

May 14, 2014

CERTIFIED MAIL NO. 7012 2210 0000 4070 7689

Delta Thermo Energy A, LLC 112 W Union Street Allentown, PA 18102-4912

Attention: Mr. Robert Van Naarden

CEO

Dear Mr. Van Naarden:

Enclosed please find the Air Quality Program Permit No. 39-00099A.

I suggest that you carefully read your permit and any special conditions accompanying it, to assure all of these conditions are satisfied. Note that the expiration date of your plan approval is 4/30/2016. If construction/modification is not completed prior to this expiration date, please submit an extension application, which can be found at the following website: http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10621. Upon completion of construction/modification, submit written notification to the Department of the date that operation is to commence as required under Section B - General Plan Approval Requirements #003 of your Plan Approval.

By copy of this letter, we are informing Allentown City and Lehigh County of the issuance of your permit.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If the Department can be of further assistance, please contact Mr. Shailesh Patel in the Air Quality Program at the above telephone number.

Sincerely,

Mr. Mark Wejkszner, P.E.

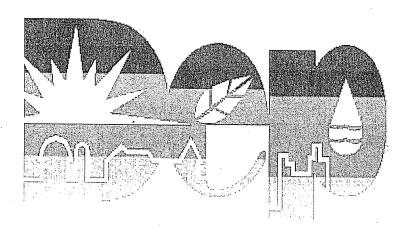
Program Manager Air Quality Program





COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office Air Quality Program



PLAN APPROVAL PERMIT # 39-00099A

DELTA THERMO ENERGY A, LLC.
Allentown City, Lehigh County

Issue Date: May 14, 2014

Expiration Date: April 30, 2016

·
.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date:

May 14, 2014

Effective Date:

May 14, 2014

Expiration Date:

April 30, 2016

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 construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval 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 plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 39-00099A

Federal Tax Id - Plant Code: 80-0494550-1

Owner Information

Name: DELTA THERMO ENERGY A, LLC.

Mailing Address: 112 W UNION ST

ALLENTOWN, PA 18102-4912

Plant Information

Plant: DELTA THERMO ENERGY A LLC/ALLENTOWN ENERGY PLT

Location: 39

Lehigh County

39001 Allentown City

SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: ROBERT VAN NAARDEN

Title: CEO

Phone: (215) 809 - 1139

Plan Approval Contact Person

Name: ROBERT VAN NAARDEN

Title: CEO

Phone: (215) 809 - 1139

[Signature]

MARK J. WEJKSZNER.

NORTHEAST REGION AIR PROGRAM MANAGER



DELTA THERMO ENERGY ALLC/ALLENTOWN ENERGY PLT



Plan Approval Description

The Plan Approval is for the construction and operation of a Energy Production facility in the City of Allentown, Lehigh County. The facility will utilize municipal solid waste (MSW) and sludge from the City of Allentown's Wastewater Treatment Plant as feedstock to produce a pulverized fuel to generate an average of 3.7 megawatts (MW) of electricity for internal use and sale.

DEP Auth ID: 970243



39-00099A



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents
Plan Approval Inventory List

Section B. General Plan Approval Requirements

#001	Definitions

#002 Future Adoption of Requirements

#003 Plan Approval Temporary Operation

#004 Content of Applications

#005 Public Records and Confidential Information

#006 Plan Approval terms and conditions.

#007 Transfer of Plan Approvals

#008 Inspection and Entry

#009 Plan Approval Changes for Cause

#010 Circumvention

#011 Submissions

#012 Risk Management

#013 Compliance Requirement

Section C. Site Level Plan Approval Requirements

C-I: Restrictions

C-II: Testing Requirements

C-III: Monitoring Requirements

C-IV: Recordkeeping Requirements

C-V: Reporting Requirements

C-VI: Work Practice Standards

C-VII: Additional Requirements

C-VIII: Compliance Certification

C-IX: Compliance Schedule

Section D. Source Level Plan Approval Requirements

D-I: Restrictions

D-II: Testing Requirements

D-III: Monitoring Requirements

D-IV: Recordkeeping Requirements

D-V: Reporting Requirements

D-VI: Work Practice Standards

D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E Source Group Restrictions

E-I: Restrictions

E-II: Testing Requirements

E-III: Monitoring Requirements

E-IV: Recordkeeping Requirements

E-V: Reporting Requirements

E-VI: Work Practice Standards

E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

F-I: Restrictions

F-II: Testing Requirements

F-III: Monitoring Requirements





SECTION A. Table of Contents

F-IV: Recordkeeping Requirements F-V: Reporting Requirements F-VI: Work Practice Standards F-VII: Additional Requirements

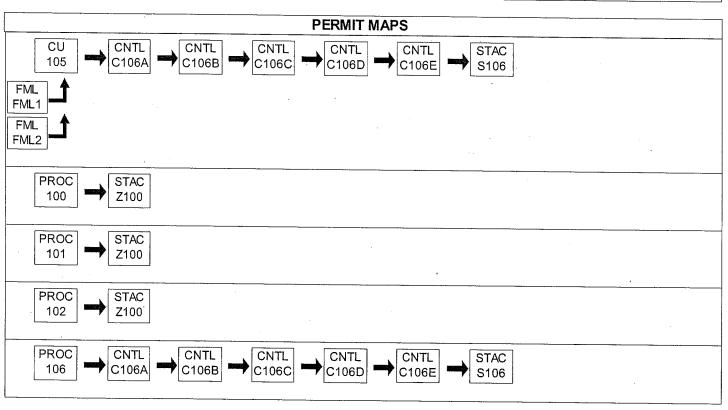
Section G. Emission Restriction Summary

Section H. Miscellaneous



SECTION A. Plan Approval Inventory List

Source ID Source Name		Capacity/Throughput Fuel/Material	
COMPLETE COMBUSTION CHAMBER (CCC)	76.280	MMBTU/HR	
TIPPING FLOOR			
SHREDDER		,	
FEEDSTOCK PIT		***	
FIVE (5) RESOURCE RECYCLING SYSTEMS (RRS)			
DRYER			
BOILER	70.400	MMBTU/HR	
STEAM TURBINE			
TWIN CYCLONE	14		
SELECTIVE CATALYTIC REDUCTION (SCR)			
BAGHOUSE			
PACKED COLUMN SCRUBBER			
4 BED CARBON ADSORPTION SYSTEM			
PULVERIZED FUEL	**		
NATURAL GAS			
STACK			
FUGITIVE		·	
	COMPLETE COMBUSTION CHAMBER (CCC) TIPPING FLOOR SHREDDER FEEDSTOCK PIT FIVE (5) RESOURCE RECYCLING SYSTEMS (RRS) DRYER BOILER STEAM TURBINE TWIN CYCLONE SELECTIVE CATALYTIC REDUCTION (SCR) BAGHOUSE PACKED COLUMN SCRUBBER 4 BED CARBON ADSORPTION SYSTEM PULVERIZED FUEL NATURAL GAS STACK	COMPLETE COMBUSTION CHAMBER (CCC) TOMPLETE COMBUSTION CHAMBER (CCC) TIPPING FLOOR SHREDDER FEEDSTOCK PIT FIVE (5) RESOURCE RECYCLING SYSTEMS (RRS) DRYER BOILER TWIN CYCLONE SELECTIVE CATALYTIC REDUCTION (SCR) BAGHOUSE PACKED COLUMN SCRUBBER 4 BED CARBON ADSORPTION SYSTEM PULVERIZED FUEL NATURAL GAS STACK	



39-00099A



SECTION B. General Plan Approval Requirements

#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this plan approval 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 § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

- (a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.
- (b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.
- (c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.
- (d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.
- (e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

- (a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.
- (b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the



SECTION B. General Plan Approval Requirements

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

- (a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.
- (b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:
 - (i) A justification for the extension,
 - (ii) Aschedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

- (a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.
- (b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.
- (c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

- (a) 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.
- (b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.



39-00099A



SECTION B. General Plan Approval Requirements

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

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, 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.

#011 [25 Pa. Code § 127.12c]

Submissions

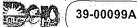
Reports, test data, monitoring data, notifications shall be submitted to the:

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

#012 [25 Pa. Code § 127.12(9) & 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 facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:





SECTION B. General Plan Approval Requirements

- (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 the Environmental Protection Agency 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 plan approval 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.

#013 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
 - (1) Construction or demolition of buildings or structures.
 - (2) Grading, paving and maintenance of roads and streets.
- (3) 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.
 - (4) Clearing of land.
 - (5) Stockpiling of materials.
 - (6) Open burning operations.
- (7) Sources and classes of sources other than those identified in paragraphs (1)-(6), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) 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 Site Condition #001 (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 limitations of Site Condition #004 shall not apply to a visible emission in any of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.



(3) When the emission results from sources specified in Site Condition #001 (relating to prohibition of certain fugitive emissions).

006 [25 Pa. Code §129.14]

Open burning operations

- (a) No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
 - (3) The emissions interfere with the reasonable enjoyment of life or property.
 - (4) The emissions cause damage to vegetation or property.
 - (5) The emissions are or may be deleterious to human or animal health.
- (b) Exceptions: The requirements of subsections (a) do not apply where the open burning operations result from:
- (1) 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.
 - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
 - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) 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 such structure.
 - (6) A fire set solely for recreational or ceremonial purposes.
 - (7) A fire set solely for cooking food.

II. TESTING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

If requested by the Department, the company shall perform stack tests in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department, within a time specified by the Department.

008 [25 Pa. Code §139.1]

Sampling facilities.

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

009 [25 Pa. Code §139.11]

General requirements.

The following provisions are applicable to source tests for determining emissions from stationary sources:





- (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 the Department.
- (2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:
 - (i) A thorough source description, including a description of any air cleaning devices and the flue.
- (ii) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
 - (iii) The location of the sampling ports.
- (iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO2, O2 and N2), static and barometric pressures.
- (v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
 - (vi) Laboratory procedures and results.
 - (vii) Calculated results.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that the control devices shall be equipped with the applicable monitoring equipment and the monitoring equipment shall be installed, calibrated, operated, and maintained according to the vendor's specifications at all times the control equipment is in use. The permittee shall monitor pressure drops across control devices to insure the pressure drop is within manufacturers specifications.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) A visual inspection of the facility shall be performed on a daily basis to determine if fugitive or visible emissions are detectable at the facility.
- (b) Visible emissions may be measured according to the methods specified in Section C, Condition #010, or alternatively, plant personnel who observe any visible emissions will report the incident of the visible emission to the Department within four hours of each incident and make arrangements for a certified observer to verify the opacity of the visible emissions.

IV. RECORDKEEPING REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of each type of fuel used on a monthly basis. The records shall include but not limited to the type of fuel, the amount used during the month, and the emissions from the use of each fuel.



014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a record of the results of the facilities visible and fugitive emissions inspections. At a minimum, the permittee shall record the date, time, results of the inspection, and individual conducting the inspection.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the pressure drops on a daily basis. The records shall be recorded in a format approved by the Department and maintained for 5 years.

V. REPORTING REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company, within one hour of discovery, shall notify the Department, at 610-861-2070, of any malfunction, recordkeeping and reporting errors, or other possible non-compliance issues, which result in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulations contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within five working days following the incident describing the malfunction, recordkeeping and reporting error or other non-compliance issue and the corrective actions being taken. The Department may take enforcement action for any violations of the applicable standards.

VI. WORK PRACTICE REQUIREMENTS.

017 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
 - (3) Paving and maintenance of roadways.
- (4) 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 other means.

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain all equipment in accordance with manufacturers specifications and maintain records of any maintenance performed.

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The use of any in-plant roads associated with the aforementioned source(s) shall not result in the emission of fugitive particulate matter in excess of the limitation specified in Section 123.1 and 123.2 of the Rules and Regulations of the Department of Environmental Protection.

020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain all equipment in accordance to manufacturing specifications and perform annual tune-ups as specified by the manufacturers.



39-00099A



SECTION C. Site Level Plan Approval Requirements

VII. ADDITIONAL REQUIREMENTS.

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Within 30 days of selection, but no less than 120 days prior to the installation, of sources & air pollution control devices, the permittee shall submit to the Department for approval, the manufacturer name and model number with design specifications of each source & control devices by submitting the appropriate pages of the plan approval application.

022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company shall not impose conditions upon or otherwise restrict the Department's access to the aforementioned source(s) and/or any associated air cleaning device(s) and shall allow the Department to have access at any time to said source(s) and associated air cleaning device(s) with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act.

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator shall comply with the following:

- a. Develop and update on a yearly basis a site specific operating manual that shall, at a minimum, address the following elements of facility's operation:
- 1) Summary of the applicable standards;
- 2) Description of basic combustion theory application to the combustor unit;
- 3) Procedures for receiving, handling, and feeding municipal waste, sludge and other fuels;
- 4) Start-up, shutdown, and malfunction procedures for all equipment.
- 5) Procedures for maintaining proper combustion air supply levels;
- 6) Procedures for operating the facility's equipment within the applicable standards;
- 7) Procedures for responding to periodic upset or off-specification conditions;
- 8) Procedures for responding to emergency events, eg.explosion, fires, etc.;
- 9) Procedures for minimizing particulate matter carry over;
- 10) Procedures for handling ash;
- 11) Procedures for monitoring facilitie's emissions, and;
- 13) Reporting and recordkeeping procedures;
- 14) Site specific training manual for plant operators.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.





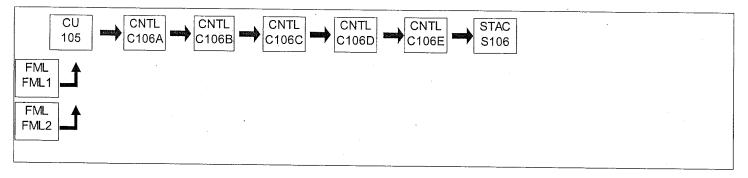
Source ID: 105

Source Name: COMPLETE COMBUSTION CHAMBER (CCC)

Source Capacity/Throughput:

76.280 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 2



RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.



DELTA THERMO ENERGY A LLC/ALLENTOWN ENERGY PL



SECTION D. Source Level Plan Approval Requirements

Source ID: 100

Source Name: TIPPING FLOOR

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

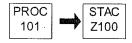


Source ID: 101

Source Name: SHREDDER

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1



RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.



DELTA THERMO ENERGY A LLC/ALLENTOWN ENERGY PL



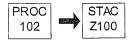
SECTION D. Source Level Plan Approval Requirements

Source ID: 102

Source Name: FEEDSTOCK PIT

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

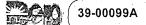
V. REPORTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.



DELTA THERMO ENERGY ALLC/ALLENTOWN ENERGY PLT



SECTION D. Source Level Plan Approval Requirements

Source ID: 103

Source Name: FIVE (5) RESOURCE RECYCLING SYSTEMS (RRS)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

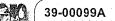
V. REPORTING REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.



DELTA THERMO ENERGY ALLC/ALLENTOWN ENERGY PLT



SECTION D. Source Level Plan Approval Requirements

Source ID: 104

Source Name: DRYER

Source Capacity/Throughput:

RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section.B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

DEP Auth ID: 970243



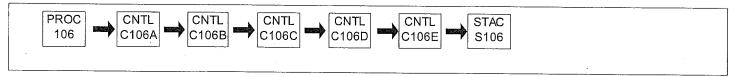
Source ID: 106

Source Name: BOILER

Source Capacity/Throughput:

70.400 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 2



RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.







Source ID: 107

Source Name: STEAM TURBINE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 2

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval 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 plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

DEP Auth ID: 970243



Group Name:

GROUP 1

Group Description: Fuel Preparation Area

Sources included in this group

ID	Name
100	TIPPING FLOOR
101	SHREDDER
102	FEEDSTOCK PIT
103	FIVE (5) RESOURCE RECYCLING SYSTEMS (RRS)

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

1. The operation of all associated equipment shall at all times be in compliance with 25 PA Code Section 123.1.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The storage and handling of the material associated with the aforementioned source(s) shall not at any time result in the emission of fugitive air contaminants in excess of the limitations specified in Section 123.1 of chapter 123 of the Rules and Regulations of the Department of Environmental Protection.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The use of any in-plant roads associated with the aforementioned source(s) shall not results in the emission of fugitive particulate matter in excess of the limitations specified in Sections 123.1 and 123.2 of Chapter 123 of the Rules and Regulations of the Department of Environmental Protection.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Control of fugitive particulate matter emissions from the vehicle used to transport MSW and sludge may include, but is not limited to the following measures:

- I. Use of completely enclosed vehicles.
- II. Tarping the vehicle;
- III. Maintaining the vehicle body in such a condition that any leaks of material are prevented;
- IV. Spraying the materials in the vehicle with a chemical dust suppressant;
- V. Washing and dewatering truck tires and underbody.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

and the first fields the second reduction is a



39-00099A



SECTION E. Source Group Plan Approval Restrictions.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. Large, bulky non-combustibles, (e.g., water heaters, refrigerators) and difficult to burn, bulky combustible materials, (e.g., mattresses, sofas), and visible automotive batteries shall be excluded from the refuse charged to the RRS unit.
- 2. The tipping area shall be totally enclosed and operated at a negative pressure to prevent the escape of malodors. The air shall be used as primary combustion air in the combuster. Open storage of municipal waste is prohibited.
- 3. Open topped refuse trucks must be appropriately covered. Any such truck not so equipped shall be denied access. Notice of this requirements shall be conspicuously posted. Similarly all haulers of material off the site shall be required to tarp or otherwise cover their loads.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. All operations related to MSW and sludge receiving from trucks shall be conducted inside the building and shall be equipped with doors, which shall be shut during MSW and sludge unloading operations from trucks to receiving pit to create a total enclosure.
- 2. All equipment associated with MSW & sludge receiving operations, which are not entirely located inside a building, shall be fully enclosed..

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

In Plant Roads & Trucks

- A. In order to prevent fugitive particulate matter resulting from the use of the in plant roads from becoming airborne, the company shall adhere to the following plan:
- 1. All paved in plant roads shall be swept on as-needed basis, weather permitting.
- 2. Water and/or chemicals to be applied on all paved and unpaved inplant roads as needed to control the fugitive emissions.
- 3. The company shall keep a log of the dates of road sweeping or cleaning.
- B. In order to prevent fugitive particulate matter resulting from truck traffic, the company shall adhere to the following plan:
- 1. All MSW and sludge delivery trucks must be tarped or enclosed when transporting the MSW and sludge to the plant facility.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall keep on hand such equipment and materials as are necessary to take reasonable action (including but not necessarily limited to the application of water, oil or chemicals) to prevent fugitive particulate matter resulting from the use of any roadways and/or material stockpiling operations associated with the plant from becoming airborne and shall be used, as

necessary, to prevent such fugitive particulate matter from becoming airborne.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).



39-00099A



SECTION E. Source Group Plan Approval Restrictions.

Group Name:

GROUP 2

Group Description: Energy Production Plant

Sources included in this group

ID Name	
105 COMPLETE COMBUSTION CHAMBER (CCC)	
106 BOILER	
107 STEAMTURBINE	

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §§127.1 and 127.12(a)(5), the Owner or Operator shall limit the emissions from the facility to the following:

- 1. PM- 0.39 lb/hr, 1.5 tons/yr in any 12- month period, rolling monthly.
- 2. NOx- 1.3 lb/hr, 5.0 tons/yr in any 12- month period, rolling monthly.
- 3. HCL- 0.13 lb/hr, 0.5 tons/yr in any 12- month period, rolling monthly.
- 4. CO- 3.5 lb/hr, 13.4 tons/yr in any 12- month period, rolling monthly.
- 5. VOC- 1.04 lb/hr, 4.0 tons/yr in any 12- month period, rolling monthly.
- 6. SOX- 1.89 lb/hr, 7.3 tons/yr in any 12- month period, rolling monthly.
- 7. Hg- 0.0015 lb/hr, 0.006 tons/yr in any 12- month period, rolling monthly.
- 8. HF- 0.12 lb/hr, 0.46 tons/yr in any 12- month period, rolling monthly.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §§127.1 and 127.12(a)(5), the Owner or Operator shall limit the emission of ammonia for selective catalytic reduction (SCR) system exhaust to 5 ppmvd, measured dry volume corrected to 15% oxygen.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Technology provision of 25 Pa. Code §§127.1 and 127.12(a)(5), visible emissions shall not exceed 10 percent opacity for periods aggregating more than 3 minutes in any 60-minute period, except during startup, when visible emissions may not exceed 20 percent opacity for periods aggregating more than 3 minutes in any 60-minute period. Visible emissions may not equal or exceed 30 percent opacity at any time.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. The company shall maintain minimum pressure drop across the wet scrubber, which is calculated as the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the emission limitations.
- 2. The company shall maintain minimum scrubber liquor flow rate, which is calculated as the average liquor flow rate at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.
- 3. The company shall naintain minimum scrubber liquor pH, which is calculated as the average liquor pH at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with the emission limitations.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Technology (BAT) provisions of 25 Pa. Code §§127.1 and 127.12(a)(5), the Owner or



39-00099A



SECTION E. Source Group Plan Approval Restrictions.

Operator shall limit the emissions from the facility to the following:

- 1. Lead- 0.20 milligrams/dscm at 7% O2.
- 2. Dioxins/Furans (total mass basis)- 13 nanograms/dscm at 7% O2
- 3. Arsenic and compounds 7.2 ug/dscm at 7% O2
- 4. Beryllium and compounds 0.2 ug/dscm at 7% O2
- 5. Cadmium and compounds 15.8 ug/dscm at 7% O2
- 6. Hexavalent chromium and compounds 2.3ug/dscm at 7% O2
- 7. Nickel and compounds 25.0 ug/dscm at 7% O2

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The exhaust gas temperature, measured at the inlet to the final particulate control device, shall not exceed more than 30 degrees Fahrenheit above the maximum demonstrated particulate matter control device temperature measured during the most recent dioxins/furans compliance test or 300 degrees Fahrenheit, whichever is more stringent. The compliance will be determined on a 4-hr block arithmetic average.

The requirement that the exhaust gas temperature be maintained below 300 degrees Fahrenheit may be waived if a satisfactory demonstration is made that an equivalent control of condensable heavy metals and toxic organics can be achieved at higher exhaust temperature through the use of alternate technologies.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The boiler is subject to 40 CFR Part 63 Subpart JJJJJJ and 40 CFR Part 60 Subpart Dc, of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of these Subparts.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11196]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my compliance dates?

Pursuant to the requirements of 40 CFR 63.11196(c) – Combustor must achieve compliance with the provisions of 40 CFR 63 Subpart JJJJJJ upon start-up.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

How do I demonstrate initial compliance with the work practicestandard, emission reduction measures, and management practice?

Pursuant to the requirements of 40 CFR 63.11214(b) – conduct a performance tune-up in accordance with 40 CFR 63.11223(b) and submit a signed statement in the Notification of Compliance status report that indicates that a tune-up of combustor has been conducted. In accordance with 40 CFR 63.9(h)(2)ii, the Notification of Compliance status must be submitted with 60 days of completion of the initial tune-up.

Operation Hours Restriction(s).

010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The emission limits apply at all times except during periods of combustion unit startup, shutdown, or malfunction.
- (b) Each startup, shutdown, or malfunction must not last for longer than 3 hours.
- (c) A maximum of 3 hours of test data can be dismissed from compliance calculations during periods of startup, shutdown, or malfunction.
- (d) During startup, shutdown, or malfunction periods longer than 3 hours, emissions data cannot be discarded from



compliance calculations and all provisions under §60.11(d) apply.

Throughput Restriction(s).

011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The maximum heat input to the combustor shall not exceed 76.28 million Btu's per hour at any time from firing pulvarized fuel.

012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The steam load flow rate shall not exceed a level greater than 110% of the maximum demonstrated load achieved during the most recent dioxin/furan compliance test. Steam flow measured in pounds per hour shall be calculated in 4-hour block arithmetic averages.

Control Device Efficiency Restriction(s).

013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Control Technology provision of 25 Pa. Code §§127.1 and 127.12(a)(5), the carbon adsorption unit shall meet the following limitations:

(a) Removal efficiency--- 90 % removel efficiency for the mercury.

II. TESTING REQUIREMENTS.

014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. Within 120 days of achieving the maximum firing rate, but no later than 180 days after the initial startup, a stack test shall be performed in accordance with the provision of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection to demonstrate the compliance with the emission limitation set by the conditions above for the pollutants including opacity, heavy metals and back and front half for particulate matters emissions. The stack test shall be performed while the aforementioned source is operating at the maximum rated capacity as stated on the application. If testing is performed at a rate less than maximum rated capacity, the operation is restricted to the process-input rate of testing at such level until a subsequent compliance test is performed at a maximum rated capacity.
- 2. At least sixty (60) calendar days prior to commencing an emission testing program required by this permit, a test protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- 3. At least fifteen (15) calendar days prior to commencing an emission testing program required by this permit, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Written notification shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring. The notification shall not be made without prior receipt of a protocol acceptance letter from the Department. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing. In addition, the emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- 4. A complete test report shall be submitted to the Department no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program.
- 5. A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:



- a. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings;
- b. Permit number(s) and condition(s) which are the basis for the evaluation;
- c. Summary of results with respect to each applicable permit condition; and
- d. Statement of compliance or non-compliance with each applicable permit condition.

015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) Initial Application (Phase I): Proposal[s] containing information as listed in the Phase I section of the Department's Continuous Source Monitoring Manual for the Continuous Emissions Monitoring Systems must be submitted at least 180 days prior to the planned initial source startup date.
- (b) Performance Testing (Phase II): Testing as listed in the Phase II section of the Department's Continuous Source Monitoring Manual must be completed for the Continuous Emissions Monitoring Systems no later than 180 days after initial source startup date and no later than 60 days after source achieves normal process capacity.
- (c) Final Approval (Phase III): The final report of testing as listed in the Phase III section of the Department's Continuous Source Monitoring Manual must be submitted to the Bureau no later than 60 days after completion of testing.
- (d) The owner or operator of the source shall not be issued an operating permit until the Continous Emissions Monitoring System has received Phase III approval, in writing from the Department, when installation of a Continous Emissions Monitoring System is made a condition of the plan approval. Until Phase III Department approval is obtained, operation shall be covered solely under condition of a plan approval.

016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The company shall conduct initial and annual stack tests to measure the emission levels of dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash. Conduct each annual stack test no later than 13 months after the previous stack test.
- (b) You may test less often if all stack tests for a given pollutant over 3 consecutive years show you comply with the emission limit. In that case, you are not required to conduct a stack test for that pollutant for the next 2 years. However, you must conduct another stack test within 36 months of the anniversary date of the third consecutive stack test that shows you comply with the emission limit. Thereafter, you must perform stack tests every 3rd year but no later than 36 months following the previous stack tests. If a stack test shows noncompliance with an emission limit, you must conduct annual stack tests for that pollutant until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant. The provision applies to all pollutants subject to stack testing requirements: dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash.

III. MONITORING REQUIREMENTS.

017 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. The company shall ensure that SCR, baghouse, cyclone, scrubber, & carbon beds shall be equipped with the applicable monitoring equipment and the monitoring equipment shall be installed, calibrated, operated, and maintained according to the vendor's specifications at all times the control devices are in operation or in use.
- 2. Mechanical gauges shall be installed and maintained to indicate, in inches of water column, the static pressure differential across the SCR, baghouse, cyclone, scrubber, & carbon beds.

018 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

A continuous process monitoring system (CPMS) to control the injection of urea solution rate shall be installed, operated, maintained, and calibrated in accordance with the manufacturer's specifications.





019 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage for the combustor source ID no.105.

020 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall provide or install equipment so that at the request of the Department the following can be measured.

- a. Pressure drop across the packed column scrubber, utilizing a differential manometer, or equivalent.
- b. Scrubbing solution flow rate to packed column scrubber, utilizing a rotameter or equivalent.
- c. pH of the scrubbing liquid.

021 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) The permittee shall install, operate and maintain continuous emissions monitoring systems for HCI, CO, CO2, SO2, H2O, O2, NOx, ammonia, and opacity to convert data to required units in compliance with 25 Pa. Code Chapter 139 Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources). Results of the opacity monitoring shall be submitted to the Department on a regular basis in compliance with Chapter 139 Subchapter C.
- b) The permittee shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with 25 Pa. Code Chapter 139, Subchapter C.
- c) Continuous nitrogen oxides monitoring systems installed under the requirements of the section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The following continuous emission monitoring systems must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the 'Submittal and Approval', 'Record Keeping and Reporting', and 'Quality Assurance' requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.
- 1. Continous Emissions Monitoring System #1
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: CO
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard # 1: 3.5 lb/hr
- (a) Emission Standard Averaging Period Description: 3-hour rolling block average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No
- 2. Continous Emissions Monitoring System #2
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported:NOX
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard # 1: 1.3 lb/hr
- (a) Emission Standard Averaging Period Description: 3-hour rolling block average, calculated once per hour





- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No
- 3. Continous Emissions Monitoring System #3
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: CO2
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard # 1: None
- (a) Emission Standard Averaging Period Description: Monthly Sum
- 4. Continous Emissions Monitoring System #4
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: SO2
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards- 1.89 lb/hr
- (1) Emission Standard #1:1.89 lb/hr
- (a) Emission Standard Averaging Period Description: 3-hour rolling block average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No
- 5. Continous Emissions Monitoring Systems #5
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: HCL
- (c) Units of Measurement to be Reported: lb/hr
- (d) Moisture Basis of Measurement to be Reported:
- (e) Correction basis of Measurements to be Reported: none
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard # 1: 0.13 lb/hr
- (a) Emission Standard Averaging Period Description: 3-hour rolling block average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No
- 6. Continous Emissions Monitoring System #6
- (a) Source Combination to be Monitored: Comustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: Ammonia
- (c) Units of Measurement to be Reported: PPM
- (d) Moisture Basis of Measurement to be Reported: dry
- (e) Correction basis of Measurements to be Reported: 15% O2
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard #1:5 PPM
- (a) Emission Standard Averaging Period Description: 3-hour rolling block average, calculated once per hour
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No





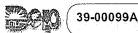
- 7. Continous Emissions Monitoring System #7
- (a) Source Combination to be Monitored: Combustor chamber/Boiler/Turbine
- (b) Parameter to be Reported: Opacity
- (c) Units of Measurement to be Reported:%
- (d) Moisture Basis of Measurement to be Reported: None
- (e) Correction basis of Measurements to be Reported: None
- (f) Data Substitution Required: No
- (g) Emission Standards-
- (1) Emission Standard # 1: 10 %
- (a) Emission Standard Averaging Period Description: 3 minute in any 60-minute period.
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No
- (2) Emission Standard # 2: 30 % at any time
- (a) Emission Standard Averaging Period Description: none
- (b) Emission Standard Direction: Violation if greater than emission standard value
- (c) Variable Emission Standard: No

023 [25 Pa. Code §127.12b]

Plan approval terms and conditions,

This section applies to monitoring systems as defined in the manual referenced at 139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under section 4 of the act(35 P. S. 4004).

- (1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual," available from the Department shall be utilized to obtain Department approval. This publication includes:
- (i) Installation requirements.
- (ii) Performance specifications.
- (iii) Test procedures.
- (iv) Reporting requirements.
- (v) Quality assurance requirements.
- (vi) Administrative procedures for obtaining Department approval.
- (2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of persons qualified by training and experience.
- (3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.
- (4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the manual referenced in 139.102.
- (3). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.
- (5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the manual referenced in 139.102(3). The records shall be maintained for 5 years and be available for inspection by Department personnel.
- (6) The owner of a monitored source shall provide permanent sampling facilities as specified in 139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.





- (7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the manual referenced in 139.102(3).
- (8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 139.102.
- (9) The Department's approval will be based on the criteria specified in the manual referenced in 139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.
- (10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than 1 hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within 2 hours of the malfunction.
- (11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the manual referenced in 139.102(3).
- (12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title, in a plan approval or permit condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under section 4 of the act. For purposes of calculating data availability, "process down" time, as specified in the manual referenced in 139.102(3), shall be considered valid time.
- (i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.
- (14) Monitoring systems shall comply with the applicable performance specifications section of the manual referenced in 139.102(3). The Department has the authority to determine which of the performance specifications are applicable.
- (15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.
- (16) The requirements of this section apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the following operating parameters:

(a) Temperature of flue gases at the inlet of particulate matter air pollution control device.

025 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a). The permitte shall install, calibrate, maintain, and operate a device to continuously measure the temperature of the flue gas stream at the inlet of each particulate matter control device.

026 [25 Pa. Code §127.12b]

Plan approval terms and conditions.



The permittee shall adhere to the following sampling plan for manufactured fuel:

- (a) A grab sample shall be obtained from the manufactured fuel from RRS every shift for a total of 21 grab samples per 7-day period. The 21 samples shall be composited into one sample.
- (b) The weekly composite sample shall be analyzed for the following: analysis of 11 metals (Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Lead, Manganese, Mercury, Nickel, and Selenium) chlorine, fluorine, nitrogen, sulfur, volatile organic compounds (specifically, benzene, toluene, ethyl benzene, xylenes and styrene), semi-volatile organic compounds (polycyclic aromatic hydrocarbons, PAHs), higher heating value (BTU/lb), moisture, and ash. Minimum sample volume must be 200 grams per sample.
- (c) The Department may reduce the frequency of sampling analysis, if the fuel analysis results shows consistency of the constituents contains in the manufactured fuel.

IV. RECORDKEEPING REQUIREMENTS.

027 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall record the total amount of fuel consumption for each type of fuel. The data recorded shall include, but not be limited to:

- (1) The date of operation of the combuster.
- (2) The rate of fuel consumption (In Tons or ft3)
- (3) Total quantity of each fuel used.

The measurements, records and other data shall be maintained in accordance with General State Only Requirements #020 and shall be made available to the Department upon the request.

028 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall record the pressure drop across the control devices. At a minimum these recordings shall be taken once per week, while the sources and control devices are in operation. The recordings shall be maintained in a logbook and made available to the Department upon request.

029 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All required records shall be kept for a five (5) year minimum period and shall be made available to the Department upon request.

030 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep record on a monthly basis to verify compliance with NOx, CO, SOX, PM, Hg and VOC emissions limitations for the facility.

031 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The company shall maintain a log of all preventative maintenance inspections of the source and control device(s). The inspection logs, at a minimum, shall contain the dates of the inspections, the name of the person performing the inspection, any mechanical repairs and/or adjustments, any potential problems or defects that were encountered, and thesteps taken to correct them.

032 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(5) and 139.101(12), 139.103,139.108 or 139.111)]

(a) The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), (and) the 'Record Keeping and Reporting' requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.





- (b) Records shall be retained for at least 5 years and shall be made available to the Department upon request.
- (c) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

033 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner or Operator shall record each start-up and shutdown, including date and times of each event.

034 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The combustor unit shall also comply with the following, subparagraphs a. through e. and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- a. The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage.
- b. The permittee shall comply with the recordkeeping and certification requirements in accordance with 40 CFR §§60.46c(e), 60.42c(h) and 60.48c(f)(1). Reports shall be submitted on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period (this does not apply to gas-fired units).
- c. The permittee shall maintain daily fuel consumption records in accordance with 40 CFR §60.48c(g).
- d. Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR §§60.48c(d), 60.48c(e)(11) and 60.48c(j). The initial semi-annual report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test. Each subsequent report shall be postmarked by the 30th day following the end of the reporting period (this does not apply to gas-fired units).
- e. Pursuant to 40 CFR §60.4, the permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to:

Air Enforcement Branch, Mail Code 3AP12 US EPA, Region III 1650 Arch Street Philadelphia PA 19103-2029

035 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my notification, reporting, and recordkeeping requirements?

Pursuant to the requirements of 40 CFR 63.11225(c) – maintain records as specified in 63.11225(c) paragraphs c(1-7). Records shall be maintain for 5 years.

V. REPORTING REQUIREMENTS.

036 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility is subject to the requirements listed in 40 CFR Part 98 for Greenhouse gas reporting rules, the permittee shall comply with all applicable requirements by applicable dates.

037 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Any changes in the location of the aforementioned sources, or any changes in the process or control equipment would be consider a modification and would require the submittal of an amended application for plan approval in accordance with the provisions of 25 PA Code 127.11 and 127.12.

038 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall keep reports at the site for the Department personel verification that include the supporting calculations to verify compliance with the NOx, CO, SOX, PM, Hg and VOC emissions limitations for boiler in any 12 consecutive month



period.

039 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Any notification as a result of any condition herein should be directed to:

Mark J. Wejkszner, P.E. Air Quality Program Manager Department of Environmental Protection 2 Public Square Wilkes-Barre, PA 18701-1915

040 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(10) and 139.101(12), 139.103, 139.108 or 139.111)]

- (a) The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), (and) the "Record Keeping and Reporting" requirements as established in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.
- (b) The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.
- (c) Initial quarterly reports following system certification shall be submitted to the Department within 35 days following thedate upon which the Department notifies the owner or operator, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.
- (d) Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.
- (e) Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.
- (f) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

041 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility shall submit semi-annual reports no later than March 1 for the January 1 thru December 31 of the previous year period and by September 1 for the July 1 of the previous year thru June 30 of the concurrent year period. The report shall include:

1. The greenhouse gas and emissions including emission calculations from all air-contaminant sources, on a monthly basis, in order to demonstrate compliance with the emission limitations for all sources at the facility.

042 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The combustor is subject to 40 CFR Part 63 Subpart JJJJJJ and 40 CFR Part 60 Subpart Dc, of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subparts. Submit copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Associate Director
Office of Air Enforcement and Compliance, 3AP20
US EPA, Region III
1650 Arch Street



Philadelphia, PA 19103

VI. WORK PRACTICE REQUIREMENTS.

043 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. The aforementioned source(s) may only be operated as long as the associated air pollution control devices are operated and maintained in accordance with the specifications set forth in the respective plan approval(s), and the application(s) submitted for said plan approval(s) (as approved by the Department), and in accordance with any conditions set forth herein.
- 2. The company shall perform an annual adjustment and/or tune-up on the combustion process as per manufacturer specifications. The sources shall be operated and maintained in accordance with the manufacturers specification and with good air pollution control practices.
- 3. The company shall maintain and operates the air pollution control equipment and sources in accordance with good engineering practice.

044 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Dust collected in the baghouse filters & cyclone shall be discharged into closed containers only.

045 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The storage and handling of the material collected in the air cleaning device(s) associated with the aforementioned source(s) shall not at any time result in the emission of fugitive air contaminants in excess of the limitations specified in Section 123.1of chapter 123 of the Rules and Regulations of the Department of Environmental Protection.

046 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall keep on hand a sufficient quantity of spare baghouse bags for the baghouse(s) associated with the aforementioned source(s) in order to be able to immediately replace any bags requiring replacement due to deterioration resulting from routine operation of the source(s) and baghouse(s).

047 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- 1. The control devices shall be properly installed, operated, and maintained. Manufacturer's instructions, if available, shall be kept on site and readily available to Department representatives.
- 2. All control devices shall be inspected and/or repaired according to the operation and maintenance manual or more frequently as indicated by monitoring devices or other indication of equipment failure.

048 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The permittee shall perform a daily operational inspection of the source until such time as the Department approves a work practice inspection protocol submitted by the permittee. After Departmental approval, the permittee shall perform periodic inspections of the significant source equipment and emission controls in accordance with the approved work practice inspection protocol.
- (b) All gauges employed by the permittee to monitor the required control device operating parameters shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (+/- 2%) of full scale reading.
- (c) The permittee shall operate the control device(s) at all times this source is in operation once operating parameters (temperature, flow, etc.) are sufficient for proper control device operation.
- (d) The permittee shall maintain and operate this source and the control device(s) in accordance with the manufacturer's specifications, the manufacturer's preventative maintenance schedule, and good air pollution control practices. The facility





shall maintain a copy of the manufacturer's preventative maintenance schedule on-site.

- (e) The SCR system shall be designed so it will not inject urea solution into the system when the inlet temperature to the catalyst is less than the minimum catalyst temperature to be established as part of the O&Mplan.
- (f) Prior to commencement of operations, the permittee shall develop and submit to the Department for approval a Risk Management Plan (RMP) meeting the requirements of Clean Air Act Section 112(r) and 40 CFR 68 Subpart G, with respect to the storage of aqueous ammonia if the permittee intends to store aqueous ammonia with a concentration of 20% or greater such that the quantity of ammonia present at the facility at any time exceeds 20,000 pounds, and the permittee shall implement the Department approved RMP.

049 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 139.101(1)(iv), 139.101(2), 139.101(3),139.101(4), 139.101(6), 139.101(7), 139.101(8), 139.101(12), 139.101(14) and 139.101(15))]

- (a) Continuous Emission Monitoring Systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.
- (b) Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.
- (c) Data Availability Standards: Continuous emission monitoring shall meet the following minimum data availability requirements:
- 1. In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:
- (a) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies, shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001; or
- (b) In each calendar quarter, at least 95% of the hours shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.
- 2. Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with the regulations.
- 3. Emission Standard(s) To Which Data Availability Standard applies:
- (a) CO (lb/hr)
- (b) NOx (lb/hr)
- (c) CO2 (lbs)
- (d) Ammonia (ppmvd)
- (e) SO2 (lb/hr)
- (f) HCL (lb/hr)
- (g) Opacity (%)

050 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following conditions are related to the GHG Tailoring Rule (40 CFR 51 and 52)

(a) The permittee shall incorporate instrumentation and control systems that will allow plant efficiency to be optimized to the maximum extent practicable. To maintain efficient operating characteristics, these systems shall be periodically maintained in accordance with the permittee's Preventative maintenance Program.



(b) Facility shall develop a site Preventative Maintenance Program to maintain plant operating efficiency.

051 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11205]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

What are my general requirements for complying with this subpart?

Pursuant to the requirements of 40 CFR 63.11205(a) – at all times, the company must operate and maintain combustor unit in a manner consistent with safety and good air pollution control practices for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

052 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The source is subject to the following:
- 1. Risk Management Program (40 CFR 68) (Applicable if greater than 20,000 lbs of aqueous ammonia at concentrations of 20% or greater is stored at facility)
- (b) Any information required to be submitted as part of the above conditions should be submitted to:

Mark J Wejkszner Air Quality Program Manager Air Quality Program Northeast Regional Office 2 Public Square, Wilkes-Barre, PA 18701-1915.

(c) In accordance with 40 CFR 60.4 copies of all requests, reports, applications submittals and other communications shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

Air Quality Program Manager Pa DEP, Air Quality Program Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18701-1915

and

EPA Region III
Associate Director, Office of Air Enforcement and Compliance Assistance (3AP20)
1650 Arch Street
Philadelphia, PA 19103

(d) Issuance of an operating permit is contingent upon satisfactory compliance with conditions numbered above, upon the source being constructed and operated as stated in the application, and upon the satisfactory demonstration that the emissions from the source will not be in violation of applicable Rules & Regulations of the Department of Environmental Protection.

053 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

- 1. The permittee shall perform the emissions monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 114(a)(3) (42 U.S.C.A§§ 7414 (a)(3)) or 504(b) (42 U.S.C.A§§ 7661c(b)) of the Clean Air Act.
- 2. Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, quality assurance,



recordkeeping and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, Subpart C, Article III (relating to air resources), including Chapter 139 (relating to sampling and testing). The permittee shall also comply with applicable requirements related to monitoring, quality assurance, reporting and recordkeeping required by the Clean Air Act including §§ 114(a)(3) and 504(b) and regulations adopted thereunder, unless otherwise required by this permit.

054 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For each month during the first eleven months of operation including the shakedown period, that the facility must show the sum of the preceding monthly emissions is less than the 12-month rolling limits.

DEP Auth ID: 970243





SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

DEP Auth ID: 970243





SECTION H. Miscellaneous.



EC 10

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