



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM**

TITLE V/STATE OPERATING PERMIT

Issue Date: November 21, 2017

Effective Date: November 21, 2017

Expiration Date: November 21, 2022

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 46-00010

Federal Tax Id - Plant Code: 65-0314688-1

Owner Information

Name: COVANTA PLYMOUTH RENEWABLE ENERGY LLC

Mailing Address: 1155 CONSHOHOCKEN RD
CONSHOHOCKEN, PA 19428-1028

Plant Information

Plant: COVANTA PLYMOUTH RENEWABLE ENERGY/ PLYMOUTH

Location: 46 Montgomery County 46944 Plymouth Township

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: HERMAN LOVE

Title: FACILITY MGR

Phone: (610) 940 - 6000

Permit Contact Person

Name: PAUL A BUNN

Title: ENV. COMPL. SPEC.

Phone: (610) 940 - 6000

[Signature] _____

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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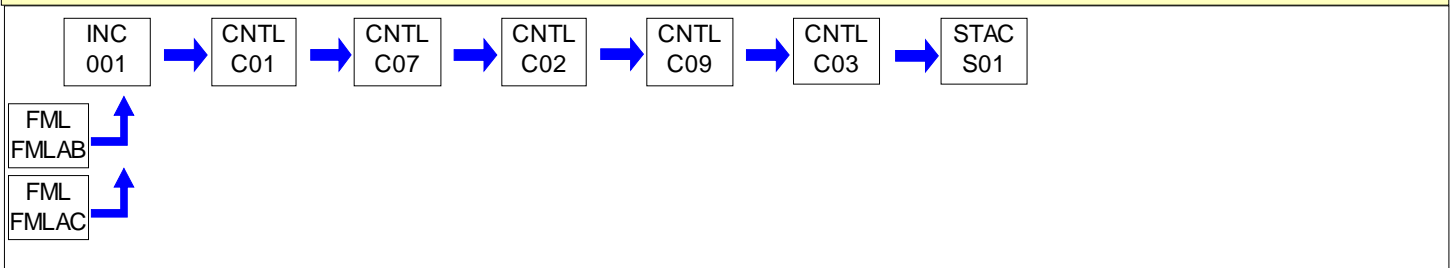
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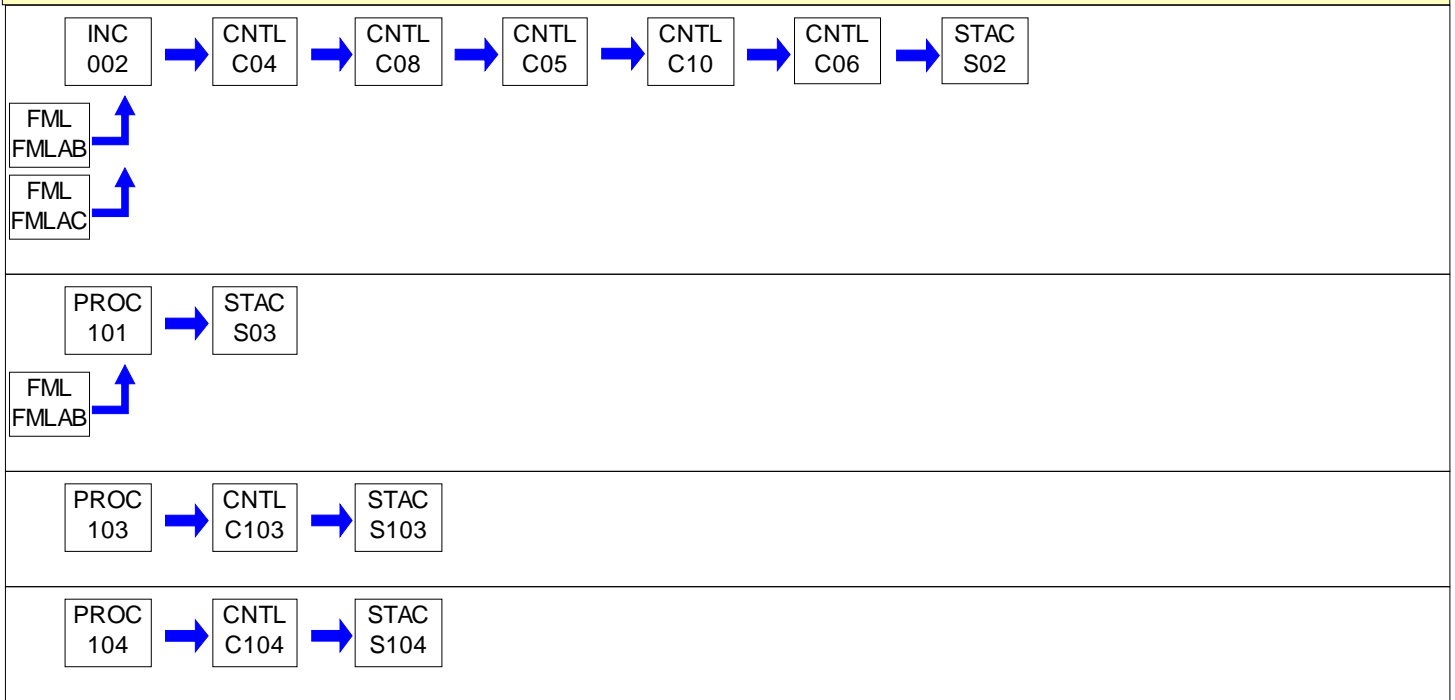
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
001	MWI UNIT 1	N/A	MUNICIPAL WASTE
		N/A	#2 Oil
		50,667.000 Lbs/HR	MUNICIPAL WASTE
002	MWI UNIT 2	N/A	MUNICIPAL WASTE
		N/A	#2 Oil
		50,667.000 Lbs/HR	MUNICIPAL WASTE
101	EMER GENERATOR	11.500 Gal/HR	#2 Oil
103	LIME SILO	N/A	LIME
104	POWDERED ACTIVATED CARBON SILO	N/A	PAC
C01	UNIT 1 AUXILIARY BURNERS		
C02	UNIT 1 ACID GAS SCRUBBER		
C03	UNIT 1 BAGHOUSE		
C04	UNIT 2 AUXILIARY BURNERS		
C05	UNIT 2 ACID GAS SCRUBBER		
C06	UNIT 2 BAGHOUSE		
C07	#1 SNCR SYSTEM		
C08	#2 SNCR SYSTEM		
C09	UNIT 1 PAC INJECTION SYSTEM		
C10	UNIT 2 PAC INJECTION SYSTEM		
C103	LIME SILO FABRIC FILTER		
C104	PAC SILO FABRIC FILTER		
FMLAB	AUXILLARY FUEL STORAGE TK		
FMLAC	MUNICIPAL WASTE STORAGE PIT		
S01	INCIN 1 STACK		
S02	INCIN 2 STACK		
S03	EMER GENERATOR STACK		
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S104	PAC SILO EXHAUST		

PERMIT MAPS

PERMIT MAPS

**SECTION B. General Title V Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]**Property Rights**

This permit does not convey property rights of any sort, or any exclusive privileges.

#004 [25 Pa. Code § 127.446(a) and (c)]**Permit Expiration**

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]**Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]**Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

**SECTION B. General Title V Requirements**

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]**Inspection and Entry**

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
- (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]**Compliance Requirements**

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) 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 specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]**Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]**Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or

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to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]**Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]**Reopening a Title V Permit for Cause by EPA**

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#013 [25 Pa. Code § 127.522(a)]**Operating Permit Application Review by the EPA**

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#014 [25 Pa. Code § 127.541]**Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with

**SECTION B. General Title V Requirements**

25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#015 [25 Pa. Code §§ 121.1 & 127.462]**Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#016 [25 Pa. Code § 127.450]**Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#017 [25 Pa. Code § 127.512(b)]**Severability Clause**

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]**Fee Payment**

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

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(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#019 [25 Pa. Code §§ 127.14(b) & 127.449]**Authorization for De Minimis Emission Increases**

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

- (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
- (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
- (4) Space heaters which heat by direct heat transfer.

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(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]**Reactivation of Sources**

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#021 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department,

**SECTION B. General Title V Requirements**

the device or technique may be used for control of malodors.

#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]**Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter,
or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Office of Air Enforcement and Compliance Assistance (3AP20)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]**Sampling, Testing and Monitoring Procedures**

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#024 [25 Pa. Code §§ 127.511 & Chapter 135]**Recordkeeping Requirements**

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

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(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]**Reporting Requirements**

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#026 [25 Pa. Code § 127.513]**Compliance Certification**

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

#027 [25 Pa. Code § 127.3]**Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (1) Section 127.14 (relating to exemptions)

**SECTION B. General Title V Requirements**

- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]**Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

- (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

**SECTION B. General Title V Requirements**

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]**Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]**Permit Shield**

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified above for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

- (1) the emissions are of minor significance with respect to causing air pollution; and
- (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in condition #002 above, if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

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.

005 [25 Pa. Code §123.41]**Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (b) Equal to or greater than 60% at any time.

006 [25 Pa. Code §123.42]**Exceptions**

The limitations of Condition #005 of this Section shall not apply to a visible emission in any of the following instances:

- (a) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from sources specified in Condition #002 of this Section.

**SECTION C. Site Level Requirements****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The aggregate VOC emissions from the facility shall not exceed 24.99 tons in any 12 consecutive month period.

008 [25 Pa. Code §129.14]**Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

- (a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer;
- (b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
- (c) a fire set for the prevention and control of disease or pests, when approved by the Department;
- (d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;
- (e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
- (f) a fire set solely for recreational or ceremonial purposes; or
- (g) a fire set solely for cooking food.

II. TESTING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) If at any time the Department has reasonable cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

(a) The permittee shall monitor the facility, once per operating day, for the following:

- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42).; and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.

IV. RECORDKEEPING REQUIREMENTS.**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

**SECTION C. Site Level Requirements**

(a) The permittee shall maintain a record of all reports of fugitive emissions, visible emissions and odors that the Department may consider to be malodors. The report shall contain, at a minimum, the following items:

- (1) date, time, and location of the incident(s);
- (2) the cause of the event, if the emission(s) originate on-site; and
- (3) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

(b) The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (1) emissions increase of minor significance without notification to the Department.
- (2) de minimis increases with notification to the Department, via letter.
- (3) increases resulting from a Request for Determination (RFD) to the Department.
- (4) increases resulting from the issuance of a plan approval and subsequent operating permit.

V. REPORTING REQUIREMENTS.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

(a) The permittee shall report malfunctions to the Department. Pursuant to 40 CFR § 60.2 and 25 Pa. Code Chapter 122, a malfunction is any sudden, infrequent, and not reasonably preventable failure of and pollution control equipment, process equipment, of a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. Malfunctions shall be reported as follows:

(1) Malfunctions which pose an imminent danger to the public health, safety, welfare, and the environment shall be immediately reported to the Department by telephone at 484-250 5920. The telephone report of such malfunctions shall occur no later than two (2) hours after the permittee becomes aware of the malfunction. The permittee shall follow this up with a written report to the Department as outlined in paragraph (a)(3), below.

(2) Malfunctions that result in an increase in emissions above permitted levels and are not subject to the reporting requirements in (a)(1), above, shall be reported to the Department as outlined in paragraph (a)(3), below.

(3) A written report shall be submitted to the Department within two (2) working days following the notification of the incident described in paragraph (a)(1) and within 2 working days of the occurrence of an excess emissions malfunction event described in paragraph (a)(2), and shall describe, at a minimum, the following:

- (i) the malfunction(s).
- (ii) the emission(s).
- (iii) the duration.
- (iv) any corrective action taken.

(b) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #24 of section B of this permit. The annual certificate of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov

(c) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

013 [25 Pa. Code §135.21]**Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement for the preceding calendar year.

**SECTION C. Site Level Requirements****# 014 [25 Pa. Code §135.3]****Reporting**

The permittee shall submit by March 1, of each year, an Air Information Management System (AIMS) inventory report for the preceding calendar year.

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (a) use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;
- (b) application of asphalt, water, or other suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;
- (c) paving and maintenance of roadways;
- (d) prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means; and
- (e) the area surrounding the plant, including roadways, shall be cleaned as needed to remove litter and control fugitive dust.

016 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

- (a) The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III, or any other applicable rule promulgated under the Clean Air Act.
- (b) The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.
- (c) The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #017(g) of Section B of this permit.

VII. ADDITIONAL REQUIREMENTS.**# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The capacities listed of each source in Section A and D are design capacities and are not intended to be limitations of any kind.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

IX. COMPLIANCE SCHEDULE.

#018 01-JAN-17

Comply with 25 Pa. Code §129.97(f) according to 25 PA. Code §129.97(a)(1).



***** Permit Shield In Effect *****

**SECTION D. Source Level Requirements**

Source ID: 001

Source Name: MWI UNIT 1

Source Capacity/Throughput:

N/A

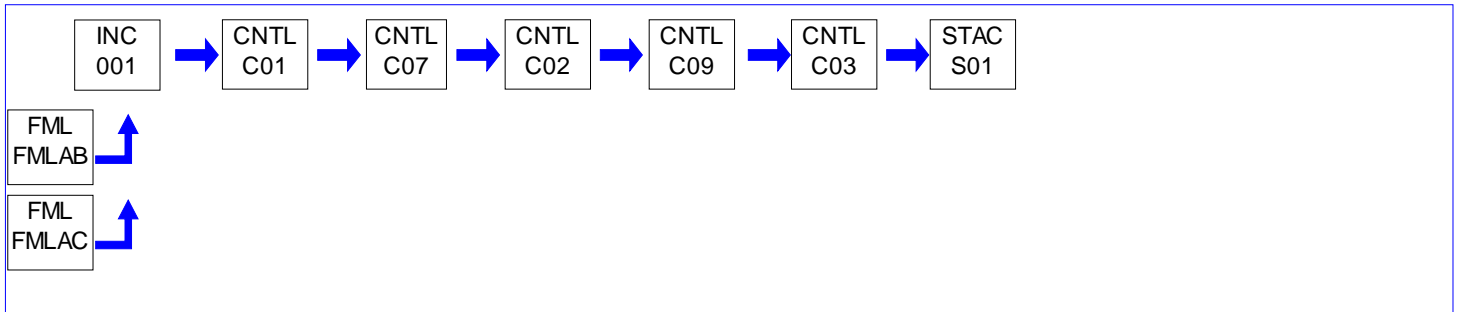
MUNICIPAL WASTE

N/A

#2 Oil

50,667.000 Lbs/HR

MUNICIPAL WASTE

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.42]****Exceptions**

The visible emission limitations of 25 Pa. Code §123.41 shall not apply in either of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from sources specified in Condition #002 of Section C of this permit.

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.****(a) Nitrogen Oxides (NOx) emission limitations**

(1) NOx emissions per combustor, expressed as NO2, shall not exceed

- (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;
- (ii) 477.4 tons in any 12 consecutive month period.

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

(3) Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system (CEMS) approved by the Department for measuring NOx and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 12.4.1.

(b) Volatile organic compounds (VOC) emission limitations

(1) VOC emissions expressed as total hydrocarbon, shall not exceed 2.68 lbs/hr per combustor.

(2) Compliance with the VOC lbs/hr emission limit shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(c) Dioxin/furan emission limitation

(1)* Total dioxin/furan emissions from each combustor shall not exceed 30 nanograms per dry standard cubic meter, corrected to 7% oxygen.

**SECTION D. Source Level Requirements**

(2) Compliance with the dioxin/furan emission limitation shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(d) Sulfur dioxide (SO₂) emission limitations

(1)* SO₂ emissions, per combustor, shall not exceed 29 ppmv, or shall be reduced by not less than 75% of the pre-controlled SO₂ emission concentration (by weight or volume), corrected to 7% oxygen on a dry basis, whichever is less stringent. [Compliance with this limit deemed compliance with 25 Pa. Code §123.21.]

(2) Compliance with the SO₂ emission limit (concentration or percent reduction) shall be determined by using the Department approved CEM system for measuring SO₂ and calculating a 24-hour geometric average emission concentration or a 24-hour geometric average percent reduction. The EPA Reference Method 19, section 12.4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.

(3) The EPA Reference Method 19, section 12.5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.

(e) Hydrochloric acid (HCl) emission limits

(1)* HCl emissions, per combustor, shall be less than 29 ppmv, or shall be reduced by no less than 95% of the pre-controlled HCl emission concentration (by weight or volume), corrected to 7% oxygen, dry basis, whichever is less stringent.

(2) Compliance with the HCl emission limit (concentration or percent reduction) shall be determined by using the Department approved CEMS for measuring HCl and calculating a 24-hour arithmetic average emission concentration or a 24-hour arithmetic average percent reduction.

(f) Ambient impact analysis

Compliance with the maximum annual ambient concentrations listed below shall be demonstrated using the data from each stack test from each combustor and the dispersion modeling techniques used in the plan approval application as approved by the Department. Ambient air quality analysis shall be redone if there is a modification in emission limits or for any parameter that exceeds the applicable stack test limitation during any stack test series. The Department may require the permittee to resume full modeling if the Department determines that a decrease in either volumetric flow rate and/or stack temperature has a significant adverse impact on the ambient concentration. A certification shall be supplied to the Department stating compliance with maximum allowable annual ambient concentrations with every stack test report.

PCDD & PCDF, expressed as 2,3,7,8 TCDD equivalents 0.30 x 10E-7

Arsenic and Compounds 0.23 x 10E-3

Beryllium and Compounds 0.42 x 10E-3

Cadmium and Compounds 0.56 x 10E-3

Nickel and Compounds 0.33 x 10E-2

Hexavalent Chromium and Compounds 0.83 x 10E-4

Lead and Compounds 0.09

Mercury and Compounds 0.024

Hydrogen Chloride 7.0

Benzo(a)pyrene 0.59 x 10E-3

(g) The following stack emission limitations for arsenic and compounds and toxic metals (per combustor) shall not be exceeded:

(1) Emission concentration, measured in ug/dscm and corrected to 7% oxygen:

Total PCDD and PCDF 30

Arsenic and Compounds 7.2

Beryllium and Compounds 0.2

*Cadmium and Compounds 15.8

**SECTION D. Source Level Requirements**

Nickel and Compounds 25.0

Hexavalent Chromium and Compounds 2.3

*Lead and Compounds 166.0

*Mercury and Compounds 50.0 or 85% reduction (by weight), whichever is less stringent.

(2) Emission rate, measured in lbs/hr at 105,000 dscfm and corrected to 7% oxygen.

Arsenic and Compounds 0.0024

Beryllium and Compounds 0.0000673

Cadmium and Compounds 0.00532

Nickel and Compounds 0.0084

Hexavalent Chromium and Compounds 0.000774

Lead and Compounds 0.0559

Mercury and Compounds 0.211

(3) Compliance with the above emission limitations shall be based on the average of three (3) consecutive test runs.

(h)* 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.

(i) Visible emissions from combustion ash

(1) The permittee shall not cause to be discharged to the atmosphere visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period).

(2) The visible emission limit does not cover visible emissions discharged inside buildings or enclosures, and during the maintenance and repair of ash handling systems.

(j) The ammonia slip concentration from the SNCR system shall not exceed 10 ppmv, corrected to 7% oxygen, dry basis. Compliance with this limit is based on the average of three (3) consecutive test runs.

(j) Carbon monoxide (CO) emissions limit

(1)* CO emissions per combustor shall not exceed 100 ppmvd, calculated as a 4-hour block arithmetic average, corrected to 7% oxygen on a dry basis.

(2) The CO limit applies at all times when municipal wastes are combusted, except during periods of start-up, and shutdown. Provided that the duration of the start-up or shut-down shall not exceed three (3) hours per occurrence. During periods of startup or shutdown, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR § 60.59b(d)(7).

(3) Compliance with this CO limit in ppmvd shall be determined using a four (4) hour block arithmetic average. The four (4) hour block arithmetic average shall be calculated from one (1) hour arithmetic averages expressed in ppmv, corrected to 7% oxygen (dry basis).

(k)* Particulate matter (PM) emissions, discharged to the atmosphere from each combustor, shall not exceed 0.011 gr/dscf (25 mg/dscm), corrected to 7% oxygen. Compliance with this emission limit shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(l) Start-up commences when municipal waste is added into an empty combustor and does not include any warm-up period when the combustor is combusting only a fossil fuel, or any other auxiliary fuel, approved by the Department, and no municipal waste is being combusted.

(m) Shutdown commences with the cessation of charging municipal waste for the purpose of shutting down the combustor.

**SECTION D. Source Level Requirements**

After the initiation of shutdown, the selected parameters that define normal process operation for the facility are when the dry inlet O₂ is less than or equal to 15.5% and the steam flow is greater than or equal to 60,000 pounds/hr. If either of these conditions is not met, and the facility has ceased feeding MSW into the combustor, the combustor shall be coded as "process down".

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only No. 2 fuel oil shall be fired as auxiliary fuel in the combustors.

Throughput Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) No more than 10%, by weight, of the total amount of waste accepted per month at the facility shall be municipal-like residual waste. The municipal-like residual waste accepted at the facility shall be approved by the Department's Waste Management, and documented in accordance with the conditions of the Department's Waste Management Permit No. 400558.

(b) Each combustor shall not be operated at a steam load level greater than 110% of the maximum steam load measured during the most recent dioxin/furan performance test, except during the annual dioxin/furan or mercury performance test and the two (2) weeks preceding the annual dioxin/furan or mercury performance test, no steam load limit is applicable. The averaging time is a 4-hour block arithmetic average steam load. The steam load limit may be waived in writing by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The combustor unit load limit continues to apply, and remains enforceable, until and unless the Department grants the waiver.

(c) Only the municipal waste and municipal like residual waste approved by Waste Management of the Department, Permit No. 400588, shall be combusted in the incinerators.

Control Device Efficiencies Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Air emissions from each combustor are controlled by individual selective non-catalytic reduction (SNCR) system to reduce NO_x emissions, acid gas scrubbers (quench reactor) to control acid gases, a carbon adsorption process (PAC injection) to control emissions of toxic pollutants, and a baghouse to control particulate matter emissions.

(b) The flue gas temperature, measured at the baghouse inlet and calculated in 4-hour block arithmetic averages, shall not exceed 17°C (30°F) above the maximum demonstrated baghouse inlet temperature as defined in 40 CFR §60.51b. The baghouse inlet temperature limit may be waived in writing by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The temperature limits continue to apply, and remain enforceable, until and unless

(1) the Department grants the waiver; or

(2) during the annual dioxin/furan or mercury performance test, and the two (2) weeks preceding the annual dioxin/furan or mercury performance test, when no baghouse inlet temperature limitations are applicable.

(c) The 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.

(d) The carbon mass feed rate shall be averaged over a block 8-hour period, and the 8-hour block average must equal to or

**SECTION D. Source Level Requirements**

exceed the level(s) documented during the most recent annual performance tests, except during the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no limit is applicable for average mass carbon feed rate. The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 139.]

(a) The permittee shall perform an annual stack test, using the Department-approved procedures, to demonstrate compliance with the emission limits or emission reductions for the combustor, all procedures and test methods, if not specified below, shall be in accordance with Department's Source Testing Manual, Revision No. 8, or source testing procedures approved by the Department.

(b) The amount of waste incinerated during a stack test shall be an adequate representation of the waste load to be processed by the facility.

(c) All annual stack tests shall consist of a minimum of three test runs conducted under representative full load operating conditions for the following pollutants:

- (1) Particulate matter, PM and PM10 (including particle sizing), using EPA Method 5
- (2) Sulfur dioxides (SO₂), using EPA Reference Method 19
- (3) Carbon monoxide (CO), using EPA Reference Method 10, 10A, or 10B
- (4) visible emissions, using EPA Reference Method 9
- (5) Nitrogen oxides (NO_x), using EPA Reference Method 19
- (6) Hydrogen chloride (HCl), using EPA Reference Method 26 or 26A
- (7) Polycyclic aromatic hydrocarbon (PAH) compounds, including benzo(a)pyrene, using method approved by DEP;
- (8) VOC (expressed as total hydrocarbons), using EPA Reference Method 25A;
- (9) arsenic and compounds (expressed as arsenic), using method approved by DEP;
- (10) cadmium and compounds (expressed as cadmium), using EPA Reference Method 29;
- (11) hexavalent chromium and compounds (expressed as chromium), using EPA Reference Method 29;
- (12) nickel and compounds (expressed as nickel), using method approved by DEP;
- (13) lead and compounds (expressed as lead), using EPA Reference Method 29;
- (14) beryllium and compounds (expressed as beryllium), using method approved by DEP;
- (15) mercury and compounds (expressed as mercury), using EPA Reference Method 29;
- (16) zinc and compounds (expressed as zinc), using method approved by DEP;
- (17) PCDD and PCDF (expressed as total dioxin and furan, as specified in 40 CFR Part 60, Subpart Cb), using EPA Reference Method 23;
- (18) ammonia slip concentration, using method approved by DEP
- (19) fugitive ash emissions, using EPA Reference Method 22

(d) The following operating parameters shall be measured and re-established during each annual performance test:

- (1) maximum baghouse inlet temperature
- (2) minimum carbon injection rate in pounds per hour
- (3) the carbon injection system primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting)
- (4) the maximum demonstrated municipal waste combustor unit load level.

(e) The permittee may use CEM Relative Accuracy Test Audits (RATA) in lieu of stack testing for HCl, SO₂, NO_x, CO, and opacity.

(f) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.

**SECTION D. Source Level Requirements**

(g) The EPA Reference Method 3, 3A or 3B, or as an alternative ASME PTC-19-10-1981—part10, as applicable, shall be used for gas analysis.

(h) An oxygen measurement shall be obtained simultaneously with each test run.

(i) The testing procedures submitted to the Department for approval shall include, at a minimum, the following:

- (1) amount of waste to be combusted;
- (2) composition and classification of waste;
- (3) Btu content of waste.

(j) The permittee shall conduct semiannual test for the following pollutants if any of the pollutants exceed 80% of the emission standards during the tests:

- (1) PM and PM-10
- (2) arsenic and compounds
- (3) toxic metals and compounds
- (4) PAH (including benzo(A)pyrene)
- (5) visible emissions
- (6) ammonia reagent slip

Testing frequency may be revert to annual basis should all tested PM10, and toxic metals remain less than 80% of the permitted standards for a consecutive 24-month period and the permittee notifies the Department in advance.

(k) At least 90 days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(l) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(m) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(n) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) with a justification for the extension in writing or electronically. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall continuously monitor and record the following:

- (1) The combustion chamber temperature
- (2) The baghouse inlet temperature
- (3) The carbon injection rate
- (4) The steam load

(b) The permittee shall continuously monitor and record the following using the Department approved CEMS:

- (1) Opacity
- (2) CO emissions in ppmv
- (3) NOx emissions in ppmv
- (4) SO2 emissions in ppmv
- (5) HCL emissions in ppmv

**SECTION D. Source Level Requirements**

(6) O₂ in percent

(c) The continuous monitoring system shall be operated and maintained to achieve the following data availability standards:

- (1) CO and temperatures: 100% valid hours/day, where a valid hour is defined as greater than or equal to 90% valid readings (54 minutes);
- (2) oxygen (O₂), and opacity: greater than or equal to 95% valid hours/day, where a valid hour is defined as greater than or equal to 75% valid readings (45 minutes); and
- (3) HCl, SO₂, and NO_x: greater than or equal to 90% valid hours/month, where a valid hour is defined as greater than or equal to 75% valid readings (45 minutes).

(d) The permittee shall operate, calibrate, and maintain a continuous emission monitoring system and record the output of the system for measuring the O₂ content of the flue gas at each location where CO, SO₂, or NO_x emissions are monitored and shall comply with the test procedures and methods specified below:

- (1) the span value of the O₂ monitor shall be 25% O₂;
- (2) the monitor shall conform to performance specification 3 in Appendix B of 40 CFR 60, except for section 2.3, (relative accuracy requirement);
- (3) the quality assurance procedures of Appendix F of 40 CFR 60 shall apply to the monitor, except for 5.1.1 (relative accuracy test audit).

(e) The permittee shall record all CEM emissions consistent with the Department's CEM manual.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain the following records for each combustor:

- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured by CEMS and CMS as specified below.
 - (i) All 1-hour average SO₂, NO_x, CO, and HCl emission concentrations, steam load measurements, baghouse inlet temperatures, and opacity.
 - (ii) All 1-day geometric average SO₂ emission concentrations and all 1-day geometric average percent reductions in SO₂ emissions.
 - (iii) All 1-day arithmetic average NO_x and HCl emission concentrations and all 1-day block average percent reductions in HCl emissions.
 - (iv) All 4-hour block arithmetic average steam load levels and baghouse inlet temperatures.
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, operating parameters, or the opacity levels recorded are above or below the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) The following operating parameter records:
 - (i) The average carbon mass feed rate (in pounds per hour) estimated during annual performance tests, with supporting calculations.
 - (ii) The average carbon mass feed rate (in pounds per hour) estimated for each hour of operation, with supporting calculations.

**SECTION D. Source Level Requirements**

- (iii) The total carbon usage for each calendar quarter estimated, with supporting calculations.
- (iv) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed) averaged over a block 8-hour period.
- (4) Identification of the calendar dates and times (hours) for which valid hourly data have not been obtained, or continuous automated sampling systems were not operated, including reasons for not obtaining the data and a description of corrective actions taken:
 - (i) SO₂ emissions data;
 - (ii) NO_x emissions data;
 - (iii) NO_x emissions data;
 - (iv) Municipal waste combustor unit load data;
 - (v) Baghouse inlet temperature data; and
 - (vi) HCl emissions data.
- (5) Identification of each occurrence that SO₂, NO_x, CO, and HCl emissions data, or operational data (i.e., steam load, and baghouse inlet temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (6) The results of daily drift tests and quarterly accuracy determinations for SO₂, NO_x, CO, and HCl continuous emission monitoring systems.
- (7) The test reports documenting the results of all annual performance tests along with supporting calculations:
 - (i) The results of all annual performance tests conducted to determine compliance with the PM, cadmium, lead, mercury, dioxins/furans, VOC, ammonia slip concentration, and fugitive ash emission limits.
 - (ii) For all annual dioxin/furan performance tests, the maximum demonstrated steam load and maximum demonstrated baghouse inlet temperature.
- (8) Identification of the calendar dates when the average carbon mass feed rates recorded were less than either of the hourly carbon feed rates estimated during the annual performance tests, with reasons for such feed rates and a description of corrective actions taken.
- (9) Identification of the calendar dates when the carbon mass feed rates in lb/hr (averaged over a block 8-hour period) recorded were less than the hourly carbon feed rates estimated during the annual performance tests, with reasons for such feed rates and a description of corrective actions taken.
 - (b) The following records shall be maintained for operators and operator training:
 - (1) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required including the dates of initial and renewal certifications and documentation of current certification.
 - (2) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required including the dates of initial and renewal certifications and documentation of current certification.
 - (3) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course as required including documentation of training completion.
 - (4) Records of when a certified operator is temporarily off site:

**SECTION D. Source Level Requirements**

- (i) If the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for 2 weeks or less, and no other certified operator is on site, record the dates that the certified chief facility operator and certified shift supervisor were off site.
- (ii) When all certified chief facility operators and certified shift supervisors are off site for more than 2 weeks and no other certified operator is on site, keep records of four items:
 - (A) Time of day that all certified persons are off site.
 - (B) The conditions that cause those people to be off site.
 - (C) The corrective actions taken to ensure a certified chief facility operator or certified shift supervisor is on site as soon as practicable.
 - (D) Copies of the written reports submitted every 4 weeks that summarize the actions taken to ensure that a certified chief facility operator or certified shift supervisor will be on site as soon as practicable.
- (5) Records showing the names of persons who have completed a review of the operating manual including the date of the initial review and subsequent annual reviews.
- (c) The permittee shall calculate emissions for all pollutants with emission limits on a monthly basis and 12-month rolling sum.
- (d) All records specified shall be maintained onsite in either paper copy or computer-readable format.

V. REPORTING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall submit semiannual reports with the following information:
 - (1) A summary of the following data collected for all pollutants and parameters required.
 - (i) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, HCl, and fugitive ash emission levels achieved during the performance tests.
 - (ii) A list of the highest emission level recorded through CEMS or CMS for SO₂, NO_x, CO, and HCl, opacity, steam load level, and baghouse inlet temperature.
 - (iii) Periods when valid data were not obtained.
 - (A) The total number of hours per calendar quarter and hours per calendar year that valid data for SO₂, NO_x, CO, HCl, steam load, or baghouse inlet temperature data were not obtained based on the data recorded.
 - (B) For each continuously monitored pollutant or parameter, the hours of valid emissions data per calendar quarter and per calendar year expressed as a percent of the hours per calendar quarter or year that the combustor was operating and combusting municipal solid waste.
 - (iv) Periods when the total number of hours that valid data for SO₂, NO_x, CO, HCl, steam load, and baghouse inlet temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded.
 - (2) The summary of data reported shall also provide the types of data specified in paragraph (a)(1) above for the calendar year preceding the year being reported, in order to provide the Department with a summary of the performance of the combustors over a 2-year period.
 - (3) The summary of data including the information above shall highlight any emission or parameter levels that did not achieve the emission or parameter limits.

**SECTION D. Source Level Requirements**

- (4) Documentation of periods when all certified chief facility operators and certified shift supervisors are off site for more than 12 hours.
- (b) The permittee shall submit a semiannual report that includes the following information for any recorded pollutant or parameter that does not comply with the limit.
- (1) Information recorded for SO₂, NO_x, CO, HCl, opacity, steam load level, baghouse inlet temperature, and opacity.
- (2) For each date recorded and reported as required, the SO₂, NO_x, CO, HCl, opacity, steam load level, inlet temperature, or opacity data recorded.
- (3) Document any PM, cadmium, lead, mercury, dioxins/furans, and fugitive ash emission levels that were above the applicable pollutant limits, a copy of the test report documenting the emission levels and the corrective actions taken.
- (4) The information recorded for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
- (5) The carbon feed rate data recorded for each operating date reported.
- (6) The semiannual reports shall be submitted according to the schedule specified below.
- (i) The report shall be submitted by August 1st following the first half calendar year, if the data reported were collected during the first half calendar year.
- (ii) The report shall be submitted by February 1st following the second half calendar year, if the data reported were collected during the second half calendar year.
- (c) All reports required shall be submitted as a paper copy, postmarked on or before the February 1 or August 1, and maintained onsite as a paper copy for a period of 5 years.
- (d) The permittee may send EPA reports, compliance certifications (if required) electronically to R3_APD_Permits@epa.gov. Any such electronic submissions must include the name of facility, city of the facility, and TVOP number.

VI. WORK PRACTICE REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.***** Operator Training**

- (a) Each chief facility operator and shift supervisor shall obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference—see 40 CFR §60.17 of subpart A of this part)] or a State certification program.
- (b) Each chief facility operator and shift supervisor shall have completed full certification or shall have scheduled a full certification exam with either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference—see 40 CFR §60.17 of subpart A of this part)] or a State certification program.
- (c)(1) The permittee shall not allow the combustors to be operated at any time unless one of the following persons is on duty and at the facility:
- (A) A fully certified chief facility operator,
 (B) A provisionally certified chief facility operator who is scheduled to take the full certification exam within 6 months,
 (C) A fully certified shift supervisor, or a provisionally certified shift supervisor who is scheduled to take the full certification exam within 6 months.
- (2) If both the certified chief facility operator and certified shift supervisor are unavailable, a provisionally certified control

**SECTION D. Source Level Requirements**

room operator on site at the municipal waste combustion unit may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, the permittee must meet one of following three criteria:

(i) When the certified chief facility operator and certified shift supervisor are both off site for 12 hours or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor.

(ii) When the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for two weeks or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Department. However, the permittee must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under 40 CFR §60.59b(g)(5).

(iii) When the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without approval by the Department. However, the permittee must take two actions:

(A) Notify the Department in writing. In the notice, state what caused the absence and what actions are being taken by the permittee to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable.

(B) Submit a status report and corrective action summary to the Department every four weeks following the initial notification. If the Department provides notice that the status report or corrective action summary is disapproved, the municipal waste combustion unit may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Department withdraws the disapproval, municipal waste combustion unit operation may continue.

(3) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion unit may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Department for up to six months before taking the ASME QRO certification exam.

(d) The permittee shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified below.

- (1) A summary of the applicable standards under this Operating Permit;
- (2) A description of basic combustion theory applicable to a municipal waste combustor unit;
- (3) Procedures for receiving, handling, and feeding municipal solid waste;
- (4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;
- (5) Procedures for maintaining proper combustion air supply levels;
- (6) Procedures for operating the municipal waste combustor unit within the standards established under this subpart;
- (7) Procedures for responding to periodic upset or off-specification conditions;
- (8) Procedures for minimizing particulate matter carryover;
- (9) Procedures for handling ash;
- (10) Procedures for monitoring municipal waste combustor unit emissions; and
- (11) Reporting and recordkeeping procedures.

(e) The permittee shall establish an annual training program to review the operating manual with each person who has responsibilities affecting the operation of the combustors including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

(f) The operating manual required shall be kept in a readily accessible location for all persons required to undergo training. The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request.

(g) As per 40 CFR §60.58b(m)(4), the carbon injection system operational indicator used to provide additional verification of

**SECTION D. Source Level Requirements**

carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in the site-specific operating manual required under 40 CFR §60.54b(e).

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.****(a) Combustors**

(1) Each combustor shall be equipped with an automatic alarm and interlock system to stop the solid waste charging grates if any of the following conditions occur:

(i) the combustor temperature measured at the furnace roof, at the Department approved location, drops below 900°F, (a Department approved reference temperature which corresponds to 1600°F), for a 15-minute period;

(ii) the CO emissions exceed 500 ppmv corrected to 7% oxygen on a dry basis for a 15-minute period; (This requirement is waived during the startup period.)

(iii) the flue gas oxygen (as measured at the oxygen monitor upstream of the control device) level drops below 3% (wet basis) for a 15-minute period; and

(iv) the opacity of the exhaust gases is equal to or greater than 10% for a period of 15 minutes.

(2) No solid waste shall be charged into the combustor(s) until equilibrium has been attained in the furnace zones and the temperature of the combustion gases reach 1800°F for one (1) second of retention time. All control equipment shall be operational and functioning properly prior to the introduction of solid waste into the combustor(s).

(3) The permittee shall replace all rooftop temperature thermocouples on a quarterly basis with those that have been certified in accordance with National Institute of Standards and Testing (NIST). The permittee shall perform a new alternative location verification and retention test in the event that furnace combustion gas flow rates change significantly from any previous alternate location verification test, or at the Department's request.

(4) During the process of all planned shut downs of the combustor(s), auxiliary burners shall be used to ensure that the temperature of the combustion gases does not drop below 1600°F while any waste material is still being incinerated. All control equipment shall be operational and functioning properly until all of the solid waste is incinerated.

(b) Tipping floor

(1) The tipping area air shall be used as primary combustion air in the combustor(s).

(2) Unacceptable waste and visible unapproved residual waste as defined by 25 Pa. Code Section 287.1 of the Bureau of Waste Management Regulations shall be removed from the refuse pit for proper off-site disposal.

(3) Whenever the combustor(s) is in operation, the tipping area shall be operated at a negative pressure as determined by the operation of the induced draft fan.

(4) All waste that can be airborne or spilled shall be transported in or out of this facility in closed containers or tarped trucks.

(5) Open storage of solid waste outside of a building is prohibited.

(c) Air Pollution control devices

(1) The urea feed system and the injection system shall be modulated by interfacing with the NO_x CEMS to assure NO_x concentrations below the NO_x emission limit.

(2) All air pollution control devices shall be operated and maintained in accordance with manufacturers' specifications and good air pollution control practices.

SECTION D. Source Level Requirements

- (3) A sufficient spare parts inventory shall be maintained to provide the timely repair or replacement of parts as reasonably anticipated.
- (4) The permittee shall estimate the total carbon usage of the plant (pounds) for each calendar quarter by two independent methods, according to the procedures below.
- (i) The weight of carbon delivered to the plant.
- (ii) Estimate the average carbon mass feed rate in pounds per hour for each hour of operation for each combustor based on the average mass feed rate in pounds per hour during the most recent performance test, and sum the results for both combustors at the plant for the total number of hours of operation during the calendar quarter.
- (d) Ash removal equipment
- (1) The ash removal equipment, including the ash extractors and fly ash conveyors, shall be enclosed.
- (2) The ash shall be loaded in an enclosed area or handled wet.

VII. ADDITIONAL REQUIREMENTS.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) Words and terms that are not otherwise defined in Condition #001 of Section B of this permit shall have the meanings set forth in 40 CFR §§60.31b or 60.51b.
- (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.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 002

Source Name: MWI UNIT 2

Source Capacity/Throughput:

N/A

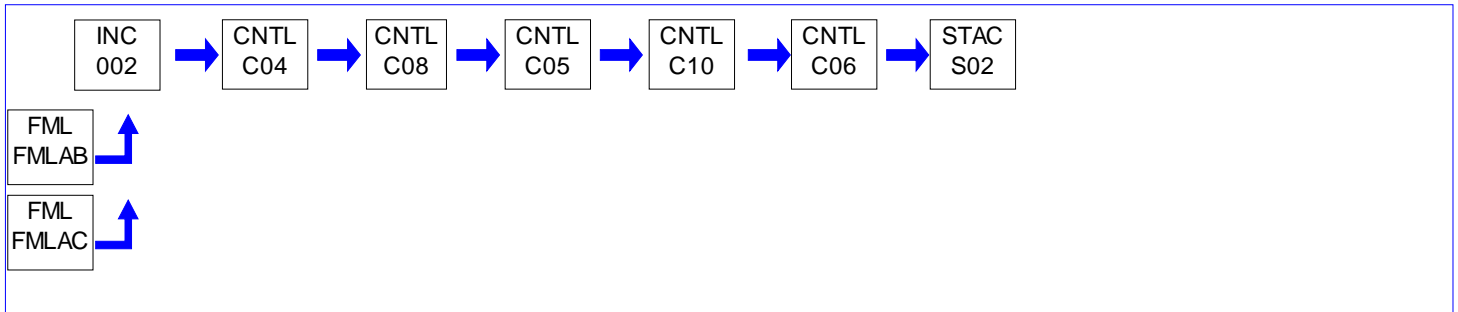
MUNICIPAL WASTE

N/A

#2 Oil

50,667.000 Lbs/HR

MUNICIPAL WASTE

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.42]****Exceptions**

The visible emission limitations of 25 Pa. Code §123.41 shall not apply in either of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from sources specified in Condition #002 of Section C of this permit.

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) Nitrogen Oxides (NOx) emission limitations

(1) NOx emissions per combustor, expressed as NO2, shall not exceed

- (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;
- (ii) 477.4 tons in any 12 consecutive month period.

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

(3) Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system (CEMS) approved by the Department for measuring NOx and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 12.4.1.

(b) Volatile organic compounds (VOC) emission limitations

(1) VOC emissions expressed as total hydrocarbon, shall not exceed 2.68 lbs/hr per combustor.

(2) Compliance with the VOC lbs/hr emission limit shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(c) Dioxin/furan emission limitation

(1)* Total dioxin/furan emissions from each combustor shall not exceed 30 nanograms per dry standard cubic meter, corrected to 7% oxygen.

**SECTION D. Source Level Requirements**

(2) Compliance with the dioxin/furan emission limitation shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(d) Sulfur dioxide (SO₂) emission limitations

(1)* SO₂ emissions, per combustor, shall not exceed 29 ppmv, or shall be reduced by not less than 75% of the pre-controlled SO₂ emission concentration (by weight or volume), corrected to 7% oxygen on a dry basis, whichever is less stringent. [Compliance with this limit deemed compliance with 25 Pa. Code §123.21.]

(2) Compliance with the SO₂ emission limit (concentration or percent reduction) shall be determined by using the Department approved CEM system for measuring SO₂ and calculating a 24-hour geometric average emission concentration or a 24-hour geometric average percent reduction. The EPA Reference Method 19, section 12.4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.

(3) The EPA Reference Method 19, section 12.5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.

(e) Hydrochloric acid (HCl) emission limits

(1)* HCl emissions, per combustor, shall be less than 29 ppmv, or shall be reduced by no less than 95% of the pre-controlled HCl emission concentration (by weight or volume), corrected to 7% oxygen, dry basis, whichever is less stringent.

(2) Compliance with the HCl emission limit (concentration or percent reduction) shall be determined by using the Department approved CEMS for measuring HCl and calculating a 24-hour arithmetic average emission concentration or a 24-hour arithmetic average percent reduction.

(f) Ambient impact analysis

Compliance with the maximum annual ambient concentrations listed below shall be demonstrated using the data from each stack test from each combustor and the dispersion modeling techniques used in the plan approval application as approved by the Department. Ambient air quality analysis shall be redone if there is a modification in emission limits or for any parameter that exceeds the applicable stack test limitation during any stack test series. The Department may require the permittee to resume full modeling if the Department determines that a decrease in either volumetric flow rate and/or stack temperature has a significant adverse impact on the ambient concentration. A certification shall be supplied to the Department stating compliance with maximum allowable annual ambient concentrations with every stack test report.

PCDD & PCDF, expressed as 2,3,7,8 TCDD equivalents 0.30 x 10E-7

Arsenic and Compounds 0.23 x 10E-3

Beryllium and Compounds 0.42 x 10E-3

Cadmium and Compounds 0.56 x 10E-3

Nickel and Compounds 0.33 x 10E-2

Hexavalent Chromium and Compounds 0.83 x 10E-4

Lead and Compounds 0.09

Mercury and Compounds 0.024

Hydrogen Chloride 7.0

Benzo(a)pyrene 0.59 x 10E-3

(g) The following stack emission limitations for arsenic and compounds and toxic metals (per combustor) shall not be exceeded:

(1) Emission concentration, measured in ug/dscm and corrected to 7% oxygen:

Total PCDD and PCDF 30

Arsenic and Compounds 7.2

Beryllium and Compounds 0.2

*Cadmium and Compounds 15.8

**SECTION D. Source Level Requirements**

Nickel and Compounds 25.0

Hexavalent Chromium and Compounds 2.3

*Lead and Compounds 166.0

*Mercury and Compounds 50.0 or 85% reduction (by weight), whichever is less stringent.

(2) Emission rate, measured in lbs/hr at 105,000 dscfm and corrected to 7% oxygen.

Arsenic and Compounds 0.0024

Beryllium and Compounds 0.0000673

Cadmium and Compounds 0.00532

Nickel and Compounds 0.0084

Hexavalent Chromium and Compounds 0.000774

Lead and Compounds 0.0559

Mercury and Compounds 0.211

(3) Compliance with the above emission limitations shall be based on the average of three (3) consecutive test runs.

(h)* 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.

(i) Visible emissions from combustion ash

(1) The permittee shall not cause to be discharged to the atmosphere visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period).

(2) The visible emission limit does not cover visible emissions discharged inside buildings or enclosures, and during the maintenance and repair of ash handling systems.

(j) The ammonia slip concentration from the SNCR system shall not exceed 10 ppmv, corrected to 7% oxygen, dry basis. Compliance with this limit is based on the average of three (3) consecutive test runs.

(j) Carbon monoxide (CO) emissions limit

(1)* CO emissions per combustor shall not exceed 100 ppmvd, calculated as a 4-hour block arithmetic average, corrected to 7% oxygen on a dry basis.

(2) The CO limit applies at all times when municipal wastes are combusted, except during periods of start-up, and shutdown. Provided that the duration of the start-up or shut-down shall not exceed three (3) hours per occurrence. During periods of startup or shutdown, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR § 60.59b(d)(7).

(3) Compliance with this CO limit in ppmvd shall be determined using a four (4) hour block arithmetic average. The four (4) hour block arithmetic average shall be calculated from one (1) hour arithmetic averages expressed in ppmv, corrected to 7% oxygen (dry basis).

(k)* Particulate matter (PM) emissions, discharged to the atmosphere from each combustor, shall not exceed 0.011 gr/dscf (25 mg/dscm), corrected to 7% oxygen. Compliance with this emission limit shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

(l) Start-up commences when municipal waste is added into an empty combustor and does not include any warm-up period when the combustor is combusting only a fossil fuel, or any other auxiliary fuel, approved by the Department, and no municipal waste is being combusted.

(m) Shutdown commences with the cessation of charging municipal waste for the purpose of shutting down the combustor.

**SECTION D. Source Level Requirements**

After the initiation of shutdown, the selected parameters that define normal process operation for the facility are when the dry inlet O₂ is less than or equal to 15.5% and the steam flow is greater than or equal to 60,000 pounds/hr. If either of these conditions is not met, and the facility has ceased feeding MSW into the combustor, the combustor shall be coded as "process down".

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only No. 2 fuel oil shall be fired as auxiliary fuel in the combustors.

Throughput Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) No more than 10%, by weight, of the total amount of waste accepted per month at the facility shall be municipal-like residual waste. The municipal-like residual waste accepted at the facility shall be approved by the Department's Waste Management, and documented in accordance with the conditions of the Department's Waste Management Permit No. 400558.

(b) Each combustor shall not be operated at a steam load level greater than 110% of the maximum steam load measured during the most recent dioxin/furan performance test, except during the annual dioxin/furan or mercury performance test and the two (2) weeks preceding the annual dioxin/furan or mercury performance test, no steam load limit is applicable. The averaging time is a 4-hour block arithmetic average steam load. The steam load limit may be waived in writing by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The combustor unit load limit continues to apply, and remains enforceable, until and unless the Department grants the waiver.

(c) Only the municipal waste and municipal like residual waste approved by Waste Management of the Department, Permit No. 400588, shall be combusted in the incinerators.

Control Device Efficiencies Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Air emissions from each combustor are controlled by individual selective non-catalytic reduction (SNCR) system to reduce NO_x emissions, acid gas scrubbers (quench reactor) to control acid gases, a carbon adsorption process (PAC injection) to control emissions of toxic pollutants, and a baghouse to control particulate matter emissions.

(b) The flue gas temperature, measured at the baghouse inlet and calculated in 4-hour block arithmetic averages, shall not exceed 17°C (30°F) above the maximum demonstrated baghouse inlet temperature as defined in 40 CFR §60.51b. The baghouse inlet temperature limit may be waived in writing by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The temperature limits continue to apply, and remain enforceable, until and unless

(1) the Department grants the waiver; or

(2) during the annual dioxin/furan or mercury performance test, and the two (2) weeks preceding the annual dioxin/furan or mercury performance test, when no baghouse inlet temperature limitations are applicable.

(c) The 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.

(d) The carbon mass feed rate shall be averaged over a block 8-hour period, and the 8-hour block average must equal to or

**SECTION D. Source Level Requirements**

exceed the level(s) documented during the most recent annual performance tests, except during the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no limit is applicable for average mass carbon feed rate. The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Department for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 139.]

(a) The permittee shall perform an annual stack test, using the Department-approved procedures, to demonstrate compliance with the emission limits or emission reductions for the combustor, all procedures and test methods, if not specified below, shall be in accordance with Department's Source Testing Manual, Revision No. 8, or source testing procedures approved by the Department.

(b) The amount of waste incinerated during a stack test shall be an adequate representation of the waste load to be processed by the facility.

(c) All annual stack tests shall consist of a minimum of three test runs conducted under representative full load operating conditions for the following pollutants:

- (1) Particulate matter, PM and PM10 (including particle sizing), using EPA Method 5
- (2) Sulfur dioxides (SO₂), using EPA Reference Method 19
- (3) Carbon monoxide (CO), using EPA Reference Method 10, 10A, or 10B
- (4) visible emissions, using EPA Reference Method 9
- (5) Nitrogen oxides (NO_x), using EPA Reference Method 19
- (6) Hydrogen chloride (HCl), using EPA Reference Method 26 or 26A
- (7) Polycyclic aromatic hydrocarbon (PAH) compounds, including benzo(a)pyrene, using method approved by DEP;
- (8) VOC (expressed as total hydrocarbons), using EPA Reference Method 25A;
- (9) arsenic and compounds (expressed as arsenic), using method approved by DEP;
- (10) cadmium and compounds (expressed as cadmium), using EPA Reference Method 29;
- (11) hexavalent chromium and compounds (expressed as chromium), using EPA Reference Method 29;
- (12) nickel and compounds (expressed as nickel), using method approved by DEP;
- (13) lead and compounds (expressed as lead), using EPA Reference Method 29;
- (14) beryllium and compounds (expressed as beryllium), using method approved by DEP;
- (15) mercury and compounds (expressed as mercury), using EPA Reference Method 29;
- (16) zinc and compounds (expressed as zinc), using method approved by DEP;
- (17) PCDD and PCDF (expressed as total dioxin and furan, as specified in 40 CFR Part 60, Subpart Cb), using EPA Reference Method 23;
- (18) ammonia slip concentration, using method approved by DEP
- (19) fugitive ash emissions, using EPA Reference Method 22

(d) The following operating parameters shall be measured and re-established during each annual performance test:

- (1) maximum baghouse inlet temperature
- (2) minimum carbon injection rate in pounds per hour
- (3) the carbon injection system primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting)
- (4) the maximum demonstrated municipal waste combustor unit load level.

(e) The permittee may use CEM Relative Accuracy Test Audits (RATA) in lieu of stack testing for HCl, SO₂, NO_x, CO, and opacity.

(f) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.

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(g) The EPA Reference Method 3, 3A or 3B, or as an alternative ASME PTC-19-10-1981—part10, as applicable, shall be used for gas analysis.

(h) An oxygen measurement shall be obtained simultaneously with each test run.

(i) The testing procedures submitted to the Department for approval shall include, at a minimum, the following:

- (1) amount of waste to be combusted;
- (2) composition and classification of waste;
- (3) Btu content of waste.

(j) The permittee shall conduct semiannual test for the following pollutants if any of the pollutants exceed 80% of the emission standards during the tests:

- (1) PM and PM-10
- (2) arsenic and compounds
- (3) toxic metals and compounds
- (4) PAH (including benzo(A)pyrene)
- (5) visible emissions
- (6) ammonia reagent slip

Testing frequency may be revert to annual basis should all tested PM10, and toxic metals remain less than 80% of the permitted standards for a consecutive 24-month period and the permittee notifies the Department in advance.

(k) At least 90 days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(l) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(m) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(n) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) with a justification for the extension in writing or electronically. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall continuously monitor and record the following:

- (1) The combustion chamber temperature
- (2) The baghouse inlet temperature
- (3) The carbon injection rate
- (4) The steam load

(b) The permittee shall continuously monitor and record the following using the Department approved CEMS:

- (1) Opacity
- (2) CO emissions in ppmv
- (3) NOx emissions in ppmv
- (4) SO2 emissions in ppmv
- (5) HCL emissions in ppmv

SECTION D. Source Level Requirements

(6) O₂ in percent

(c) The continuous monitoring system shall be operated and maintained to achieve the following data availability standards:

- (1) CO and temperatures: 100% valid hours/day, where a valid hour is defined as greater than or equal to 90% valid readings (54 minutes);
- (2) oxygen (O₂), and opacity: greater than or equal to 95% valid hours/day, where a valid hour is defined as greater than or equal to 75% valid readings (45 minutes); and
- (3) HCl, SO₂, and NO_x: greater than or equal to 90% valid hours/month, where a valid hour is defined as greater than or equal to 75% valid readings (45 minutes).

(d) The permittee shall operate, calibrate, and maintain a continuous emission monitoring system and record the output of the system for measuring the O₂ content of the flue gas at each location where CO, SO₂, or NO_x emissions are monitored and shall comply with the test procedures and methods specified below:

- (1) the span value of the O₂ monitor shall be 25% O₂;
- (2) the monitor shall conform to performance specification 3 in Appendix B of 40 CFR 60, except for section 2.3, (relative accuracy requirement);
- (3) the quality assurance procedures of Appendix F of 40 CFR 60 shall apply to the monitor, except for 5.1.1 (relative accuracy test audit).

(e) The permittee shall record all CEM emissions consistent with the Department's CEM manual.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall maintain the following records for each combustor:

- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured by CEMS and CMS as specified below.
 - (i) All 1-hour average SO₂, NO_x, CO, and HCl emission concentrations, steam load measurements, baghouse inlet temperatures, and opacity.
 - (ii) All 1-day geometric average SO₂ emission concentrations and all 1-day geometric average percent reductions in SO₂ emissions.
 - (iii) All 1-day arithmetic average NO_x and HCl emission concentrations and all 1-day block average percent reductions in HCl emissions.
 - (iv) All 4-hour block arithmetic average steam load levels and baghouse inlet temperatures.
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, operating parameters, or the opacity levels recorded are above or below the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) The following operating parameter records:
 - (i) The average carbon mass feed rate (in pounds per hour) estimated during annual performance tests, with supporting calculations.
 - (ii) The average carbon mass feed rate (in pounds per hour) estimated for each hour of operation, with supporting calculations.

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- (iii) The total carbon usage for each calendar quarter estimated, with supporting calculations.
- (iv) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed) averaged over a block 8-hour period.
- (4) Identification of the calendar dates and times (hours) for which valid hourly data have not been obtained, or continuous automated sampling systems were not operated, including reasons for not obtaining the data and a description of corrective actions taken:
 - (i) SO₂ emissions data;
 - (ii) NO_x emissions data;
 - (iii) NO_x emissions data;
 - (iv) Municipal waste combustor unit load data;
 - (v) Baghouse inlet temperature data; and
 - (vi) HCl emissions data.
- (5) Identification of each occurrence that SO₂, NO_x, CO, and HCl emissions data, or operational data (i.e., steam load, and baghouse inlet temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (6) The results of daily drift tests and quarterly accuracy determinations for SO₂, NO_x, CO, and HCl continuous emission monitoring systems.
- (7) The test reports documenting the results of all annual performance tests along with supporting calculations:
 - (i) The results of all annual performance tests conducted to determine compliance with the PM, cadmium, lead, mercury, dioxins/furans, VOC, ammonia slip concentration, and fugitive ash emission limits.
 - (ii) For all annual dioxin/furan performance tests, the maximum demonstrated steam load and maximum demonstrated baghouse inlet temperature.
- (8) Identification of the calendar dates when the average carbon mass feed rates recorded were less than either of the hourly carbon feed rates estimated during the annual performance tests, with reasons for such feed rates and a description of corrective actions taken.
- (9) Identification of the calendar dates when the carbon mass feed rates in lb/hr (averaged over a block 8-hour period) recorded were less than the hourly carbon feed rates estimated during the annual performance tests, with reasons for such feed rates and a description of corrective actions taken.
 - (b) The following records shall be maintained for operators and operator training:
 - (1) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required including the dates of initial and renewal certifications and documentation of current certification.
 - (2) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required including the dates of initial and renewal certifications and documentation of current certification.
 - (3) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course as required including documentation of training completion.
 - (4) Records of when a certified operator is temporarily off site:

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- (i) If the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for 2 weeks or less, and no other certified operator is on site, record the dates that the certified chief facility operator and certified shift supervisor were off site.
- (ii) When all certified chief facility operators and certified shift supervisors are off site for more than 2 weeks and no other certified operator is on site, keep records of four items:
 - (A) Time of day that all certified persons are off site.
 - (B) The conditions that cause those people to be off site.
 - (C) The corrective actions taken to ensure a certified chief facility operator or certified shift supervisor is on site as soon as practicable.
 - (D) Copies of the written reports submitted every 4 weeks that summarize the actions taken to ensure that a certified chief facility operator or certified shift supervisor will be on site as soon as practicable.
- (5) Records showing the names of persons who have completed a review of the operating manual including the date of the initial review and subsequent annual reviews.
- (c) The permittee shall calculate emissions for all pollutants with emission limits on a monthly basis and 12-month rolling sum.
- (d) All records specified shall be maintained onsite in either paper copy or computer-readable format.

V. REPORTING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall submit semiannual reports with the following information:
 - (1) A summary of the following data collected for all pollutants and parameters required.
 - (i) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, HCl, and fugitive ash emission levels achieved during the performance tests.
 - (ii) A list of the highest emission level recorded through CEMS or CMS for SO₂, NO_x, CO, and HCl, opacity, steam load level, and baghouse inlet temperature.
 - (iii) Periods when valid data were not obtained.
 - (A) The total number of hours per calendar quarter and hours per calendar year that valid data for SO₂, NO_x, CO, HCl, steam load, or baghouse inlet temperature data were not obtained based on the data recorded.
 - (B) For each continuously monitored pollutant or parameter, the hours of valid emissions data per calendar quarter and per calendar year expressed as a percent of the hours per calendar quarter or year that the combustor was operating and combusting municipal solid waste.
 - (iv) Periods when the total number of hours that valid data for SO₂, NO_x, CO, HCl, steam load, and baghouse inlet temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded.
 - (2) The summary of data reported shall also provide the types of data specified in paragraph (a)(1) above for the calendar year preceding the year being reported, in order to provide the Department with a summary of the performance of the combustors over a 2-year period.
 - (3) The summary of data including the information above shall highlight any emission or parameter levels that did not achieve the emission or parameter limits.

**SECTION D. Source Level Requirements**

- (4) Documentation of periods when all certified chief facility operators and certified shift supervisors are off site for more than 12 hours.
- (b) The permittee shall submit a semiannual report that includes the following information for any recorded pollutant or parameter that does not comply with the limit.
- (1) Information recorded for SO₂, NO_x, CO, HCl, opacity, steam load level, baghouse inlet temperature, and opacity.
 - (2) For each date recorded and reported as required, the SO₂, NO_x, CO, HCl, opacity, steam load level, inlet temperature, or opacity data recorded.
 - (3) Document any PM, cadmium, lead, mercury, dioxins/furans, and fugitive ash emission levels that were above the applicable pollutant limits, a copy of the test report documenting the emission levels and the corrective actions taken.
 - (4) The information recorded for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
 - (5) The carbon feed rate data recorded for each operating date reported.
 - (6) The semiannual reports shall be submitted according to the schedule specified below.
 - (i) The report shall be submitted by August 1st following the first half calendar year, if the data reported were collected during the first half calendar year.
 - (ii) The report shall be submitted by February 1st following the second half calendar year, if the data reported were collected during the second half calendar year.
 - (c) All reports required shall be submitted as a paper copy, postmarked on or before the February 1 or August 1, and maintained onsite as a paper copy for a period of 5 years.
 - (d) The permittee may send EPA reports, compliance certifications (if required) electronically to R3_APD_Permits@epa.gov. Any such electronic submissions must include the name of facility, city of the facility, and TVOP number.

VI. WORK PRACTICE REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.***** Operator Training**

- (a) Each chief facility operator and shift supervisor shall obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference—see 40 CFR §60.17 of subpart A of this part)] or a State certification program.
- (b) Each chief facility operator and shift supervisor shall have completed full certification or shall have scheduled a full certification exam with either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference—see 40 CFR §60.17 of subpart A of this part)] or a State certification program.
- (c)(1) The permittee shall not allow the combustors to be operated at any time unless one of the following persons is on duty and at the facility:
- (A) A fully certified chief facility operator,
 - (B) A provisionally certified chief facility operator who is scheduled to take the full certification exam within 6 months,
 - (C) A fully certified shift supervisor, or a provisionally certified shift supervisor who is scheduled to take the full certification exam within 6 months.
- (2) If both the certified chief facility operator and certified shift supervisor are unavailable, a provisionally certified control

**SECTION D. Source Level Requirements**

room operator on site at the municipal waste combustion unit may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, the permittee must meet one of following three criteria:

- (i) When the certified chief facility operator and certified shift supervisor are both off site for 12 hours or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor.
- (ii) When the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for two weeks or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Department. However, the permittee must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under 40 CFR §60.59b(g)(5).
- (iii) When the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without approval by the Department. However, the permittee must take two actions:
 - (A) Notify the Department in writing. In the notice, state what caused the absence and what actions are being taken by the permittee to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable.
 - (B) Submit a status report and corrective action summary to the Department every four weeks following the initial notification. If the Department provides notice that the status report or corrective action summary is disapproved, the municipal waste combustion unit may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Department withdraws the disapproval, municipal waste combustion unit operation may continue.
- (3) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion unit may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Department for up to six months before taking the ASME QRO certification exam.
- (d) The permittee shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified below.
 - (1) A summary of the applicable standards under this Operating Permit;
 - (2) A description of basic combustion theory applicable to a municipal waste combustor unit;
 - (3) Procedures for receiving, handling, and feeding municipal solid waste;
 - (4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;
 - (5) Procedures for maintaining proper combustion air supply levels;
 - (6) Procedures for operating the municipal waste combustor unit within the standards established under this subpart;
 - (7) Procedures for responding to periodic upset or off-specification conditions;
 - (8) Procedures for minimizing particulate matter carryover;
 - (9) Procedures for handling ash;
 - (10) Procedures for monitoring municipal waste combustor unit emissions; and
 - (11) Reporting and recordkeeping procedures.
- (e) The permittee shall establish an annual training program to review the operating manual with each person who has responsibilities affecting the operation of the combustors including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.
- (f) The operating manual required shall be kept in a readily accessible location for all persons required to undergo training. The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request.
- (g) As per 40 CFR §60.58b(m)(4), the carbon injection system operational indicator used to provide additional verification of

**SECTION D. Source Level Requirements**

carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in the site-specific operating manual required under 40 CFR §60.54b(e).

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.****(a) Combustors**

(1) Each combustor shall be equipped with an automatic alarm and interlock system to stop the solid waste charging grates if any of the following conditions occur:

(i) the combustor temperature measured at the furnace roof, at the Department approved location, drops below 900°F, (a Department approved reference temperature which corresponds to 1600°F), for a 15-minute period;

(ii) the CO emissions exceed 500 ppmv corrected to 7% oxygen on a dry basis for a 15-minute period; (This requirement is waived during the startup period.)

(iii) the flue gas oxygen (as measured at the oxygen monitor upstream of the control device) level drops below 3% (wet basis) for a 15-minute period; and

(iv) the opacity of the exhaust gases is equal to or greater than 10% for a period of 15 minutes.

(2) No solid waste shall be charged into the combustor(s) until equilibrium has been attained in the furnace zones and the temperature of the combustion gases reach 1800°F for one (1) second of retention time. All control equipment shall be operational and functioning properly prior to the introduction of solid waste into the combustor(s).

(3) The permittee shall replace all rooftop temperature thermocouples on a quarterly basis with those that have been certified in accordance with National Institute of Standards and Testing (NIST). The permittee shall perform a new alternative location verification and retention test in the event that furnace combustion gas flow rates change significantly from any previous alternate location verification test, or at the Department's request.

(4) During the process of all planned shut downs of the combustor(s), auxiliary burners shall be used to ensure that the temperature of the combustion gases does not drop below 1600°F while any waste material is still being incinerated. All control equipment shall be operational and functioning properly until all of the solid waste is incinerated.

(b) Tipping floor

(1) The tipping area air shall be used as primary combustion air in the combustor(s).

(2) Unacceptable waste and visible unapproved residual waste as defined by 25 Pa. Code Section 287.1 of the Bureau of Waste Management Regulations shall be removed from the refuse pit for proper off-site disposal.

(3) Whenever the combustor(s) is in operation, the tipping area shall be operated at a negative pressure as determined by the operation of the induced draft fan.

(4) All waste that can be airborne or spilled shall be transported in or out of this facility in closed containers or tarped trucks.

(5) Open storage of solid waste outside of a building is prohibited.

(c) Air Pollution control devices

(1) The urea feed system and the injection system shall be modulated by interfacing with the NO_x CEMS to assure NO_x concentrations below the NO_x emission limit.

(2) All air pollution control devices shall be operated and maintained in accordance with manufacturers' specifications and good air pollution control practices.

**SECTION D. Source Level Requirements**

- (3) A sufficient spare parts inventory shall be maintained to provide the timely repair or replacement of parts as reasonably anticipated.
- (4) The permittee shall estimate the total carbon usage of the plant (pounds) for each calendar quarter by two independent methods, according to the procedures below.
- (i) The weight of carbon delivered to the plant.
- (ii) Estimate the average carbon mass feed rate in pounds per hour for each hour of operation for each combustor based on the average mass feed rate in pounds per hour during the most recent performance test, and sum the results for both combustors at the plant for the total number of hours of operation during the calendar quarter.
- (d) Ash removal equipment
- (1) The ash removal equipment, including the ash extractors and fly ash conveyors, shall be enclosed.
- (2) The ash shall be loaded in an enclosed area or handled wet.

VII. ADDITIONAL REQUIREMENTS.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) Words and terms that are not otherwise defined in Condition #001 of Section B of this permit shall have the meanings set forth in 40 CFR §§60.31b or 60.51b.
- (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.

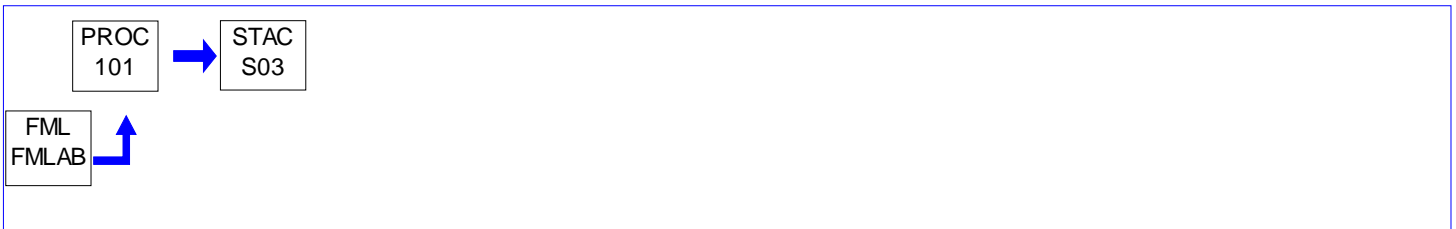
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: EMER GENERATOR

Source Capacity/Throughput: 11.500 Gal/HR #2 Oil

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this emergency generator at any time, in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

Fuel Restriction(s).

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6604]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**What fuel requirements must I meet if I own or operate an existing stationary CI RICE?**

The permittee must use diesel fuel that meets the requirements specified below:

- (a) Sulfur content: 15 ppm maximum
- (b) Cetane index or aromatic content, as follows:
 - (1) A minimum cetane index of 40; or
 - (2) A maximum aromatic content of 35 volume percent.

Operation Hours Restriction(s).

003 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

The engine shall be operated less than 500 hours in a 12-month rolling period.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

For the engine to be considered as an emergency stationary RICE, the permittee must operate the engine according to the requirements specified in 40 CFR §63.6640(f).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

**SECTION D. Source Level Requirements****What are my monitoring, installation, operation, and maintenance requirements?**

The engine shall be equipped with a non-resettable hour meter.

IV. RECORDKEEPING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.100, and 40 CFR §63.6604.]

The permittee shall keep the following records:

- (a) operating hours of the engine on a daily basis, when operating, and 12-month rolling sum.
- (b) fuel oil sulfur content certificate from the supplier.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

- (a) The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
- (b) The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****In what form and how long must I keep my records?**

- (a) The permittee records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
- (b) As specified in 40 CFR §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

- (a) Except during periods of startup, the permittee must meet the following requirements:

**SECTION D. Source Level Requirements**

- (1) change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- (3) inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(b) During periods of startup the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(c) The permittee has the option of utilizing an oil analysis program as outlined in Table 2c of 40 CFR 63, Subpart ZZZZ and in 40 CFR § 63.6625(i).

**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What are my monitoring, installation, operation, and maintenance requirements?

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(c)(8).]

The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions.

VII. ADDITIONAL REQUIREMENTS.

**# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

Am I subject to this subpart?

The emergency engine that is subject to the provisions of 40 CFR 63 Subpart ZZZZ is as follows:

Manufacturer: Cummins
Model number: NT-855
Rated Capacity: 300 HP
Fuel: Diesel
Installed: 1991

**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]
Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What parts of the General Provisions apply to me?

The permittee shall comply with the General Provisions in 40 CFR §§63.1 through 63.15 that apply.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

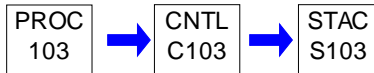
Source ID: 103

Source Name: LIME SILO

Source Capacity/Throughput:

N/A

LIME

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §123.13]

Processes

Particulate matter (PM) emissions from the exhausts associated with the lime silo(s) shall not exceed 0.02 gr/dscf.

Control Device Efficiencies Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The silo shall be equipped with fabric filter to control PM emissions when the silo is being filled.

(b) The operating pressure drop across the fabric filter shall be maintained at or above 0.1 inches w.g. when the silo is being filled.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the date and pressure drop across the fabric filter each time when the silo is being filled.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall keep records of each maintenance activity and/or the fabric filter repair/replacement conducted to the silo.

(b) The permittee shall keep records of the date and pressure drop across the fabric filter recorded each time when the silo is being filled.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Enough new spare fabric filters for complete replacement shall be maintained on-site.

**SECTION D. Source Level Requirements**

(b) The permittee shall maintain and operate the silo and the fabric filter in accordance with the manufacturer's instruction and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

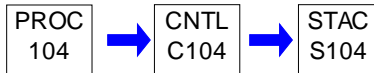
Source ID: 104

Source Name: POWDERED ACTIVATED CARBON SILO

Source Capacity/Throughput:

N/A

PAC

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §123.13]

Processes

Particulate matter (PM) emissions from the exhausts associated with the powdered activated carbon (PAC) silo shall not exceed 0.02 grains per dry standard cubic foot.

Control Device Efficiencies Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The silo shall be equipped with fabric filter to control PM emissions when the silo is being filled.

(b) The operating pressure drop across the fabric filter shall be maintained at or above 0.1 inches w.g. when the silo is being filled.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the pressure drop across the fabric filter each time when the silo is being filled.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall keep records of each maintenance activity and/or fabric filter repair/replacement conducted to the silo.

(b) The permittee shall keep records of the date and pressure drop across the fabric filter recorded each time when the silo is being filled.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Enough new spare fabric filters for complete replacement shall be maintained on-site.

**SECTION D. Source Level Requirements**

(b) The permittee shall maintain and operate the silo and the fabric filter in accordance with the manufacturer's instruction and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****



SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION F. Emission Restriction Summary.**

Source Id	Source Description		
001	MWI UNIT 1		
Emission Limit		Pollutant	
7.200	UG/M3	Arsenic	Arsenic Coumpounds
0.200	UG/M3	Beryllium	Beryllium Compounds
100.000	PPMV	4 hr arith avg	CO
156.480	Lbs/Hr	7% oxygen	CO
15.800	UG/M3	Cadmium	Cadmium Compounds
2.300	UG/M3	Hex Chromium	Chromium Compounds
30.000	NG/M3	Dioxin total	Furan
29.000	PPMV	HCl, or 95% red, 24-hr geom. avg	Hydrochloric Acid
166.000	UG/M3	Lead	Lead Compounds
50.000	UG/M3	Hg, or 85% reduction	Mercury Compounds
109.000	Lbs/Hr		NOX
180.000	PPMV	24-hr arith avg	NOX
477.400	Tons/Yr		NOX
25.000	UG/M3	Nickel	Nickel Compounds
26.800	Lbs/Hr		SOX
29.000	PPMV	or 75% red, 24-hr geom. avg	SOX
0.011	gr/DRY FT3	25 mg/dscm	TSP
2.680	Lbs/Hr		VOC
002	MWI UNIT 2		
Emission Limit		Pollutant	
7.200	UG/M3	Arsenic	Arsenic Coumpounds
0.200	UG/M3	Beryllium	Beryllium Compounds
100.000	PPMV	4 hr arith avg	CO
156.480	Lbs/Hr	7% oxygen	CO
15.800	UG/M3	Cadmium	Cadmium Compounds
2.300	UG/M3	Hex Chromium	Chromium Compounds
30.000	NG/M3	Dioxin total	Furan
29.000	PPMV	HCl, or 95% red, 24-hr geom. avg	Hydrochloric Acid
166.000	UG/M3	Lead	Lead Compounds
50.000	UG/M3	Hg, or 85% reduction	Mercury Compounds
109.000	Lbs/Hr		NOX
180.000	PPMV	24-hr arith avg	NOX
477.400	Tons/Yr		NOX
25.000	UG/M3	Nickel	Nickel Compounds
26.800	Lbs/Hr		SOX
29.000	PPMV	or 75% red, 24-hr geom. avg	SOX
0.011	gr/DRY FT3	25 mg/dscm	TSP
2.680	Lbs/Hr		VOC
101	EMER GENERATOR		
Emission Limit		Pollutant	
0.040	gr/DRY FT3	PM	TSP

**SECTION F. Emission Restriction Summary.**

Source Id	Source Description
103	LIME SILO
Emission Limit	
0.040 gr/DRY FT3	Pollutant TSP
104	POWDERED ACTIVATED CARBON SILO
Emission Limit	
0.020 gr/DRY FT3	Pollutant PM10

Site Emission Restriction Summary

Emission Limit	Pollutant
24.990 Tons/Yr 12-month rolling total	VOC

**SECTION G. Miscellaneous.**

The emission limitations contained in the Emission Restriction Summary Section of this permit are: incomplete, provided for informational purposes only, and are not enforceable emission limitations. The actual emission limitations are provided for in Sections C, D, or E of this permit.

The Department has determined that the emissions from the following activity, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, or recordkeeping:

- Cooling tower;
- Above ground storage tanks - fuel oil, urea, sodium hypochlorite, and sulfuric acid;
- Portable kerosene heaters;
- Ash conveyors;
- Metal sorting equipment and process (eRFD No. 5036); and
- Lime slaker.

July 2003. The Title V permit was amended to address changes brought on by Plan Approval, PA-46-0010C. APS - 346428. Auth ID - 377358.

Plan Approval No. PA-46-0010E (APS - 510897, AUTH - 538568) was incorporated into this TVOP.

February 2007. APS: 346428, AUTH: 650327. The Department renewed this operating permit. There have been no changes since the past permit revision. No sources are subject to CAM because the affected sources are subject to a federal regulation that was published after November 15, 1990, as defined in 40 CFR § 64.2(b)(i).

March 2009. APS: 346428, AUTH: 782423. The Department amended this permit to address a discrepancy between the applicable state BAT policy and the federal regulation for dioxin/furan testing.

May 2012. APS: 346428, AUTH: 894899. No new sources since the last permit was issued. All Cb/Eb regulatory citations have been replaced with the state regulations as the EPA has previously approved the state plan for municipal waste combustors.

- The facility is exempt from 40 CFR 60, Subpart Db as noted in 40 CFR § 60.40b(k).
- Source 101 is now subject to 40 CFR 63, Subpart ZZZZ, as noted in 40 CFR § 63.6590(a)(1)(ii). The future applicable (May 3, 2013) parts of this regulation have been incorporated into this renewal.

May 2014. eRFD number 4419 - replacement of the Lime Silo Baghouse with a like-kind housing, bags, fan, air-to-cloth ratio, and operating perssure drop was exempted from the need to obtain a plan approval. The new unit will continue to meet the applicable requirements and limitations.

May 5, 2015: APS ID: 870112; AUTH ID: 1072111. Owner name change from Covanta Plymouth Renewable Energy LP to Covanta Plymouth Renewable Energy LLC.

November 16, 2016, AUTH ID: 1161400. TVOP Renewal.



***** End of Report *****

