition derived from 25 Pa. Code  $\S$  129.112(f) and 129.115(b)(3) which supersedes 25 Pa. Code  $\S$  129.97(f) and 129.100(a)(3). Compliance with this streamlined condition under paragraph (1)(i) assures compliance with 40 C.F.R. § 60.33b(d).]

The citations were changed since 25 Pa. Code §§ 129.111 and 129.115 now supersede 25 Pa. Code §§ 129.97 and 129.100 under RACT III.

The following changes was made to dioxin/furan requirements under Condition #003:

Added the citation reference "[Additional authority for this condition is derived from 40 C.F.R. § 60.33b(c)(1)(iii).]"; and Added the term "(total mass)" after meter in paragraph (1).

- The following changes were made to SO2 requirements under Condition #004:
  - Added the citation reference "[Additional authority for this condition is derived from 40 C.F.R. §§ 60.33b(b)(3)(i).]"; and
  - Changed "[Compliance with this limit deemed compliance with 25 Pa. Code §123.21.]" to "[Compliance paragraph (1) above assures compliance with 25 Pa. Code § 123.21]" and moved to the bottom of the condition.

The following changes were made to HCl requirements under Condition #005:

Added the citation reference "[Additional authority for this condition is derived from 40 C.F.R. §§ 60.33b(b)(3)(ii).]".

• Deleted "Total PCDD and PDCF 30" from Condition #006 since this is a group of organic compounds, not a metal group, and the information is provided, in the correct unit of measure of nanograms per dscf, in Condition #004.

• Added the following note to the Section E, Condition #006 for cadmium:

"[This streamlined condition ensures compliance with 40 C.F.R. § 60.33b(a)(2)(i).]"

The more stringent condition for cadmium was established under BAT for Municipal Waste Incineration Facilities.

• Added the following language to Condition #006 for lead and lead compounds:

"[This streamlined condition ensures compliance with 40 C.F.R. § 60.33b(a)(4). This condition was established under BAT for Municipal Waste Incineration Facilities.]"

The more stringent emission requirement for lead and lead compounds was established under BAT for Municipal Waste Incineration Facilities.

• Added the following language to Condition #006 for mercury and compounds:

"[Additional authority for this condition is derived from 40 C.F.R. § 60.33b(a)(3).]"

• Changed Condition #007 from

"Visible air contaminants from each combustor shall not be emitted in such a manner that the opacity of the emissions is equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; or equal to or greater than an opacity of 30% at any time."

To the following language

"As specified by 40 C.F.R. § 60.33b(a)(1)(iii), the emission limit for opacity exhibited by the gases discharged to the atmosphere from a designated facility is 10 percent (6-minute average)

[This streamlined condition ensures compliance with 25 Pa. Code § 123.41 and PADEP's BAT for Municipal Waste Incineration Facilities]"

The revised language is more stringent than the previous condition.

• Added the following language to Condition #008:

"[Additional authority for this condition is derived from 40 C.F.R. §§ 60.36b, 60.55b(a)-(c).]"

• Revised Condition #009 by deleting "concentration from the SNCR system" and replacing with "emission limit".

• Added the following language to Condition #010 for CO:

"[Additional authority for this condition is derived from 40 C.F.R. § 60.34b(a).]"

• Added the following language to Condition #011 for PM:

"[Additional authority for this condition is derived from 40 C.F.R. § 60.33b(a)(1)(i).]

• Added the following language to Condition #021:

"[Additional authority for this condition is derived from §§ 60.39b, 60.59b(g)(1)-(3), (g)(5), (h)(1)-(h)(6) and (j).]"

• Added the following language to Condition #023:

"[Additional authority for this condition is derived from 40 C.F.R. §§ 60.35b, 60.54b(a)-(c) and (e)-(g).]"

• Deleted the following language from Condition #025 since the references have been incorporated into the respective conditions:

(b) The permittee shall comply with the following for the combustors, whichever is more stringent:

(1) 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 if any, except where otherwise provided in this permit; and

(2) the State Implementation Plan (SIP) approved by the USEPA on August 20, 2001 (Federal Register /Vol. 66, No. 161).

(c) The conditions, marked with \* in Section E, indicate compliance with this streamlined permit condition assures compliance with Clean Air Act (CAA) Section 111(d)/129 State Plan approved by EPA with the effective date(s) specified in 40 CFR §62.9642.

• Added Condition #026 under 25 Pa. Code § 127.441 to the Additional Requirements section to indicate that 40 C.F.R. Part 60, Subpart Cb, has been incorporated into the operating permit. Pennsylvania's State Plan under Section 111(d)/129 for Large Waste Combustors was approved EPA in which PA adopted the Emission Guidelines under 40 C.F.R. Part 60, Subpart Cb in its entirety.