



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

TITLE V/STATE OPERATING PERMIT

Issue Date: March 10, 2023

Effective Date: March 10, 2023

Expiration Date: March 9, 2028

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: 23-00004

Federal Tax Id - Plant Code: 76-0531017-1

Owner Information

Name: COVANTA DELAWARE VALLEY LP

Mailing Address: 10 HIGHLAND AVE
CHESTER, PA 19013-2231

Plant Information

Plant: COVANTA DELAWARE VALLEY LP/DELAWARE VALLEY RES REC

Location: 23 Delaware County 23001 Chester City

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: LARRY SMITH

Title: FACILITY MGR

Phone: (610) 497 - 8100

Email: lsmith2@covanta.com

Permit Contact Person

Name: ALEXANDRA(ALLIE) JOZWIK

Title: ENV COMPLIANCE SPECIALIST

Phone: (610) 497 - 8100

Email: ajozwik@covanta.com

[Signature]


JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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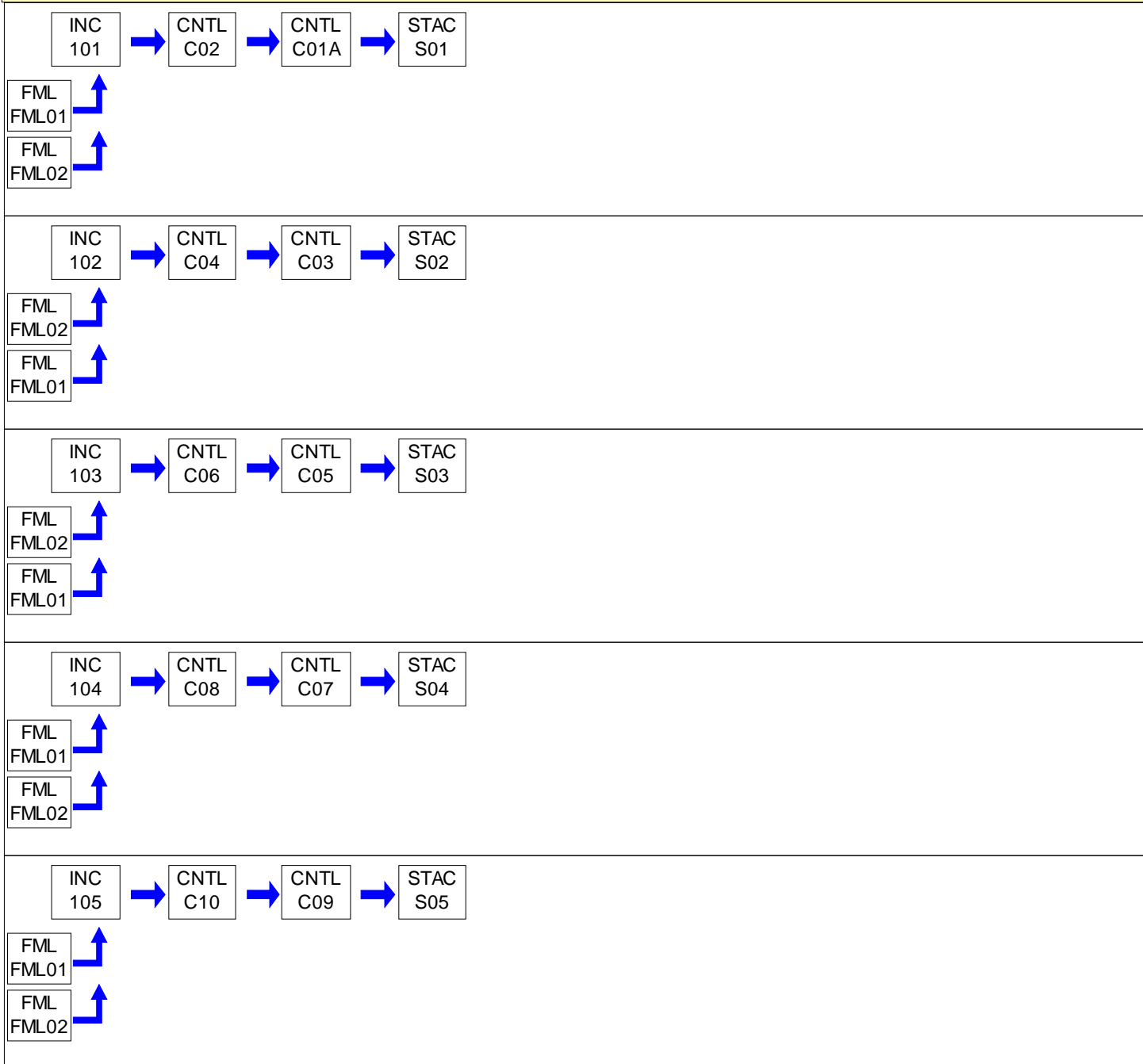
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	ROTARY COMBUSTER 1		
102	ROTARY COMBUSTER 2		
103	ROTARY COMBUSTER 3		
104	ROTARY COMBUSTER 4		
105	ROTARY COMBUSTER 5		
106	ROTARY COMBUSTER 6		
107	VEHICLE TRAFFIC ON ROADS	N/A	DUST
108	COOLING TOWER		
110	LIME STORAGE SILO		
111	ASH HANDLING		
112	COLD DEGREASERS (2)	N/A	SOLVENT
113	EMERGENCY ENGINE		
114	EMERGENCY FIRE PUMP ENGINE		
C01A	BAGHOUSE - PULSE JET FABRIC FILTER		
C02	SPRAY DRYER ABSORBER		
C03	BAGHOUSE - PULSE JET FABRIC FILTER		
C04	SPRAY DRYER ABSORBER		
C05	BAGHOUSE - PULSE JET FABRIC FILTER		
C06	SPRAY DRYER ABSORBER		
C07	BAGHOUSE - PULSE JET FABRIC FILTER		
C08	SPRAY DRYER ABSORBER		
C09	BAGHOUSE - PULSE JET FABRIC FILTER		
C10	SPRAY DRYER ABSORBER		
C108	COOLING TOWER MIST ELIMINATORS		
C11	BAGHOUSE - PULSE JET FABRIC FILTER		
C110	LIME SILO FABRIC FILTER		
C12	SPRAY DRYER ABSORBER		
FML01	NATURAL GAS PIPELINE		
FML02	MUNICIPAL WASTE STORAGE PIT		
FML03	DIESEL FUEL		
S01	COMBUSTOR 1 STACK		
S02	COMBUSTOR 2 STACK		
S03	COMBUSTOR 3 STACK		
S04	COMBUSTOR 4 STACK		
S05	COMBUSTOR 5 STACK		
S06	COMBUSTOR 6 STACK		
S110	LIME STORAGE STACK		
S113	EMERGENCY ENGINE STACK		
S114	EMERGENCY FIRE PUMP ENGINE STACK		
Z01	ROAD DUST EMISSIONS		

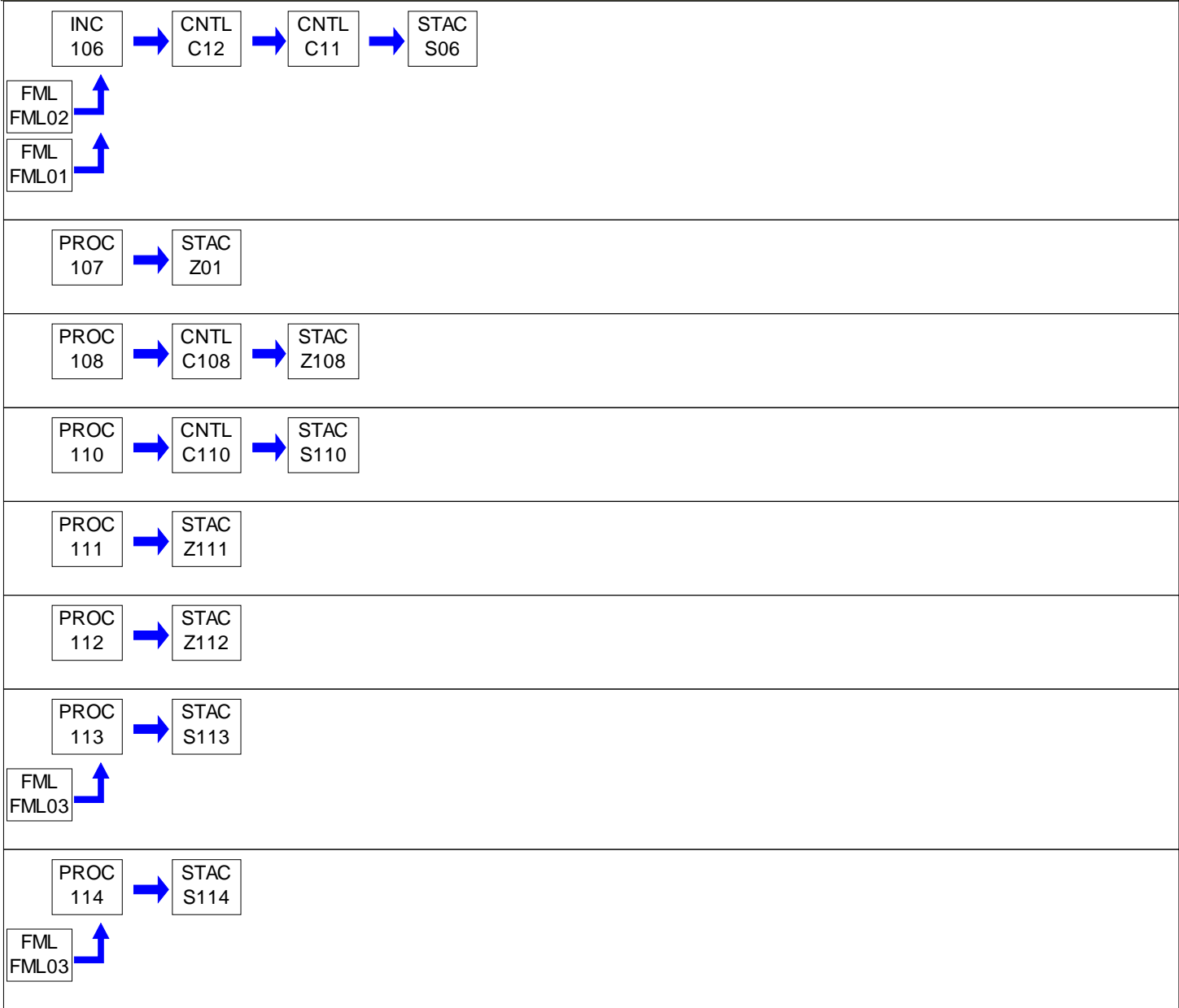
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
Z108	COOLING TOWER FUGITIVES		
Z111	ASH HANDLING FUGITIVES		
Z112	DEGREASER FUGITIVES		

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 & 127.704(b)]**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. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(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

**SECTION B. General Title V Requirements**

the Department.

(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.

**SECTION B. General Title V Requirements****#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 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].

**SECTION B. General Title V Requirements****#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 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). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(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.

**SECTION B. General Title V Requirements**

(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).

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

(1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.

(2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.

(3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

#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.

**SECTION B. General Title V Requirements**

(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.

(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

**SECTION B. General Title V Requirements**

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, 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:

Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

(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 § 127.513]**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

**SECTION B. General Title V Requirements**

the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

#025 [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.

(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.

#026 [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.

**SECTION B. General Title V Requirements****#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)
- (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.

**SECTION B. General Title V Requirements**

(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.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this 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.

#031 [25 Pa. Code §135.3]**Reporting**

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#032 [25 Pa. Code §135.4]**Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [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 in (a)-(h), 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.

002 [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 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

003 [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.

004 [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:

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

005 [25 Pa. Code §123.42]**Exceptions**

The opacity limitations as per 25 Pa. Code § 123.41 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 to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

**SECTION C. Site Level Requirements****# 006 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) Except as provided in Condition #001 of Section C and Condition #001 of Section D for Source ID 111, no fugitive emissions shall be emitted into the outdoor atmosphere from any building or enclosure associated with the combustor(s) at any time.

(b) The VOC emissions from the entire facility shall not exceed 50.0 tons in any 12 consecutive month period.

007 [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.

(g) A fire set solely for cooking food.

II. TESTING REQUIREMENTS.**# 008 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this operating 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 and the most current version of the DEP Source Testing Manual, 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.**# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

(a) a device approved by the Department and maintained to provide accurate opacity measurements; and

(b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

010 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

(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).

**SECTION C. Site Level Requirements**

(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.**

[Additional authority for this condition is also derived from 25 Pa. Code § 127.512.]

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

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

012 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall maintain a file containing all records and other data that are required to be collected pursuant to the various provisions of this Operating Permit. This file shall include, but not be limited to:

- (1) all air pollution control system performance evaluations;
- (2) records of calibration checks; and
- (3) records of adjustments and maintenance performed on all equipment which is subject to this operating permit.

(b) The permittee shall keep daily, monthly and 12 consecutive month records of the quantities and classification of all solid waste combusted and accepted at this facility in a format approved by the Department.

(c) The permittee shall maintain records of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

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

V. REPORTING REQUIREMENTS.**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

The permittee shall submit the following:

(a) 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 #26 of section B of this permit. The annual certificate of compliance shall be submitted to DEP electronically, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 23-00004, Facility Name: Covanta Delaware Valley L.P."

(b) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the

**SECTION C. Site Level Requirements**

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).

(c) For those contaminants monitored by a Department certified CEMS for which the Department's Enforcement Policy - Continuous Emission Monitoring System (CEMS) established penalties for excess emissions, the aforementioned notification and reporting requirements shall be waived.

014 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

015 [25 Pa. Code §135.21]**Emission statements**

(a). The owner or operator of each stationary source emitting oxides of nitrogen or VOCs shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

**SECTION C. Site Level Requirements**

(b). Annual emission statements are due by March 1 for the preceding calendar year, and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

- (1) A more frequent submission is required by the EPA.
- (2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.

VI. WORK PRACTICE REQUIREMENTS.**# 016 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified 25 Pa. Code § 123.1 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 suitable 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.

017 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

- (a) The sources and air pollution control devices listed in this permit shall be operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.
- (b) 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.

VII. ADDITIONAL REQUIREMENTS.**# 018 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The permittee may not modify any air contaminant system identified in Sections A or G, of this permit, prior to obtaining Department approval, except those modifications authorized by Condition #017(g), of Section B, of this permit.

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.

No compliance milestones exist.

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

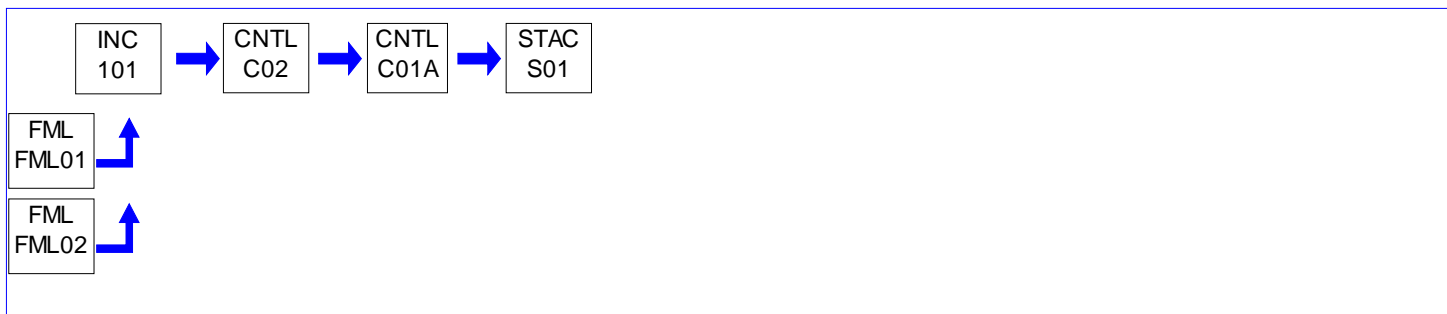
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: ROTARY COMBUSTER 1

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

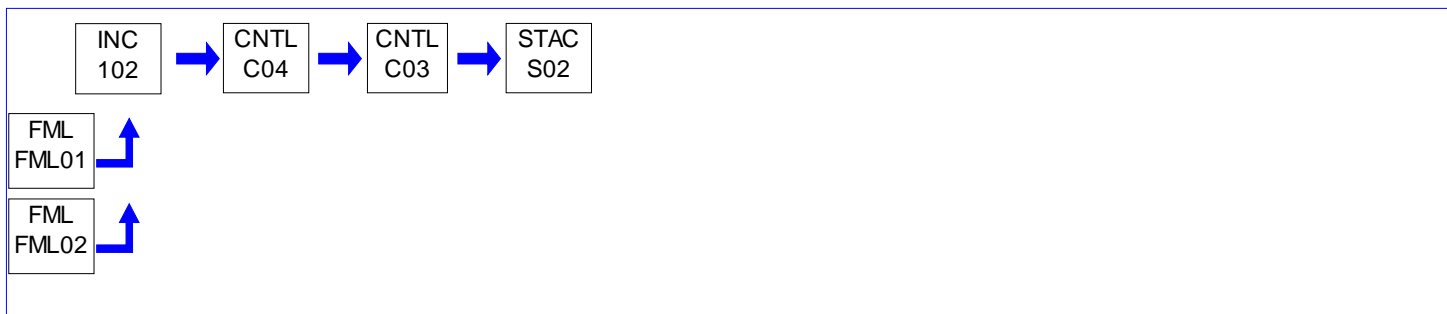
**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: ROTARY COMBUSTER 2

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

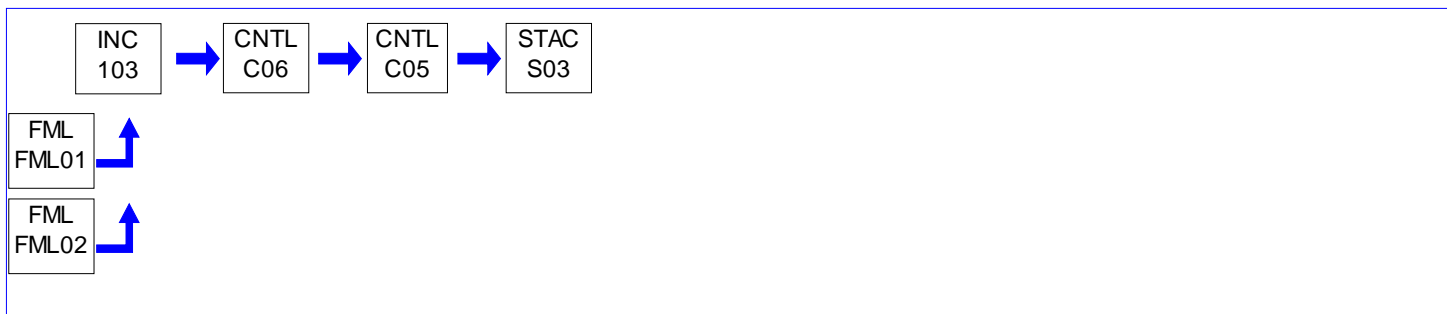
**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: ROTARY COMBUSTER 3

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

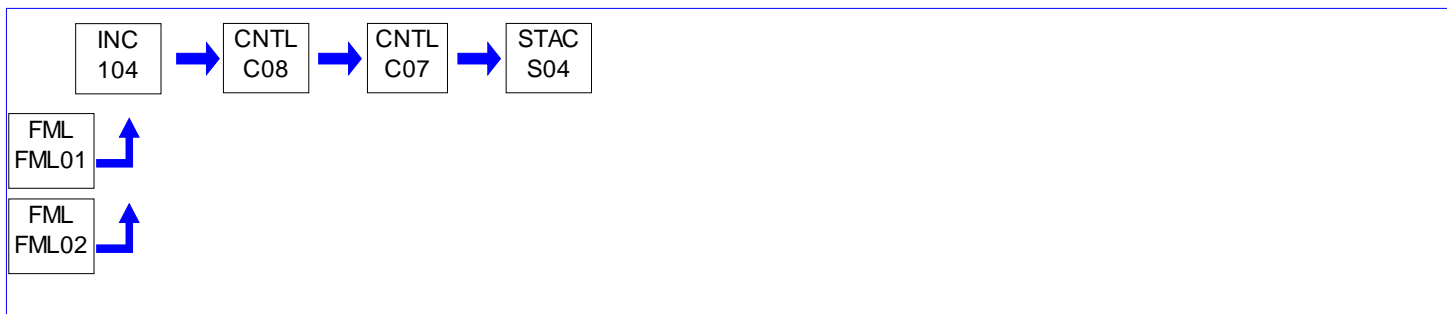
**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: ROTARY COMBUSTER 4

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

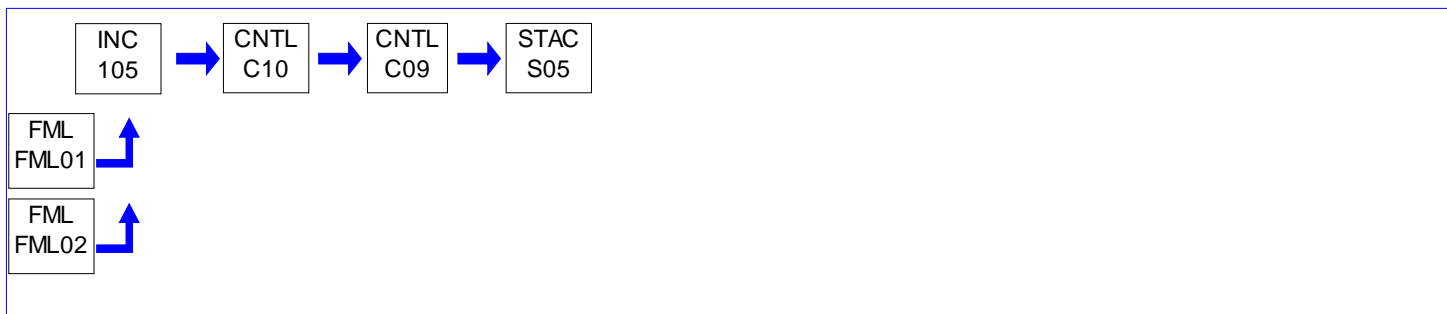
**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: ROTARY COMBUSTER 5

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

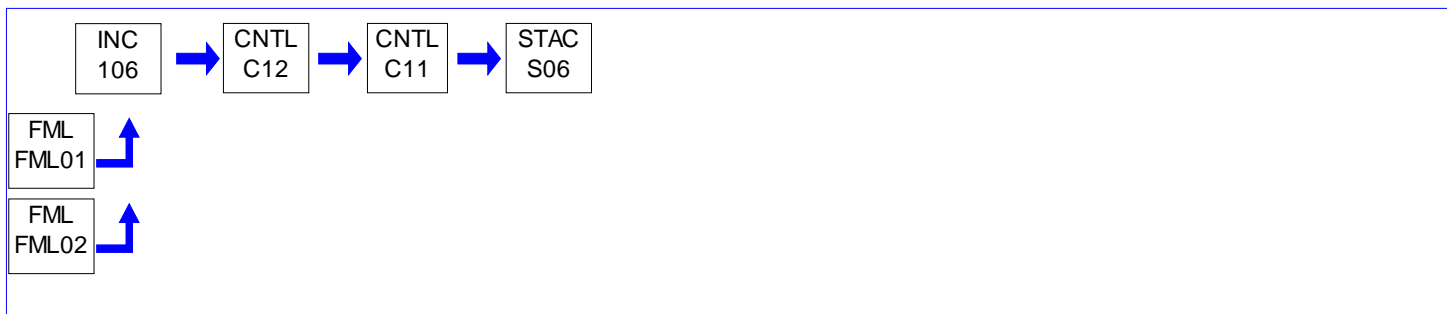
**SECTION D. Source Level Requirements**

Source ID: 106

Source Name: ROTARY COMBUSTER 6

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LARGE MWC

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

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

**SECTION D. Source Level Requirements**

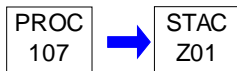
Source ID: 107

Source Name: VEHICLE TRAFFIC ON ROADS

Source Capacity/Throughput:

N/A

DUST

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

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

- (a) Grading, paving, and maintenance of roads and streets.
- (b) 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.
- (c) Stockpiling of materials.

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from this source, if such emissions are visible at the point the emissions pass outside the person's property.

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.

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

IV. RECORDKEEPING REQUIREMENTS.

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

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.**# 003 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

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

- (a) Application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which

**SECTION D. Source Level Requirements**

may give rise to airborne dusts.

(b) Paving and maintenance of roadways.

(c) 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.

VII. ADDITIONAL REQUIREMENTS.

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

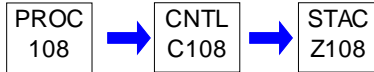
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**SECTION D. Source Level Requirements**

Source ID: 108

Source Name: COOLING TOWER

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.512]

Operating permit terms and conditions.

- (a) PM10 emissions from the cooling tower shall not exceed 2.39 tons per year on a 12-month rolling sum.
- (b) The total dissolved solids (TDS) concentration in the circulating water shall not exceed 2,780 ppm, by weight.

Throughput Restriction(s).

002 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The cooling tower is permitted to use Chester Water Authority (CWA) water and/or DELCORA secondary effluent as makeup water.

Control Device Efficiency Restriction(s).

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

If DELCORA secondary effluent is used, the conductivity of the makeup water, measured at Permeate, shall not exceed 200 uS/cm on a daily average basis to be considered the TDS removal efficiency of 95%.

II. TESTING REQUIREMENTS.

004 [25 Pa. Code §127.512]

Operating permit terms and conditions.

- (a) The permittee shall measure circulating water TDS concentration at the inlet of the cooling tower water once per calendar quarter.
- (b) The permittee shall record the circulating water conductivity measured at the inlet of the cooling tower at the same time when the above samples are taken.
- (c) The TDS concentrations shall be measured using methods and/or procedures approved by the Department.
- (d) The data of conductivity vs TDS concentration collected may be used for re-establishing the conductivity limit in the future, when the Department believes that an adjustment is necessary.

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall operate and maintain devices that continuously monitor and record the following:

- (a) The amount of cooling tower circulating water on a monthly basis, or the rated capacity of the pump in gallons per hour and pump operating hours on a monthly basis.
- (b) The circulating water conductivity, measured at the inlet of the cooling tower, averaged daily and monthly.
- (c) The makeup water conductivity, measured at Permeate, on a daily average.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 006 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall keep the following records for 5 years:

(1) The PM10 emissions on a monthly basis calculated using the following equation, and 12-month rolling sum:

$$E = Q \text{ (gal/month)} \times 8.34 \text{ (lb/gal)} \times \text{Drift rate (0.001\%)} \times \text{TDS (ppmw in circulating water)} \times 53 \text{ \% mass (smaller than PM10)}$$

Where:

E = Emissions in pounds per month (lb/month)

Q = Circulating water rate (gallons per month)

1 gallon of water = 8.34 lb

% mass smaller than PM10 = 53%

(2) The circulating water conductivity readings on a daily average and monthly average.

(3) The amount of circulating water in gallons per month either recorded directly or calculated through the rated capacity of the pump and monthly operating hours.

(4) The date and the TDS concentrations in ppmw measured each quarter and the conductivities readings at each time of sampling. The purpose of these records is to establish a basis of the conductivity vs TDS concentration.

(5) The makeup water conductivity measured at Permeate as daily average.

(b) The permittee may use TDS concentration of 2,780 ppmw to calculate the PM emissions, if the monthly rolling average conductivity is below 4,000 uS/cm.

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.**# 007 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) The permittee shall operate the ultrafiltration system and reverse osmosis unit in accordance with the manufacturer's specifications and good air pollution control practices.

(b) The drift eliminators shall be installed, operated, and maintained in accordance with the manufacturer's specifications and good air pollution control practices.

(c) The drift eliminators shall not be modified or repaired without the Department's prior written approval, if the modification or repair will result in change of the eliminators' removal efficiency.

(d) The conductivity of the cooling tower circulating water shall be maintained below 4,000 uS/cm on a monthly average.

VII. ADDITIONAL REQUIREMENTS.

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

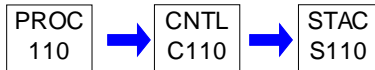
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 110

Source Name: LIME STORAGE SILO

Source Capacity/Throughput:

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the exhausts associated with the lime silo(s) shall not exceed 0.02 gr/dscf [the BAT standard for Municipal Waste Incineration facilities].

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The silo fabric filter equipment will be operated below prescribed manufacturer operating pressures during offloading.

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 §127.511]

Monitoring and related recordkeeping and reporting requirements.

- (a) A silo area operator must be present when the silo is being filled.
- (b) The silo area operator shall:
 - (1) monitor the loading operating pressure, and
 - (2) observe the silo stack for visible emissions during the silo loading.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall keep the following records for each silo loading operation:

- (a) date;
- (b) visible emissions observed; and
- (c) the loading operating pressure.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 005 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

If visible emissions present during silo loading, the permittee shall

- (a) investigate the incident;
- (b) take corrective actions if necessary; and
- (c) record the date of the incident and specify the corrective actions taken.

VII. ADDITIONAL REQUIREMENTS.

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

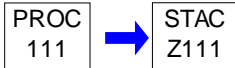
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 111

Source Name: ASH HANDLING

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Visible emissions of fugitive combustion ash from the ash conveying system shall not be in excess of 5% of the observation period (9 minutes per 3-hour period), as determined by EPA Reference Method 22, except as described below:

- (a) the emission limit does not apply to visible emissions discharged inside buildings or enclosures; and
- (b) the emission limit does not apply during the maintenance and repair of ash handling systems.

II. TESTING REQUIREMENTS.**# 002 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Testing requirements for this source (Ash Handling) are specified in Group Name: Large WMC, in Section E of this permit.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 003 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Recordkeeping requirements for this source (Ash Handling) are specified in Group Name: Large WMC, in Section E of this permit.

V. REPORTING REQUIREMENTS.**# 004 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Reporting requirements for this source (Ash Handling) are specified in Section E - Combustors, Source Group 1.

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

- (a) The ash removal equipment including the ash extractors and fly ash conveyors shall be enclosed.
- (b) The ash shall be loaded in an enclosed area or handled wet in closed containers.

VII. ADDITIONAL REQUIREMENTS.

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



SECTION D. Source Level Requirements

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

**SECTION D. Source Level Requirements**

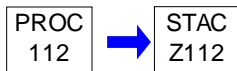
Source ID: 112

Source Name: COLD DEGREASERS (2)

Source Capacity/Throughput:

N/A

SOLVENT

**I. RESTRICTIONS.**

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

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.

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

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §129.63]****Degreasing operations**

(a) The permittee shall maintain the following information:

- (1) The name and address of the solvent supplier.
- (2) The type of solvent including the product or vendor identification number.
- (3) The vapor pressure of the solvent measured in mm hg at 20°C (68°F).

(b) An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used for compliance status.

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.**# 002 [25 Pa. Code §129.63]****Degreasing operations**

(a) The immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater.

(b) The immersion cold cleaning machines shall:

(1) Have a permanent, conspicuous label summarizing the operating requirements in paragraph (c), below. In addition, the label shall include the following discretionary good operating practices:

(A) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.

(B) When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent

**SECTION D. Source Level Requirements**

with no observable splashing of the solvent against the tank walls or the parts being cleaned.

(C) Work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.

(2) Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.

(c) The cold cleaning machines shall be operated in accordance with the following procedures:

(1) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(2) Flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray.

(3) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.

(4) Air agitated solvent baths may not be used.

(5) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

(d) The permittee may not use any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.

(e) The permittee shall obtain the following written information from the solvent provider:

(1) The name and address of the solvent supplier.

(2) The type of solvent including the product or vendor identification number.

(3) The vapor pressure of the solvent measured in mm hg at 20°C (68°F).

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.512]

Operating permit terms and conditions.

To avoid being subject to the requirements of 40 CFR Part 63 Subpart T, the permittee shall not use any solvent, in the degreasers, containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.

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

**SECTION D. Source Level Requirements**

Source ID: 113

Source Name: EMERGENCY ENGINE

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Nitrogen Oxides (NO_x) emissions from this engine shall not exceed 100lb/hr, 1000 lb/day, 2.75 tons per ozone season, and 6.6 tons per year on a 12-month rolling sum.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

As per 40 CFR §§60.4205(b) and 60.4202(a)(2), the emissions from the engine shall not exceed the following in grams per HP-Hour over the entire life of the engine:

- (a) 3.0 for NO_x + HC
- (b) 2.6 for CO
- (c) 0.15 for PM

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine**

The permittee must operate and maintain the engine to achieve the emission standards as required in 40 CFR § 60.4205(b) over the entire life of the engine.

Fuel Restriction(s).**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to**

- (a) The source shall only use diesel fuel that meets the requirements of 40 CFR §80.510(b) for non-road diesel fuel:
 - i. A sulfur content of 15 ppm maximum, and
 - ii. A minimum cetane index of 40; or maximum aromatic content of 35% volume.
- (b) The permittee shall maintain records of the diesel sulfur content report and/or certification for diesel fuel shipment received.

[Compliance with this condition assures compliance with 25 Pa. Code §123.21.]

Operation Hours Restriction(s).**# 005 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

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

For this source, total operating hours, including maintenance checks and readiness testing, shall not exceed 500 hours per year, calculated as a 12-month rolling sum.

**SECTION D. Source Level Requirements**

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) The permittee shall operate the emergency engine according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).

(b) If the permittee does not operate the engine according to the requirements of 40 C. F. R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart III and must meet all requirements for non-emergency engines.

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.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

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

IV. RECORDKEEPING REQUIREMENTS.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

The permittee shall maintain the following records:

(a) startup and shutdown time, duration of operation, reasons for operation (such as maintenance and emergency), when it is in operation.

(b) total operating hours and total non-emergency operating hours, monthly and as a 12-month rolling sum.

(c) a copy of manufacturer's operating and maintenance specifications.

(e) maintenance records, i.e., routine/preventative maintenance, repairs, parts replacement, tune-ups, etc.

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 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

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

(a) As per 40 CFR §60.4211(a), the permittee shall

**SECTION D. Source Level Requirements**

- (1) Operate and maintain the engine and control device according to the manufacturer's emission-related written instructions;
 - (2) Change only those emission-related settings that are permitted by the manufacturer; and
 - (3) Meet the requirements of 40 CFR Parts 89 and 1068 that apply.
- (b) The engine must be installed and configured according to the manufacturer's emission-related specifications.

VII. ADDITIONAL REQUIREMENTS.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Am I subject to this subpart?**

- (a) Source ID 113 is an emergency stationary CI RICE purchased and installed in 2011.

Manufacturer: Cummins Inc.

Model No.: QSL9-G2 NR3

EPA Certification No.: CEX-STATCI-11-21 (Date issued: 10/14/2010)

EPA Diesel Engine Family: BCEXL0540AAB

Engine nameplate HP: 364

Displacement: 8.9 liters

Emission control device: Turbocharged and CAC

- (b) The permittee fulfilled the requirement of 40 CFR §60.4211(c) by purchasing an engine certified to the emission standards in 40 CFR §60.4205(b).

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What parts of the General Provisions apply to me?**

The permittee shall comply with the General Provisions in 40 CFR §§60.1 through 60.19 that apply.

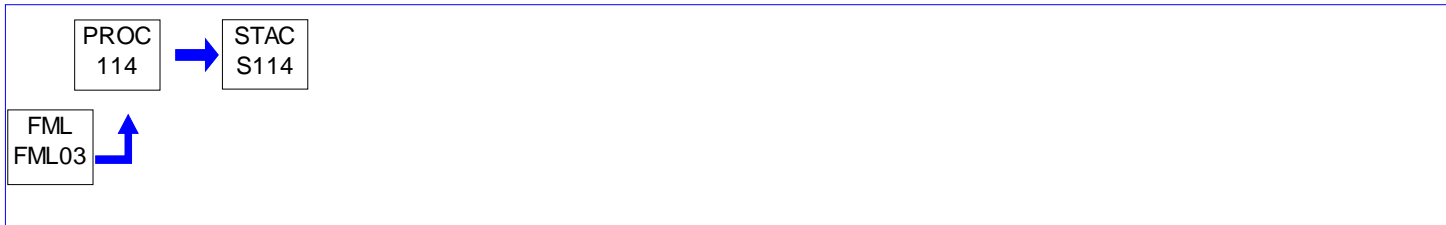
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 114

Source Name: EMERGENCY FIRE PUMP ENGINE

Source Capacity/Throughput:

**I. RESTRICTIONS.****Fuel Restriction(s).****# 001 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) The source shall only use diesel fuel that meets the requirements of 40 CFR §80.510(b) for non-road diesel fuel:

- i. A sulfur content of 15 ppm maximum, and
- ii. A minimum cetane index of 40; or maximum aromatic content of 35% volume.

(b) The permittee shall maintain records of the diesel sulfur content report and/or certification for diesel fuel shipment received.

[Compliance with this condition assures compliance with 25 Pa. Code §123.21.]

Operation Hours Restriction(s).**# 002 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(1) For this source, total operating hours, including maintenance checks and readiness testing, shall not exceed 499 hours per year, calculated as a 12-month rolling sum. [Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(c)(8).]

(2) Pursuant to 40 CFR 63.6640(f),

(a) maintenance checks and readiness testing for this source shall not exceed 100 hours per calendar year.

(b) non-emergency operation hours for this source shall not exceed 50 hours per year, and are counted as part of the 100 hr/yr for maintenance and testing hours.

If the permittee does not operate the engine according to the requirements of 40 CFR Part 63 §63.6640(f), the engine will not be considered an emergency engine under 40 CFR Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

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 [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?**

This source shall be equipped with a non-resettable hour meter.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 004 [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?**

For this source, the permittee shall keep the following records,

- (a) the maintenance conducted;
- (b) startup and shutdown time, duration of operation, reasons for operation (such as maintenance and emergency), when it is in operation;
- (c) total operating hours, monthly and as a 12-month rolling sum; and
- (d) total non-emergency operating hours, monthly and as a 12-month rolling sum.

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 [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 shall

- (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 replace as necessary;
- (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 shall 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.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

(a) The permittee must be in compliance with the requirements in 40 CFR 63 Subpart ZZZZ that apply to this engine at all times.

(b) At all times the permittee must operate and maintain this engine and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.

007 [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 for this permit condition is also derived from 25 Pa. Code § 129.97(c)(8).]

The permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop an own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

008 [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 engine (manufactured by Cummins Engine Company, Inc. Model No. NT-855 F 3, 300 HP) is subject to the provisions of 40 CFR 63 Subpart ZZZZ.

009 [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 must comply with the general provisions of 40 CFR 63 Subpart A that apply.

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

**SECTION E. Source Group Restrictions.**

Group Name: LARGE MWC

Group Description: Rotary Waterwall Combustors

Sources included in this group

ID	Name
101	ROTARY COMBUSTER 1
102	ROTARY COMBUSTER 2
103	ROTARY COMBUSTER 3
104	ROTARY COMBUSTER 4
105	ROTARY COMBUSTER 5
106	ROTARY COMBUSTER 6

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Nitrogen Oxide (NO_x) emissions per combustor, expressed as NO₂, shall not exceed any of the following:

- (a) 180 ppmdv, corrected to 7% oxygen, on a 24-hour block arithmetic average using the Department approved Continuous Emission Monitors (CEMS) [additional authority of this NO_x emission limit is also derived from 25 Pa. Code §§ 129.97(f) and 129.100(a)(3)];
- (b) 88.56 lbs/hr; and
- (c) 0.42 lbs/MMBtu.

The NO_x emission limit (in ppmdv) applies at all times when municipal wastes are incinerated, including during periods of start-up, shut-down, and malfunction.

[Compliance with the above NO_x limits assure compliance with the Department's BAT standards.]

002 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) The following annual ambient concentrations, expressed in micrograms/dry standard cubic meter (UG/DSCM), shall not be exceeded. To demonstrate compliance with the following annual ambient concentrations, the permittee shall calculate the concentrations using the actual stack emission rates and exhaust parameters from each stack test specified for the combustor(s), and the dispersion modeling techniques used in the application, as approved by the Department. A certification shall be supplied to the Department stating compliance with maximum allowable ambient concentrations with every stack test report.

Total dioxin/furan 0.30 x 10E-7 (PCDD & PCDF, expressed as 2,3,7,8 TCDD equivalents*)
 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

(b) 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.

(c) The permittee may be required 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.

* Polychlorinated dibenzo-p-dioxins ("PCDD") and polychlorinated dibenzofurans ("PCDF") expressed as 2, 3, 7, 8

**SECTION E. Source Group Restrictions.**

tetrachlorinated dibenzo-p-dioxins ("TCDD") equivalents using toxicity equivalents factors ("TEFS") as described in the Department's BAT and calculated according to PADEP approved method.

003 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91.]

(a) Volatile organic compounds (VOC) emissions, expressed as total hydrocarbons, shall not exceed 37.6 pounds per hour (lbs/hr) as an aggregate emission rate for the six (6) combustors.

(b) Compliance with this limitation shall be based on the average of three (3) consecutive test runs.

(c) This emissions cap does not provide any relief from obtaining a plan approval for any future physical change or change in the method of operation of any of the combustors. Future applicability determinations must consider the baseline actual emissions of the emissions units and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the six combustors as one emissions unit for NSR/PSD purposes, any future applicability determinations must involve all six combustors, e.g. should major NSR/PSD be triggered for any one combustor or process change, BACT/LAER is required for all six combustors.

004 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Sulfur dioxides (expressed as SO₂) emissions, per combustor, shall not exceed any of the following:

(a) SO₂: 68.45 lbs/hr; and

(b) ** SO₂: 29 ppmvd, corrected to 7% oxygen, or the pre-controlled emissions shall be reduced by no less than 80% (by weight) on a 24-hour block geometric average using CEMS, whichever is less stringent.

005 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) The toxic metal emissions per combustor shall not exceed any of the following:

(1) Emission concentration, measured in UG/DSCM (micrograms/dry standard cubic meter) and corrected to 7% oxygen:

Arsenic and Compounds	7.2
Beryllium and Compounds	0.2
Cadmium and Compounds	15.8
Hexavalent Chromium and Compounds	2.3
Nickel and Compounds	25.0
Lead and Compounds	166.0

** Mercury and Compounds 50.0 ug/dscm or 15% of the potential mercury emission concentration (85-percent reduction by weight), whichever is less stringent.

(2) Emission rate (lbs/hr) was based on an exhaust rate of 68,679 dscfm (dry standard cubic feet per minute), at 7% oxygen.

Arsenic and Compounds	0.00185
Beryllium and Compounds	0.000051
Cadmium and Compounds	0.00406
Hexavalent Chromium and Compounds	0.000591
Nickel and Compounds	0.00643
Lead and Compounds	0.0423
Mercury and Compounds	0.029

(b) Compliance with the emission concentration limits shall be documented through stack tests for each combustor. The

**SECTION E. Source Group Restrictions.**

results shall be based on ppmvd or ug/dscm, as appropriate, and corrected to 7% oxygen.

(c) Compliance with the emissions, expressed in pound/hour, shall be documented for each combustor, as follows:

(1) The Permittee must continuously monitor the load level of each municipal waste combustion unit to demonstrate that that the units are not operating at a load higher than during the annual compliance stack tests or that waste combustion units are not overloaded which could cause higher PM emission rates. The maximum demonstrated municipal waste combustor unit load, as per 40 CFR Section 60.51b, was determined during the initial performance test for dioxins/furans and shall continue to be determined during each subsequent performance test for which compliance with the dioxin/furan emission limit is demonstrated. The maximum demonstrated municipal unit load shall be the highest 4-hour arithmetic average load during four consecutive hours, as per 40 CFR Section 60.58b, during the most recent test during which compliance with the dioxin/furan limit was achieved. The Permittee must not operate a municipal waste combustion unit at loads greater than 110 percent of the maximum demonstrated load (4-hour block average) for that municipal waste combustion unit or 161,000 lbs steam/hour, whichever is less. (Permit Section E, Source Group Larger MWC, Condition #012 for each combustor unit).

(2) The permittee shall continuously monitor Opacity via COMs. In the event of opacity rising above the normal operating range, the facility will isolate the unit's cell(s) to assess the location of the opacity, perform an inspection of each baghouse cell (fabric filter bags, cages, tube sheet, etc.) if needed, complete any necessary system maintenance/repair, and return the cell(s) to service, as applicable.

Note: An opacity reading that is greater than normal operating range is defined as a COMS reading equal to or greater than 2% for any 1-hour period.

006 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) Visible air contaminants from any combustor stack shall not be emitted in such a manner that the opacity (measured by CEMS) of the emissions is equal to or greater than

- (1) 10% for a period aggregating more than three (3) minutes in any one (1) hour; or
- (2) 30% at any time.

(b) The above visible emission limitations do 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; or
- (2) when the emission results from sources specified in Condition #001 of Section C of this permit.

007 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) Total mass dioxin/furan emissions per combustor shall not exceed 30 nanograms per dry standard cubic meter (total mass), corrected to 7% oxygen.

(b) Compliance with this emission limitation shall be based on the average of three (3) consecutive test runs.

008 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) Carbon monoxide (CO) emissions per combustor shall not exceed any of the following:

- (1) 100 ppmvd, corrected to 7% oxygen, calculated as a 24-hour block arithmetic average using CEMS; and
- (2) 29.95 lbs/hr.

(b) The CO emission limit applies at all times when municipal wastes are combusted, except during periods of start-up, and shut-down. Provided that the duration of the start-up or shut-down does not exceed three (3) hours per occurrence.

(c) Compliance with the CO limit shall be determined using a 24-hour block arithmetic average. The 24-hour block arithmetic average shall be calculated from one (1) hour arithmetic averages expressed in ppmvd, corrected to 7% oxygen.

**SECTION E. Source Group Restrictions.****# 009 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

Hydrochloric acid (HCl) emissions per combustor shall be reduced by not less than 95% (by weight), on a 24-hour daily arithmetic basis. This reduction requirement shall be waived if the exhaust concentrations are less than 25 ppmvd, corrected to 7% oxygen, on a 24-hour block arithmetic average, and 36.58 lbs/hr.

010 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) Total particulate matter (filterable PM) emissions, discharged to the atmosphere from each combustor, shall not exceed:

- 5.80 lbs./hr, and
- 0.010 gr/dscf (25 mg/dscm), corrected to 7% oxygen [PA BAT standard for Municipal Waste Incinerators, Document No. 275-2101-007/ February 23, 1996 / Page 20].

(b) Compliance with the above limits shall be based on the average of three (3) consecutive test runs performed annually and in accordance with Testing Requirements for this source.

011 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) The Department reserves the right to establish and impose more stringent limits than those stated in this permit, based on the test results from each stack test performed, the CEMS results and the dispersion modeling techniques as approved by the Department.

(b) Start-up of the combustor commences with the introduction of municipal waste to 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.

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

Throughput Restriction(s).**# 012 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) Each combustor shall not be operated to exceed 161,000 lbs steam/hr, or 110% of the maximum demonstrated steam load during the most recent annual dioxin/furan performance test, whichever is less, except during the dioxin/furan performance test and the two (2) weeks preceding this test, when the steam load limitations do not apply.

(b) Only the following types of waste are permitted to be burned in the combustors:

- (1) municipal waste, as defined in 25 Pa. Code § 287.1;
- (2) municipal-like residual waste, as permitted in the Department's Waste Permit No. 400593, and the Miscellaneous Section of this permit; and
- (3) residual waste, as permitted in the Department's Waste Permit No. 400593, and the Miscellaneous Section of this permit.

(c) The residual waste (Form R waste list) accepted at the facility shall not exceed the following on a daily basis:

- (1) 10% of the total amount of waste, by weight; or
- (2) 500 tons

(d) The daily amount of residual waste and total amount of waste must be documented in accordance with the conditions of the Department's Waste Permit No. 400593.

(e) Any changes to the waste streams or types of waste shall be approved by the Department.

**SECTION E. Source Group Restrictions.****Control Device Efficiency Restriction(s).****# 013 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) Compliance with combustion temperature set forth in condition below, assures compliance with the VOC and dioxin/furan emission limits, as specified in Conditions #003 and #007 under Group Name: Large WMC, of this Section.

(i) The temperature sensors shall be located at the furnace roof position approved by DEP for each combustor. Each combustor shall be operated to maintain flue gas temperature at greater than 1800 °F for at least one (1) second in furnace combustion zone, calculated as an hourly average (1-hour block arithmetic). Auxiliary burners of each combustor shall be controlled manually or automatically to maintain the flue gas at the aforementioned temperature whenever waste is being incinerated.

(ii) The permittee shall use roof top temperature value, measured with a thermocouple located at roof top furnace floor level (elevation 166 feet, approximately one feet away from the furnace waterwall), as a surrogate indicator for flue gas temperature in the combustion zone. The roof top temperature shall be maintained at greater than 850 °F (a Department approved reference temperature value) which correlates to flue gas temperature at greater than 1800 °F for at least one (1) second in the combustor.

(iii) When a roof top thermocouple is used for providing flue gas combustion temperature, the permittee shall:

- (1) indicate location of combustion temperature sensor(s) (including elevation) in the CEMS data collecting system and all reports submitted to the Department and the US EPA;
- (2) record roof top temperature as measured in °F;
- (3) record and report flue gas combustion temperature as: measured roof top temperature value plus 950 °F;
- (4) perform a new alternative location verification and retention test for each combustor when:
 - combustion gas flow rate changes significantly;
 - thermocouple(s) for providing combustion temperature value is relocated; or
 - at the Department's request.

(b) The flue gas temperature, measured at the particulate matter control device inlet and averaged arithmetically in 4-hour block, shall not exceed 300°F or 30°F above the maximum demonstrated particulate matter control device temperature, as defined in 40 C.F.R. §60.51b, whichever is lower, except during the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, when the particulate matter control device inlet flue gas temperature limitation of 300°F is applicable.

(c) The above temperature limits apply and remain enforceable at all times, until and unless the Department grants a waiver in writing for the purpose of evaluating system performance, testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

014 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

Emissions from each combustor shall be controlled by individual dry acid gas scrubbers and pulse-jet cleaning type fabric collectors.

II. TESTING REQUIREMENTS.**# 015 [25 Pa. Code §127.512]****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 each of the combustors. All procedures and test methods, if not specified below, shall be in accordance with Department's Source Testing Manual (the current revision), or source testing procedures approved by the Department.

When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

**SECTION E. Source Group Restrictions.**

(b) The amount and type(s) of waste incinerated during a stack test shall be an adequate representation of the waste 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) total filterable particulate matter using Method 5, and condensable and filterable PM-10 using Method 202 and 201A respectively
- (2) arsenic and compounds (expressed as arsenic);
- (3) cadmium and compounds (expressed as cadmium);
- (4) hexavalent chromium and compounds (expressed as chromium);
- (5) nickel and compounds (expressed as nickel);
- (6) lead and compounds (expressed as lead);
- (7) beryllium and compounds (expressed as beryllium);
- (8) mercury and compounds (expressed as mercury);
- (9) PCDD and PCDF (expressed as 2,3,7,8 TCDD equivalents calculated according to the Department approved method and as total dioxin and furan);
- (10) VOC (expressed as total hydrocarbons);
- (11) Polycyclic aromatic hydrocarbon (PAH) compounds, including benzo(a)pyrene;
- (12) NO_x;
- (13) SO₂;
- (14) HCl;
- (15) CO; and
- (16) Visible emissions of fugitive combustion ash from the ash conveying system (Source ID 111)

(i) If the emissions of PM, or PM₁₀, or any of the toxic metals from any one of the combustors equal to or exceed 80% of the emission limitations, that combustor(s) shall be tested semiannually for each of the pollutants that equals to or exceeds 80% of the emission limitations. Testing frequency can revert back to annually when the tested emissions are less than 80% of the emission limitations for a consecutive period of 24-months, plus the permittee notifies the Department of such testing schedule reversion.

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

(d) Unless approved by the Department prior to the testing, the following procedures and test methods shall be used to determine compliance with the emission limits:

- (1) EPA reference method 1, for the sampling sites and traverse points.
- (2) EPA reference method 3 or 3A, for the gas analysis.
- (3) EPA reference methods 5, 201A/202 for PM and PM₁₀. Both the front half and back half catches are to be analyzed and reported. However, only the front half catch is to be utilized in determining compliance.
- (4) EPA reference method 9, for opacity.
- (5) EPA reference method 29, for cadmium, lead and mercury, with a minimum sample volume to be 1.7 cubic meters for mercury. The percent weight reduction for mercury emissions shall be computed using the mercury concentrations measured at the inlet and outlet of the control device, corrected to 7% oxygen, (dry basis).
- (6) EPA reference method 26, or 26A, for HCl.
- (7) EPA reference method 19, for SO₂.
- (8) EPA reference method 6, 6A, or 6C, for the RATA tests on the SO₂ CEMS.
- (9) EPA reference method 19, for NO_x.
- (10) EPA reference method 7, 7A, 7C, 7D, or 7E, for the RATA test on the NO_x CEMS.
- (11) EPA reference method 10, 10A, or 10B, for CO.
- (12) EPA reference method 23, for Dioxins/furans.
- (13) EPA reference method 22, for visible emissions of fugitive combustion ash from the ash conveying system (Source ID 111).

Each combustor shall be equipped with test ports so that periodic measurement of the 1800°F for one (1) second residence time requirement can be conducted at the Department's request.

**SECTION E. Source Group Restrictions.****(e) Schedule**

(1) 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. The test procedure shall also include the following:

- (A) amount of waste to be combusted;
- (B) composition and classification of waste;
- (C) Btu content of waste.

(2) 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.

(3) Within sixty (60) days after the source test(s), the permittee shall submit a complete test report to the Department. The test report shall also include the following which shall be recorded simultaneously with each test day:

- (A) amount of waste combusted (in ton/hr), composition and classification of waste, and BTU value of waste;
- (B) flue gas NO_x and oxygen data recorded using the CEMS and CSM; and
- (C) flue gas combustion temperature (furnace roof top temperature values plus 950 °F), recorded by the CMS.

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

(f) The permittee shall conduct annual VOC and total dioxin/furan performance tests in a normal temperature operating range, that is annual average combustion temperature ± 200 oF in the CEMS reports. The VOC and dioxin/furan performance test reports shall include hourly averaged NO_x emissions, steam production, and combustion temperature data (recorded by the CEMS) during the testing period.

(g) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the Air Quality Program Manager of the Southeast Regional Office and the PSIMS Administrator in Central Office. Any questions and/or concerns regarding source testing submissions may be sent to the PSIMS Administrator.

AQ Manager of Southeast Region
RA-EPSEstacktesting@pa.gov

PSIMS Administrator
RA-EPstacktesting@pa.gov

The following pertinent information shall be indicated on the title page of all submissions.

(1) Test Date(s)

- a. For protocols, providing the proposed date on which testing will commence or "TBD"
- b. For reports, providing the first and last dates of testing

(2) Facility Identification Number (Facility ID, or PF ID).

(3) Source ID(s) as specified in this permit

(4) Testing requirements

(5) Operating permit number

(6) If a submittal includes confidential information, the permittee shall submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

(h) Per 25 Pa. Code 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by DEP. Maximum routine operating conditions:

- a. represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions), and

**SECTION E. Source Group Restrictions.**

b. are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.

DEP is requesting that compliance testing not be stopped or postponed to avoid periods of routine operating conditions, such as the incineration of "wet waste", except during air emission testing for polychlorinated dibenzodioxins and furans (PCDDs/PCDFs), when future operations are (or would be) limited to the maximum steam flow (lbs/hour) during the testing.

III. MONITORING REQUIREMENTS.**# 016 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The Department approved Continuous Emission Monitors (CEMS) shall be operated and maintained in accordance with 25 Pa. Code Chapter 139, the Department's "Continuous Source Monitoring Manual (CSM Manual)" (the current Revision), and latest amendments ("CSM Manual") for the following:

- (1) CO monitored both upstream and downstream of the air pollution control equipment;
- (2) SO₂ monitored upstream and downstream of the air pollution control equipment;
- (3) NO_x monitored downstream of the air pollution control equipment;
- (4) HCL monitored downstream of the air pollution control equipment; and
- (5) Opacity of the exhaust gases.

(b) The following operating parameters shall be monitored and recorded continuously using the Department approved continuous monitoring system (CMS) for each combustor at the locations, if specified:

- (1) Oxygen, at both upstream and downstream of the air pollution control equipment;
- (2) Temperature of the gases exiting the combustor monitored at the furnace roof position approved by the Department;
- (3) Temperature of the gases at the inlet of each baghouse for the combustors.
- (4) The lime slurry injection rate to the dry acid gas scrubber; and
- (5) The steam load for each combustor in lb/hr and calculated in 4-hour block arithmetic averages.

(c) The permittee shall replace all thermocouples (4 units), at the furnace roof top floor level of each combustor, on a quarterly basis with those that have been certified in accordance with NIST (National Institute of Standards and Testing).

(d) The permittee shall monitor and record supplemental fuel usage on a monthly basis.

(e) The permittee shall ensure that the Data Acquisition System maintains an uninterruptible power supply until the combustors are in a "process down" mode of operation.

(f) The selected parameters that define "normal operations" for CEM reporting purposes are when the dry inlet O₂ is less than or equal to 18.0% and the steam flow is greater than or equal to 50,000 lbs/hr. If either of the conditions is not met, the CEM reports the combustor as "process down" for that minute.

(g) The Department reserves the right to require the permittee to install, operate and maintain an uninterruptible power supply (UPS) for the continuous monitoring system at the facility. The requirement to install a UPS will be based on power outages and the loss of data and the affect on the CEM system.

017 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 139.111.]

The CEMS and CMS shall be operated and maintained to achieve the following data availability standards:

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

(b) Opacity and oxygen (O₂): Greater than or equal to 95% valid hours/day, where a valid hour is defined as greater than or equal to 75% valid readings/hour (45 minutes).

**SECTION E. Source Group Restrictions.**

(c) Hydrochloric Acid (HCl), Sulfur dioxide (SO₂), and Nitrogen oxides (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/hour (45 minutes).

IV. RECORDKEEPING REQUIREMENTS.**# 018 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall maintain, on-site, the following records for a minimum of five (5) years, in either paper copy, or computer-readable format, unless an alternative format is approved by the Department.

- (a) the calendar date of each record.
- (b) all emission averages from the continuous monitoring systems, which include: all one (1) hour average SO₂, NO_x, CO, and HCl emission concentrations, combustor unit load measurements, and PM control device inlet temperatures.
- (c) all block geometric or arithmetic average concentrations, and percent reductions, as applicable, for SO₂, NO_x, CO, HCl, combustor unit load level, and PM control device inlet temperatures.
- (d) identification of the calendar dates when any of the average emissions, percent reductions, or operating parameters recorded for SO₂, NO_x, CO, HCl, combustor unit load levels, particulate matter control device inlet temperature, or opacity, are above the applicable limits, with reasons for such exceedances and a description of the corrective action taken.
- (e) identification of the calendar dates when the minimum hours of any of the data for SO₂, NO_x, CO, HCl emissions data, combustor unit load, PM control device inlet temperature and/or opacity have not been obtained, the reason for not obtaining sufficient data, and a description of corrective action taken.
- (f) the results of the daily drift tests and quarterly accuracy determinations for the SO₂, NO_x, CO, HCl CEMS.
- (g) results of all performance tests, including supporting calculations, along with maximum demonstrated unit load, and maximum PM control device inlet temperature.
- (h) the names of the combustor chief facility operator, shift supervisors, and control room operators who have been fully certified or provisionally certified, as specified in Condition #020(b), under Group Name: Large MWC, of this Section.
- (i) the supplemental fuel usage.

V. REPORTING REQUIREMENTS.**# 019 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

- (a) The permittee shall submit, to both the USEPA and the Department, semiannual reports that shall include the following information :
 - (1) A list of PM, lead, cadmium, opacity, mercury, dioxin/furans, and fugitive ash emission levels achieved during the performance tests.
 - (2) A list of the highest emission level recorded for SO₂, NO_x, CO, HCl, municipal waste combustor unit load level, and PM control device inlet temperature based on the data recorded using CMS.
 - (3) The highest opacity level measured and recorded.
 - (4) The total number of hours per calendar quarter and hours per calendar year that valid data for SO_x, NO_x, CO, HCl, municipal waste combustor unit load, or PM control device inlet temperature data were not obtained.
 - (5) The total number of hours that data for SO₂, NO_x, CO, HCl, combustor load, and PM control device inlet temperature were excluded from the calculation of average emission concentrations of parameters.
- (b) The semiannual reports shall include information from the preceding calendar year for the year being reported, in order

**SECTION E. Source Group Restrictions.**

to provide the Department with a summary of the performance of this facility over a 2-year period.

(c) The semiannual report shall include the following information for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit:

(1) SO₂, NO_x, CO, HCl, combustor load level, PM control device inlet temperature, and opacity.

(2) Any exceedance of the applicable levels for the following: PM, opacity, mercury, cadmium, lead, dioxin/furans, and fugitive ash. A copy of the test report documenting the emission levels and the corrective action taken, shall accompany the report.

(d) The semiannual reports shall be submitted electronically, on or before August 1 and February 1 following the preceding 6-month period ending each December and June, respectively.

(e) Combustion temperature values submitted in each quarterly report shall consist of actual roof top temperature values plus 950°F, the difference measured at the surrogate location and the demonstrated 1800°F for one (1) second retention time location.

(f) All CEM reports, including CEMS violations, shall be submitted to the Department within thirty (30) days after each quarter, unless otherwise approved the Department. The Department reserves the right to require the report submissions with a format acceptable to the Department.

VI. WORK PRACTICE REQUIREMENTS.**# 020 [25 Pa. Code §127.512]****Operating permit terms and conditions.****(a) Combustor Operation Requirements**

(1) 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 (based upon the surrogate temperature of 850°F as displayed on the facility CEMS) for one (1) second of retention time when the combustor is empty. All control equipment shall be operational and functioning properly prior to the introduction of solid waste into the combustor(s).

(2) During the process of all planned shut downs of each combustor, auxiliary burners shall be used to ensure that the temperature of the combustion gases does not drop below 1600°F (measured furnace roof top temperature value plus 950 °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.

(3) The charging of waste to each combustor shall automatically cease through the use of an interlock system, if:

(A) The combustor temperature measured at the furnace roof, at the Department approved location, drops below 650°F (measured furnace roof top temperature value), for a 15-minute period, or,

(B) The CO emissions exceed 600 ppmv, corrected to 7% oxygen on a dry basis for a period of fifteen (15) minutes (this requirement is waived during the startup periods), or

(C) The flue gas oxygen (as measured at the oxygen monitor upstream of the control device) level drops below 3% (wet basis or equivalent dry) for a 15-minute period, or,

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

(4) An adequate spare parts inventory shall be maintained to ensure timely repairs of major component malfunctions.

(b) ** Operator Training

(1) 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.

(2) 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

**SECTION E. Source Group Restrictions.**

40 CFR §60.17 of subpart A of this part)] or a State certification program.

(3)

a). 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.

b). If both the certified chief facility operator and certified shift supervisor are unavailable, a provisionally certified control 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:

(A) 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.

(B) 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).

(C) 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:

(i) 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.

(ii) 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.

c). 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.

(4) 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

**SECTION E. Source Group Restrictions.**

11. Reporting and recordkeeping procedures.

(5) 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.

(6) 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.

(c) Waste Management

(1) The following wastes or materials shall be removed from the tipping room floor for appropriate disposal:

(A) Unacceptable waste, visible hazardous materials, and visible unapproved residual waste as defined by 25 Pa. Code § 287.1 of the Bureau of Waste Management Regulations;

(B) Large non-combustible bulky materials, including visible automotive batteries;

(C) Combustible bulky materials.

(2) The amount of solid waste material stored in the tipping room shall be less than the amount of solid waste material which can be reasonably incinerated within 120 hours of its delivery. If there is reason to believe that the combustor(s) are not capable of incinerating the solid waste material specified in the time frame above, the Department shall be notified in accordance with the malfunction reporting condition of this permit. No additional waste material shall be accepted and all the solid waste material shall be removed, if needed, to prevent the escape of odor beyond the property line. No air shall be exhausted to the outdoor atmosphere from this building during such an occurrence without being treated in the combustor(s) unless otherwise authorized by the Department.

(3) Except recyclable materials, open storage of solid waste outside of a building is prohibited.

(4) All wastes or materials which can be airborne or spilled shall be transported in closed containers or tarped trucks.

(d) Tipping Area Management

(1) The tipping area shall be operated at a negative pressure, when any combustor is in operation. The air passing through all natural draft openings surrounding the tipping floor, including the MWC charging area, shall flow inward continuously.

(2) To ensure negative pressure on the tipping area, at a minimum, the permittee shall:

(A) limit the number of open entrance and exit doors to the tipping floor to one in each direction;

(B) close all truck delivery doors to the tipping floor between 8:00 pm and 5:00 am every day and all day on Sunday;

(C) use and maintain plastic flaps or other equivalent shielding to reduce the effective opening area on any open truck delivery door to the tipping floor; and

(D) on a daily basis, inspect and log that all roof vents over the tipping floor and combustor charging chutes are closed and that all tipping floor doors and openings not in use that day are closed.

VII. ADDITIONAL REQUIREMENTS.**# 021 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) The combustors are subject to the Pennsylvania Section 111(d)/129 State Plan for Large Municipal Waste Combustors (MWCs). This state plan was approved by the USEPA to implement 40 C.F.R. Part 60 subpart Cb requirements, as indicated in 40 C.F.R. §62.9640.

(b) The conditions, marked with "***" under this Group of Section E, are streamlined conditions which assure compliance with the State Plan with the effective date(s) specified in 40 C.F.R. §62.9642.

**SECTION E. Source Group Restrictions.**

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

- (1) the Pennsylvania State Plan for implementing 40 C.F.R. Part 60 Subpart Cb;
- (2) the streamlined permit conditions to assure compliance with the State Plan;
- (3) the Department BAT standards; and
- (4) 25 Pa. Code Sections.

(d) The design, construction, and operation of each combustor as stated in the Plan Approval Application, in accordance with the Department's BAT for MWI and its subsequent amendments issued up to the issuance of the Plan Approval and the conditions of the Plan Approval shall be adhered to. Department approval must be obtained prior to modification of any of the design, construction, and operation of each combustor.

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
101	ROTARY COMBUSTER 1		
	Emission Limit		Pollutant
	7.200 ug/DSCM	7% O2	Arsenic Coumpounds
	0.200 ug/DSCM	7% O2	Beryllium Compounds
	29.950 Lbs/Hr		CO
	100.000 PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
	15.800 ug/DSCM	7% O2	Cadmium Compounds
	2.300 ug/DSCM	7% O2	Chromium Compounds
	30.000 NG/DSCM	7% O2, total dioxin/furan	Furan
	25.000 PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)
	36.580 Lbs/Hr		Hydrogen Chloride (Anhydrous)
	166.000 ug/DSCM	7% O2	Lead Compounds
	50.000 ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
	0.420 Lbs/MMBTU		NOX
	88.560 Lbs/Hr		NOX
	180.000 PPMV	7% O2, dry basis, RACT II	NOX
	25.000 ug/DSCM	7% O2	Nickel Compounds
	29.000 PPMV	or 80% reduction, 7% O2 dry basis	SOX
	68.450 Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
	0.010 gr/DRY FT3	7% O2 dry basis, filterable PM	TSP
	5.800 Lbs/Hr	filterable PM	TSP
	37.600 Lbs/Hr	Aggregate of 6 combustors	VOC
102	ROTARY COMBUSTER 2		
	Emission Limit		Pollutant
	7.200 ug/DSCM	7% O2	Arsenic Coumpounds
	0.200 ug/DSCM	7% O2	Beryllium Compounds
	29.950 Lbs/Hr		CO
	100.000 PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
	15.800 ug/DSCM	7% O2	Cadmium Compounds
	2.300 ug/DSCM	7% O2	Chromium Compounds
	30.000 NG/DSCM	7% O2, total dioxin/furan	Furan
	25.000 PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)
	36.580 Lbs/Hr		Hydrogen Chloride (Anhydrous)
	166.000 ug/DSCM	7% O2	Lead Compounds
	50.000 ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
	0.420 Lbs/MMBTU		NOX
	88.560 Lbs/Hr		NOX
	180.000 PPMV	7% O2, dry basis, RACT II	NOX
	25.000 ug/DSCM	7% O2	Nickel Compounds
	29.000 PPMV	or 80% reduction, 7% O2 dry basis	SOX
	68.450 Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
	0.010 gr/DRY FT3	7% O2 dry basis, filterable PM	TSP

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
	5.800 Lbs/Hr	filterable PM	TSP
	37.600 Lbs/Hr	Aggregate of 6 combustors	VOC
103	ROTARY COMBUSTER 3		
	Emission Limit		Pollutant
	7.200 ug/DSCM	7% O2	Arsenic Coumpounds
	0.200 ug/DSCM	7% O2	Beryllium Compounds
	29.950 Lbs/Hr		CO
	100.000 PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
	15.800 ug/DSCM	7% O2	Cadmium Compounds
	2.300 ug/DSCM	7% O2	Chromium Compounds
	30.000 NG/DSCM	7% O2, total dioxin/furan	Furan
	25.000 PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)
	36.580 Lbs/Hr		Hydrogen Chloride (Anhydrous)
	166.000 ug/DSCM	7% O2	Lead Compounds
	50.000 ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
	0.420 Lbs/MMBTU		NOX
	88.560 Lbs/Hr		NOX
	180.000 PPMV	7% O2, dry basis, RACT II	NOX
	25.000 ug/DSCM	7% O2	Nickel Compounds
	29.000 PPMV	or 80% reduction, 7% O2 dry basis	SOX
	68.450 Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
	0.010 gr/DRY FT3	7% O2 dry basis, filterable PM	TSP
	5.800 Lbs/Hr	filterable PM	TSP
	37.600 Lbs/Hr	Aggregate of 6 combustors	VOC
104	ROTARY COMBUSTER 4		
	Emission Limit		Pollutant
	7.200 ug/DSCM	7% O2	Arsenic Coumpounds
	0.200 ug/DSCM	7% O2	Beryllium Compounds
	29.950 Lbs/Hr		CO
	100.000 PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
	15.800 ug/DSCM	7% O2	Cadmium Compounds
	2.300 ug/DSCM	7% O2	Chromium Compounds
	30.000 NG/DSCM	7% O2, total dioxin/furan	Furan
	25.000 PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)
	36.580 Lbs/Hr		Hydrogen Chloride (Anhydrous)
	166.000 ug/DSCM	7% O2	Lead Compounds
	50.000 ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
	0.420 Lbs/MMBTU		NOX
	88.560 Lbs/Hr		NOX

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
180.000	PPMV	7% O2, dry basis, RACT II	NOX
25.000	ug/DSCM	7% O2	Nickel Compounds
29.000	PPMV	or 80% reduction, 7% O2 dry basis	SOX
68.450	Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
0.010	gr/DRY FT3	7% O2 dry basis, filterable PM	TSP
5.800	Lbs/Hr	filterable PM	TSP
37.600	Lbs/Hr	Aggregate of 6 combustors	VOC
105	ROTARY COMBUSTER 5		
Emission Limit			Pollutant
7.200	ug/DSCM	7% O2	Arsenic Compounds
0.200	ug/DSCM	7% O2	Beryllium Compounds
29.950	Lbs/Hr		CO
100.000	PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
15.800	ug/DSCM	7% O2	Cadmium Compounds
2.300	ug/DSCM	7% O2	Chromium Compounds
30.000	NG/DSCM	7% O2, total dioxin/furan	Furan
25.000	PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)
36.580	Lbs/Hr		Hydrogen Chloride (Anhydrous)
166.000	ug/DSCM	7% O2	Lead Compounds
50.000	ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
0.420	Lbs/MMBTU		NOX
88.560	Lbs/Hr		NOX
180.000	PPMV	7% O2, dry basis, RACT II	NOX
25.000	ug/DSCM	7% O2	Nickel Compounds
29.000	PPMV	or 80% reduction, 7% O2 dry basis	SOX
68.450	Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
0.010	gr/DRY FT3	7% O2 dry basis, filterable PM	TSP
5.800	Lbs/Hr	filterable PM	TSP
37.600	Lbs/Hr	Aggregate of 6 combustors	VOC
106	ROTARY COMBUSTER 6		
Emission Limit			Pollutant
7.200	ug/DSCM	7% O2	Arsenic Compounds
0.200	ug/DSCM	7% O2	Beryllium Compounds
29.950	Lbs/Hr		CO
100.000	PPMV	7% O2 dry basis 24-hr block arithmetic average	CO
15.800	ug/DSCM	7% O2	Cadmium Compounds
2.300	ug/DSCM	7% O2	Chromium Compounds
30.000	NG/DSCM	7% O2, total dioxin/furan	Furan
25.000	PPMV	7% O2 dry basis on a 24 hr daily arithmetic average or 95% weight reduction	Hydrogen Chloride (Anhydrous)

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
	36.580 Lbs/Hr		Hydrogen Chloride (Anhydrous)
	166.000 ug/DSCM	7% O2	Lead Compounds
	50.000 ug/DSCM	7% O2, or 85% weight reduction	Mercury Compounds
	0.420 Lbs/MMBTU		NOX
	88.560 Lbs/Hr		NOX
	180.000 PPMV	7% O2, dry basis, RACT II	NOX
	25.000 ug/DSCM	7% O2	Nickel Compounds
	29.000 PPMV	or 80% reduction, 7% O2 dry basis	SOX
	68.450 Lbs/Hr	7% O2 and dry basis, per combustor and	SOX
	0.010 gr/DRY FT3	7% O2 dry basis, filterable PM	TSP
	5.800 Lbs/Hr	filterable PM	TSP
	37.600 Lbs/Hr	Aggregate of 6 combustors	VOC
110	LIME STORAGE SILO		
	Emission Limit		Pollutant
	0.020 gr/CF		PM10
113	EMERGENCY ENGINE		
	Emission Limit		Pollutant
	2.600 GRAMS/HP-Hr		CO
	3.000 GRAMS/HP-Hr		NOX
	0.150 GRAMS/HP-Hr		PM10

Site Emission Restriction Summary

Emission Limit		Pollutant
50.000 Tons/Yr	12-month rolling sum	VOC

**SECTION H. Miscellaneous.**

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:

- 4,000 gal. fuel oil storage tank
- 3,000 gal. nitrogen tank
- 5,200 gal. sodium hypochlorite tank
- 4,200 gal sulfuric acid tank
- 300 hp emergency diesel fire pump
- 2,500 gal diesel tank

The following is a list of wastes approvable for burning at American Ref-Fuel, as noted in the Department's Waste Permit No. 400593:

FORM "R" Residual Wastes Requiring Chemical Analyses

- Acidic Chemicals (pH<6) (RWC 301)
- Basic Chemicals (pH>8) (RWC 302)
- Combustible Chemicals (RWC 303)
- Chemical Salts (RWC 304)
- Carbon residues (decoloring, filtering) (RWC 305)
- Surface Coating (solid, semi-solid paints, polishes, adhesives, ink) (RWC 306)
- Filter Aids (only combustible filter aids) (RWC 307)
- Filter Media (RWC 308)
- Spent dyes (RWC 309)
- Detergents, cleaning agents (RWC 310)
- Off-spec products, intermediates (RWC 311)
- Wood wastes (treated wood) (RWC 403)
- Halogenated plastics (PVC, teflon, CPE) (RWC 409)
- Agricultural wastes (fertilizers, feed supplements) (RWC 411)
- Oil-contaminated waste (spent absorbent, oily rags) (RWC 503)
- Spent catalyst (RWC 505)
- Spill residues (RWC 506)
- On-site generated used oil
- Empty containers (processed by a Department approved procedure)

FORM "S" Residual Wastes with Chemical Analyses Waived

- Leather scrap wastes
- Textile wastes (yarn, fabric, fiber, and elastic)
- Carbon filters and carbon residues *
- Cosmetic wastes ***
- Finished wood waste (painted, stained, non-treated)
- Markers and paint stick shavings *
- Pharmaceutical waste ***
- Photographic waste **
- Spent cleaning rags, excluding rags containing solvent *
- Glass reinforced plastics
- Carpet/fabric scrap waste
- Cured resin waste
- Foam type waste
- Food waste
- Fresh air intake filters
- Gasket waste (unused)
- Labels/packing waste
- Non-halogenated plastic waste (polyethylene, polystyrene, polyurathane)
- Rubber elastomer waste (including waste tires, whole and processed)
- Screen waste
- Shingle scrap waste

**SECTION H. Miscellaneous.**

Styrofoam waste *
Thermal insulation waste
Personal protective equipment (unused or uncontaminated)
Untreated wood, sawdust and shavings (must be from untreated wood)
Empty containers
Linoleum waste
Plant waste
Nylon material waste
Packing/shipping material waste
Paper, cardboard waste

* no more than 10% per truckload, unless a Form S for the generator is approved.

** no more than 5% per truckload, unless a Form S for the generator is approved.

*** Subject to specific Form S approval.

May 2006. APS: 570425, AUTH: 615122. The Department renewed the operating permit for this facility and has made a change in the name of the facility from American Ref-Fuel Company of Delaware Valley, L.P. to Covanta Delaware Valley, L.P. (the federal tax ID remained the same). The following changes have taken place since the permit was last amended on 8-22-2002:

- Source 112, two (2) cold cleaning machines have been added.
- Reference to the combustion efficiency interlock for the combustors has been removed from the permit due to an earlier installation of a CEM for CO.

The facility is not subject to CAM, because the controlled sources either have applicable federal regulations that were proposed after November 15, 1990, or the emissions are monitored by CEMS. Both of these exemptions are qualified by as defined in 40 CFR §63.2(b)(i).

November, 2006. APS: 570425, AUTH: 650636. Minor permit modification to combustors to clarify wording found in the BAT that the combustors are subject to.

December 3, 2010 - AUTH: 861896. OP Renewal.

March 2008. APS: 570425, AUTH: 782425. The Department amended this permit to address a discrepancy between the applicable state BAT policy and the federal regulation for dioxin/furan testing.

January 20, 2009, (APS: 570425; AUTH: 782425) TVOP amendment.

December 2, 2010, (APS: 570425; AUTH 861896) TVOP renewal.

March 30, 2015 (AUTH ID 1067453) TVOP amendment to incorporate Plan Approval No. 23-0004A.

Nov. 6, 2015 (AUTH ID: 1099034) TVOP renewal, and incorporate an emergency engine (Source ID 113) (RFD No. 2567).

XXXX, 2023 (AUTH ID: 1338439) TVOP renewal, and incorporate the Pennsylvania RACT Phase II requirements (as defined 25 Pa. Code §§ 129.96 – 129.100).



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