

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: December 10, 2019 Effective Date: December 10, 2019

Expiration Date: December 9, 2024

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

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

TITLE V Permit No: 09-00016

Federal Tax Id - Plant Code: 23-3064219-12

	Owner Information			
Name: EXELON GENERATION CO LLC Mailing Address: 1 INDUSTRIAL HWY EDDYSTONE, PA 19022-1524				
	Plant Information			
Plant: EXELON GENERATION CO/CROYDON GI	EN STA			
Location: 09 Bucks County	09001	Bristol Township		
SIC Code: 4911 Trans. & Utilities - Electric Services				
Responsible Official				
Name: JOSEPH M DICK				
Title: GENERAL MGR				
Phone: (610) 595 - 8101				
Р	ermit Contact Person			
Name: CHANDRA COPPLIN				
Title: SR PROG MGR – AIR QUALITY				
Phone: (605) 219 - 9510				
[Signature]				
JAMES D. REBARCHAK. SOUTHEAST REGION AIR PROGRAMMANAGER				



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents Site Inventory List

Section B. General Title V Requirements

#001	Definitions
#001	

- #002 Prohibition of Air Pollution
- #003 Property Rights
- #004 Permit Expiration
- #005 Permit Renewal
- #006 Transfer of Ownership or Operational Control
- #007 Inspection and Entry
- #008 Compliance Requirements
- #009 Need to Halt or Reduce Activity Not a Defense
- #010 Duty to Provide Information
- #011 Reopening and Revising the Title V Permit for Cause
- #012 Reopening a Title V Permit for Cause by EPA
- #013 Operating Permit Application Review by the EPA
- #014 Significant Operating Permit Modifications
- #015 Minor Operating Permit Modifications
- #016 Administrative Operating Permit Amendments
- #017 Severability Clause
- #018 Fee Payment
- #019 Authorization for De Minimis Emission Increases
- #020 Reactivation of Sources
- #021 Circumvention
- #022 Submissions
- #023 Sampling, Testing and Monitoring Procedures
- #024 Recordkeeping Requirements
- #025 Reporting Requirements
- #026 Compliance Certification
- #027 Operational Flexibility
- #028 Risk Management
- #029 Approved Economic Incentives and Emission Trading Programs
- #030 Permit Shield

Section C. Site Level Title V 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 Title V 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





SECTION A. Table of Contents

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

Section E. Alternative Operating Scenario(s)

E-I: Restrictions

E-II: Testing RequirementsE-III: Monitoring RequirementsE-IV: Recordkeeping Requirements

E-V: Reporting Requirements E-VI: Work Practice Standards E-VII: Additional Requirements

Section F. Emission Restriction Summary

Section G. Miscellaneous





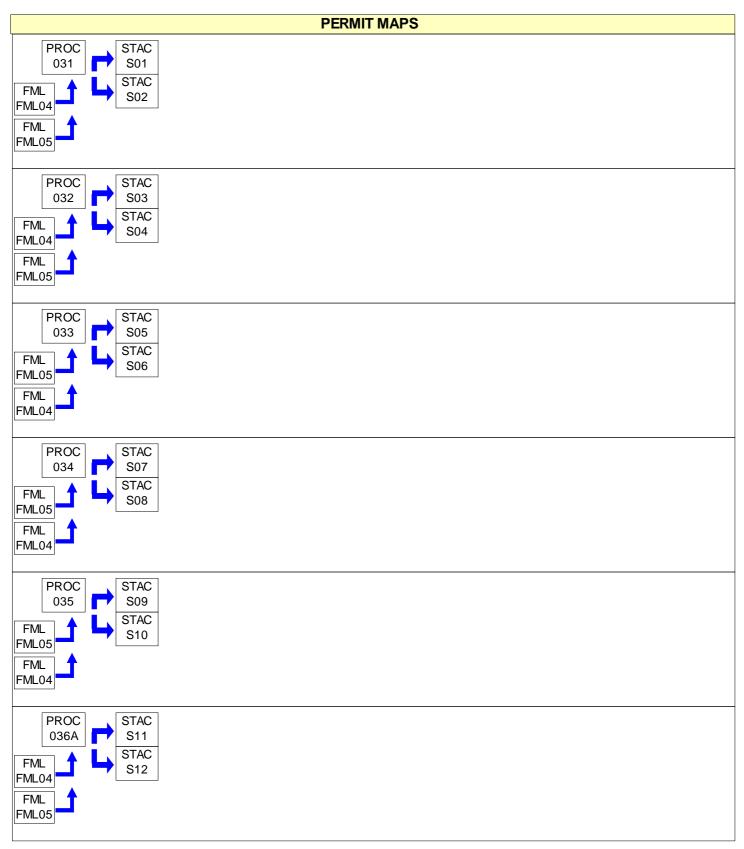
SECTION A. Site Inventory List

SIMPLE CYCLE TURBINE #11	Capacity/Throughput	
	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
032 SIMPLE CYCLE TURBINE #12		#2 Oil
	,	Kerosene
033 SIMPLE CYCLE TURBINE #21		#2 Oil
	5,940.000 Gal/HR	Kerosene
034 SIMPLE CYCLE TURBINE #22	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
035 SIMPLE CYCLE TURBINE #31	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
036A SIMPLE CYCLE TURBINE #32	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
SIMPLE CYCLE TURBINE #41	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
038 SIMPLE CYCLE TURBINE #42	5,940.000 Gal/HR	#2 Oil
	5,940.000 Gal/HR	Kerosene
TANK 4 - 6.3 MMGAL		
TANK 5 - 6.3 MMGAL		
UNIT #11, FLUE A		
UNIT #11, FLUE B		
UNIT #12, FLUE A		
UNIT #12, FLUE B		
UNIT #21, FLUE A		
UNIT #21, FLUE B		
UNIT #22, FLUE A		
UNIT #22, FLUE B		
UNIT #31, FLUE A		
UNIT #31, FLUE B		
UNIT #32, FLUE A		
UNIT #32, FLUE B		
UNIT #41, FLUE A		
UNIT #41, FLUE B		
UNIT #42, FLUE A		
UNIT #42, FLUE B		
	SIMPLE CYCLE TURBINE #21 SIMPLE CYCLE TURBINE #31 SIMPLE CYCLE TURBINE #32 SIMPLE CYCLE TURBINE #41 SIMPLE CYCLE TURBINE #42 TANK 4 - 6.3 MMGAL TANK 5 - 6.3 MMGAL UNIT #11, FLUE A UNIT #12, FLUE A UNIT #12, FLUE B UNIT #22, FLUE A UNIT #22, FLUE A UNIT #31, FLUE B UNIT #31, FLUE B UNIT #31, FLUE B UNIT #31, FLUE B UNIT #32, FLUE A UNIT #32, FLUE A UNIT #32, FLUE A UNIT #32, FLUE B UNIT #341, FLUE B UNIT #41, FLUE B UNIT #41, FLUE B UNIT #41, FLUE B	SIMPLE CYCLE TURBINE #12

PERMIT MAPS

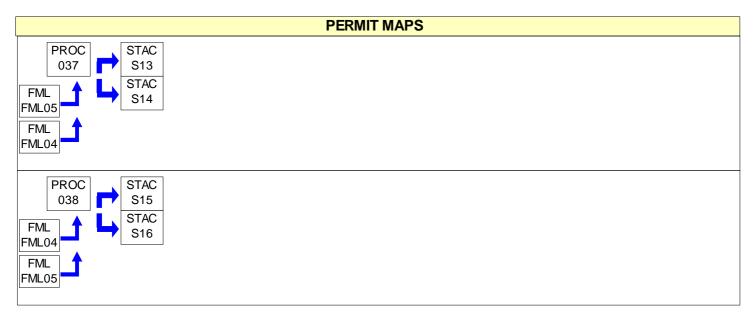
















#001 [25 Pa. Code § 121.1]

Definitions

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

#002 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

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

#003 [25 Pa. Code § 127.512(c)(4)]

Property Rights

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

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

Permit Expiration

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

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

Permit Renewal

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
 - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.





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

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

Inspection and Entry

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
 - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

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

Compliance Requirements

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
 - (1) Enforcement action
 - (2) Permit termination, revocation and reissuance or modification
 - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

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

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

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





to determine compliance with the permit.

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

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

- (a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

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

#013 [25 Pa. Code § 127.522(a)]

Operating Permit Application Review by the EPA

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

R3_Air_Apps_and_Notices@epa.gov

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

#014 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

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





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

R3_Air_Apps_and_Notices@epa.gov

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

#015 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

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

R3_Air_Apps_and_Notices@epa.gov

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

#016 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

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

R3_Air_Apps_and_Notices@epa.gov

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

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

#017 [25 Pa. Code § 127.512(b)]

Severability Clause

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

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

Fee Payment

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.
- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).





- (e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.
- (f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#019 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
 - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

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

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.





- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#021 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

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





09-00016

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

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

Submissions

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

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

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

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

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

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

Sampling, Testing and Monitoring Procedures

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

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

Recordkeeping Requirements

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
 - (1) The date, place (as defined in the permit) and time of sampling or measurements.
 - (2) The dates the analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of the analyses.
 - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.





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

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

Reporting Requirements

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.
- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#026 [25 Pa. Code § 127.513]

Compliance Certification

- (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:
 - (1) The identification of each term or condition of the permit that is the basis of the certification.
 - (2) The compliance status.
 - (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
 - (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

#027 [25 Pa. Code § 127.3]

Operational Flexibility

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

(1) Section 127.14 (relating to exemptions)





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

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

Risk Management

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
 - (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
 - (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.



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

#029 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

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

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

Permit Shield

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
 - (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
 - (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
 - (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.





I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

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

002 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (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 §127.441]

Operating permit terms and conditions.

- (a) The NOx emissions from the facility may not exceed 1,296.0 tons in any 12 consecutive month period. [Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91.]
- (b) The SOx emissions from this facility may not exceed 153.0 tons in any 12 consecutive month period.

005 [25 Pa. Code §129.14]

Open burning operations

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

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





006 [25 Pa. Code §123.41]

Limitations

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

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

007 [25 Pa. Code §123.42]

Exceptions

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

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

II. TESTING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.513, 129.91, 129.99, and 129.100.]

- (a) The permittee shall perform a stack test on at least three (3) of the eight (8) turbines listed in Section A once per permit term.
- (b) If the emissions results for stack testing for one turbine are not within 10% of the emissions results, on a pounds per MMBTU basis, of the other two (2) turbines tested at similar loads and capacities for the stack testing in paragraph (a) above, then the permittee shall test the other five (5) turbines within the permit term.
- (c) If only three (3) turbines are tested in one permit term and if the terms of paragraph (b) above do not apply, stack testing shall be performed on all eight (8) units at least once through every three (3) permit terms.
- (d) The stack testing in paragraphs (a) and (c) above shall be performed at least twelve (12) months prior to the expiration date of each permit.
- (e) The stack test shall, at a minimum, test for the NOx emissions in lbs/MMBtu and lbs/hr in accordance with the provisions of 25 Pa. Code Chapters 139 and 145. The stack test shall be performed while the turbines are operating at the maximum normal operating condition.
- (f) At least ninety (90) days prior to the test(s), the permittee shall submit to DEP, for approval, the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (g) At least thirty (30) days prior to the test(s), the Regional Manager shall be informed of the date and time of the test.
- (h) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions shall be submitted to the Regional Manager for approval.
- (i) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.



Note: For the purposes of compliance with this stack test condition, "similar loads and capacities" shall mean that the permittee shall assure that the electrical load and fuel usage (or heat input) are within 10% of each other for the combustion turbines chosen for stack testing in this current permit term.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall monitor the facility, once per operating day, for the following:
- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.
- (c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.
- (d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

011 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions pursuant to 25 Pa. Code § 123.41 shall be measured using either:

- (1) Observers, trained and qualified to measure plume opacity with the naked eye; or
- (2) Monitor the following through the turbine's computerized control system:
 - (i) Differential discharge temperature,
 - (ii) Maximum discharge temperature, and
 - (iii) Operating conditions of this turbine for excursions related to the potential excess stack opacity.





012 [25 Pa. Code §145.6]

Standard requirements.

- (a) The permittee and the NOx authorized account representative of each NOx budget facility and each NOx budget source at the facility shall comply with the monitoring requirements of 25 Pa. Code §§ 145.70-145.76 (relating to recordkeeping and recording requirements) by May 1, 2002.
- (b) The emissions measurements recorded and reported in accordance with 25 Pa. Code §§ 145.70-145.76 shall be used to determine compliance by the unit with the NOx budget emissions limitation under 25 Pa. Code § 145.6(c).

013 [25 Pa. Code §145.74.]

Recordkeeping and reporting.

The permittee shall comply with requirements of 40 CFR § 75.62, except that the monitoring plan is only required to include the information required by 40 CFR 75, Subpart H.

IV. RECORDKEEPING REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall record the observations and findings, each time the monitoring is conducted that is required by Condition III Monitoring Requirements of this Section.
- (b) The facility's monthly total NOx and SOx emissions shall be recorded each month for the aggregate of the combustion turbines as calculated in Section D for Source IDs: 031 to 038.
- (c) The permittee shall determine on a monthly basis the facility's total NOx and SOx emissions for the previous 12 consecutive months for the aggregate of the combustion turbines at the facility.
- (d) Monthly records of the facility's aggregate 12-month NOx and SOx emission total shall be kept to demonstrate compliance with the site level NOx and SOx emission limits.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

V. REPORTING REQUIREMENTS.

016 [25 Pa. Code §135.3]

Reporting

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

If the permittee has been previously advised by the Department to submit a source report, the permittee shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported, including those sources listed in the Miscellaneous Section of this permit.

The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.





017 [25 Pa. Code §135.21]

Emission statements

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

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall submit the following reports:

- (a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov, and
- (b) A semiannual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall notify the Department at (484) 250-5920, within two (2) hours of becoming knowledgeable of any malfunction(s) of the source(s), listed in Section A of this permit, which results in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in this permit or of a regulation contained in 25 Pa. Code Article III.
- (b) Malfunction(s) which occur(s) at this Title V facility, and pose(s) an imminent danger to public health, safety, welfare and the environment, and would violate permit conditions if the source continued to operate after the malfunction(s) shall immediately, after becoming knowledgeable of any occurrence, be reported to DEP by telephone at the above number.
- (c) A written report describing the malfunction(s) shall be submitted to the Department within two (2) working days following the notification of the incident, and shall describe the following:
- (1) The malfunction(s),
- (2) The emission(s),
- (3) The duration,
- (4) Any corrective action(s) taken.

020 [25 Pa. Code §145.30.]

Compliance certification report.

For each control period in which one or more NOx budget units at a source are subject to the NOx budget emissions limitation, the NOx authorized account representative of the source shall submit to DEP by November 30 of that year, a compliance certification report for the source covering all of the units.

021 [25 Pa. Code §145.74.]

Recordkeeping and reporting.

- (a) The NOx authorized account representative shall submit an application to DEP within 45 days after completing all initial certification or recertification tests required under 25 Pa. Code § 145.71 (relating to initial certification and recertification procedures) including the information required under 40 CFR 75. Subpart H.
- (b) The authorized account representative shall submit to DEP a quarterly emissions report in accordance with the requirements of 25 Pa. Code § 145.74(d).
- (c) The NOx authorized account representative shall submit to DEP a compliance certification in support of each quarterly report required under 25 Pa. Code § 145.74(d) based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the units emissions are correctly and fully monitored.





VI. WORK PRACTICE REQUIREMENTS.

022 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

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

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III, or any other applicable rule promulgated under the Clean Air Act.

025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #019(g), of Section B, of this permit.

026 [25 Pa. Code §145.10.]

Authorization and responsibilities of the NOx authorized account representative.

- (a) Except as provided under 25 Pa. Code § 145.11 (relating to alternate NOx authorized account representative), each NOx budget source, including all NOx budget units at the source, shall have one, and only one, NOx authorized account representative, with regard to all matters under the NOx Budget Trading Program concerning the source or any NOx budget unit at the source.
- (b) Each submission under the NOx Budget Trading Program shall be submitted, signed and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made.

027 [25 Pa. Code §145.6]

Standard requirements.

(a) The permittee of each NOx budget facility and each NOx budget source at the facility shall hold NOx allowances available for compliance deductions under 25 Pa. Code § 145.54 (relating to compliance), as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with 25 Pa. Code §§ 145.70-145.76 (relating to recordkeeping and reporting requirements) plus any amount necessary to account for actual heat input under 25 Pa. Code § 145.42(e) (relating to NOx allowance allocation) for the control period or to account for excess emissions for a prior control period under 25 Pa. Code § 145.54(d) or to account for withdrawal from the NOx budget trading program, or a change in regulatory status, of a NOx budget opt-in unit under 25 Pa. Code §§ 145.86 and 145.87 (relating to withdrawal from NOx Budget Trading Program; and opt-in source change in regulatory status).







- (b) Each NOx budget unit at the facility shall be subject to the requirements under paragraph (a), above, starting on May 1, 2003.
- (c) The permittee of a NOx budget source that has excess emissions in any control period shall surrender the NOx allowances required for deduction under 25 Pa. Code § 145.54(d)(1)(relating to compliance).
- (d) Unless otherwise provided, the permittee shall maintain at a central location and provided upon request by DEP all documents required under 25 Pa. Code § 145.6(d) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by DEP.

028 [25 Pa. Code §145.90.]

Emission reduction credit provisions.

NOx budget units may create, transfer and use emission reduction credits ("ERCs") in accordance with Chapter 127 and 25 Pa. Code § 145.90. ERCs may not be used to satisfy NOx allowance requirements.

VII. ADDITIONAL REQUIREMENTS.

029 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Additional authority for the following permit conditions is also derived from 25 Pa. Code Chapter 145.
- (1) The emission limitations, monitoring and all other requirements of the NOx Budget Trading Program established in 25 Pa. Code §§ 145.1–145.90 are hereby incorporated by reference.
- (2) The following is the NOx Allowance Certification Information for Exelon Generation Company, LLC—Croydon Generating Station for the NOx control period from 2019–2024:

Owner Mailing Address: Exelon Generation Company 1 Industrial Highway Eddystone, PA 19022-1524

Plant Location: Croydon, Bucks County, Bristol Township

Operator Mailing Address: Exelon Generation Company 1 Industrial Highway Eddystone, PA 19022-1524

Authorized Account Representative: Joseph M. Dick

Permit Contact: Chandra Copplin

(b) Additional authority for the following permit condition is also derived from 25 Pa. Code § 127.512.

If the SOx emissions for this facility exceed 153 tons in any 12 consecutive month period, the facility shall comply with 40 CFR § 52.21.

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

*** Permit Shield In Effect ***



09-00016

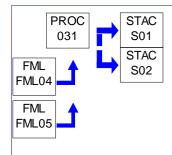


SECTION D. Source Level Requirements

Source ID: 031 Source Name: SIMPLE CYCLE TURBINE #11

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.





(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units);
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination







is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 031, NATS Account - 008012000031.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

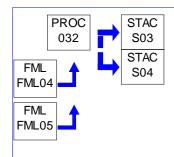
*** Permit Shield in Effect. ***



Source ID: 032 Source Name: SIMPLE CYCLE TURBINE #12

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.





(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units); or
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination







is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 032, NATS Account - 008012000032.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

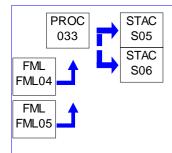




Source ID: 033 Source Name: SIMPLE CYCLE TURBINE #21

> Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

> > 5,940.000 Gal/HR Kerosene



RESTRICTIONS. Ι.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

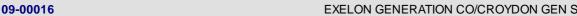
Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.





(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units);
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination







is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 033, NATS Account - 008012000033.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

09-00016

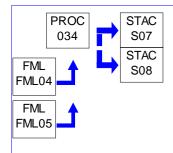


SECTION D. **Source Level Requirements**

Source ID: 034 Source Name: SIMPLE CYCLE TURBINE #22

> Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

> > 5,940.000 Gal/HR Kerosene



RESTRICTIONS. Ι.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.





(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units); or
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination





is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

09-00016

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 034, NATS Account - 008012000034.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

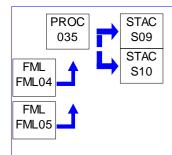




Source ID: 035 Source Name: SIMPLE CYCLE TURBINE #31

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.







(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units); or
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination







is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

09-00016

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 035, NATS Account - 008012000031.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

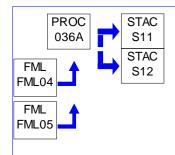




Source ID: 036A Source Name: SIMPLE CYCLE TURBINE #32

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.



(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units); or
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination

09-00016



SECTION D. **Source Level Requirements**

is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 036, NATS Account - 008012000036.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

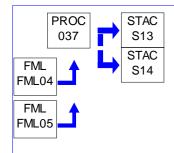




Source ID: 037 Source Name: SIMPLE CYCLE TURBINE #41

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.





(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units); or
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination



09-00016



SECTION D. Source Level Requirements

is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

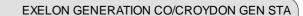
[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 037, NATS Account - 008012000037.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***

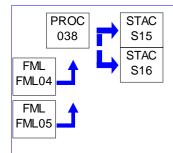




Source ID: 038 Source Name: SIMPLE CYCLE TURBINE #42

Source Capacity/Throughput: 5,940.000 Gal/HR #2 Oil

5,940.000 Gal/HR Kerosene



09-00016

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this turbine in a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot pursuant to 25 Pa. Code §123.13(c)(1)(iii).

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this simple cycle combustion turbine in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The NOx emissions for this turbine shall not exceed 0.70 pounds per million Btu or 587 pounds per hour, whichever is more stringent.

[Compliance with the emission limits derived from RACT I (25 Pa. Code § 129.91) above also demonstrates compliance with the alternate RACT II requirements (25 Pa. Code § 129.99).]

Fuel Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.444.]

- (a) The permittee shall only use kerosene, No. 2 fuel oil, or a mixture of the two in this turbine.
- (b) The sulfur content of the fuel oil fired in this turbine shall not exceed 0.2% (by weight). Compliance with this streamlined permit condition assures compliance with 25 Pa.Code § 123.21.

Throughput Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.99.]

(a) The capacity factor for this turbine shall not exceed 20% in any 12 consecutive month period. The capacity factor is defined as the ratio of net electrical power generation, in megawatt hours (MWH), for the last twelve (12) months to the maximum capacity of the unit (MW) times the number of hours in the same twelve (12) months.

09-00016



SECTION D. **Source Level Requirements**

(b) The rolling 12-month capacity factor is expressed in the following formula:

[(Last 12 months net electric power generation (MWH)) x (100)]

divided by:

[(Maximum capacity of unit (MW)) x (Number of operating hours in last 12 months)]

[Compliance with the annual capacity restriction above also demonstrates compliance with the annual capacity factor restriction determined under RACT I (25 Pa. Code § 129.91).]

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §139.16]

Sulfur in fuel oil.

- (a) The permittee shall sample and analyze for sulfur content, weight percent, and Btu heating value of the fuel being combusted by the source within two (2) working days after delivery of the fuel according to the specifications stated in 25 Pa. Code §139.16:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code §139.4(10) (relating to references).
- (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code §139.4(11) (relating to references). The viscosity shall be determined at 100°F.
- (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code §139.4(12)--(15).
- (4) Results shall be reported in accordance with the units specified in 25 Pa. Code §123.22 (relating to combustion units);
- (b) Obtain and keep fuel supplier certifications that contains the sulfur content, weight percent, and Btu heating value of the fuel delivered.
- (c) Any other methods for sampling and analyzing sulfur content and heating value must be prior approved by DEP.

MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record:

- (1) Fuel consumption on a monthly basis;
- (2) Net electric power generation (MWH) on a monthly basis; and
- (3) Dates and times of operation on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91 and 127.511.]

- (a) The permittee shall record the following information for this turbine:
- (1) Monthly fuel consumption;





- (2) Monthly net electrical power (MWH) generated;
- (3) The dates and times of operation of this turbine, including discharge temperature and operation conditions related to stack opacity;
- (4) Monthly and 12 month rolling capacity factor
- (5) Monthly NOx emissions calculated using the emission factors from the most recent stack test result.
- (6) Monthly SOx emissions calculated using the emission factor of 1.01S, where S is the weight percent of sulfur in the fuel. The permittee must use one of the following sulfur weight contents to calculate SOx monthly emissions:
- i. 0.2% as specified in 25 Pa. Code §123.22(e)(2); or
- ii. the sulfur content from the sample tested or fuel supplier certificate in the month; or
- iii. the highest sulfur content of the month, if more than one samples were tested or more than one fuel deliveries during a month,; or
- iv. the sulfur content used most recently for SOx calculation, if there was no fuel delivery during a month.
- (b) The permittee shall keep records of the most recent stack test report for this turbine until there is a new stack test report.
- (c) Fuel test results and/or fuel supplier's certificates containing sulfur weight percent and Btu heating value.
- (d) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:
- (1) Date, time, and location of the incident(s).
- (2) The cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.
- (e) The permittee shall keep appropriate records to demonstrate that this turbine is operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.

[Compliance with the requirements in paragraph (a) derived from RACT I (25 Pa. Code §§ 129.91 to 129.95) also demonstrates compliance the monitoring requirements of RACT II (25 Pa. Code § 129.100).]

V. REPORTING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A forced normal shutdown or a trip of this simple cycle turbine initiated by the computerized control system due to indications of combustor liner failure, combustion connection crosstube failure, or combustor transition piece failure will be considered a malfunction which requires notification to DEP under the malfunction procedure found in Section C of this permit.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The permittee shall maintain and operate this turbine in accordance with manufacturer's specifications and good air pollution control practices.
- (b) In the event of a forced normal shutdown or a trip due to combustor failure, this turbine shall not be restarted until the permittee inspects and determines whether the failure resulted in an exceedance of stack opacity limits. If a determination







is made that an opacity exceedance has occurred, this turbine may not be restarted until corrective actions are taken.

VII. ADDITIONAL REQUIREMENTS.

011 [25 Pa. Code §145.42.]

NOx allowance allocations.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 145.41.]

Until they are replaced by the Clean Air Interstate Rule (CAIR) allocations, the Department shall allocate NOx allowances to this source for the May 1 through September 30 control periods in 2009 through 2014, inclusive:

Source - 038, NATS Account - 008012000038.

In addition, the Department may allocate additional allowances to this source during one or more of the referenced control periods pursuant to the provisions of 25 Pa. Code § 145.43.

*** Permit Shield in Effect. ***





SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.







SECTION F. Emission Restriction Summary.

Course la	Course Description		
031	SIMPLE CYCLE TURBINE #11		
Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

032 SIMPLE CYCLE TURBINE #12

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

033 SIMPLE CYCLE TURBINE #21

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

034 SIMPLE CYCLE TURBINE #22

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

035 SIMPLE CYCLE TURBINE #31

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

036A SIMPLE CYCLE TURBINE #32

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

037 SIMPLE CYCLE TURBINE #41

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV	dry basis	SO2

038 SIMPLE CYCLE TURBINE #42

Emission Limit			Pollutant
0.700	Lbs/MMBTU	or 587 lbs/hr	NOX
0.020	gr/DRY FT3	Particulate Matter	PM10







SECTION F. Emission Restriction Summary.

Source Id	Source Description			
500.000	PPMV	dry basis	SO2	

Site Emission Restriction Summary

Emission Limit	Pollutant
1,296.000 Tons/Yr	NOX
153.000 Tons/Yr	SOX





SECTION G. Miscellaneous.

- (a) The plant address is: 955 River Road, Croydon, PA 19020.
- (b) The following previously issued operating permits serve as the basis for certain terms and conditions set forth in this permit:
 - (1) RACT Operating Permit No. OP-09-0016A (for Source IDs 031-035, 036A, and 037-038).
 - (2) Operating Permit No. 09-312-002 (for Source IDs FML01 and FML03).
- (c) The following sources have been determined by the Department to be insignificant sources of air emissions and, therefore, do not require additional restrictions, monitoring, or recordkeeping. They are still subject to any applicable federal, state, and local regulations, including those indicated in Section C, of this permit:
 - (1) Other sealed/contained systems.
 - (2) Activities involving emissions of non-regulated substances.
 - (3) Machinery lubrications.
 - (4) Waste oil tanks.
 - (5) Barge and tanker loading.
 - (6) Lube vents.
- (d) The following items are present at the facility and are listed on the United States Environmental Protection Agency's trivial list.
 - (1) Diesel fire pump.
 - (2) Weldere.
- (e) This permit incorporates the requirements of the NOx Trading Program in 25 Pa. Code Chapter 145 and the transition from the NOx Allowance Requirements in 25 Pa. Code § 123.121 from Title V Operating Permit No. 09-00016 issued February 9, 2001.
- (f) On October 31, 2000, PECO Energy Co. requested that the Department change their name to Exelon Generation Company, LLC. On March 6, 2001, the Department accepted the name and address change, and the Title V Permit has been revised to reflect these changes.
- (g) In September, 2003, the Department reissued the Title V Operating Permit. AUTH ID 496425, APS 346079. This renewal also incorporated Plan Approval No. 09-0016, which allowed Source ID 038 to be changed from a regenerative cycle turbine to a simple cycle turbine.
- (h) July, 2004. APS: 346079, Auth ID: 550293. The Department amended the Title V Operating Permit to address permit contact and responsible official changes, as well as a change in testing requirements for the turbines. In April 2003, Turbines 22, 31 and 42 (Source IDs 034–035 and 038) were tested in accordance with Department-approved procedures.
- (i) December 2006. APS: 346079, Auth ID: 656285. The Department amended the Title V Operating Permit to incorporate Plan Approval No. 09-0016A to convert the regenerative cycle turbine Unit 32 (Source ID: 036A) into a simple cycle turbine.

Note: The Source ID for Unit 32 has been changed from 036 to 036A.

- (j) APS No. 346079, AUTH No. 715866: Application was received on July 25, 2007 to incorporate Plan Approval No. 09-0016B conditions into TVOP. Plan Approval No. 09-0016B allows converting Unit 21 (Source ID 033) from regenerative cycle turbine to simple cycle turbine.
- (k) APS: 346079, AUTH: 724003. Permit renewal issued in November 2008.
- Changes made to the semi-annual deviation reporting and annual compliance reporting dates and periods.
- (I) AUTH: 979646: OP renewal.



EXELON GENERATION CO/CROYDON GEN STA



SECTION G. Miscellaneous.

(m) December, 2016: Significant Modification: RACT II. APS ID No. 346079; AUTH ID No. 1156441

(n) This permit (APS ID 346079; AUTH ID No. 1226944) is a renewal of Title V Operating Permit No. 09-00016, and incorporates changes to the responsible official, permit contact person, and NOx allowance certification information.





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