

State of Delaware
Department of Natural Resources and Environmental Control
Division of Air Quality
Blue Hen Corporate Center
655 South Bay Road, Suite 5 N
Dover, DE 19901

7 DE Admin. Code 1130 (Title V) Operating Permit
Facility I.D. Number: 1000300007
Permit Number: AQM-003/00007-(Renewal 1)

Effective Date: September 22, 2010

Expiration Date: July 28, 2013

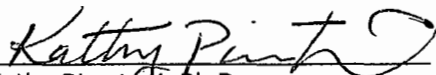
Renewal Application Due Date: July 28, 2012

Pursuant to 7 **Del. C.**, Ch 60, Section 6003, 7 **DE Admin. Code** 1102 Section 2.0, and 7 **DE Admin. Code** 1130 Section 7.2 approval by the Department of Natural Resources and Environmental Control ("Department") is hereby granted to operate the emission units listed in Condition 1 of this permit subject to the terms and conditions of this permit.

This approval is granted to:

Permittee/Owner (hereafter referred to as "Company/Owner")	Operator (hereafter referred to as "Operator")
Calpine Mid-Atlantic Generation, LLC. North Regional Business Office 1000 N West Street, Suite 1200 Wilmington, DE 19801 Responsible Official: Eric Graber Title: Plant Manager	Calpine Operating Services Company, Inc. Same as company address
Plant Site Location (hereafter referred to as "Facility") Edge Moor Power Plant	Plant Mailing Address Edge Moor Power Plant
200 Hay Road Wilmington, Delaware 19809	Same as company address

The nature of business of the facility is Electric Power Generation. The Standard Industrial Classification (SIC) code is 4911. The North American Industry Classification System (NAICS) code is 221112.



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Engineer, Engineering & Compliance Branch
(302) 323-4542

9/22/2010
Date



Paul E. Foster, P.E.
Program Manager, Engineering & Compliance Branch
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Condition 1- Emission Unit Identification

[Reference: 7 DE Admin. Code 1130 Section 3.3 dated 11/15/93]

a. Emission Units Information.

Emission Units	Emission Unit Description
Emission Unit EM3	Boiler, nominally rated at 983 mmBTU/hr, with associated ESP fired primarily on coal and No. 2, No. 6, Natural Gas, Digester Gas, and re-refined oil as secondary fuels, designated as Boiler No. 3.
Emission Unit EM4	Boiler, nominally rated at 1793 mmBTU/hr, with associated ESP fired primarily on coal and No. 2, No. 6, Natural Gas, Digester Gas, and re-refined oil as secondary fuels, designated as Boiler No. 4.
Emission Unit EM5	Boiler, nominally rated at 4551 mmBTU/hr, fired primarily on No. 6 fuel oil and No. 2, Natural Gas, Digester Gas, and re-refined oil as secondary fuels, designated as Boiler No. 5.
Emission Unit EM10	Combustion Turbine, nominally rated at 264 mmBTU/hr, fired solely on distillate fuel oil.
Emission Units EM101 thru EM105	<ul style="list-style-type: none"> EM101 is a 10,800,000 gallon fuel oil storage tank with an internal floating roof, storing No. 6 fuel oil with a maximum vapor pressure of 0.00006 psi. EM102 is a 10,800,000 gallon fuel oil storage tank with an internal floating roof, storing No. 6 fuel oil with a maximum vapor pressure of 0.00006 psi.

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Emission Units	Emission Unit Description
	<ul style="list-style-type: none"> • EM103 is a 10,800,000 gallon fuel oil storage tank with an internal floating roof, storing LSLPP (Low Sulfur Light Petroleum Product) with a maximum vapor pressure of 0.009 psi. • EM104 is a 50,000 gallon fuel oil storage tank with a fixed roof, storing No. 2 fuel oil with a maximum true vapor pressure of 0.0090 psi. • EM105 is a 3,360,000 gallon fuel oil storage tank with a fixed roof, storing No. 2 fuel oil with a maximum true vapor pressure of 0.0090 psi.
Emission Unit EM110	5.1 Acre Coal Pile
Emission Unit EM111	Coal handling and transfer equipment including conveyors, crushers, railcars, bunkers, and gates.
Emission Units EM112 & 114	Fly Ash Silo and Baghouse
Emission Unit EM113	17.6 Acre Ash Landfill
Emission Units EM201 thru EM209	Nine Cold Solvent Degreasers
Emission Unit EM121	One emergency generator rated at 1.6 MMBTU/hr
Emission Unit EM122	One emergency generator rated at 2.5 MMBTU/hr

b. 7 DE Admin. Code 1102 Permit Identification.

This table identifies the underlying permits whose provisions have been incorporated into this Title V permit and specifies the reference number that will be used to identify the source of the underlying permit condition throughout this Title V permit.

Reference: Number	Full 7 DE Admin. Code 1102 Permit Designation
APC-83/0824	<p>APC-83/0824-OPERATION (Amendment 3)(NO_x RACT) dated September 3, 2009 for a 759.54 Million BTU per hour heat input boiler, with associated electrostatic precipitator and fly ash handling equipment, and a urea-based Selective Non-Catalytic Reduction (SNCR) system as a demonstration project for the control of nitrogen oxide (NO_x) emissions, fired on bituminous coal, residual oil, distillate oil, and/or natural gas, designated Unit #3.</p> <p>NOTE: On June 19, 2000, the Department received an application from the Company for the Expansion of the existing Hay Road Power Complex. Due to this request, the Hay Road facility became subject to New Source Review (NSR) which required, among other things, the installation of Lowest Achievable Emission Rate (LAER) Technology and Emission Offsets. In order to comply with the offset requirements, the Company opted to limit Nitrogen Oxide (NO_x) emissions on this unit. The Department amended this permit to reflect the emission offset requirements under Condition 12 of Permit: APC-2000/0281-CONSTRUCTION (EOP)(PSD)(NSPS)(NO_x RACT).</p>
APC-83/0825	APC-83/0825-OPERATION (Amendment 3)(NO _x RACT) dated February 5, 2001 for a 1793 Million BTU per hour heat input boiler, with associated

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Reference: Number	Full 7 DE Admin. Code 1102 Permit Designation
	electrostatic precipitator and fly ash handling equipment, utilizing Gas Reburn Technology and a separated overfired air system, fired on bituminous coal, residual oil, distillate oil, natural gas, landfill gases, natural gas pipeline condensate or any combination thereof, designated Unit #4.
APC-83/0826	APC-83/0826-OPERATION (Amendment 2)(RACT) dated February 14, 1995 for a 4551 Million BTU per hour heat input boiler, equipped with Low-NO _x burners, fired on residual oil, distillate oil, and/or natural gas, designated Unit #5.
APC-80/0380	APC-80/380-OPERATION (Amendment 1) dated September 3, 2009 for a 264 Million BTU per hour heat input combustion turbine, fired primarily on distillate oil with low sulfur light petroleum product (LSLPP) and on-spec waste oil as secondary fuel, with a seasonal NO _x control water injection system on the electric generating combustion turbine, designated as Unit 10.
APC-2008/0109	APC-2008/0109-OPERATION dated September 3, 2009 for a urea-based enhanced Selective Non-Catalytic Reduction (SNCR) NO _x control injection system on Unit #4.
APC-2008/0171	APC-2008/0171-OPERATION dated September 3, 2009 for an activated carbon injection system (ACI) and associated carbon storage silo on Generating Unit # 3.
APC-2008/0172	APC-2008/0172-OPERATION dated September 3, 2009 for an activated carbon injection system (ACI) and associated carbon storage silo on Generating Unit #4.
APC-2009/0024	APC-2009/0024-OPERATION dated September 3, 2009 for a Sodium-based dry sorbent injection system (DSI) and associated five storage silos on Generating Unit #3.
APC-2009/0025	APC-2009/0025-OPERATION dated September 3, 2009 for a sodium-based dry sorbent injection system (DSI) and associated five storage silos on Generating Unit #4.
APC-2009/0026	APC-2009/0026-OPERATION dated September 3, 2009 for a Flue Gas Recirculation (FGR) and Boosted Overfire Air (BOFA) NO _x control systems on Unit #5.
APC-2009/0027	APC-2009/0027-OPERATION dated September 3, 2009 for a urea-based enhanced Selective Non-Catalytic Reduction (SNCR) NO _x control injection system on Unit #5.

Condition 2 – General Requirements

a. Certification.

1. Each document submitted to the Department/EPA as required by this permit shall be certified by a Responsible Official and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [Reference : 7 DE Admin. Code 1130 Section 5.6 dated 11/15/93 and 6.3.1 dated 12/11/00]
2. Any report of deviations required under Conditions 3(c)(2)(ii) or 3(c)(2)(iii) that must be submitted to the Department within ten calendar days of discovery of the deviation, may be

Condition 2- General Requirements (Cont.)

submitted in the first instance without a certification provided a certification meeting the requirements of Condition 2(a)(1) is submitted to the Department within ten calendar days thereafter, together with any corrected or supplemental information required concerning the deviation. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.3.4 dated 12/11/00]

3. Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses:

State of Delaware – DNREC Division of Air Quality Blue Hen Corporate Center 655 South Bay Road, Suite 5 N Dover, DE 19901 ATTN: Division Director	United States Environmental Protection Agency Director, Air Protection Division (3AP12) 1650 Arch Street Philadelphia, PA 19103
No. of Originals: <u>1</u> & No. of Copies: <u>1</u>	No. of Copies: <u>1</u>

4. In lieu of submitting a physical copy of the Compliance Certification report specified in Condition 3(c)(3) of this permit to the EPA, the Owner and/or Operator may, and is encouraged to, submit an electronic copy of the report to **R3 APD Permits@epa.gov** as a PDF document. The signed original annual General Certification report must be submitted to the Department at the address in Condition 2(a)(3).

5. **Compliance.**

1. The Owner and/or Operator shall comply with all terms and conditions of this permit. Any noncompliance with this permit constitutes a violation of the applicable requirements under the Clean Air Act, and/or 7 DE Admin. Code 1100, and is grounds for an enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of a permit renewal. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.1 dated 12/11/00]
2.
 - i. For applicable requirements with which the source is in compliance, the Owner and/or Operator shall continue to comply with such requirements. [Reference: 7 DE Admin. Code 1130 Sections 5.4.8.3.1 dated 11/15/93 and 6.3.3 dated 12/11/00]
 - ii. For applicable requirements that will become effective during the term of this permit, the Owner and/or Operator shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [Reference: 7 DE Admin. Code 1130 Sections 5.4.8.3.2 dated 11/15/93 and 6.3.3 dated 12/11/00]
3. Nothing in Condition 2(b)(1) of this permit shall be construed to preclude the Owner and/or Operator from making changes consistent with Condition 2(m)(3) [Minor Permit Modifications] or Condition 4(a) [Operational Flexibility]. [Reference: 7 DE Admin. Code 1130 Sections 6.8 dated 12/11/00 and 7.5.1.5 dated 12/11/00]
4. The fact that it would have been necessary to halt or reduce an activity in order to maintain compliance with the terms and conditions of this permit shall not constitute a defense for the Owner and/or Operator in any enforcement action. Nothing in this permit shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or

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reducing operations would be more serious than the impacts of continuing operations. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.2 dated 12/11/00]

5. The Owner and/or Operator may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency or malfunction if both the record keeping requirements in Condition 3(b)(2)(iii) and the reporting requirements in Condition 3(c)(2)(ii)(A) are satisfied. [Reference: 7 DE Admin. Code 1130 Section 6.7.2 dated 12/11/00]
 6.
 - i. In any enforcement proceeding, the Owner and/or Operator seeking to establish the occurrence of an emergency or malfunction has the burden of proof. [Reference: 7 DE Admin. Code 1130 Section 6.7.4 dated 12/11/00]
 - ii. The provisions of 7 DE Admin. Code 1130 pertaining to Emergency/Malfunctions as defined in Conditions Nos. 2(b)(5); 2(b)(6); 3(b)(2)(iii); and 3(c)(2)(ii)(A) of this permit are in addition to any emergency or malfunction provision contained in any applicable requirement. [Reference: 7 DE Admin. Code 1130 Section 6.7.5 dated 12/11/00]
 7. Reserved.
 8. If required, the schedule of compliance in Condition 5 of this permit is supplemental to and shall not sanction noncompliance with the applicable requirements upon which it is based. [Reference: 7 DE Admin. Code 1130 Section 5.4.8.3.3 dated 11/15/93]
 9. Nothing in this permit shall be interpreted to preclude the use of any credible evidence to demonstrate noncompliance with any term of this permit. [Reference: 62 FR 8314 dated 2/24/97]
 10. All terms and conditions of this permit are enforceable by the Department and by the U.S. Environmental Protection Agency ("EPA") unless specifically designated as "State Enforceable Only" [Reference: 7 DE Admin. Code 1130 Section 6.2.1 dated 12/11/00]
- c. Confidentiality.** The Owner and/or Operator may make a claim of confidentiality for any information or records submitted to the Department. However, by submitting a permit application, the Owner and/or Operator waives any right to confidentiality as to the contents of its permit, and the permit contents will not be entitled to protection under 7 Del. C., Ch 60, § 6014. [Reference: 7 DE Admin. Code 1130 Sections 5.1.4 dated 11/15/93, 6.1.3.3.5 dated 12/11/00, and 6.1.7.5 dated 12/11/00]
1. Confidential information shall meet the requirements of 7 Del. C., Ch 60, § 6014, and 29 Del. C., Ch 100. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
 2. If the Owner and/or Operator submits information to the Department under a claim of confidentiality, the Owner and/or Operator shall also submit a copy of such information directly to the EPA, if the Department requests that the Owner and/or Operator do so. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
- d. Construction, Installation, or Alteration.** The Owner and/or Operator shall not initiate construction, installation, or alteration of any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department under 7 DE Admin. Code 1102, and, when applicable, 7 DE Admin. Code No. 1125, and receiving approval of such application from the Department; except as exempted in 7 DE Admin. Code 1102 Section 2.2. [Reference: 7 DE Admin. Code 1102 Section 2.1 dated 6/1/97 and 7 DE Admin. Code 1130 Section 7.2.3 dated 12/11/00]

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- e. **Definitions/Abbreviations.** Except as specifically provided for below, for the purposes of this permit, terms used herein shall have the same meaning accorded to them under the applicable requirements of the Clean Air Act and 7 DE Admin. Code 1100.
1. "Act" means the Clean Air Act, as amended by the Clean Air Act Amendments of November 15, 1990, 42 U.S.C. 7401 *et seq.* [Reference: 7 DE Admin. Code 1130 Section 2 dated 11/15/93]
 2. "AP-42" means the Compilation Of Air Pollutant Emission Factors, Fifth Edition, AP-42, dated January 15, 1995, as amended with Supplements "A" dated February 1996, "B" dated November 1996, "C" dated November 1997, "D" dated August 1998, "E" dated September 1999, and "F" dated September 2000 and the December 2001 update, the December 2002 update and the December 2003 update.
 3. "CFR" means Code of Federal Regulations.
 4. "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the sources, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Reference: 7 DE Admin. Code 1130 Section 6.7.1 dated 12/11/00]
 5. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or of a process to operate in a normal or usual manner, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the malfunction. A malfunction shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Reference: 7 DE Admin. Code 1130 Section 6.7.1 dated 12/11/00]
 6. "Number 2 fuel oil" and "No. 2 fuel oil" means distillate oil.
 7. "Reg." and "Regulation" mean the regulations covered under 7 DE Admin. Code 1100.
 8. "Regulations Governing the Control of Air Pollution" means the codification of those regulations enacted by the Delaware Department of Natural Resources and Environmental Control, in accordance with 7 Del. C., Ch 60, § 6010.
- f. **Duty to Supplement.**
1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the Owner and/or Operator shall promptly submit to the Department such supplementary facts or corrected information. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
 2. The Owner and/or Operator shall promptly submit to the Department information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to the release of a corresponding draft permit. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
 3. The Owner and/or Operator shall furnish to the Department, upon receipt of a written request and within a reasonable time specified by the Department:

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Condition 2- General Requirements (Cont.)

- i. Any information that the Department determines is reasonable necessary to evaluate or take final action on any permit application submitted in accordance with Condition 2(l) or 2(m) of this permit. The Owner and/or Operator may request an extension to the deadline the Department may impose on the response for such information. *[Reference: 7 DE Admin. Code 1130 Section 5.1.2.3 dated 11/15/93]*
 - ii. Any information that the Department requests to determine whether cause exists to modify, terminate, or revoke this permit, or to determine compliance with the terms and conditions of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.1.7.5 dated 12/11/00]*
 - iii. Copies of any records required to be kept by this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.1.7.5.7 dated 12/11/00]*
- g. Emission Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. *[Reference: 7 DE Admin. Code 1130 Section 6.1.9 dated 12/11/00]*
- h. Fees.** The Owner and/or Operator shall pay fees to the Department consistent with the fee schedule established by the Delaware General Assembly. *[Reference: 7 DE Admin. Code 1130 Section 6.1.8 dated 12/11/00 and Section 9.0 dated 11/15/93]*
- i. Inspection and Entry Requirements.** Upon presentation of identification, the Owner and/or Operator shall allow authorized officials of the Department to perform the following:
1. Enter upon the Owner and/or Operator's premises where a source is located or an emissions-related activity is conducted, or where records that must be kept under the terms and conditions of this permit are located. *[Reference: 7 DE Admin. Code 1130 Section 6.3.2.1 dated 12/11/00]*
 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.3.2.2 dated 12/11/00]*
 3. Inspect, at reasonable times and using reasonable safety practices, any facility, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.3.2.3 dated 12/11/00]*
 4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement. *[Reference: 7 DE Admin. Code 1130 Section 6.3.2.4 dated 12/11/00]*
- j. Permit and Application Consultation.** The Owner and/or Operator is encouraged to consult with Department personnel before submitting an application or, at any other time, concerning the operation, construction, expansion, or modification of any installation, or concerning the required pollution control devices or system, the efficiency of such devices or system, or the pollution problem related to the installation. *[Reference: 7 DE Admin. Code 1130 Section 5.1.1.7 dated 11/15/93]*
- k. Permit Availability.** The Owner and/or Operator shall have available at the facility at all times a copy of this permit and shall provide a copy of this permit to the Department upon request. *[Reference: 7 DE Admin. Code 1102 Section 8.1 dated 6/1/97]*
- l. Permit Renewal.** This permit expires on July 28, 2013 except as provided in Condition 2(l)(4) below. *[Reference: 7 DE Admin. Code 1130 Section 6.1.2 dated 12/11/00]*
1. Applications for permit renewal shall be subject to the same procedural requirements, including those for public participation, affected state comment, and EPA review, that apply to initial

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permit issuance under **7 DE Admin. Code 1130 Section 7.1**, except that an application for permit renewal may address only those portions of the permit that the Department determines require revision, supplementing, or deletion, incorporating the remaining permit terms by Reference: from the previous permit. The Department may similarly, in issuing a draft renewal permit or proposed renewal permit, specify only those portions that will be revised, supplemented, or deleted, incorporating the remaining permit terms by Reference:.. [Reference: **7 DE Admin. Code 1130 Section 7.3.1 dated 12/11/00**]

2. The Owner and/or Operator's right to operate shall cease upon the expiration date unless a timely and complete renewal application has been submitted to the Department by July 28, 2012. [Reference: **7 DE Admin. Code 1130 Section 7.3.2 dated 12/11/00**]
3. The Department shall review each application for completeness and shall inform the applicant within 60 days of receipt if the application is incomplete. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness within 60 days of an application, an application will be deemed complete if it contains the information required by the application form and **7 DE Admin. Code 1130 Section 5.4**. [Reference: **7 DE Admin. Code 1130 Section 5.1.2.1 dated 11/15/93**]
4. If a timely and complete application for a permit renewal is submitted to the Department pursuant to **7 DE Admin. Code 1130, Section 5.1.2.4 (dated 11/15/93)** and **Section 7.3.1 (dated 12/11/00)** and the Department, through no fault of the Owner and/or Operator, fails to take final action to issue or deny the renewal permit before the end of the term of this permit, then this permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. [Reference: **7 DE Admin. Code 1130 Section 7.3.3 dated 12/11/00**]

m. Permit Revision and Termination.

1.
 - i. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. [Reference: **7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00**]
 - ii. Except as provided under Condition 2(m)(3) ["Minor Permit Modification"], the filing of a request by the Owner and/or Operator for a permit modification, revocation and reissuance, or termination, or of a modification of planned changes or anticipated noncompliance does not stay any term or condition of this permit. [Reference: **7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00 and 7.5.1.5 dated 12/11/00**]
2. "Administrative Permit Amendment." When required, the Owner and/or Operator shall submit to the Department a request for an administrative permit amendment in accordance with **7 DE Admin. Code 1130 Section 7.4**. [Reference: **7 DE Admin. Code 1130 Section 7.4 dated 12/11/00**]
3. "Minor Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a minor permit modification in accordance with **7 DE Admin. Code 1130 Section 7.5.1 and 7.5.2**. [Reference: **7 DE Admin. Code 1130 Section 7.5.1 dated 12/11/00 and 7.5.2 dated 12/11/00**]
 - i. For a minor permit modification, during the period of time between the time the Owner and/or Operator makes the change or changes proposed in the minor permit modification application and the time that the Department takes action on the application, the Owner and/or Operator shall comply with both the applicable requirements governing the change

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Condition 2- General Requirements (Cont.)

and the proposed permit terms and conditions. During this period the Owner and/or Operator, at its own risk, need not comply with the existing terms and conditions of this permit that it seeks to modify. *[Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 12/11/00 and 7.5.2.5 dated 12/11/00]*

- ii. If the Owner and/or Operator fail to comply with its proposed permit terms and conditions during this time period, the existing terms and conditions of this permit may be enforced against the Owner and/or Operator. *[Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 12/11/00 and 7.5.2.5 dated 12/11/00]*
4. "Significant Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a significant permit modification in accordance with **7 DE Admin. Code 1130 Section 7.5.3.** *[Reference: 7 DE Admin. Code 1130 Section 7.5.3 dated 12/11/00]*
5.
 - i. When the Owner and/or Operator is required to meet the requirements under Section 112(g) of the Act or to obtain a preconstruction permit under **7 DE Admin. Code 1100**, the Owner and/or Operator shall file a complete application to revise this permit within 12 months of commencing operation of the construction or modification. *[Reference: 7 DE Admin. Code 1130 Section 5.1.1.4 dated 11/15/93]*
 - ii. When the Owner and/or Operator is required to obtain a preconstruction permit, the Owner and/or Operator may submit an application to revise this permit for concurrent processing. The revision request for this permit when submitted for concurrent processing shall be submitted to the Department with the Owner and/or Operator's preconstruction review application or at such later time as the Department may allow. Where this permit would prohibit such construction or change in operation, the Owner and/or Operator shall obtain a permit revision before commencing operation. *[Reference: 7 DE Admin. Code 1102 Sections 11.2.10, 11.5 and 12.4, dated 6/11/06, and 7 DE Admin. Code 1130 Section 5.1.1.4 dated 11/15/93]*
 - iii. Where an application is not submitted for concurrent processing, the Owner and/or Operator shall obtain an operating permit under **7 DE Admin. Code 1100** prior to commencing operation of the construction or modification to cover the period between the date operation is commenced and until such time as operation is approved under **7 DE Admin. Code 1130.** *[Reference: 7 DE Admin. Code 1102 Section 2.1 dated 6/11/06]*
6. "Permit Termination." The Owner and/or Operator may at any time apply for termination of this permit in accordance with **7 DE Admin. Code 1130 Section 7.8.4** or **Section 7.8.5.** *[Reference: 7 DE Admin. Code 1130 Sections 7.8.4 dated 12/11/00 and 7.8.5 dated 12/11/00]*

n. Permit Transfer.

1. A change in ownership or operational control of this facility shall be treated as an administrative permit amendment where the Department has determined that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new owner has been submitted to the Department. *[Reference: 7 DE Admin. Code 1130 Section 7.4.1.4 dated 12/11/00]*
2. In addition to any written agreement submitted by the Owner and/or Operator in accordance with Condition 2(n)(1), the Owner and/or Operator shall have on file at the Department a statement meeting the requirements of **7 Del. C., Ch 79, Section 7902.** *This permit condition is state enforceable only. [Reference: 7 Del. C., Ch 79 Section 7902 dated 8/28/2007]*

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3. The written agreement required in Condition 2(n)(1) of this permit shall be provided to the Department within a minimum of 30 calendar days prior to the specific date for transfer and shall indicate that the transfer is agreeable to both the current and new owner. *[Reference: 7 DE Admin. Code 1102 Section 7.1 dated 6/1/97]*

o. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. *[Reference: 7 DE Admin. Code 1130 Section 6.1.7.4 dated 12/11/00]*

p. Risk Management Plan Submissions.

1. In the event this stationary source, as defined in the State of Delaware 7 DE Admin. Code 1201 "Accidental Release Prevention Regulation" Section 4.0, is subject to or becomes subject to Section 5.0 of 7 DE Admin. Code 1201 (as amended March 11, 2006), the owner or operator shall submit a risk management plan (RMP) to the Environmental Protection Agency's RMP Reporting Center by the date specified in Section 5.10 and required revisions as specified in Section 5.190. A certification statement shall also be submitted as mandated by Section 5.185. *[Reference: 7 DE Admin. Code 1130 Section 6.1.4 dated 12/11/00, 7 DE Admin. Code 1201 as amended March 11, 2006 and Delaware; Approval of Accidental Release Prevention Program, Federal Register Vol. 6, No. 11 pages 30818-22 dated June 8, 2001]*
2. If this stationary source, as defined in 7 DE Admin. Code 1201 Section 4.0, is not subject to Section 5.0 but is subject or becomes subject to Section 6.0 (as amended March 11, 2006), the owner or operator shall submit a Delaware RMP to the State of Delaware's Accidental Release Prevention group by the date as specified in Section 6.6.10 and required revisions as specified by Section 6.6.1. *Note: State enforceable only. [Reference: 7 DE Admin. Code 1201 as amended March 11, 2006]*

q. Protection of Stratospheric Ozone.

When applicable, this Facility shall comply with the following requirements: *[Reference: 40 CFR Part 82 "Protection of Stratospheric Ozone" revised as of 7/1/97 and 7 DE Admin. Code 1130 Section 2.0 dated 11/15/93]*

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - i. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a process that uses a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - ii. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - iii. The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - iv. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2. Any person servicing, maintaining, or repairing appliances, except for motor vehicles, shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. In

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addition, Subpart F applies to refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment.

- i. Persons owning appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156.
 - ii. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - iii. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - iv. Persons performing maintenance, service, repair, or disposal of appliances must certify with the Administrator pursuant to §82.158 and §82.162.
 - v. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152)
 - vi. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
3. Owners/Operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR Part 82, Subpart F §82.166.
 4. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
 5. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".
 - i. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. These systems are regulated under 40 CFR Part 82, Subpart F.
 6. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.
- r. **Severability.** The provisions of this permit are severable. If any part of this permit is held invalid, the application of such part to other persons or circumstances and the remainder of this permit shall not be affected thereby and shall remain valid and in effect. [Reference: 7 DE Admin. Code 1130 Section 6.1.6 dated 12/11/00]

Condition 3- Specific Requirements

- a. **Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards.** The Owner and/or Operator shall comply with the limitations and standards detailed in Condition 3 – Table 1 of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.1.1 dated 12/11/00]*
- b. **Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping).** The Owner and/or Operator shall maintain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all original strip-chart recordings, where appropriate, for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, the permit may specify that records may be maintained in computerized form. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.2 dated 12/11/00]*
 1.
 - i. **Specific Requirements.** The Owner and/or Operator shall comply with the operational limitations, monitoring, testing, and record keeping requirements detailed in Condition 3 – Table 1 which are in addition to those in Conditions 3(b)(1)(ii) and 3(b)(2) of this permit. *[Reference: 7 DE Admin. Code 1130 Sections 6.1.1 dated 12/11/00, 6.1.3.1 dated 12/11/00, and 6.1.10 dated 12/11/00]*
 - ii. **General Testing Requirements.** Upon written request of the Department, the Owner and/or Operator shall, at the Owner and/or Operator's expense, sample the emissions of, or fuel used by, an air contaminant emission source, maintain records, and submit reports to the Department on the results of such sampling. *[Reference: 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]*
 2. **General Record Keeping Requirements.** The Owner and/or Operator shall record, at a minimum, all of the following information:
 - i. If required, for each operating scenario identified in Condition 3 – Table 1 of this permit, a log that indicates the operating scenario under which each particular emission unit is operating. The Owner and/or Operator shall, contemporaneously with changing from one operating scenario to another, record in this log the time at which the operating scenario under which it is operating is changed. *[Reference: 7 DE Admin. Code 1130 Section 6.1.10 dated 12/11/00]*
 - ii. The following information to the extent specified in Condition 3 – Table 1 of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1 dated 12/11/00]*
 - A. The date, place, and time of the sampling or measurements. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.1 dated 12/11/00]*
 - B. The dates analyses were performed. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.2 dated 12/11/00]*
 - C. The Owner and/or Operator or entity that performed the analyses. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.3 dated 12/11/00]*
 - D. The analytical techniques or methods used. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.4 dated 12/11/00]*
 - E. The results of such analyses. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.5 dated 12/11/00]*
 - F. The operating conditions as existing at the time of sampling or measurement. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.6 dated 12/11/00]*

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Condition 3- Specific Requirements (Cont.)

- iii. If the Owner and/or Operator is claiming the affirmative defense of emergency or malfunction as provided in Condition 2(b)(5); a properly signed, contemporaneous operating logs, or other relevant evidence which indicates that: *[Reference: 7 DE Admin. Code 1130 Section 6.7.3 dated 12/11/00]*
 - A. An emergency or malfunction occurred and the causes of the emergency or malfunction. *[Reference: 7 DE Admin. Code 1130 Section 6.7.3.1 dated 12/11/00]*
 - B. The facility was at the time of the emergency or malfunction being operating in a prudent and professional manner and in compliance with the generally accepted industry operations and maintenance procedures. *[Reference: 7 DE Admin. Code 1130 Section 6.7.3.2 dated 12/11/00]*
 - C. During the period of the emergency or malfunction the Owner and/or Operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.7.3.3 dated 12/11/00]*
- iv. A copy of the written notice required by Condition 3(c)(2)(iii) for each change made under Condition 4(c) [Operational Flexibility] of this permit shall be maintained with a copy of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]*

c. Reporting and Compliance Certification Requirements.

- 1. Specific Reporting/Certification Requirements. The Owner and/or Operator shall comply with the Reporting/Certification Requirements detailed in Condition 3- Table 1 of this permit, which are in addition to those of Conditions 3(c)(2) and 3(c)(3) of this permit. Each report that contains any deviations from the terms of Condition 3- Table 1 shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. *[Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3 dated 12/11/00, 6.1.3.3.3 dated 12/11/00, and 6.1.3.3.4 dated 12/11/00]*
- 2. General Reporting Requirements.
 - i. The Owner and/or Operator shall submit to the Department a report of any required monitoring not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the period July 1 through December 31 of the previous calendar year) of each calendar year. Each report shall identify any deviations from the monitoring, record keeping, and reporting requirements under this permit; and the probable cause of the deviations; and any corrective actions or preventative measures taken. If no deviations have occurred, such shall be stated in the report. *[Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.1 dated 12/11/00, 6.1.3.3.2 dated 12/11/00, and 6.1.3.3.4 dated 12/11/00]*
 - ii. In addition to the semiannual monitoring reports required under Condition 3(c)(2)(i), the Owner and/or Operator shall submit to the Department supplemental written reports and/or notices identifying all deviations from permit conditions, probable cause of the deviations, and any corrective actions or preventative measures as follows: *[Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3 dated 12/11/00 and 6.1.3.3.4 dated 12/11/00]*
 - A. If the Owner and/or Operator is claiming the affirmative defense of emergency or malfunction as provided in Condition 2(b)(5) of this permit, a notice of any deviation resulting from emergency or malfunction conditions shall be reported to the Department within two working days of the time when the technology-based emission limitations were

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Condition 3- Specific Requirements (Cont.)

exceeded. Such notice shall contain a description of the emergency or malfunction, any steps taken to mitigate emissions, and any corrective actions taken. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.1 dated 12/11/00 and 6.7.3.4 dated 12/11/00]

- B. Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery and after activating the appropriate site emergency plan, in the following manner: [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 12/11/00 and 6.1.3.3.3.2 dated 12/11/00]
1. Emissions that pose an imminent and substantial danger to public health, safety or the environment must be reported by calling the Department's Environmental Emergency Notification and Complaint number (800) 662-8802. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.2 dated 12/11/2000]
 2. Emissions in excess of any permit condition or emissions which create a condition of air pollution but do not pose an imminent and substantial danger to public health, safety or the environment must either be called in to the Environmental Emergency Notification and Complaint number (800) 662-8802 or faxed to (302) 739-2466. The ability to fax notifications to the Department may be revoked by the Department upon written notice to the Company and at the Department's sole discretion. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.3.2 dated 12/11/2000]
- C. All emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department in a written report pursuant to Condition 3(c).2.1 and/or the specific reporting requirements listed in Condition 3 – Table 1 of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 12/11/00 and 6.1.3.3.3.4 dated 12/11/00]
- D. Discharges to the atmosphere in excess of any quantity specified in the 7 DE Admin. Code 1203 ("**Reporting of a Discharge of a Pollutant or an Air Contaminant**") shall be reported, immediately upon discovery and after activating the appropriate site emergency plan, either in person or to the Department's 24-hour Environmental Emergency Notification and Complaint line (1-800-662-8802). Discharges in compliance with this permit and excess emissions previously reported under Condition 3(c)(2)(ii)(B) of this permit are exempt from this reporting requirement. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.3.3.5 dated 12/11/00 and 7 DE Admin. Code 1203]
- iii. Prior to making a change as provided in Condition 4 [Operational Flexibility] of this permit the Owner and/or Operator shall give written notice to the Department and EPA at least seven calendar days before the change is to be made. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
- A. The seven day period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
 - B. If less than seven calendar days notice is provided because of a need to respond more quickly to such unanticipated conditions, the Owner and/or Operator shall provide notice to the Department and EPA as soon as possible after learning of the need to make the change, together with the reasons why advance notice could not be given. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]

Condition 3- Specific Requirements (Cont.)

- C. The written notice shall include all of the following information: *[Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]*
 - 1. The identification of the affected emission units and a description of the change to be made.
 - 2. The date on which the change will occur.
 - 3. Any changes in emissions.
 - 4. Any permit terms and conditions that are affected, including any new applicable requirements.
 - iv. The Owner and/or Operator shall submit to the Department an annual emissions statement in accordance with 7 DE Admin. Code 1117 Section 7.0 not later than April 30 of each year, or other date as established by the Department, unless an extension by the Department is granted. Such emissions statement shall cover the preceding calendar year. *[Reference: 7 DE Admin. Code 1117 Section 7.0 dated 1/11/93]*
 - v. If required, the Owner and/or Operator shall submit to the Department a progress report for applicable requirements identified in Condition 5 – Table 1 of this permit. Such reports shall be submitted not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the period July 1 through December 31 of the previous calendar year) of each calendar year. Each progress report shall include the following: *[Reference: 7 DE Admin. Code 1130 Sections 5.4.8 dated 11/15/93 and 6.3.4 dated 12/11/00]*
 - A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved. *[Reference: 7 DE Admin. Code 1130 Section 6.3.4.1 dated 12/11/00]*
 - B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. *[Reference: 7 DE Admin. Code 1130 Section 6.3.4.2 dated 12/11/00]*
 - vi. Nothing herein shall relieve the Owner and/or Operator from any reporting requirements under federal, state, or local laws. *[Reference: 7 DE Admin. Code 1130 Section 6.1.3.3.3.5 dated 12/11/00]*
3. General Compliance Certification Requirements.
- i. Compliance with terms and conditions of this permit shall be certified to the Department not later than the first day of February of each year unless the terms or conditions in Condition 3– Table 1 of this permit require compliance certifications to be submitted more frequently. Such certification shall cover the previous calendar year and shall be submitted on Form AQM-1001BB. The Compliance Certification shall include the following information: *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.1 dated 12/11/00]*
 - A. The identification of each term or condition of the permit that is the basis of the certification. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.1 dated 12/11/00]*
 - B. The Owner and/or Operator's current compliance status, as shown by monitoring data and other information reasonably available to the Owner and/or Operator. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.2 dated 12/11/00]*

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- C. Such certification shall indicate whether compliance was continuous or intermittent during the covered period. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.3 dated 12/11/00]*
- D. The methods used for determining the compliance status of the Owner and/or Operator, currently and over the reporting period as required by the monitoring, record keeping, and reporting required under Condition 3. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.4 dated 12/11/00]*
- E. Such other facts as the Department may require to determine the compliance status of the source. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.5 dated 12/11/00]*
- ii. Each compliance certification shall be submitted to the Department and EPA and shall be certified in accordance with Condition 2(a) of this permit. *[Reference: 7 DE Admin. Code 1130 Section 6.3.5.4 dated 12/11/00]*
- iii. Any additional information possessed by the Owner and/or Operator that demonstrates non-compliance with any applicable requirement must also be used as the basis for compliance certifications. *[Reference: 62 FR 8314 dated 2/24/97]*

Condition 3 – Table 1: Specific Requirements

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>a. Emission Unit EM3 Nominally rated 983 mmBTU/hr fossil fuel fired boiler with associated electrostatic precipitator and fly ash handling equipment, a urea-based selective non-catalytic reduction system, an activated carbon injection (ACI) system and associated carbon storage silo, and a dry sorbent injection (DSI) system and associated five dry sorbent storage silos</p>		
<p>1. Nitrogen Oxides</p>		
<p>i. <u>Emission Standard:</u> Annual NO_x mass emissions shall not exceed 773 tons. [Reference: 7 DE Admin Code 1146, Table 4.1 dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> A Department approved ammonia slip concentration resulting from use of SNCR and at maximum production rate shall be established by June 30, 2011. [Reference 7 DE Admin. Code 1102 Section 11.6 dated 6/11/06]</p> <p>iii. <u>Operational Standard:</u> A. Beginning on May 1, 2009 through December 31, 2011, NO_x emissions shall not exceed 0.15 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.1 dated 12/11/06] B. Beginning with the 2012 calendar year, NO_x emissions shall not exceed 0.125 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.3 dated 12/11/06]</p> <p>iv. <u>Operational Limitation:</u> A. The Company shall make best efforts to optimize the Selective Non-Catalytic Reduction (SNCR) system urea injection rate to maximize NO_x reduction while minimizing</p>	<p>v. <u>Compliance Method:</u> A. Compliance with the operation standards and the operation limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00] B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(a)(1)(i) shall be based on Condition 3 - Table 1(m)(1)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 4.2.1 and 4.4 dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> A. The Company shall continuously monitor and record the Nitrogen Oxide emissions from this unit through the use of Continuous Emission Monitors (CEMS) approved by the Department. [Reference: APC-83/0824 dated 9/3/09 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06] B. The Company shall monitor: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00] 1) The emission data from the NO_x CEMS</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Report each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence with the following information: [Reference: 7 DE Admin. Code 1112, Section 7.3 dated 11/24/93] 1) The name and location of the facility; 2) The subject source(s) that caused the excess emission; 3) The time and date of the first observation of the excess emissions; 4) The cause and expected duration of the excess emission; 5) For sources subject to the numerical limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions. 6) The proposed corrective actions and schedule to correct the conditions causing the excess emission.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>the associated ammonia slip while ensuring effective operation of the boiler and associated systems. [Reference: APC-83/0824 dated 9/3/09]</p> <p>B. The Company shall determine the annual average NO_x emission rate in lb/mmBTU, using methods specified in 40 CFR Part 75. [Reference: 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00]</p> <p>C. The Company shall, by September 1st of each year, determine ammonia slip by conducting three (3) one (1) hour tests at base load by EPA Conditional Test Method CTM-027. [Reference: 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00]</p>	<p>shall be totaled for each day from midnight to midnight as tons of emissions per day.</p> <ol style="list-style-type: none"> 2) The Company shall monitor the hourly heat input. 3) The Company shall monitor for each period of operation of the SNCR, the date, time, and hours of operation. 4) The Company shall monitor the ammonia slip each year. <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct performance testing on Unit 3 to establish a proposed ammonia slip limit by June 30, 2011 and provide the Department with the written report of the results.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors and Continuous Recorders shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the requirements of 40 CFR Part 96, subpart HH (April 28, 2006 amendment) to continuously measure and record the emission concentration for NO_x. [Reference: APC-83/0824 dated 9/3/09 and 7 DE Admin Code 1146, Section 4.4, dated 12/11/06]</p>	<p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <ol style="list-style-type: none"> 1) Tabulation of NO_x emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard. 2) For NO_x mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard. 3) For NO_x mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard. 4) For NO_x emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units. 5) Identification of any period or periods of, and cause for, any invalid data averages.

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>ix. <u>Recordkeeping</u>: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Keep a copy of the Quality Assurance Program on site. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>B. Continuously record the NO_x readings from the monitors. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>C. Record the outage date for the NO_x monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>6) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>7) Identification of any exceedance of any NO_x emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>8) Results from all tests, audits, and recalibrations performed during the period.</p> <p>9) Any other relevant data requested by the Department.</p> <p>10) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		<p>11) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>
2. Particulate Matter		
<p>i. <u>Emission Standard:</u></p> <p>A. The Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104 Section 2.1 dated 2/1/81]</p> <p>B. Particulate emissions from each activated carbon storage silo and dry sorbent storage silo shall not exceed 0.2 grain per dry standard cubic foot of exhaust air. [Reference: 7 DE Admin Code 1105, Section 2 dated 2/1/81]</p> <p>ii. <u>Emission Limitation:</u></p> <p>A. Particulate emissions shall not exceed 59.59 lbs/hr and 261 tons in any twelve (12) consecutive months. [Reference: APC-83/0824 dated 9/3/09]</p> <p>B. The total particulate emissions from dry sorbent storage silo unloading and dry sorbent injection process shall not exceed 0.42 tons per year. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>C. Particulate emissions increase from the</p>	<p>v. <u>Compliance Method:</u> Compliance with the emission standards and the operation limitations shall be based on the following:</p> <p>A. The quality of liquid fuel as determined in Condition 3 - Table 1 (a)(3)(vii)(A), (B), and (C).</p> <p>B. The proper operation and maintenance of the electrostatic precipitator. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>C. Recordkeeping requirements of Condition 3-Table 1(a)(3)(ix)(D)(1), (2), and (5) through (11), and Condition 3-Table 1(a)(4)(ix)(C)(4) through (12). [Reference: APC-2009/0024 dated 9/3/09 and APC-2008/0171 dated 9/3/09]</p> <p>vi. <u>Monitoring:</u></p> <p>A. The Company shall continuously monitor the primary volts and amps, the secondary kilovolts and milliamps, and the spark rate for each ESP field and shall conduct visible inspections for corrosion of the ESP during</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedances of the standard, with supporting records, in accordance with Condition 3(c)(2) of this permit. [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>activated carbon injection system and associated activated carbon storage silos and the dry sorbent injection system and associated dry sorbent storage silos each shall not exceed: [Reference: APC-2008/0171 dated 9/3/09 and APC-2009/0024 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For total particulate emissions baseline plus 25 tons per twelve month rolling period. 2) For total PM₁₀ emissions baseline plus 15 tons per twelve month rolling period. 3) For total PM_{2.5} emissions using PM₁₀ emissions as the surrogate, baseline plus 15 tons per twelve month rolling period. <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> The electrostatic precipitators shall be maintained and operated at the highest practical collection efficiency during all periods of boiler operation when firing coal. [Reference: APC-83/0824 dated 9/3/09]</p>	<p>the annual maintenance outage. The perforated distribution plate at the inlet and the underside of the top plate of the precipitator housing shall be included in the inspection. The company shall correct any corrosion problems prior to being placed back in-service. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>B. The Company shall monitor the information in Condition 3-Table 1(a)(3)(ix)(D)(1), (2), and (5) through (11), and Condition 3-Table 1(a)(4)(ix)(C)(4) through (12). [Reference: APC-2009/0024 dated 9/3/09 and APC-2008/0171 dated 9/3/09]</p> <p>vii. <u>Testing:</u> That required by Condition 3(b)(1)(ii) of this permit.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <ol style="list-style-type: none"> A. Maintain records of all inspections including items inspected, any deficiencies found, and actions taken to correct the deficiencies. B. Maintain records of the monitoring required in Condition 3 – Table 1(a)(2)(vi). 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>C. The twelve month rolling period emissions of particulate matter and PM₁₀. [Reference: APC-2008/0171 dated 9/3/09 and APC-2009/0024 dated 9/3/09]</p>	
<p>3. Sulfur Oxides</p>		
<p>i. <u>Emission Standard:</u></p> <p>A. The sulfur content of the solid fuel shall not exceed 1.0 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2 and APC-83/0824 dated 9/3/09]</p> <p>B. The sulfur content of the distillate fuel oil used to fire this unit shall not exceed 0.3 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2 and APC-83/0824 dated 9/3/09]</p> <p>C. The Company shall not receive for use in this unit residual fuel oil having a sulfur content of greater than 0.5% by weight as determined by one of the following ASTM methods: D129-00, D1552-03, D2622-05, or D4294-03. [Reference: 7 DE Admin Code 1146, Section 5.5, dated 12/11/06]</p> <p>D. Annual SO₂ mass emissions limits shall not exceed 1391 tons. [Reference: 7 DE Admin Code 1146, Section 5.3, dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u></p> <p>SO₂ emissions from this unit shall not exceed 1,110.10 lbs/hr. [Reference: APC-2000/0281 dated 10/17/00]</p> <p>iii. <u>Operational Standard:</u></p> <p>A. Beginning on May 1, 2009 through</p>	<p>v. <u>Compliance Method:</u></p> <p>A. Compliance with the emission standards in Condition 3 - Table 1(a)(3)(i)(A),(B), and (C) shall be demonstrated by sampling and analysis of fuel burned in the equipment using ASTM methods and record keeping of this condition. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(a)(3)(i)(D) shall be based on Condition 3 – Table 1(m)(2)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Sections 5.3.1 and 5.4 dated 12/11/06]</p> <p>C. Compliance with operational standards in Condition 3 - Table 1(a)(3)(iii)(A) and (B) shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>D. Compliance with operational limitations in Condition 3 - Table 1(a)(3)(iv) shall be demonstrated by recordkeeping requirements of Condition 3-Table</p>	<p>x. <u>Reporting:</u></p> <p>In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. In addition to submitting all records indicating exceedances of the standard in accordance with Condition 3(c)(2), the Company shall submit to the Department at monthly intervals, not later than sixty (60) days after the end of the month in which such data is determined, the following: [Reference APC-83/0824 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) The monthly weighted average for sulfur content, ash content, and gross heating value of the shipment composite samples for coal received; 2) The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit; 3) Actual weekly usage of each fuel for this unit; and 4) Results of individual oil or coal composite samples in which the sulfur

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>December 31, 2011, SO₂ emissions shall not exceed 0.37 lb/MMBTU heat input on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 5.1 dated 12/11/06]</p> <p>B. Beginning with the 2012 calendar year, SO₂ emissions shall not exceed 0.26 lb/MMBTU heat input on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 5.2 dated 12/11/06]</p> <p>iv. Operational Limitation:</p> <p>A. For purposes of satisfying the Coastal Zone requirements, the Company shall provide offsets from this unit in accordance with the following equation: (STATE ENFORCEABLE ONLY) [Reference: APC-2000/0281 dated 10/17/00]</p> $EM3_{cap-SO_2} = 2906 - [(HR_{57}SO_2) + (HR_{57}H_2SO_4 * 5.23) + (HR_{57}CO * 0.15) + (HR_{57}PM_{10} * 1.05) + (HR_{57}NH_3 * 0.25) + (HR_{57}Hrs * 0.0024) + 15]$ <p>Where:</p> <p>EM3_{cap}SO₂ = Maximum permitted calendar annual tons of SO₂ emitted by Edge Moor Unit 3.</p> <p>HR₅₇SO₂ = Actual calendar annual tons of SO₂ emitted from Hay Road Units 5 through 7. (As calculated and reported through EDR Reports.)</p> <p>HR₅₇H₂SO₄ = Actual calendar annual tons of H₂SO₄ emitted from Hay Road</p>	<p>1(a)(3)(ix)(D). [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00]</p> <p>vi. <u>Monitoring</u>:</p> <p>A. The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <ol style="list-style-type: none"> 1) The sulfur content of each train car load of coal received at the facility. 2) The weighted average of sulfur analyses each month. 3) The sulfur content of the fuel oils combusted in the unit. 4) Hourly, monthly, and yearly SO₂ emissions. 5) Hourly SO₂ emissions in lb/mmBTU. 6) SO₂ allowances. 7) Periodic reviews and updates of the offset ratios on the basis of changes in any established TLV's. <p>B. The Company shall continuously monitor SO₂ emissions from this unit through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>vii. <u>Testing</u>:</p> <p>In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct the following:</p> <p>A. Analysis for the sulfur content, ash content, and gross heating value of a composite sample for each shipment of coal received.</p>	<p>content exceeded the limits specified under this condition.</p> <p>5) No later than March 1st of each calendar year, submit a written report to the Department detailing the SO₂ offset requirements, in tons per calendar year, and written proof of the surrendering of SO₂ allowances, equal in tons, to those calculated offsets annual, in accordance with the equation listed in Condition 3 - Table 1(a)(4)(B) of this permit. [Reference: 7 DE Admin Code 1130 Section 6.1.1 dated 12/11/00]</p> <p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <ol style="list-style-type: none"> 1) Tabulation of SO₂ emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard. 2) For SO₂ mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard. 3) For SO₂ mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>Units 5 through 7. <i>(As calculated by EPA emission factors.)</i></p> <p>HR₅₇CO = Actual calendar annual tons of CO emitted from Hay Road Units 5 through 7. <i>(As monitored through CEM data.)</i></p> <p>HR₅₇PM₁₀ = Actual calendar annual tons of PM₁₀ emitted from Hay Road Units 5 through 7. <i>(As calculated through EPA emission factors, or compliance testing.)</i></p> <p>HR₅₇NH₃ = Actual calendar annual tons of NH₃ emitted from Hay Road Units 5 through 7. <i>(As monitored through CEM data or as calculated by EPA emission factors.)</i></p> <p>HR₅₇Hrs = Actual unit hours operated by Hay Road Units 5 through 7.</p> <p>Note:</p> <ul style="list-style-type: none"> • 2906 is the baseline of Edge Moor Boiler 3 in tons of SO₂. • Weighting of 0.0024 is the offset weighting of potential HAPs determined as below in Table No. 2, APPENDIX A. <p>The Company is required to conduct periodic reviews and updates of the offset ratios on the basis of changes in any established TLV's. This review must occur at a minimum before issuance of the operating permit and prior to any renewals thereof. In addition, the Company must surrender SO₂</p>	<p>Sampling and sample preparation shall comply with ASTM Methods D-2234-74 and D-2013. Sample analysis shall be in accordance with ASTM Methods D-4239 for sulfur content, D-3174 for ash content, and D-2015 for gross heating value determination, or alternative methods approved by the Department. Compliance determination for the sulfur content in the coal shall be on the results of the composite sample for each shipment. [Reference: APC-83/0824 dated 10/7/97, 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>B. Analysis for the sulfur content of a weekly composite of daily samples for the residual and distillate fuel oil fired in this unit. Compliance determination for the sulfur content in the fuel oil shall be on the results of each composite sample. [Reference: APC-83/0824 dated 10/7/97, 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>C. Samples shall be collected: [Reference: 7 DE Admin Code 1146, Section 5.5.1 and 5.5.2 dated 12/11/06]</p> <ol style="list-style-type: none"> 1) From the transport vessel for each shipment of residual fuel oil received at the facility for combustion, or 2) From the supply pipeline each day residual oil is delivered to the facility via pipeline for combustion, after sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the 	<p>units consistent with the applicable emission standard.</p> <ol style="list-style-type: none"> 4) For SO₂ emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units. 5) Identification of any period or periods of, and cause for, any invalid data averages. 6) Records of any repairs, adjustment, or maintenance to the monitoring system. 7) The results of all fuel oil sulfur analysis. 8) Identification of any exceedance of any SO₂ emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance. 9) Results from all tests, audits, and recalibrations performed during the period. 10) Any other relevant data requested by the Department. 11) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>allowances, equal in tons, to those calculated offsets annually. Note that the above equation offset weightings are derived in accordance with Appendix A of this permit.</p> <p>B. The dry sorbent loading rate during silo loading operations shall not exceed 20 tons per hour per silo. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>C. Only two silos can be loaded simultaneously. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>D. Only "SOLVAir® Select 200" or "SOLVAir® Select 300" shall be stored in the silos. Any material other than "SOLVAir® Select 200" or "SOLVAir® Select 300" requires prior approval by the Department. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>E. The owner or operator shall dispose of dry sorbent injection system wastes in accordance with all applicable Department regulations and permits. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>F. The dry sorbent storage silos dust collectors at the top and base of each silo shall be operated whenever the respective silo is operated. [Reference: APC-2009/0024 dated 9/3/09]</p> <p>G. The dry sorbent storage silos dust collectors at the top and base of each silo shall be operated within the pressure range recommended by the manufacturer. [Reference: APC-2009/0024 dated 9/3/09]</p>	<p>sampling line, or</p> <p>3) From the supply pipeline at the inlet to the residual oil-fired unit each day the unit fires any quantity of oil fuel, after sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the sampling line.</p> <p>4) Fuel oil samples shall be analyzed in accordance with ASTM Method D-129-00, D-1552-03, D-2622-05 or D-4294-03.</p> <p>D. Annual compliance demonstration with emission standard of Condition 3 – Table 1(a)(3)(i)(D) shall be submitted within 30 days of the end of each calendar year (January 1-December 31). [Reference: APC-2009/0024 dated 9/3/09]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the monitoring and reporting requirements of 40 CFR Part 96, subpart HHH (April 28, 2006 amendment). [Reference: 7 DE Admin Code 1146, Section 5.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> A. In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this</p>	<p>information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."</p> <p>12) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>permit, the Company shall maintain the following records: [Reference: APC-83/0824 dated 9/3/09, 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <ol style="list-style-type: none"> 1) The monthly weighted average for sulfur content, ash content, and gross heating value of the shipment composite samples for coal received; 2) The monthly weighted average for sulfur content of the weekly composite samples for the coal and fuel oil consumed in this unit; 3) Actual weekly usage of each fuel for this unit; and 4) Results of individual oil or coal composite samples in which the sulfur content exceeded the limits specified under this condition. 5) Records of the hourly and rolling twelve month total SO₂ emissions. <p>B. The Company shall continuously record the SO₂ readings from the monitors. [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>C. The Company shall record the outage date for the SO₂ monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>D. The following information shall be recorded, and maintained: [Reference: APC-2009/0024 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For each period of operation of the DSI 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>the date, time, and hours of operation.</p> <ol style="list-style-type: none">2) The type of coal being combusted.3) The SO₂ emissions in lb/tBtu on an hourly basis.4) The SO₂ emissions monthly and annually.5) For each delivery of dry sorbent to each silo, the name of the product, quantity delivered, time required to transfer the load to the silo, transfer rate, air flow rate, number of silos loaded, and baghouse pressure drop.6) Baghouse conditions each month to ensure proper operation.7) All routine and non-routine maintenance performed on the activated carbon injection systems and silo baghouses including dates and duration of outages.8) Presence or absence of visible emissions for the baghouse once each day in a log. If visible emissions are detected, the Company must identify and correct the cause(s) of the emissions within 48 hours.9) For all visible emissions that are not normal, record the cause(s) of the violation and all corrective action(s) in the daily log.10) Monitor visible emissions and record the results in the daily log immediately following any corrective action(s). If	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>visible emissions are still detected, the Company shall verify visible emissions by the EPA Reference Method 22 to verify compliance or noncompliance with the opacity emissions standard. The results shall be recorded in the daily log.</p> <p>11) Repeat actions in Condition 3 – Table 1(a)(3)(ix)(D)(10) and (11) until the excess emissions are eliminated.</p>	
<p>4. Mercury (Hg)</p> <p>i. <u>Emission Standard:</u></p> <p>A. Beginning on January 1, 2009 through December 31, 2012, annual Hg mass emissions limits shall not exceed 266 ounces. [Reference: 7 DE Admin Code 1146, Section 6.3, dated 12/11/06]</p> <p>B. Beginning with the 2013 calendar year annual Hg mass emissions limits shall not exceed 106 ounces. [Reference: 7 DE Admin Code 1146, Section 6.3, dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u></p> <p>A. Hg emissions shall not exceed on a quarterly average 1.0 lb/tBtu heat input. [Reference: 7 DE Admin Code 1146, Section 6.1.1, dated 12/11/06]</p> <p>B. On or after January 1, 2012, Hg emissions shall not exceed on a quarterly average 0.6</p>	<p>v. <u>Compliance Method:</u></p> <p>A. Compliance with emission standards in Condition 3 - Table 1(a)(4)(i) shall be demonstrated on an annual basis through the use of continuous emissions monitoring systems (CEMs). [Reference: 7 DE Admin Code 1146, Sections 6.3.1 and 6.4.1, dated 12/11/06]</p> <p>B. Compliance with operational standards in Condition 3 - Table 1(a)(4)(iii) shall be demonstrated through the use of continuous emissions monitoring systems (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1, dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> The Company shall continuously monitor mercury emissions from this unit through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1 dated 12/11/06]</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Report all exceedances of the emission standards, with supporting records, in accordance with Condition 3(c)(2).</p> <p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06 and APC-08/0171 dated 9/3/09]</p> <p>1) Tabulation of mercury emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>lb/tBtu heat input. [Reference: 7 DE Admin Code 1146, Section 6.2.1, dated 12/11/06]</p> <p>iv. <u>Operational Limitation:</u></p> <p>A. A continuous emissions monitoring system for the measurement of mercury shall be installed, calibrated, operated, and certified in accordance with 40 CFR Part 75 (May 18, 2005 amendment) [Reference: 7 DE Admin Code 1146, Sections 6.3.1 and 6.4.1, dated 12/11/06]</p> <p>B. The Company shall dispose of activated carbon injection system wastes in accordance with all applicable Department regulations and permits. [Reference: APC-2008/0171 dated 9/3/09]</p> <p>C. The activated carbon storage silo baghouse shall be operated whenever the respective silo is operated. [Reference: APC-2008/0171 dated 9/3/09]</p> <p>D. The activated carbon storage silo baghouse shall be operated within the pressure range recommended by the manufacturer. [Reference: APC-2008/0171 dated 9/3/09]</p>	<p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall demonstrate compliance with emission standard of Condition 3 – Table 1(a)(4)(i)(A). The first compliance demonstration shall be due 30 days after the end of the annual period (January 1-December 31, 2009), and successive annual demonstrations shall be submitted within 30 days of the end of each following calendar year (January 1-December 31). [Reference: APC-2008/0171 dated 9/3/09]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) and meeting the monitoring and reporting requirements of 40 CFR Part 60 (June 9, 2006 amendment). [Reference: 7 DE Admin Code 1146, Section 6.4.1, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Continuously record the Hg readings from the monitors. [Reference: 7 DE Admin Code 1146, Section 6.4.1 dated 12/11/06]</p> <p>B. Record the outage date for the Hg monitors due to maintenance, the date the monitor was repaired, and the maintenance</p>	<p>2) For mercury mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard.</p> <p>3) For mercury mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard.</p> <p>4) For mercury emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units.</p> <p>5) Identification of any period or periods of, and cause for, any invalid data averages.</p> <p>6) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>7) Identification of any exceedance of any mercury emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>8) Results from all tests, audits, and recalibrations performed during the period.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>C. The following information shall be recorded, and maintained: [Reference: APC-2008/0171 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For each period of operation of the ACI the date, time, and hours of operation. 2) The type of coal being combusted. 3) The Hg emissions in lb/tBtu on an hourly basis. 4) The Hg emissions monthly and annually. 5) The Hg emissions in ounces for each calendar year. 6) For each delivery of activated carbon to each silo, the quantity delivered, time required to transfer the load to the silo, transfer rate, air flow rate, and baghouse pressure drop. 7) Baghouse conditions each month to ensure proper operation. 8) All routine and non-routine maintenance performed on the activated carbon injection systems and silo baghouses including dates and duration of outages. 9) Presence or absence of visible emissions for the baghouse once each day in a log. If visible emissions are detected, the Company must identify and correct the cause(s) of the emissions within 48 hours. 10) For all visible emissions that are not 	<ol style="list-style-type: none"> 9) Any other relevant data requested by the Department. 10) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." 11) Signature by the designated representative. <p>x. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>normal, record the cause(s) of the violation and all corrective action(s) in the daily log.</p> <p>11) Monitor visible emissions and record the results in the daily log immediately following any corrective action(s). If visible emissions are still detected, the Company shall verify visible emissions by the EPA Reference Method 22 to verify compliance or noncompliance with the opacity emissions standard. The results shall be recorded in the daily log.</p> <p>12) Repeat actions in Condition 3 – Table 1(a)(4)(ix)(D)(10) and (11) until the excess emissions are eliminated.</p>	
5. Opacity		
<p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance which is greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin Code 1114, Section 2.1, dated 7/17/84 and APC-83/0824 dated 9/3/09]</p> <p>ii. <u>Emission Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Sections 6(a)(3)(i)(B) and 6(b)(1) dated 12/11/00] and 7 DE Admin Code 1117 Section 4.3 dated 7/17/84]</p> <p>A. Continuous opacity readings; B. Zero and span calibration drift shall be checked at least once daily;</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit a written report of excess emissions no later than sixty (60) days after each calendar quarter detailing the nature and cause of the excess emissions. The averaging period used for data reporting shall correspond to</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iii. <u>Operational Standard</u>: During the process of bringing the unit from a cold condition to an on-line condition or during the reverse process, the opacity shall not exceed fifty percent (50%) for twenty-five (25) minutes and thirty percent (30%) for forty-five (45) minutes in a one (1) hour period or thirty percent (30%) for ninety (90) minutes and fifty percent (50%) for forty-five (45) minutes in any twenty-four (24) hour period. For purpose of this condition, a cold start-up is defined as any start-up which occurs after the boiler reaches an ambient pressure condition.</p> <p>iv. <u>Operational Limitation</u>:</p> <p>A. A continuous monitoring system for the measurement of opacity shall be operating properly, in accordance with 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources, during all periods of boiler operation. [Reference: 7 DE Admin Code 1117 Sections 3(1)(a) and 4.1(a) dated 7/17/84]</p> <p>B. The opacity monitor shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period. [Reference: 7 DE Admin Code 1117 Section 4.2 dated 7/17/84]</p>	<p>C. Periods of opacity meter outage.</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall:</p> <p>A. Record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; to adjust the zero and span whenever the 24-hour drift or 24-hour calibration drift limits of 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources are exceeded.</p> <p>B. Instrument span should be approximately 200 percent of the expected instrument data display corresponding to the emission standard.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the monitoring required in</p>	<p>the averaging period specified in the emission test method used to determine compliance with the emission standard in Condition 3 - Table 1(a)(5)(i). The report at a minimum shall include the following: [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p> <p>1) For opacity measurements, the summary shall consist of the magnitude in actual percent of all one-minute (or such other time deemed appropriate by the State) averages of opacity greater than the opacity standard in the applicable plan for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess averages of opacity (e.g., whenever a regulation allows two minutes of opacity measurements in excess of the standard, the State shall require the source to report all opacity averages in any one hour, in excess of the standard, minus the two-minute exemption). [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	this Condition. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.1.2 and 6.2.1 dated 12/11/00]	xi. <u>Certification</u> : That required by Condition 3(c)(3) of this permit. [Reference 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
6. Supplemental Fuels		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: The Company may combust supplemental fuels to include CDG soils contaminated with known contaminants and soils containing less than 2ppm of PCB's, less than 10 ppm BTEX and passing TCLP. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: The Company shall monitor all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall test all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain all records of testing</p>	<p>x. <u>Reporting</u>: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	performed on the supplemental fuels. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]	
7. Compliance Assurance Monitoring Plan: ESP for PM Control - Applicable When Firing Coal Only		
i. <u>Emission Standard:</u> None. ii. <u>Emission Limitation:</u> None. iii. <u>Operational Standard:</u> None. iv. <u>Operational Limitations:</u> A. Indicators [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97] 1) Voltage and current shall be used as the primary indicator. 2) Opacity shall be used as the secondary indicator. B. Indicator Ranges [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97] 1) Voltage shall be between 50 and 480 V on an hourly average basis. 2) Current shall be between 5 and 235 amps on an hourly average basis. 3) Visible emissions shall not exceed twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one	v. <u>Compliance Method:</u> Compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] vi. <u>Monitoring:</u> [Reference 40 CFR Part 64.3 and 64.4 dated 10/22/97] A. Data Representativeness [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1) The voltage and current shall be measured using instrumentation supplied by the manufacturer, or equivalent. 2) The COMs shall be installed and maintained in accordance with the manufacturer's specification and 40 CFR 60, Appendix B, PS-1. B. Verification of Operational Status [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1) Daily logs shall be verified that readings were logged and are in appropriate ranges. 2) The COMS shall be calibrated according to manufacturer's specifications. 3) The Company shall conduct periodic	xi. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Quality Improvement Plan (QIP) 1) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if any stack tests reveal higher than permitted emission rates. [Reference 40 CFR Part 64.7(e) dated 10/22/97] 2) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if excursions exceed 5% of the unit's operating time for a reporting period. [Reference 40 CFR Part 64.8(a) dated 10/22/97] B. The Company shall notify the Department at least 30 days prior to any reestablishment of excursion values. [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97] C. The report required by Condition 3(c)(2) of this permit shall also contain the following information: [Reference 40 CFR Part 64.9(a)(2) dated 10/22/97] 1) Summary information on the number,

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>(1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period.</p> <p>C. Excursion [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) An excursion shall be defined as hourly average voltage below 50 V or above 480 V. 2) An excursion shall be defined as hourly average current below 5 amps or above 235 amps. 3) An excursion shall be defined as visible emissions over twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period excluding start-up and shut-down provisions as described in Condition 3-Table 1(a)(5)(iii). 4) An excursion shall trigger an investigation, corrective action, and a reporting requirement. [Reference 40 CFR Part 64.7(d) dated 10/22/97] <p>D. Monitoring/Measurement Approach [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Voltage and current shall be based on measurement by voltmeter and ammeter. 2) Opacity shall be determined by COMs. <p>E. At all times, the Company shall maintain the</p>	<p>stack testing to verify parameters being monitored.</p> <p>C. QA/QC Practices [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) The Company shall confirm the meters read zero when unit is not operating. 2) The Company shall inspect and service meters during maintenance outages. 3) The Company shall follow manufacturer instructions on system checks and testing. 4) The COM shall be calibrated in accordance with the manufacturer's specifications. 5) Observers shall be properly trained to assess visible emissions and areas to inspect. <p>D. Frequency [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) The primary voltage and current readings are recorded and averaged over an hourly period. 2) Opacity shall be monitored continuously. 3) Visual inspections shall occur daily <p>E. Data Collection Procedures [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) An alarm system shall signal operator when voltage and/or amps are outside of normal operating parameters. 	<p>duration, and cause of excursions or exceedances;</p> <ol style="list-style-type: none"> 2) The corrective actions taken after an excursion or exceedance; 3) Summary information on the number, duration, and cause of monitor downtime incidents; and 4) If triggered, a description of the actions taken to implement the QIP. <p>xi. <u>Certification:</u> In addition to the requirements of Condition 3(c)(3) of this permit, compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [Reference 40 CFR Part 64.7(b) dated 10/22/97]</p> <p>F. At all times, the Company shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [Reference 40 CFR Part 64.7(c) dated 10/22/97]</p>	<p>2) Opacity shall be monitored with a certified COM and recorded in DAHS.</p> <p>F. Averaging Period [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <p>1) Hourly average for voltage and current. 2) The COMs shall use 6 minute averages.</p> <p>vii. <u>Testing:</u> That required by Condition 3(b)(1)(ii) of this permit.</p> <p><u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Record Keeping:</u> [Reference 40 CFR Part 64.9(b) dated 10/22/97] The Company shall maintain records of the following:</p> <p>A. Monitoring data. B. Monitor performance data. C. Corrective actions taken. D. Any written quality improvement plan (QIP) required pursuant to 64.8. E. Any activities undertaken to implement a QIP. F. All supporting information used to demonstrate compliance.</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>b. Emission Unit EM4 Nominally rated 1793 mmBTU/hr fossil fuel fired boiler with associated electrostatic precipitator and fly ash handling equipment, gas reburn technology with a separated overfired air system, a urea-based enhanced selective non-catalytic reduction system, an activated carbon injection system and associated carbon storage silo, and a dry sorbent injection system and associated five dry sorbent storage silos</p>		
<p>1. Nitrogen Oxides</p>		
<p>i. <u>Emission Standard:</u> Annual NO_x mass emissions shall not exceed 1339 tons. [Reference: 7 DE Admin Code 1146, Table 4.1 dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> A Department approved ammonia slip concentration resulting from use of SNCR and at maximum production rate shall be established by June 30, 2011. [Reference 7 DE Admin. Code 1102 Section 11.6 dated 6/11/06]</p> <p>iii. <u>Operational Standard:</u> A. Beginning on May 1, 2009 through December 31, 2011, NO_x emissions shall not exceed 0.15 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.1 dated 12/11/06] B. Beginning with the 2012 calendar year, NO_x emissions shall not exceed 0.125 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.3 dated 12/11/06]</p> <p>iv. <u>Operational Limitation:</u> A. Natural Gas or Landfill Gas shall be the only fuel used to fire the Reburn Injectors. [Reference: APC-83/0825 dated 9/3/09]</p>	<p>v. <u>Compliance Method:</u> A. Compliance with the operation standards and the operation limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00] B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(b)(1)(i) shall be based on Condition 3 - Table 1(m)(1)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 4.2.1 and 4.4 dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> A. The Company shall continuously monitor and record the Nitrogen Oxide emissions from this unit through the use of Continuous Emission Monitors (CEMS) approved by the Department. [Reference: APC-83/0825 dated 9/3/09 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06] B. The emission data from the NO_x CEMS shall be totaled for each day from midnight to midnight as tons of emissions per day.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Report each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence with the following information: [Reference: 7 DE Admin. Code 1112, Section 7.3 dated 11/24/93] 1) The name and location of the facility; 2) The subject source(s) that caused the excess emission; 3) The time and date of the first observation of the excess emissions; 4) The cause and expected duration of the excess emission; 5) For sources subject to the numerical limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions. 6) The proposed corrective actions and schedule to correct the conditions causing the excess emission.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>B. The twelve (12) natural gas reburn injectors shall not increase the existing total heat input to the boiler. [Reference: APC-83/0825 dated 9/3/09]</p> <p>C. The boiler shall only operate with Low NO_x burner technology with low excess air and overfire air. [Reference: 7 DE Admin Code 1112, Section 3.2.2 dated 11/24/93]</p> <p>D. The Company shall make best efforts to optimize the Selective Non-Catalytic Reduction (SNCR) system urea injection rate to maximize NO_x reduction while minimizing the associated ammonia slip while ensuring effective operation of the boiler and associated systems. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>E. The operating temperature of the SNCR system shall be in the range of 1500°F and 2100°F. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>F. The Company shall determine the annual average NO_x emission rate in lb/mmBTU, using methods specified in 40 CFR Part 75. [Reference: 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00]</p>	<p>[Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>C. The Company shall monitor the hourly heat input. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>D. The Company shall monitor for each period of operation of the Gas Reburn Technology the date, time and hours of operation. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>E. The Company shall monitor the fuel flow to the Low NO_x Burners. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>F. The Company shall monitor the fuel flow to the Gas Reburn Injectors. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>G. The Company shall monitor for each period of operation of the SNCR, the date, time and hours of operation. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>H. The Company shall monitor the ammonia slip on a monthly and rolling twelve month basis. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>I. The Company shall monitor the operating temperature of the SNCR system. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct performance testing on Unit 4 to establish a proposed ammonia slip limit by June</p>	<p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <ol style="list-style-type: none"> 1) Tabulation of NO_x emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard. 2) For NO_x mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard. 3) For NO_x mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard. 4) For NO_x emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units. 5) Identification of any period or periods of, and cause for, any invalid data averages.

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>30, 2011 and provide the Department with the written report of the results.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors and Continuous Recorders shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the requirements of 40 CFR Part 96, subpart HH (April 28, 2006 amendment) to continuously measure and record the emission concentration for NO_x. [Reference: APC-83/0825 dated 9/3/09 and 7 DE Admin Code 1146, Section 4.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Keep a copy of the Quality Assurance Program on site. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>B. Continuously record the NO_x readings from the monitors. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>C. Record the outage date for the NO_x monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>6) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>7) Identification of any exceedance of any NO_x emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>8) Results from all tests, audits, and recalibrations performed during the period.</p> <p>9) Any other relevant data requested by the Department.</p> <p>10) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		<p>11) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>
2. Particulate Matter		
<p>i. <u>Emission Standard:</u></p> <p>A. The Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104 Section 2.1 dated 2/1/81]</p> <p>B. Particulate emissions from each activated carbon storage silo and dry sorbent storage silo shall not exceed 0.2 grain per dry standard cubic foot of exhaust air. [Reference: 7 DE Admin Code 1105, Section 2 dated 2/1/81]</p> <p>ii. <u>Emission Limitation:</u></p> <p>A. Particulate emissions shall not exceed 118.37 lbs/hr and 518 tons in any twelve (12) consecutive months. [Reference: APC-83/0825 dated 9/3/09]</p> <p>B. The total particulate emissions from dry sorbent storage silo unloading and dry sorbent injection process shall not exceed 0.42 tons per year. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>C. Particulate emissions increase from the</p>	<p>v. <u>Compliance Method:</u> Compliance with the emission standards and the operation limitations shall be based on the following:</p> <p>A. The quality of liquid fuel as determined in Condition 3 - Table 1 (b)(3)(vii)(A), (B), and (C).</p> <p>B. The proper operation and maintenance of the electrostatic precipitator. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>C. Recordkeeping requirements of Condition 3-Table 1(b)(3)(ix)(D)(1), (2), and (5) through (11), and Condition 3-Table 1(b)(4)(ix)(C)(4) through (12). [Reference: APC-2009/0025 dated 9/3/09 and APC-2008/0172 dated 9/3/09]</p> <p>vi. <u>Monitoring:</u></p> <p>A. The Company shall continuously monitor the primary volts and amps, the secondary kilovolts and milliamps, and the spark rate for each ESP field and shall conduct visible inspections for corrosion of the ESP during</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedances of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>activated carbon injection system and associated activated carbon storage silos and the dry sorbent injection system and associated dry sorbent storage silos each shall not exceed: [Reference: APC-2008/0172 dated 9/3/09 and APC-2009/0025 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For total particulate emissions baseline plus 25 tons per twelve month rolling period. 2) For total PM₁₀ emissions baseline plus 15 tons per twelve month rolling period. 3) For total PM_{2.5} emissions using PM₁₀ emissions as the surrogate, baseline plus 15 tons per twelve month rolling period. <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: The electrostatic precipitators shall be maintained and operated at the highest practical collection efficiency during all periods of boiler operation when firing coal. [Reference: APC-83/0825 dated 9/3/09]</p>	<p>the annual maintenance outage. The perforated distribution plate at the inlet and the underside of the top plate of the precipitator housing shall be included in the inspection. The company shall correct any corrosion problems prior to being placed back in-service. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>B. The Company shall monitor the information in Condition 3-Table 1(b)(3)(ix)(D)(1), (2), and (5) through (11), and Condition 3-Table 1(a)(4)(ix)(C)(4) through (12). [Reference: APC-2009/0025 dated 9/3/09 and APC-2008/0172 dated 9/3/09]</p> <p>vii. <u>Testing</u>: That required by Condition 3(b)(1)(ii) of this permit.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <ol style="list-style-type: none"> A. Maintain records of all inspections including items inspected, any deficiencies found, and actions taken to correct the deficiencies. B. Maintain records of the monitoring required in Condition 3 – Table 1(b)(2)(vi). C. The twelve month rolling period emissions of 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	particulate matter and PM ₁₀ . [Reference: APC-2008/0172 dated 9/3/09 and APC-2009/0025 dated 9/3/09]	
3. Sulfur Oxides		
<p>i. Emission Standard:</p> <p>A. The sulfur content of the solid fuel shall not exceed 1.0 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2 and APC-83/0825 dated 9/3/09]</p> <p>B. The sulfur content of the distillate fuel oil used to fire this unit shall not exceed 0.3 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2 and APC-83/0825 dated 9/3/09]</p> <p>C. The Company shall not receive for use in this unit residual fuel oil having a sulfur content of greater than 0.5% by weight as determined by one of the following ASTM methods: D129-00, D1552-03, D2622-05, or D4294-03. [Reference: 7 DE Admin Code 1146, Section 5.5, dated 12/11/06]</p> <p>D. Annual SO₂ mass emissions limits shall not exceed 2410 tons. [Reference: 7 DE Admin Code 1146, Section 5.3, dated 12/11/06]</p> <p>ii. Emission Limitation:</p> <p>SO₂ emissions from this unit shall not exceed 2,204.98 lbs/hr. [Reference: APC-83/0825 dated 9/3/09]</p> <p>iii. Operational Standard:</p> <p>A. Beginning on May 1, 2009 through December 31, 2011, SO₂ emissions shall not</p>	<p>v. Compliance Method:</p> <p>A. Compliance with the emission standard in Condition 3 - Table 1(b)(3)(i)(A),(B), and (C) shall be demonstrated by sampling and analysis of fuel burned in the equipment using ASTM methods and record keeping of this condition. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(b)(3)(i)(D) shall be based on Condition 3 – Table 1(m)(2)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMS). [Reference: 7 DE Admin Code 1146, Sections 5.3.1 and 5.4 dated 12/11/06]</p> <p>C. Compliance with operational standards in Condition 3 - Table 1(b)(3)(iii)(A) and (B) shall be demonstrated with a continuous emissions monitoring system (CEMS). [Reference: 7 DE Admin Code 1146, Sections 5.4, dated 12/11/06]</p> <p>D. Compliance with operational limitations in Condition 3 - Table 1(b)(3)(iv) shall be demonstrated by recordkeeping requirements of Condition 3-Table 1(b)(3)(ix)(D). [Reference 7 DE Admin. Code</p>	<p>x. Reporting:</p> <p>In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit to the Department at monthly intervals, not later than sixty (60) days after the end of the month in which such data is determined, the following: [Reference APC-83/0825 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) The monthly weighted average for sulfur content, ash content, and gross heating value of the shipment composite samples for coal received; 2) The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit; 3) Actual weekly usage of each fuel for this unit; and 4) Results of individual oil or coal composite samples in which the sulfur content exceeded the limits specified under this condition.

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>exceed 0.37 lb/MMBTU heat input on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Sections 5.1 dated 12/11/06]</p> <p>B. Beginning with the 2012 calendar year, SO₂ emissions shall not exceed 0.26 lb/MMBTU heat input on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Sections 5.2 dated 12/11/06]</p> <p>iv. <u>Operational Limitation:</u></p> <p>A. The dry sorbent loading rate during silo loading operations shall not exceed 20 tons per hour per silo. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>B. Only two silos can be loaded simultaneously. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>C. Only "SOLVAir[®] Select 200" or "SOLVAir[®] Select 300" shall be stored in the silos. Any material other than "SOLVAir[®] Select 200" or "SOLVAir[®] Select 300" requires prior approval by the Department. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>D. The owner or operator shall dispose of dry sorbent injection system wastes in accordance with all applicable Department regulations and permits. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>E. The dry sorbent storage silos dust collectors at the top and base of each silo shall be operated whenever the respective silo is operated. [Reference: APC-2009/0025 dated 9/3/09]</p> <p>F. The dry sorbent storage silos dust collectors</p>	<p align="center">1130 Section 6.1.7.3 dated 12/11/00]</p> <p>vi. <u>Monitoring:</u></p> <p>A. The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Section 6(a)(3) dated 12/11/00]</p> <ol style="list-style-type: none"> 1) The sulfur content of each train car load of coal received at the facility. 2) The monthly weighted average of sulfur content of the shipment composite samples for coal received. 3) The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit. 4) Hourly and monthly SO₂ emissions. 5) Hourly SO₂ emissions in lb/mmBTU. <p>B. The Company shall continuously monitor SO₂ emissions from this unit through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1 dated 12/11/06]</p> <p>vii. <u>Testing:</u></p> <p>In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall:</p> <p>A. Analysis for the sulfur content, ash content, and gross heating value of a composite sample for each shipment of coal received. Sampling and sample preparation shall comply with ASTM Methods D-2234-74 and D-2013. Sample analysis shall be in accordance with ASTM Methods D-4239 for</p>	<p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <ol style="list-style-type: none"> 1) Tabulation of SO₂ emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard. 2) For SO₂ mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard. 3) For SO₂ mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard. 4) For SO₂ emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units. 5) Identification of any period or periods of, and cause for, any invalid data averages.

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>at the top and base of each silo shall be operated within the pressure range recommended by the manufacturer. [Reference: APC-2009/0025 dated 9/3/09]</p>	<p>sulfur content, D-3174 for ash content, and D-2015 for gross heating value determination, or alternative methods approved by the Department. Compliance determination for the sulfur content in the coal shall be on the results of the composite sample for each shipment. [Reference: APC-83/0825 dated 9/3/09, 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>B. Analysis for the sulfur content of a weekly composite of daily samples for the residual and distillate fuel oil fired in this unit. Compliance determination for the sulfur content in the fuel oil shall be on the results of each composite sample. [Reference: APC-83/0825 dated 9/3/09, 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>C. Samples shall be collected: [Reference: 7 DE Admin Code 1146, Section 5.5.1 and 5.5.2 dated 12/11/06]</p> <ol style="list-style-type: none"> 1) From the transport vessel for each shipment of residual fuel oil received at the facility for combustion, or 2) From the supply pipeline each day residual oil is delivered to the facility via pipeline for combustion, after sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the sampling line, or 3) From the supply pipeline at the inlet to the residual oil-fired unit each day the unit fires any quantity of oil fuel, after 	<ol style="list-style-type: none"> 6) Records of any repairs, adjustment, or maintenance to the monitoring system. 7) The results of all fuel oil sulfur analysis. 8) Identification of any exceedance of any SO₂ emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance. 9) Results from all tests, audits, and recalibrations performed during the period. 10) Any other relevant data requested by the Department. 11) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the sampling line.</p> <p>4) Fuel oil samples shall be analyzed in accordance with ASTM Method D-129-00, D-1552-03, D-2622-05 or D-4294-03.</p> <p>D. Annual compliance demonstration with emission standard of Condition 3 – Table 1(b)(3)(i)(D) shall be submitted within 30 days of the end of each calendar year (January 1-December 31). [Reference: APC-2009/0025 dated 9/3/09]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the monitoring and reporting requirements of 40 CFR Part 96, subpart HHH (April 28, 2006 amendment). [Reference: 7 DE Admin Code 1146, Section 5.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. Maintain the following records: [Reference: APC-83/0825 dated 9/3/09, 7 DE Admin Code</p>	<p>fine or imprisonment.”</p> <p>12) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>1130 Section 6.1.3 dated 12/11/00]</p> <ol style="list-style-type: none"> 1) The monthly weighted average for sulfur content, ash content, and gross heating value of the shipment composite samples for coal received; 2) The monthly weighted average for sulfur content of the weekly composite samples for the coal and fuel oil consumed in this unit; 3) Actual weekly usage of each fuel for this unit; and 4) Results of individual oil or coal composite samples in which the sulfur content exceeded the limits specified under this condition. 5) Records of the hourly and rolling twelve month total SO₂ emissions. <p>B. Continuously record the SO₂ readings from the monitors. [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>C. Record the outage date for the SO₂ monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>D. The following information shall be recorded, and maintained: [Reference: APC-2009/0025 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For each period of operation of the DSI the date, time, and hours of operation. 2) The type of coal being combusted. 3) The SO₂ emissions in lb/tBtu on an hourly basis. 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ol style="list-style-type: none">4) The SO₂ emissions monthly and annually.5) For each delivery of dry sorbent to each silo, the name of the product, quantity delivered, time required to transfer the load to the silo, transfer rate, air flow rate, number of silos loaded, and baghouse pressure drop.6) Baghouse conditions each month to ensure proper operation.7) All routine and non-routine maintenance performed on the activated carbon injection systems and silo baghouses including dates and duration of outages.8) Presence or absence of visible emissions for the baghouse once each day in a log. If visible emissions are detected, the Company must identify and correct the cause(s) of the emissions within 48 hours.9) For all visible emissions that are not normal, record the cause(s) of the violation and all corrective action(s) in the daily log.10) Monitor visible emissions and record the results in the daily log immediately following any corrective action(s). If visible emissions are still detected, the Company shall verify visible emissions by the EPA Reference Method 22 to verify compliance or noncompliance	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>with the opacity emissions standard. The results shall be recorded in the daily log.</p> <p>11) Repeat actions in Condition 3 – Table 1(b)(3)(ix)(D)(10) and (11) until the excess emissions are eliminated.</p>	
<p>4. Mercury (Hg)</p> <p>i. <u>Emission Standard:</u></p> <p>A. Beginning on January 1, 2009 through December 31, 2012, annual Hg mass emissions limits shall not exceed 462 ounces. [Reference: 7 DE Admin Code 1146, Section 6.3, dated 12/11/06]</p> <p>B. Beginning with the 2013 calendar year annual Hg mass emissions limits shall not exceed 183 ounces. [Reference: 7 DE Admin Code 1146, Section 6.3, dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u></p> <p>A. Hg emissions shall not exceed on a quarterly average 1.0 lb/tBtu heat input. [Reference: 7 DE Admin Code 1146, Section 6.1.1, dated 12/11/06]</p> <p>B. On or after January 1, 2012, Hg emissions shall not exceed on a quarterly average 0.6 lb/tBtu heat input. [Reference: 7 DE Admin Code 1146, Section 6.2.1, dated 12/11/06]</p>	<p>v. <u>Compliance Method:</u></p> <p>A. Compliance with emission standards in Condition 3 - Table 1(b)(4)(i) shall be demonstrated on an annual basis through the use of continuous emissions monitoring systems (CEMs) [Reference: 7 DE Admin Code 1146, Sections 6.3.1 and 6.4.1, dated 12/11/06]</p> <p>B. Compliance with operational standards in Condition 3 - Table 1(b)(4)(iii) shall be demonstrated through the use of continuous emissions monitoring systems (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1, dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> The Company shall continuously monitor mercury emissions from this unit through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1 dated 12/11/06]</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Report all exceedances of the emission standards, with supporting records, in accordance with Condition 3(c)(2).</p> <p>B. Submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <p>1) Tabulation of mercury emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard.</p> <p>2) For mercury mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iv. <u>Operational Limitation:</u></p> <p>A. A continuous emissions monitoring system for the measurement of mercury shall be installed, calibrated, operated, and certified in accordance with 40 CFR Part 75 (May 18, 2005 amendment) [Reference: 7 DE Admin Code 1146, Sections 6.3.1 and 6.4.1, dated 12/11/06]</p> <p>B. The Company shall dispose of activated carbon injection system wastes in accordance with all applicable Department regulations and permits. [Reference: APC-2008/0172 dated 9/3/09]</p> <p>C. The activated carbon storage silo baghouse shall be operated whenever the respective silo is operated. [Reference: APC-2008/0172 dated 9/3/09]</p> <p>D. The activated carbon storage silo baghouse shall be operated within the pressure range recommended by the manufacturer. [Reference: APC-2008/0172 dated 9/3/09]</p>	<p>demonstrate compliance with emission standard of Condition 3 – Table 1(b)(4)(i)(A). The first compliance demonstration shall be due 30 days after the end of the annual period (January 1-December 31, 2009), and successive annual demonstrations shall be submitted within 30 days of the end of each following calendar year (January 1-December 31). [Reference: APC-2008/0172 dated 9/3/09]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) and meeting the monitoring and reporting requirements of 40 CFR Part 60 (June 9, 2006 amendment). [Reference: 7 DE Admin Code 1146, Section 6.4.1, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Continuously record the Hg readings from the monitors. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>B. Record the outage date for the Hg monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>C. The twelve month rolling period emissions</p>	<p>standard.</p> <p>3) For mercury mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard.</p> <p>4) For mercury emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units.</p> <p>5) Identification of any period or periods of, and cause for, any invalid data averages.</p> <p>6) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>7) Identification of any exceedance of any mercury emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>8) Results from all tests, audits, and recalibrations performed during the period.</p> <p>9) Any other relevant data requested by the Department.</p> <p>10) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>of particulate and PM₁₀. [Reference: APC-2008/0172 dated 9/3/09]</p> <p>D. The following information shall be recorded, and maintained: [Reference: APC-2008/0172 dated 9/3/09]</p> <ol style="list-style-type: none"> 1) For each period of operation of the ACI the date, time, and hours of operation. 2) The type of coal being combusted. 3) The Hg emissions in lb/tBtu on an hourly basis. 4) The Hg emissions monthly and annually. 5) The Hg emissions in ounces for each calendar year. 6) For each delivery of activated carbon to each silo, the quantity delivered, time required to transfer the load to the silo, transfer rate, air flow rate, and baghouse pressure drop. 7) Baghouse conditions each month to ensure proper operation. 8) All routine and non-routine maintenance performed on the activated carbon injection systems and silo baghouses including dates and duration of outages. 9) Presence or absence of visible emissions for the baghouse once each day in a log. If visible emissions are detected, the Company must identify and correct the cause(s) of the emissions within 48 hours. 	<p>affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."</p> <p>11) Signature by the designated representative.</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>10) For all visible emissions that are not normal, record the cause(s) of the violation and all corrective action(s) in the daily log.</p> <p>11) Monitor visible emissions and record the results in the daily log immediately following any corrective action(s). If visible emissions are still detected, the Company shall verify visible emissions by the EPA Reference Method 22 to verify compliance or noncompliance with the opacity emissions standard. The results shall be recorded in the daily log.</p> <p>12) Repeat actions in Condition 3 – Table 1(a)(4)(ix)(D)(10) and (11) until the excess emissions are eliminated.</p>	
5. Opacity		
<p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance which is greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin Code 1114, Section 2.1, dated 7/17/84 and APC-83/0825 dated 9/3/09]</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Sections 6(a)(3)(i)(B) and 6(b)(1) dated 12/11/00] and 7 DE Admin Code 1117 Section 4.3 dated 7/17/84]</p> <p>A. Continuous opacity readings;</p> <p>B. Zero and span calibration drift shall be</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit a written report of excess emissions no later than sixty (60) days after each calendar quarter detailing the nature and cause of the excess emissions. The averaging period</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> During the process of bringing the unit from a cold condition to an on-line condition or during the reverse process, the opacity shall not exceed fifty percent (50%) for twenty-five (25) minutes and thirty percent (30%) for forty-five (45) minutes in a one (1) hour period or thirty percent (30%) for ninety (90) minutes and fifty percent (50%) for forty-five (45) minutes in any twenty-four (24) hour period. For purpose of this condition, a cold start-up is defined as any start-up which occurs after the boiler reaches an ambient pressure condition.</p> <p>iv. <u>Operational Limitation:</u></p> <p>A. A continuous monitoring system for the measurement of opacity shall be operating properly, in accordance with 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources, during all periods of boiler operation. [Reference: 7 DE Admin Code 1117 Section 3(1)(a) dated 7/17/84]</p> <p>B. The opacity monitor shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period. [Reference: 7 DE Admin Code 1117 Section 4.2]</p>	<p>checked at least once daily; C. Periods of opacity meter outage.</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall:</p> <p>A. Record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; to adjust the zero and span whenever the 24-hour drift or 24-hour calibration drift limits of 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources are exceeded.</p> <p>B. Instrument span should be approximately 200 percent of the expected instrument data display corresponding to the emission standard.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall</p>	<p>used for data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with the emission standard in Condition 3 - Table 1(b)(5)(i). The report at a minimum shall include the following: [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p> <p>1) For opacity measurements, the summary shall consist of the magnitude in actual percent of all one-minute (or such other time deemed appropriate by the State) averages of opacity greater than the opacity standard in the applicable plan for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess averages of opacity (e.g., whenever a regulation allows two minutes of opacity measurements in excess of the standard, the State shall require the source to report all opacity averages in any one hour, in excess of the standard, minus the two-minute exemption). [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
dated 7/17/84]	maintain records of the monitoring required in this Condition. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.1.2 and 6.2.1 dated 12/11/00]	xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
6. Supplemental Fuels		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> The Company may combust supplemental fuels to include CDG soils contaminated with known contaminants and soils containing less than 2ppm of PCB's, less than 10 ppm BTEX and passing TCLP. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall test all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain all records of testing performed on the supplemental fuels.</p>	<p>x. <u>Reporting:</u> That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	[Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]	
7. Compliance Assurance Monitoring Plan: ESP for PM Control - Applicable When Firing Coal Only		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitations:</u></p> <p>A. Indicators [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Voltage and current shall be used as the primary indicator. 2) Opacity shall be used as the secondary indicator. <p>B. Indicator Ranges [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Voltage shall be between 50 and 480 V on an hourly average basis. 2) Current shall be between 5 and 235 amps on an hourly average basis. 3) Visible emissions shall not exceed twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) 	<p>v. <u>Compliance Method:</u> Compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 dated 12/11/00 and 6.2.1 dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> [Reference 40 CFR Part 64.3 and 64.4 dated 10/22/97]</p> <p>A. Data Representativeness [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) The voltage and current shall be measured using instrumentation supplied by the manufacturer, or equivalent. 2) The COMs shall be installed and maintained in accordance with the manufacturer's specification and 40 CFR 60, Appendix B, PS-1. <p>B. Verification of Operational Status [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Daily logs shall be verified that readings were logged and are in appropriate ranges. 2) The COMS shall be calibrated according to manufacturer's specifications. 3) The Company shall conduct periodic stack testing to verify parameters being 	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Quality Improvement Plan (QIP)</p> <ol style="list-style-type: none"> 1) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if any stack tests reveal higher than permitted emission rates. [Reference 40 CFR Part 64.7(e) dated 10/22/97] 2) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if excursions exceed 5% of the unit's operating time for a reporting period. [Reference 40 CFR Part 64.8(a) dated 10/22/97] <p>B. The Company shall notify the Department at least 30 days prior to any reestablishment of excursion values. [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97]</p> <p>C. The report required by Condition 3(c)(2) of this permit shall also contain the following information: [Reference 40 CFR Part 64.9(a)(2) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Summary information on the number, duration, and cause of excursions or

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>minutes in any twenty-four (24) hour period.</p> <p>C. Excursion [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) An excursion shall be defined as hourly average voltage below 50 V or above 480 V. 2) An excursion shall be defined as hourly average current below 5 amps or above 235 amps. 3) An excursion shall be defined as visible emissions over twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period excluding start-up and shut-down provisions as described in Condition 3-Table 1(b)(5)(iii). 4) An excursion shall trigger an investigation, corrective action, and a reporting requirement. [Reference 40 CFR Part 64.7(d) dated 10/22/97] <p>D. Monitoring/Measurement Approach [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Voltage and current shall be based on measurement by voltmeter and ammeter. 2) Opacity shall be determined by COMs. <p>E. At all times, the Company shall maintain the monitoring, including but not limited to,</p>	<p>monitored.</p> <p>C. QA/QC Practices [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) The Company shall confirm the meters read zero when unit is not operating. 2) The Company shall inspect and service meters during maintenance outages. 3) The Company shall follow manufacturer instructions on system checks and testing. 4) The COM shall be calibrated in accordance with the manufacturer's specifications. 5) Observers shall be properly trained to assess visible emissions and areas to inspect. <p>D. Frequency [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) The primary voltage and current readings are recorded and averaged over an hourly period. 2) Opacity shall be monitored continuously. 3) Visual inspections shall occur daily <p>E. Data Collection Procedures [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) An alarm system shall signal operator when voltage and/or amps are outside of normal operating parameters. 2) Opacity shall be monitored with a 	<p>exceedances;</p> <ol style="list-style-type: none"> 2) The corrective actions taken after an excursion or exceedance; 3) Summary information on the number, duration, and cause of monitor downtime incidents; and 4) If triggered, a description of the actions taken to implement the QIP. <p>xi. Certification: In addition to the requirements of Condition 3(c)(3) of this permit, compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>maintaining necessary parts for routine repairs of the monitoring equipment. [Reference 40 CFR Part 64.7(b) dated 10/22/97]</p> <p>F. At all times, the Company shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [Reference 40 CFR Part 64.7(c) dated 10/22/97]</p>	<p>certified COMs and recorded in DAHS.</p> <p>F. Averaging Period [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <ol style="list-style-type: none"> 1) Hourly average for voltage and current. 2) The COMs shall use 6 minute averages. <p>vii. <u>Testing:</u> That required by Condition 3(b)(1)(ii) of this permit.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Record Keeping:</u> [Reference 40 CFR Part 64.9(b) dated 10/22/97] The Company shall maintain records of the following:</p> <ol style="list-style-type: none"> A. Monitoring data. B. Monitor performance data. C. Corrective actions taken. D. Any written quality improvement plan (QIP) required pursuant to 64.8. E. Any activities undertaken to implement a QIP. F. All supporting information used to demonstrate compliance. 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>c. Emission Unit EM5 - Nominally rated 4551 mmBTU/hr fossil fuel fired boiler fired primarily on No. 6, No. 2 fuel oils, and Natural gas, and re-refined oil as secondary fuels, with a urea-based enhanced selective non-catalytic reduction system, and a flue gas recirculation (FGR) and boosted overfire air (BOFA) systems.</p>		
<p>1. Nitrogen Oxides</p>		
<p>i. <u>Emission Standard:</u> Annual NO_x mass emissions shall not exceed 1348 tons. [Reference: 7 DE Admin Code 1146, Table 4.1 dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> A Department approved ammonia slip concentration resulting from use of SNCR and at maximum production rate shall be established by June 30, 2011. [Reference 7 DE Admin. Code 1102 Section 11.6 dated 6/11/06]</p> <p>iii. <u>Operational Standard:</u> A. Beginning on May 1, 2009 through December 31, 2011, NO_x emissions shall not exceed 0.15 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.1 dated 12/11/06] B. Beginning with the 2012 calendar year, NO_x emissions shall not exceed 0.125 lb/MMBTU on a rolling 24-hour average basis. [Reference: 7 DE Admin Code 1146, Section 4.3 dated 12/11/06]</p> <p>iv. <u>Operational Limitation:</u> A. The boiler shall only operate with Low NO_x burner technology with low excess air and overfire air. [Reference: 7 DE Admin Code 1112, Section 3.2(b) dated 11/24/93]</p>	<p>v. <u>Compliance Method:</u> A. Compliance with the operation standards and the operation limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00] B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(c)(1)(i) shall be based on Condition 3 - Table 1(m)(1)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 4.2.1 and 4.4 dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> A. The Company shall continuously monitor and record the Nitrogen Oxide emissions from this unit through the use of Continuous Emission Monitors (CEMS) approved by the Department. [Reference APC-83/0826 dated 2/14/95 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06] B. The Company shall monitor: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Report each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence with the following information: [Reference: 7 DE Admin. Code 1112, Section 7.3 dated 11/24/93]</p> <ol style="list-style-type: none"> 1) The name and location of the facility; 2) The subject source(s) that caused the excess emission; 3) The time and date of the first observation of the excess emissions; 4) The cause and expected duration of the excess emission; 5) For sources subject to the numerical limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions. 6) The proposed corrective actions and schedule to correct the conditions causing the excess emission.

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>B. The Company shall make best efforts to optimize the Selective Non-Catalytic Reduction (SNCR) system urea injection rate to maximize NO_x reduction while minimizing the associated ammonia slip while ensuring effective operation of the boiler and associated systems. [Reference: APC-2009/0027 dated 9/3/09]</p> <p>C. The operating temperature of the SNCR system shall be in the range of 1500°F and 2100°F. [Reference: APC-2008/0109 dated 9/3/09]</p> <p>D. The Company shall determine the annual average NO_x emission rate in lb/mmBTU; using methods specified in 40 CFR Part 75. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	<p>1. The emission data from the NO_x CEMS shall be totaled for each day from midnight to midnight as tons of emissions per day.</p> <p>2. The Company shall monitor the hourly heat input.</p> <p>3. The Company shall monitor the fuel flow to the Low NO_x Burners.</p> <p>C. The Company shall monitor for each period of operation of the SNCR, the date, time and hours of operation. [Reference: APC-2009/0027 dated 9/3/09]</p> <p>D. The Company shall monitor the ammonia slip on a monthly and rolling twelve month basis. [Reference: APC-2009/0027 dated 9/3/09]</p> <p>E. The Company shall monitor the operating temperature of the SNCR system. [Reference: APC-2009/0027 dated 9/3/09]</p> <p>vii. <u>Testing:</u></p> <p>A. In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall demonstrate compliance with emission standard of Condition 3 – Table 1(c)(1)(i). Annual compliance demonstration shall be submitted within 30 days of the end of each calendar year (January 1-December 31). [Reference: APC-2009/0027 dated 9/3/09]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors and Continuous Recorders shall be installed, calibrated,</p>	<p>B. Submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <p>1) Tabulation of NO_x emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard.</p> <p>2) For NO_x mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard.</p> <p>3) For NO_x mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard.</p> <p>4) For NO_x emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly combined heat input weighted emission average for the affected units.</p> <p>5) Identification of any period or periods of, and cause for, any invalid data averages.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the requirements of 40 CFR Part 96, subpart HH (April 28, 2006 amendment) to continuously measure and record the emission concentration for NO_x. [Reference APC-83/0826 dated 2/14/95 and 7 DE Admin Code 1146, Section 4.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Keep a copy of the Quality Assurance Program on site. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>B. Continuously record the NO_x readings from the monitors. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>C. Record the outage date for the NO_x monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>6) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>7) Identification of any exceedance of any NO_x emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>8) Results from all tests, audits, and recalibrations performed during the period.</p> <p>9) Any other relevant data requested by the Department.</p> <p>10) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		<p>11) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>
2. Particulate Matter		
<p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104 Section 2.1 dated 2/1/81]</p> <p>ii. <u>Emission Limitation:</u> Particulate emissions shall not exceed 349.58 lbs/hr and 1531 tons in any twelve (12) consecutive months. [Reference APC-83/0826 dated 2/14/95]</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the particulate matter emission standard listed in Condition 3 – Table 1 (c)(2) shall be based on the following: A. The quality of liquid fuel as determined in Condition 3 - Table 1(c)(3)(vii)(A) and (B). B. The proper operation of the cyclone. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> A. The Company shall conduct periodic inspections and maintain records of any problems associated with the pollution control equipment. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00] B. The pressure drop across the cyclone shall be monitored. [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00]</p> <p>vii. <u>Testing:</u> None.</p>	<p>x. <u>Reporting:</u> That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Maintain records of all inspections including items inspected, any deficiencies found, and actions taken to correct the deficiencies.</p> <p>B. Maintain records of the monitoring required in Condition 3 – Table 1(c)(2)(vi).</p>	
3. Sulfur Oxides		
<p>i. <u>Emission Standard</u>:</p> <p>A. The sulfur content of the distillate fuel oil used to fire this unit shall not exceed 0.3 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2 and APC-83/0826 dated 2/14/95]</p> <p>B. The Company shall not receive for use in this unit residual fuel oil having a sulfur content of greater than 0.5% by weight as determined by one of the following ASTM methods: D129-00, D1552-03, D2622-05, or D4294-03. [Reference: 7 DE Admin Code 1146, Section 5.5, dated 12/11/06]</p> <p>C. Annual SO₂ mass emissions limits shall not exceed 4600 tons. [Reference: 7 DE Admin Code 1146, Section 5.3, dated 12/11/06]</p>	<p>v. <u>Compliance Method</u>:</p> <p>A. Compliance with the emission standard in Condition 3 - Table 1(c)(3)(i)(A) and (B) shall be demonstrated by sampling and analysis of fuel burned in the equipment using ASTM methods and record keeping of this condition. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(c)(3)(i)(C) shall be based on Condition 3 – Table 1(m)(2)(v)(B). After December 31, 2011, compliance shall be demonstrated with a continuous emissions monitoring system (CEMS). [Reference: 7 DE Admin Code 1146, Sections 5.3.1 and 5.4 dated 12/11/06]</p> <p>C. Compliance with operational standards in</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit to the Department at monthly intervals, not later than sixty (60) days after the end of the month in which such data is determined, the following: [Reference APC-83/0826 dated 2/14/95]</p> <p>1) The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit;</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>ii. <u>Emission Limitation:</u> SO₂ emissions from this unit shall not exceed 4,221.80 lbs/hr. [Reference APC-83/0826 dated 2/14/95]</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>Condition 3 - Table 1(c)(3)(iii)(A) and (B) shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Sections 5.4, dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> A. The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Section 6.1.3 dated 12/11/00] 1) The weighted average of sulfur analyses each month. 2) The sulfur content of the fuel oils combusted in the unit. 3) Hourly and monthly SO₂ emissions. 4) Hourly SO₂ emissions in lb/mmBTU. B. The Company shall continuously monitor SO₂ emissions from this unit through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 6.4.1 dated 12/11/06]</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall: A. Analysis for the sulfur content of a weekly composite of daily samples for the residual and distillate fuel oil fired in this unit. Compliance determination for the sulfur content in the fuel oil shall be on the results of each composite sample. [Reference: APC-83/0826 dated 2/14/95] B. Samples shall be collected: [Reference: 7 DE</p>	<p>2) Actual weekly usage of each fuel for this unit; and 3) Results of individual oil or coal composite samples in which the sulfur content exceeded the limits specified under this condition.</p> <p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06] 1) Tabulation of SO₂ emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard. 2) For SO₂ mass emission standards based on daily limits, the daily mass emission on a calendar day basis for each day in the period, in units consistent with the applicable emission standard. 3) For SO₂ mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard. 4) For SO₂ emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>Admin Code 1146, Section 5.5.1 and 5.5.2 dated 12/11/06]</p> <ol style="list-style-type: none"> 1) From the transport vessel for each shipment of residual fuel oil received at the facility for combustion, or 2) From the supply pipeline each day residual oil is delivered to the facility via pipeline for combustion, after sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the sampling line, or 3) From the supply pipeline at the inlet to the residual oil-fired unit each day the unit fires any quantity of oil fuel, after sufficient fuel oil has been drained from the sampling line to remove any fuel oil that may have been standing in the sampling line. 4) Fuel oil samples shall be analyzed in accordance with ASTM Method D-129-00, D-1552-03, D-2622-05 or D-4294-03. <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the monitoring and reporting requirements of 40 CFR Part 96, subpart HHH (April 28, 2006 amendment). [Reference: 7 DE Admin Code 1146,</p>	<p>the respective units, and the hourly combined heat input weighted emission average for the affected units.</p> <ol style="list-style-type: none"> 5) Identification of any period or periods of, and cause for, any invalid data averages. 6) Records of any repairs, adjustment, or maintenance to the monitoring system. 7) The results of all fuel oil sulfur analysis. 8) Identification of any exceedance of any SO₂ emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance. 9) Results from all tests, audits, and recalibrations performed during the period. 10) Any other relevant data requested by the Department. 11) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>Section 5.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u></p> <p>A. In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the following records: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00 and APC-83/0826 dated 2/14/95]</p> <ol style="list-style-type: none"> 1) The monthly weighted average for sulfur content of the weekly composite samples for the fuel oil consumed in this unit. 2) Actual weekly usage of each fuel for this unit. 3) Results of individual oil or coal composite samples in which the sulfur content exceeded the limits specified under this condition. 4) Records of the hourly and rolling twelve month total SO₂ emissions. <p>A. The Company shall continuously record the SO₂ readings from the monitors. [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>B. The Company shall record the outage date for the SO₂ monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>best of my knowledge true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”</p> <p>12) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>4. Opacity</p> <p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance which is greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin Code 1114, Section 2.1, dated 7/17/84 and APC-83/0826 dated 2/14/95]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> During the process of bringing the unit from a cold condition to an on-line condition or during the reverse process, the opacity shall not exceed fifty percent (50%) for twenty-five (25) minutes and thirty percent (30%) for forty-five (45) minutes in a one (1) hour period or thirty percent (30%) for ninety (90) minutes and fifty percent (50%) for forty-five (45) minutes in any twenty-four (24) hour period. For purpose of this condition, a cold start-up is defined as any start-up which occurs after the boiler reaches an ambient pressure condition.</p> <p>iv. <u>Operational Limitation:</u> A. A continuous monitoring system for the measurement of opacity shall be operating</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor the following: [Reference: 7 DE Admin Code 1130 Sections 6(a)(3)(i)(B) and 6(b)(1) dated 12/11/00 and Reference: 7 DE Admin Code 1117 Section 4.3 dated 7/17/84]</p> <p>A. Continuous opacity readings; B. Zero and span calibration drift shall be checked at least once daily; C. Periods of opacity meter outage. D. The Company shall record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; to adjust the zero and span whenever the 24-hour drift or 24-hour calibration drift limits of 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources are exceeded.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit a written report of excess emissions no later than sixty (60) days after each calendar quarter detailing the nature and cause of the excess emissions. The averaging period used for data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with the emission standard in Condition 3 - Table 1(c)(4)(i). The report at a minimum shall include the following: [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p> <p>1) For opacity measurements, the summary shall consist of the magnitude in actual percent of all one-minute (or such other time deemed appropriate by the State) averages of opacity greater than the opacity standard in the applicable plan for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or arithmetically averaging a minimum of four equally spaced instantaneous opacity</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>properly, in accordance with 40 CFR Part 60 Appendix B, Performance Specification 1 - Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources, during all periods of boiler operation. [Reference: 7 DE Admin Code 1117 Section 3(1)(a) dated 7/17/84]</p> <p>B. The opacity monitor shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period. [Reference: 7 DE Admin Code 1117 Section 4.2 dated 7/17/84]</p>	<p>E. Instrument span should be approximately 200 percent of the expected instrument data display corresponding to the emission standard.</p> <p>vii. <u>Testing</u>: None.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the monitoring required in this Condition. [Reference: 7 DE Admin Code 1130 Sections 6(a)(3)(i)(B) and 6(b)(1) dated 12/11/00]</p>	<p>measurements per minute. Any time period exempted shall be considered before determining the excess averages of opacity (e.g., whenever a regulation allows two minutes of opacity measurements in excess of the standard, the State shall require the source to report all opacity averages in any one hour, in excess of the standard, minus the two-minute exemption). [Reference: 7 DE Admin Code 1117 Section 2.1 dated 7/17/84]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
6. Supplemental Fuels		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: The Company may combust supplemental fuels to include DP&L soils contaminated with known contaminants and soils containing less than</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: The Company shall monitor all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6(a)(3) dated 12/11/00]</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition</p>	<p>x. <u>Reporting</u>: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>2ppm of PCB's, less than 10 ppm BTEX and passing TCLP. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	<p>3(b)(1)(ii) of this permit, the Company shall test all incoming supplemental fuels for PCB's and BTEX and must pass TCLP. [Reference: 7 DE Admin Code 1130 Section 6(a)(3) dated 12/11/00]</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain all records of testing performed on the supplemental fuels. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	
<p>7. Compliance Assurance Monitoring Plan: Cyclone for PM Control</p>		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitations</u>: A. Indicators [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97] 1) Pressure drop and alarming of the pressure drop monitoring device shall be used as the primary indicator.</p>	<p>v. <u>Compliance Method</u>: Compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 dated 12/11/00 and 6.2.1 dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: [Reference 40 CFR Part 64.3 and 64.4 dated 10/22/97] A. Data Representativeness [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1) The pressure drop shall be measured using instrumentation supplied by the manufacturer, or equivalent. 2) The COMs shall be installed and maintained in accordance with the</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Quality Improvement Plan (QIP) 1) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if any stack tests reveal higher than permitted emission rates. [Reference 40 CFR Part 64.7(e) dated 10/22/97] 2) The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if excursions exceed 5% of the unit's operating time for a reporting period.</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>2) Opacity shall be used as the secondary indicator.</p> <p>B. Indicator Ranges [Reference 40 CFR Part 64.6(c)(1)(i) dated 10/22/97]</p> <p>1) Pressure drop shall be between 5" to 9" Water Column (W.C.) at full load operation and 1" to 5" W.C. at mid load operation on an hourly average basis.</p> <p>2) Visible emissions shall not exceed twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period.</p> <p>C. Excursion [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97]</p> <p>1) An excursion shall be defined as pressure drop outside the normal operating range.</p> <p>2) An excursion shall be defined as visible emissions over twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period excluding start-up and shut-down provisions as described in Condition 3-Table 1 (c)(4)((iii)).</p> <p>3) An excursion shall trigger an investigation, corrective action, and a reporting requirement. [Reference 40</p>	<p>manufacturer's specification and 40 CFR 60, Appendix B, PS-1.</p> <p>B. Verification of Operational Status [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <p>1) Daily logs shall be verified that readings were logged and are in appropriate ranges.</p> <p>2) The COMS shall be calibrated according to manufacturer's specifications.</p> <p>3) The Company shall conduct periodic stack testing to verify parameters being monitored.</p> <p>C. QA/QC Practices [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <p>1) The Company shall confirm the pressure drop monitoring device read zero when unit is not operating.</p> <p>2) The Company shall inspect and service pressure drop monitoring device during maintenance outages.</p> <p>3) The Company shall follow manufacturer instructions on system checks and testing.</p> <p>4) The COM shall be calibrated in accordance with the manufacturer's specifications.</p> <p>5) Observers shall be properly trained to assess visible emissions and areas to inspect.</p> <p>D. Frequency [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p>	<p>[Reference 40 CFR Part 64.8(a) dated 10/22/97]</p> <p>B. The Company shall notify the Department at least 30 days prior to any reestablishment of excursion values. [Reference 40 CFR Part 64.6(c)(2) dated 10/22/97]</p> <p>C. The report required by Condition 3(c)(2) of this permit shall also contain the following information: [Reference 40 CFR Part 64.9(a)(2) dated 10/22/97]</p> <p>1) Summary information on the number, duration, and cause of excursions or exceedances;</p> <p>2) The corrective actions taken after an excursion or exceedance;</p> <p>3) Summary information on the number, duration, and cause of monitor downtime incidents; and</p> <p>4) If triggered, a description of the actions taken to implement the QIP.</p> <p>xi. <u>Certification</u>: In addition to the requirements of Condition 3(c)(3) of this permit, compliance shall be demonstrated by records of the required monitoring. [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>CFR Part 64.7(d) dated 10/22/97]</p> <p>D. Monitoring/Measurement Approach [Reference 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]</p> <p>1) Pressure drop shall be based on measurement by pressure drop monitoring device.</p> <p>2) Opacity shall be determined by COMs.</p> <p>E. At all times, the Company shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [Reference 40 CFR Part 64.7(b) dated 10/22/97]</p> <p>F. At all times, the Company shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not</p>	<p>1) Pressure drop shall be monitored continuously.</p> <p>2) Opacity shall be monitored continuously.</p> <p>3) Visual inspections shall occur daily</p> <p>E. Data Collection Procedures [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <p>1) An alarm system shall signal operator when pressure drop is outside of normal operating parameters.</p> <p>2) Opacity shall be monitored with a certified COMs and recorded in DAHS.</p> <p>F. Averaging Period [Reference 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97]</p> <p>1) There is no averaging used for pressure drop.</p> <p>2) The COMs shall use 6 minute averages.</p> <p>vii. <u>Testing:</u> In addition to that required by Condition 3(b)(1)(ii) of this permit, the Company shall conduct periodic stack test sampling within 180 days of the date of expiration of this permit, using reference methods and protocols approved in advance by the Department. [Reference Permit APC-83/074 Condition 10 and 40 CFR Part 64.6(b) dated 10/22/97]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>malfunctions. [Reference 40 CFR Part 64.7(c) dated 10/22/97]</p>	<p>ix. <u>Record Keeping:</u> [Reference 40 CFR Part 64.9(b) dated 10/22/97] The Company shall maintain records of the following: A. Monitoring data. B. Monitor performance data. C. Corrective actions taken. D. Any written quality improvement plan (QIP) required pursuant to 64.8. E. Any activities undertaken to implement a QIP. F. All supporting information used to demonstrate compliance.</p>	
<p>d. Emission Unit EM10 - Nominally rated 264 mmBTU/hr combustion turbines fired solely on distillate fuel oil.</p>		
<p>1. Nitrogen Oxides</p>		
<p>i. <u>Emission Standard:</u> NO_x emissions shall not exceed 88 ppmv (PPMV means gaseous concentration in parts per million by volume, corrected to 15 percent O₂ dry basis) based on one hour averaging periods during the ozone season, inclusive of any year for liquid fuel. Ozone season is defined as May 1st through September 30th. [Reference: 7 DE Admin Code 1148 Section 4.1, dated 7/11/2007]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall: [Reference: APC-80/0380-A1 dated 6/30/09] A. For existing stationary combustion turbine electric generating units with an ozone season capacity factor of 10% or less for</p>	<p>x. <u>Reporting:</u> That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iv. <u>Operational Limitation:</u></p> <p>A. The combustion turbine shall operate during the months of November to the end of March and shall not operate more than 5% of its capacity factor from April 1 thru October 31. [Reference: 7 DE Admin Code 1112, Section 4.5 dated 11/24/93]</p> <p>B. The combustion turbine shall operate less than 5% of its capacity factor on an annual basis, except that three months following any calendar year during which the capacity factor is 5% or greater, the source shall be subject to the applicable provisions of Section 3 of 7 DE Admin. Code 1112, except the compliance date shall be two years after the approval of the Department. [Reference: 7 DE Admin Code 1112, Section 4.6 dated 11/24/93]</p> <p>C. The operational parameters of the seasonal NO_x control water injection system will be incorporated into this permit once the stack testing results for the water injection system are reviewed and accepted by the Department. [APC-80/0380-A1 dated 6/30/09]</p> <p>D. The combustion turbine is exempt from NO_x emissions standards outlined by Condition 3-Table 1, d(1)(i)(A) for the period of 30 minutes as part of the start-up process and 20 minutes from the time that the combustion turbine initiates the shutdown procedure. [APC-80/0380-A1 dated 6/30/09]</p> <p>E. A logic control system that monitors and</p>	<p>each of the five calendar years preceding July 11, 2007, compliance emissions testing acceptable to the Department shall be conducted by the owner or operator in the calendar years representing successive 5-year intervals from the calendar year in which the initial compliance test was conducted in accordance with paragraph 4.3.3 of 7 DE Admin. Code 1148.</p> <p>B. For existing combustion turbine electric generating units with an ozone season capacity factor greater than 10% for any of the five calendar years preceding July 11, 2007:</p> <ol style="list-style-type: none"> 1) Compliance emissions testing acceptable to the Department shall be conducted by the owner or operator every two years following the calendar year in which the initial compliance test was conducted in accordance with paragraph 4.3.3 of 7 DE Admin. Code 1148. 2) If an existing combustion turbine electric generating unit's ozone season capacity factor drops below 10% for 5 consecutive years, the owner or operator may petition the Department to reduce the compliance testing frequency to 5 years. 3) For existing combustion turbine electric generating units in compliance with paragraph 5.1 of 7 DE Admin. Code 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>records operating information necessary to verify compliance with NO_x emissions standards outlined by Condition 3-Table 1, d(1)(i)(A) and to provide applicable alarms should operation issues be discovered shall be in operation whenever the water injection system is being used. [APC-80/0380-A1 dated 6/30/09]</p>	<p>1148 but which have an ozone season capacity factor of greater than 10% for any year subsequent to July 11, 2007, compliance emissions testing acceptable to the Department shall be conducted by the owner or operator every two years, starting in the calendar year after the year that the 10% ozone season capacity factor was exceeded.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Maintain a log of the date and time of each combustion turbine start-up and the capacity factor calculations.</p> <p>B. All applicable record keeping requirements including operating parameters for the water injection system and seasonal (ppmv) and rolling twelve (12) month NO_x emissions in tons/year will be incorporated into this permit. [APC-80/0380-A1 dated 6/30/09]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Particulate Matter		
<p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104 Section 2.1 dated 2/1/81]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the particulate matter emission standard listed in Condition 3 - Table 1(d)(2)(i) shall be based on the quality of liquid fuel as determined in Condition 3 – Table 1(d)(3)(vii)(A).</p> <p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> None.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedances of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
3. Sulfur Oxides		
<p>i. <u>Emission Standard:</u> The distillate fuel oil used to fire this unit shall not exceed 0.3 percent sulfur by weight. [Reference: 7 DE Admin Code 1108, Sections 2.1 and 2.2]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the emission standard in Condition 3 - Table 1(d)(3)(i) shall be demonstrated by sampling and analysis of fuel burned in the equipment using ASTM methods and record keeping of this condition. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> None.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Submit all records indicating exceedances of the standard in accordance with Condition 3(c)(2). The Company shall also submit to the Department at monthly intervals, not later than sixty (60) days after the end of the</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iv. <u>Operational Limitation:</u> None.</p>	<p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct the following: A. Analysis for the sulfur content of a weekly composite of daily samples for the distillate fuel oil fired in this unit. Sample analysis shall be in accordance with ASTM Method D-129, D-1552, D-2622 or D-4294. Compliance determination for the sulfur content in the fuel oil shall be on the results of each composite sample.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the following records: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit; B. Actual weekly usage of each fuel for this unit; and C. Results of individual oil composite samples in which the sulfur content exceeded the limits specified under this condition.</p>	<p>month in which such data is determined, the following: [Reference: 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00] 1) The monthly weighted average for sulfur content of the weekly composite samples for fuel oil consumed in this unit; 2) Actual weekly usage of each fuel for this unit; and 3) Results of individual oil composite samples in which the sulfur content exceeded the limits specified under this condition.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>4. Opacity</p> <p>i. <u>Emission Standard:</u> The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance which is greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin Code 1114, Section 2.1 dated 7/17/84]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct visual emission observations at fifteen-second intervals at least once a year for a period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. The additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Section 2 & 3 (except for Section 2.5 and the second sentence of Section 2.4) of Reference Method 9 set forth in Appendix A, 40 CFR, Part 60, revised July 1, 1982. [Reference: 7 DE Admin Code 1120, Section 1.5(c) dated 12/7/88]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. Maintain the observation records and made them available to the Department upon request. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00] B. Maintain records of all maintenance performed on these units and made them available to the Department upon request. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	
<p>e. Emission Units EM101 thru EM104 - EM101 & EM102 - two (2) 10,800,000 gallon No. 6 Fuel Oil Storage Tanks, EM103 - one (1) 10,800,000 gallon Low Sulfur Light Petroleum Product (LSLPP) Storage Tank, EM104 - one (1) 50,000 gallon No. 2 Fuel Oil Storage Tank.</p>		
<p>1. Requirements for Fuel Oil Storage Tanks</p>		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: The storage tanks designated as emission units EM101 thru EM104 shall store only petroleum liquids that have a maximum true vapor pressure of less than 1.5 psia. [Reference: 7 DE Admin Code 1124, Section 31(a)(2)(iii) dated 11/29/94]</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: None.</p> <p>vii. <u>Testing</u>: None.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p>	<p>x. <u>Reporting</u>: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Keep readily accessible records showing the dimension of the storage vessel and the analysis showing the capacity of the storage vessel. [Reference: 7 DE Admin Code 1130 Section 6(a)(3) dated 12/11/00]</p> <p>B. Maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL, if the VOL stored has a true vapor pressure greater than 1.0 psia. [Reference: 7 DE Admin Code 1130 Section 6(a)(3) dated 12/11/00]</p>	
<p>f. Emission Units EM110 & EM111 - Coal Pile and Coal Handling</p>		
<p>1. Opacity</p>		
<p>i. <u>Emission Standard</u>: The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit such as to cause a condition of air pollution. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: None.</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct:</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Section 6.1.3.2.3 and 6.2.2 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iv. <u>Operational Limitation:</u> None.</p>	<p>A. Visual emissions observations in accordance with EPA Reference Method 22 set forth in Appendix A, 40 CFR, Part 60, revised July 1, 1982. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>B. Daily qualitative visible emissions observations to determine the presence of any visible emissions. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>1) If visible emissions are observed, the Company shall take such corrective actions as necessary to maintain compliance with the emission standard. The Company may conduct a visible observation in accordance with paragraph (A) above to determine whether a visible emission occurs.</p> <p>2) If no visible emissions are observed, no further action is required.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the observation records on-site and make them available to the Department upon request. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Requirements for Material Handling		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> A. The Company shall not cause or allow visible particulate emissions of any material being transported by a motor vehicle. [Reference: 7 DE Admin Code 1106, Section 4.1 dated 2/1/81] B. The Company shall not cause or allow the stockpiling or other storage of materials or transport to or from a storage facility in such a manner as may cause a condition of air pollution. [Reference: 7 DE Admin Code 1106, Section 6.1 dated 2/1/81]</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The plant's paved and unpaved areas accommodating traffic and stockpiles shall be observed daily for airborne dirt and dust. When necessary to prevent a condition of air pollution, corrective actions shall be taken to those areas where airborne dirt and dust are observed. [Reference: 7 DE Admin Code 1130, Section 6(a)(3) dated 12/11/00]</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain a log of observations indicating the presence or absence of airborne dirt and dust. Corrective actions taken by the Company shall also be detailed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	<p>x. <u>Reporting:</u> That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
g. Emission Units EM112 & EM114 - Fly Ash Silo and Ash Handling		
1. Particulate Matter		
<p>i. <u>Emission Standard:</u> Particulate emissions from the Silo Baghouse shall not exceed 0.2 grains per dry standard cubic foot. Reference: 7 DE Admin Code 1105, Section 2.1 dated 2/1/81</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u></p> <p>A. The Fly Ash Silo shall not be operated unless the corresponding baghouse is operating properly. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>B. A gauge showing the differential pressure for the baghouse shall be maintained in a location that is visible from the ground. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>C. The Company shall not cause or allow stockpiling or other storage of materials or transport to or from a storage facility in such a manner as may cause a condition of air pollution. [Reference: 7 DE Admin Code 1106, Section 6.1 dated 2/1/81]</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor the following: [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>A. The amount of coal combusted in each boiler.</p> <p>B. The method of stockpiling and transport.</p> <p>C. The following baghouse operating parameters:</p> <p>1) Operational condition of the baghouse.</p> <p>2) Pressure drop across the baghouse.</p> <p>3) All maintenance performed on the baghouse.</p> <p>In addition to the monitoring requirements, the Company shall also conduct an annual Reference Method 9 visible emissions observation in accordance with Regulation No. 20, Section 1.5(c). [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>vii. <u>Testing:</u> None.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. Maintain records of all maintenance performed on the silo and baghouse. B. Maintain records of the annual visible emission observations. C. Maintain records of the monitoring required in Condition 3 – Table 1(g)(1)(vi).</p>	
h. Emission Units EM113 - 17.6 Acre Ash Landfill		
1. Opacity		
<p>i. <u>Emission Standard</u>: The Company shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit such as to cause a condition of air pollution while the landfill is in operation. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: None.</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: None.</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall conduct: A. Visual emissions observations when the landfill is in operation in accordance with</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>EPA Reference Method 22 set forth in Appendix A, 40 CFR, Part 60, revised July 1, 1982. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>B. Daily qualitative visible emissions observations when the landfill is in operation to determine the presence of any visible emissions. [Reference Reg. No. 30, Section 6.1.1 dated 12/11/00]</p> <p>1) If visible emissions are observed, the Company shall take such corrective actions as necessary to maintain compliance with the emission standard. The Company may conduct a visible observation in accordance with Condition 3 - Table 1(h)(1)(vii)(A) to determine whether a visible emission occurs.</p> <p>2) If no visible emissions are observed, no further action is required.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the observation records on-site and made them available to the Department upon request. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Requirements for Material Handling		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: A. The Company shall not cause or allow visible particulate emissions of any material being transported by a motor vehicle. [Reference: 7 DE Admin Code 1106, Section 4.1 dated 2/1/81] B. The Company shall not cause or allow stockpiling or other storage of materials or transport to or from a storage facility in such a manner as may cause a condition of air pollution. [Reference: 7 DE Admin Code 1106, Section 6.1 dated 2/1/81]</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: A. The plant's paved and unpaved areas accommodating traffic and stockpiles shall be observed daily when the landfill is in operation for airborne dirt and dust. When necessary to prevent a condition of air pollution, corrective actions shall be taken to those areas where airborne dirt and dust are observed. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00] B. The Company shall conduct daily qualitative visible emissions observations of the ash landfill when in operation to determine the presence of any visible emissions. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00] 1) If visible emissions are observed, the Company shall take such corrective actions as necessary to maintain compliance with the emission standard. The Company may conduct a visible observation in accordance with Condition 3 - Table 1(h)(1)(vii)(A) to determine whether a visible emission occurs.</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>2) If no visible emissions are observed, no further action is required.</p> <p>vii. <u>Testing</u>: None.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the observation records on-site and made them available to the Department upon request. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	
<p>i. Emission Units EM201 thru EM209 - Nine (9) Cold Solvent Degreasers</p>		
<p>1. Requirements</p>		
<p>i. <u>Emission Standard</u>: None.</p> <p>ii. <u>Emission Limitation</u>: None.</p> <p>iii. <u>Operational Standard</u>: For each cold solvent degreaser the Company shall: [Reference: 7 DE Admin Code 1124, Section 33.3.1 dated 11/11/01] A. As of November 11, 2002, not use any solvent whose vapor pressure exceeds 1 millimeters of Mercury (mm Hg) measured at</p>	<p>v. <u>Compliance Method</u>: Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: None.</p> <p>vii. <u>Testing</u>: In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall use</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

<p>Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards</p>	<p>Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)</p>	<p>Reporting and Compliance Certification</p>
<p>20°C (68°F), as determined by either ASTM method D2879-97 or D323-89;</p> <p>B. Not heat the solvent used in the cleaners.</p> <p>C. Post, in the vicinity of each cold solvent cleaner, a permanent, legible, conspicuous label summarizing the operating requirements of the equipment as required by both the manufacturer and by this permit.</p> <p>D. Use immersion cold solvent cleaners that shall have a freeboard ratio of 0.75 or greater unless the machine is equipped with a working mode cover that shall be closed except when parts are being placed or removed from the machine. Covers shall be free of cracks, holes, and other defects, and easily opened or closed.</p> <p>E. Equip the cold solvent cleaners with a downtime mode cover that shall be closed at all times except during cleaning or drying of parts of the addition or removal of solvent. The cover shall be free of cracks, holes, and other defects, and readily opened and closed.</p> <p>F. Equip the cold solvent cleaners with an internal drainage system.</p> <p>G. Ensure that the solvent carry out shall be minimized by draining the cleaned parts at least fifteen (15) seconds or until the dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During</p>	<p>ASTM methods D2879-97 or D323-89 for measuring the solvent true vapor pressure. [Reference: 7 DE Admin Code 1124, Section 33.4.5 dated 1/11/93]</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain copies of the manufacturer supplied Material Safety Data Sheet showing the solvent content and the true vapor pressure of the solvent used as determined by the testing condition of this permit. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cleaning machine.</p> <p>H. Ensure that if at any time the cleaning operation calls for spraying of solvent, then the flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold solvent cleaner. The solvent flushing shall be a solid fluid stream, not an atomized or shower spray, at a pressure that does not exceed ten (10) pounds per square inch gauge.</p> <p>I. Not use porous or absorbent materials such as sponges, fabric, wood, leather, rope, or paper products in the cold solvent degreaser.</p> <p>J. Collect and store in closed containers waste solvent, still bottoms, and sump bottoms. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.</p> <p>K. Locate and position work area fans so that they do not blow across the opening of the cold solvent degreaser.</p> <p>L. Immediately clean up any spills during solvent transfer and use of the cold solvent cleaner, and the wipe rags or other absorbent material shall be immediately stored in covered containers for disposal or recycling.</p> <p>M. Operate any solvent bath agitator to produce</p>		

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.</p> <p>N. Ensure that the solvent level does not exceed the fill line.</p> <p>O. Supply a solvent spray that is a solid fluid stream at a pressure that does not exceed 10 psig;</p> <p>P. Degrease only materials that are neither porous nor absorbent.</p> <p>iv. <u>Operational Limitation:</u> The Company shall not use any halogenated solvents in these units. [Reference: 7 DE Admin Code 1130, Section 6.1.3 dated 12/11/00]</p>		
j. Emission Units EM121 and EM122 – Two (2) emergency generators nominally rated at 1.6 mmBTU/hr and 2.5 mmBTU/hr		
1. Criteria Pollutants		
<p>i. <u>Emission Standards:</u> None.</p> <p>ii. <u>Emission Limitations:</u> None.</p> <p>iii. <u>Operational Standards:</u> A. The emergency generators may only operate for an unlimited number of hours during an emergency as defined below: [Reference 7 DE Admin Code 1144, Section 4.1 dated 1/11/06] 1) An electrical power outage due to: a failure of the electrical grid; on-site</p>	<p>v. <u>Compliance Method:</u> Compliance with the operation limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin Code 1130 Section 6.1.3.2.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> The Company shall monitor the following information: [Reference 7 DE Admin Code 1144, Sections 6.1.3.1.2 and 6.2.1 dated 12/11/00] C. The date, time, duration and reason for each emergency generator startup;</p>	<p>x. <u>Reporting:</u> In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, if the emergency generators are to be reclassified from emergency generators to distributed generators, the owner or operator shall submit a letter stating that the generator is to be reclassified. Reclassification shall not occur without written permission from the Department. [Reference 7 DE Admin Code 1144 Section 1.3.3 dated 1/11/2006]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g. hurricane, tornado, blizzard, etc.); or</p> <p>2) When there is a deviation of voltage or frequency from the electrical provider to the premises of three percent (3%) or greater above, or five percent (5%) or greater below, standard voltage or frequency.</p> <p>B. The emergency generators may operate for an unlimited number of hours during testing or for maintenance purposes, pursuant to the definition of emergency generator as defined in 7 DE Admin Code 1144, except as restricted by Condition 3 – Table 1(j)(1)(iii)(D). [Reference 7 DE Admin Code 1144, Section 4.2 dated 1/11/06]</p> <p>C. Each shipment of diesel fuel received for use in the emergency generators shall have a sulfur content equal to or less than 0.05 percent by weight. [Reference Reg. No. 7 DE Admin Code 1144, Section 5.1 dated 1/11/06]</p> <p>D. The emergency generators shall not be operated for testing or maintenance purposes before 5 p.m. on any day which has a Ground Level Ozone Pollution Forecast or Particulate Forecast of "Code Purple," "Code Red," or "Code Orange" as announced by the Department. [Reference 7 DE Admin Code 1144, Section 4.2 dated</p>	<p>D. The monthly fuel usage;</p> <p>E. The type of fuel used to fire the unit;</p> <p>F. The sulfur content of the fuel oil for each shipment; and</p> <p>G. The hours and minutes of operation.</p> <p>vii. <u>Testing:</u> In addition to that required by Condition 3(b)(1)(ii) of this permit, the Company shall: [Reference 7 DE Admin Code 1130 Sections 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Once a quarter the emergency generators shall be observed for the presence or absence of visible emissions for at least five minutes while the equipment is operating. The five minute observation window must start as soon as generator power is stabilized. If visible emissions are observed during the five minute observation period, the owner or operator shall take actions per the manufacturer's recommendations to correct the problem as soon as possible. After corrective actions are taken, the owner or operator shall observe visible emissions while the equipment is next operated or tested. If visible emissions still persist, these steps (observe, correct, document) shall be repeated until visible emissions are not observed.</p> <p>B. The procedure outlined above does not require that the opacity of the emissions be determined. Since this procedure requires</p>	<p>xi. <u>Certification:</u> In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational requirements shall be based upon record keeping. [Reference 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>1/11/06]</p> <p>E. Despite Condition 3-Table 1(j)(1)(iii)(D), the emergency generators may be tested on any day that such testing is required to meet National Fire Protection Association (NFPA) Standards. [Reference 7 DE Admin Code 1144, Section 4.5 dated 1/11/06]</p> <p>F. The emergency generators shall not be operated for testing or maintenance purposes before 5 p.m. on any day which has a Ground Level Ozone Pollution Forecast or Particulate Forecast of "Code Purple," "Code Red," or "Code Orange" as announced by the Department. [Reference 7 DE Admin Code 1144, Section 4.4 dated 1/11/06]</p> <p>G. The emergency generators shall be equipped with a properly functioning non-resettable hour metering device. [Reference Reg. No7 DE Admin Code 1144, Section 6.1.2 dated 1/11/06]</p> <p>H. The emergency generators shall not be operated in conjunction with a voluntary demand reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator (e.g. Delmarva Power, Delaware Electric Cooperative, PJM, etc.). [Reference 7 DE Admin Code 1144 Section 4.2 dated 1/11/2006]</p> <p>I. The emergency generators shall not be transferred off-site without first obtaining a permit from the Department for the new site. [Reference 7 DE Admin Code 1102</p>	<p>only the determination of whether excessive VE occur and does not require the determination of opacity levels, observer certification according to the procedures of EPA Method 9 (40 CFR 60, Appendix A) is not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).</p> <p>C. The sulfur content of each shipment of diesel fuel shall be determined using the following sampling and testing methods as described in 40 CFR Section 80.580:</p> <ol style="list-style-type: none"> 1) <u>Manual Sampling</u>: American Society for Testing and Materials (ASTM) method D4057-95 or D5842-95 if there is no contamination present that could affect the sulfur testing requirements; 2) <u>Automatic Sampling</u>: ASTM method D4177-95; 3) <u>Sulfur Testing Method</u>: ASTM method D2622-03; 4) <u>Alternative Sulfur Testing Method</u>: ASTM methods D4294-03, D5453-03a, or D6920-03, provided that the refiner 	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>Section 7.1 dated 6/1/1997]</p> <p>iv. <u>Operational Limitations:</u></p> <p>A. Diesel fuel shall be the only fuel fired in these units. [Reference 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00]</p> <p>B. The emergency generators shall be serviced annually by a manufacturer’s representative or by personnel trained to perform maintenance according to the manufacturer’s recommendations. [Reference 7 DE Admin Code 1102 Section 6.1.1 & 6.2.1 dated 12/11/00]</p> <p>C. The owner or operator shall operate the generators in conformance with the generator manufacturer’s instructions, such as following maintenance and operating requirements to help minimize emissions. [Reference 7 DE Admin Code 1144, Section 3.1.1 dated 1/11/06]</p>	<p>or importer test result is correlated with the appropriate method specified above; or</p> <p>5) <u>Alternative Sulfur Testing Method:</u> Sulfur content may be determined using any test method approved under 40 CFR Part 80, Subpart I, Section 80.585.</p> <p>D. As an alternative to Condition 3 – Table 1(j)(1)(vii)(C), the operator may have the fuel in the emergency generator’s associated storage tank certified by a third party lab after each shipment of fuel. This certification shall identify the percentage of sulfur (by weight dry basis) and the method used to determine the sulfur content.</p> <p>viii. <u>Quality Assurance/ Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following: [Reference 7 DE Admin Code 1130 Sections 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. The monitoring required in Condition 3 - Table 1(j)(1)(vi).</p> <p>B. Visible emission records.</p> <p>C. For each shipment of fuel, fuel supplier certifications of the diesel fuel sulfur</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>content that states: [Reference 7 DE Admin Code 1144 Section 6.1.4 dated 1/11/06]</p> <ol style="list-style-type: none"> 1) The name of the oil supplier. 2) The oil complies with the specifications for fuel oil Numbers 1 or 2, as defined by The American Society for Testing and Materials in ASTM D396, AStandard Specification for Fuel Oils.@ 3) The sulfur content of the oil as determined by ASTM Methods: D129, D1552, D2622 or D4294. <p>D. A copy of the initial notification as required by 7 DE Admin Code 1144. [Reference 7 DE Admin Code 1144 Section 1.4 dated 1/11/06]</p> <p>E. A copy of the manufacturer’s maintenance and operational recommendations. [Reference 7 DE Admin Code 1144 Section 3.1.1 dated 1/11/06]</p> <p>F. Monthly, the hours of operation on a monthly and cumulative twelve (12) month basis. [Reference 7 DE Admin Code 1144 Section 6.1.1 dated 1/11/06]</p> <p>G. Monthly, the total fuel usage on a monthly and cumulative twelve (12) month basis. [Reference 7 DE Admin Code 1144 Section 6.1.1 dated 1/11/06]</p> <p>H. A copy of the annual service performed in accordance with Condition 3 – Table 1(j)(1)(iv)(B). [Reference 7 DE Admin Code 1130 Section 6.1.3.1.2 & 6.2.1 dated 12/11/00]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
k. Insignificant Activities		
1. Particulate Matter		
<p>i. <u>Emission Standard:</u> Fuel burning equipment having a rated heat input of <= 15 mmBTU/hr shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104, Section 2.1 dated 2/1/81]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the particulate matter emission standard listed in Condition 3 - Table 1(k)(1)(i) shall be based on Condition 3 - Table 1(k)(2)(iii) and the quality of fuel oil as determined in Condition 3 - Table 1(k)(2)(iii). [Reference: 7 DE Admin Code 1130, Section 6.1.1 dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> None.</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
2. Sulfur Oxides		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> The Company shall not use in any fuel burning</p>	<p>v. <u>Compliance Method:</u> Compliance shall be demonstrated by sampling and analysis of the distillate fuel oil using acceptable ASTM methods and fuel supplier certification and/or record keeping of this condition. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>equipment, distillate fuel oil having a sulfur content greater than 0.3% by weight. [Reference: 7 DE Admin Code 1108, Section 2.2 dated 5/9/85]</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> In addition to the requirements of Condition 3(b)(1)(ii) of this permit, the Company shall use one of the following ASTM methods to determine the sulfur concentration in the distillate oil: D129-91, D1552-90, D2622-92, or D4294-90. [Reference: 7 DE Admin Code 1108, Section 2.4 dated 5/9/85 and DAWM Policy for Alternate Testing Methods dated 9/17/97]</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the following records: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p> <p>A. Fuel supplier certification for each fuel oil shipment received at the facility. Such certification shall indicate: [Reference: 7 DE Admin Code 1130, Section 6(a)(3)(i)(B) dated 11/15/93]</p> <ol style="list-style-type: none"> 1. The name of the fuel supplier; 2. Date delivered; 3. Type of fuel; 4. Amount delivered; 5. The sulfur concentration of the fuel oil; 6. The method used to determine the 	<p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	sulfur concentration.	
I. Facility Wide		
1. Requirements		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> All structural and mechanical components of the equipment covered by the permit shall be maintained in proper operating condition and such equipment shall be operated at all times in a manner consistent with good air pollution control practices. [Reference: 7 DE Admin Code 1101, Section 3 dated 2/1/81]</p>	<p>v. <u>Compliance Method:</u> Compliance shall be demonstrated by maintenance records, compliance with permit conditions an adherence to operating instructions/manuals. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> Vendor specifications and/or Industrial Standards. [Reference: 7 DE Admin Code 1130, Section 6(a)(1) dated 12/11/00]</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain applicable maintenance records and standard operating procedures. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	<p>x. <u>Reporting:</u> That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
2. Particulate Matter		
<p>i. <u>Emission Standard:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance shall be based upon the restriction on fuel quality and percent sulfur. [Reference: 7</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2)</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> The Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBTU heat input, maximum 2-hour average. [Reference: 7 DE Admin Code 1104, Section 2.1 dated 2/1/81]</p>	<p>DE Admin Code 1130, Section 6(a)(3) dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> None.</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> None.</p>	<p>of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
<p>3. Opacity</p>		
<p>i. <u>Emission Standard:</u> The Company shall not cause or allow emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance of which is greater than twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin Code 1114, Section 2.1, dated 7/17/84]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p> <p>vi. <u>Monitoring:</u> In accordance with Subsection 1.5.3 of 7 DE Admin. Code 1120 conduct visual observations at fifteen second intervals for a period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. The additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Section 2 & 3 (except for</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>iv. <u>Operational Limitation:</u> None.</p>	<p>Section 2.5 and the second sentence of Section 2.4) of Reference Method 9 set forth in Appendix A, 40 CFR, Part 60, revised July 1, 1982. [Reference: 7 DE Admin Code 1130, Section 1.5(c) dated 12/7/88]</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> None.</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the following records: [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. Observation records shall be maintained and made available to the Department upon request. B. Records of all maintenance performed on these units shall be maintained and made available to the Department upon request.</p>	
4. Odor		
<p>i. <u>Emission Standard:</u> None.</p> <p>ii. <u>Emission Limitation:</u> Odorous air contaminants shall not be emitted in such quantities as to cause or create a condition of air pollution. [Reference: 7 DE Admin Code 1119,</p>	<p>v. <u>Compliance Method:</u> Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin Code 1130 Section 6.1.7.3, dated 12/11/00]</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>Section 2.1 dated 2/1/81]</p> <p>(STATE ENFORCEABLE ONLY)</p> <p>iii. <u>Operational Standard</u>: None.</p> <p>iv. <u>Operational Limitation</u>: None.</p>	<p>vi. <u>Monitoring</u>: Includes but is not limited to scentometer tests, air quality monitoring and affidavits from affected citizens and investigators. [Reference: 7 DE Admin Code 1119, Section 1.2 dated 2/1/81]</p> <p>vii. <u>Testing</u>: That required by Condition 3(b)(1)(ii) of this permit.</p> <p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain record of all monitoring/testing on-site. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	<p>6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>
<p>5. Work Practice Standards</p>		
<p>i. <u>Emission Standard</u>: The Company shall not allow, cause, or permit the disposal of more than eleven (11) pounds of volatile organic compound (VOC), or of any materials containing more than eleven (11) pounds of any VOC, in any one (1) day, in a manner that would permit the evaporation of VOCs into the ambient air. This includes but is not limited to the disposal of VOC from VOC control equipment. [Reference: 7 DE Admin Code 1124, Section 8 dated 11/29/94] A. This condition does not apply to:</p>	<p>v. <u>Compliance Method</u>: Compliance shall be demonstrated by adherence with the VOC handling work practices, and record keeping for storage, use and disposal of VOCs. [Reference: 7 DE Admin Code 1130, Section 6(a)(3) dated 12/11/00]</p> <p>vi. <u>Monitoring</u>: None.</p> <p>vii. <u>Testing</u>: None.</p>	<p>x. <u>Reporting</u>: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedences of the standard, with supporting records, in accordance with Condition 3(c)(2). [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u>: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>1) Any VOC or materials containing VOCs emitted from a regulated entity that is subject to a VOC standard under 7 DE Admin Code 1124;</p> <p>2) Coating sources that are exempt from the emission limitations established under 7 DE Admin Code 1124;</p> <p>3) Waste paint (sludge) handling system, water treatment systems, and other similar operations at coating facilities using complying coatings; and</p> <p>4) Any VOC or material containing VOCs used during process maintenance turnarounds for the cleaning purposes, providing that (b), (c), & (d) of this condition are followed.</p> <p>B. Open containers shall not be used for the storage or disposal of cloth or paper impregnated with VOCs that are for surface preparation, clean-up, or coating removal. Containers for the storage or disposal of cloth or paper impregnated with VOCs shall be kept closed, except when adding or removing material.</p> <p>C. Open containers shall not be used to store fresh or spent VOC to be used for surface preparation, clean-up, or coating removal. Containers for the storage of fresh or spent VOCs shall be kept closed, except when adding or removing material.</p> <p>D. VOCs shall not be used for clean-up of spray equipment unless equipment is used to</p>	<p>viii. <u>Quality Assurance/Quality Control</u>: None.</p> <p>ix. <u>Recordkeeping</u>: In addition to the requirements of 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain a record of postings, and employee training related to these work practice standards and storage, use and disposal of VOCs. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</p>	<p>Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<p>collect the cleaning compounds and to minimize their evaporation to the atmosphere.</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> None.</p> <p>iv. <u>Operational Limitation:</u> None.</p>		
m. Plant Wide – Expires on December 31, 2011		
1. Nitrogen Oxides		
<p>i. <u>Emission Standard:</u> Annual total NO_x mass emissions from Emission Units EM3, EM4, and EM5 shall not exceed 3,460 tons. [Reference: 7 DE Admin Code 1146, Table 4.1 dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> Average NO_x emissions from Emission Units EM3, EM4, and EM5 shall not exceed 0.15 lb/MMBTU on a rolling 24-hour average basis.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u></p> <p>A. Compliance with the operation standard will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00]</p> <p>B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(m)(1)(i) may be achieved by demonstrating that the total number of tons of NO_x emitted from Emission Units EM3, EM4, and EM5 does not exceed the sum of the tonnage limitations for these units. Total NO_x emissions in tons for a specified period shall be calculated as the sum of all</p>	<p>x. <u>Reporting:</u></p> <p>In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>A. Report each occurrence of excess emissions, within 30 calendar days of becoming aware of such occurrence with the following information: [Reference: 7 DE Admin. Code 1112, Section 7.3 dated 11/24/93]</p> <ol style="list-style-type: none"> 1) The name and location of the facility; 2) The subject source(s) that caused the excess emission; 3) The time and date of the first observation of the excess emissions; 4) The cause and expected duration of the excess emission;

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>recorded hourly emissions, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any remaining fraction of a ton less than 0.50 ton deemed equal to zero tons. [Reference: 7 DE Admin Code 1146, Section 4.2.1 and 4.2.3 dated 12/11/06]</p> <p>C. Compliance with the emission standard of Condition 3 - Table 1(m)(1)(i) shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>vi. <u>Monitoring:</u></p> <p>A. The Company shall continuously monitor and record the Nitrogen Oxide emissions from these units through the use of Continuous Emission Monitors (CEMS) approved by the Department. [Reference: APC-83/0824 dated 9/3/09, APC-83/0825 dated 9/3/09, APC-83/0826 dated 2/14/95, and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>B. The emission data from the NO_x CEMS shall be totaled for each day from midnight to midnight as tons of emissions per day. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors and Continuous Recorders shall be installed, calibrated,</p>	<p>5) For sources subject to the numerical limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions.</p> <p>6) The proposed corrective actions and schedule to correct the conditions causing the excess emission.</p> <p>B. The Company shall submit semi-annual reports in conjunction with the reporting requirements of 7 DE Admin Code 1130 which contain, as a minimum, the following information: [Reference: 7 DE Admin Code 1146, Section 7.3, dated 12/11/06]</p> <p>1) Tabulation of NO_x emission monitoring results reduced to one-hour averages, on a clock basis, for the period in units consistent with the applicable emission standard.</p> <p>2) For NO_x mass emission standards based on annual limit, the calendar year-to-date summation of mass emissions through the period being reported, in units consistent with the applicable emission standard.</p> <p>3) For NO_x emission rate averaging, identification of the units being averaged, hourly heat input of the respective units, hourly emission rate of the respective units, and the hourly</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the requirements of 40 CFR Part 96, subpart HH (April 28, 2006 amendment) to continuously measure and record the emission concentration for NO_x. [Reference: APC-83/0824 dated 9/3/09, APC-83/0825 dated 9/3/09, APC-83/0826 dated 2/14/95, and 7 DE Admin Code 1146, Section 4.4, dated 12/11/06]</p> <p>ix. <u>Recordkeeping:</u> In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall:</p> <p>A. Keep a copy of the Quality Assurance Program on site. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p> <p>B. Continuously record the NO_x readings from the monitors. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00 and 7 DE Admin Code 1146, Section 4.4 dated 12/11/06]</p> <p>C. Record the outage date for the NO_x monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00]</p>	<p>combined heat input weighted emission average for the affected units.</p> <p>4) Identification of any period or periods of, and cause for, any invalid data averages.</p> <p>5) Records of any repairs, adjustment, or maintenance to the monitoring system.</p> <p>6) Identification of any exceedance of any NO_x emission standard provided by this regulation, cause of the exceedance, and corrective action taken in response to the exceedance.</p> <p>7) Results from all tests, audits, and recalibrations performed during the period.</p> <p>8) Any other relevant data requested by the Department.</p> <p>9) A statement, "I am authorized to make this submission on behalf of the owners and operators of the affected facility or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge true, accurate and complete. I am aware that there</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		<p>are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”</p> <p>10) Signature by the designated representative.</p> <p>xi. <u>Certification:</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>
<p>2. Sulfur Oxides</p>		
<p>i. <u>Emission Standard:</u> Annual total SO₂ mass emissions from Emission Units EM3, EM4, and EM5 shall not exceed 8,401 tons. [Reference: 7 DE Admin Code 1146, Table 5.1 dated 12/11/06]</p> <p>ii. <u>Emission Limitation:</u> None.</p> <p>iii. <u>Operational Standard:</u> Average SO₂ emissions from Emission Units EM3, EM4, and EM5 shall not exceed 0.37 lb/MMBTU on a rolling 24-hour average basis.</p> <p>iv. <u>Operational Limitation:</u> None.</p>	<p>v. <u>Compliance Method:</u></p> <p>A. Compliance with the operation standard will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements. [Reference 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00]</p> <p>B. Beginning on January 1, 2009 through December 31, 2011, compliance with the emission standard in Condition 3 - Table 1(m)(2)(i) may be achieved by demonstrating that the total number of tons of SO₂ emitted from Emission Units EM3, EM4, and EM5 does not exceed the sum of the tonnage limitations for these units. Total SO₂ emissions in tons for a specified period shall be calculated as the sum of all recorded hourly emissions, with any remaining fraction of a ton equal to or</p>	<p>x. <u>Reporting:</u> In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall report all exceedances of the standard, with supporting records, in accordance with Condition 3(c)(2) of this permit. [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.3 and 6.2.1 dated 12/11/00]</p> <p>xi. <u>Certification</u> That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.2.3 and 6.2.2 dated 12/11/2000]</p>

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>greater than 0.50 ton deemed to equal one ton and any remaining fraction of a ton less than 0.50 ton deemed equal to zero tons. [Reference: 7 DE Admin Code 1146, Section 5.3.1 and 5.3.3 dated 12/11/06]</p> <p>C. Compliance with the emission standard of Condition 3 – Table 1(m)(2)(i) shall be demonstrated with a continuous emissions monitoring system (CEMs). [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>vi. <u>Monitoring:</u> The Company shall continuously monitor and record SO₂ emissions from these units through the use of continuous emissions monitors (CEMs). [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06]</p> <p>vii. <u>Testing:</u> None.</p> <p>viii. <u>Quality Assurance/Quality Control:</u> Continuous emission monitors shall be installed, calibrated, certified, and operated in accordance with 40 CFR Part 75 (May 18, 2005 amendment) or other method approved by the Department and the EPA, and meeting the monitoring and reporting requirements of 40 CFR Part 96, subpart HHH (April 28, 2006 amendment). [Reference: 7 DE Admin Code 1146, Section 5.4, dated 12/11/06]</p>	

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<p>ix. Recordkeeping:</p> <ul style="list-style-type: none"> A. In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain the following records: B. The Company shall continuously record the SO₂ readings from the monitors. [Reference: 7 DE Admin Code 1146, Section 5.4 dated 12/11/06] C. The Company shall record the outage date for the SO₂ monitors due to maintenance, the date the monitor was repaired, and the maintenance performed. [Reference: 7 DE Admin Code 1130, Section 6.1.3.1.2 dated 12/11/00] 	
<p>n. 7 DE Admin Code 1136-Acid Rain</p>		
<p>1. Acid Rain Program</p> <p>The Acid Rain Permit is included as a complete and separable part of this operating permit as an enclosure, Permit: AQM-003/00007-IV-R2.</p> <p>Permit: AQM-003/00007-IV-R2 contains the following elements in a format prescribed by the Administrator:</p> <ul style="list-style-type: none"> A. All elements required for a complete Acid Rain Permit Application under §72.31 of 40 CFR Part 72 and 7 DE Admin Code 1136; B. The applicable Acid Rain emission limitation for sulfur dioxide; C. The applicable Acid Rain emission limitation for nitrogen oxides; and D. The Company shall maintain allowances as required by 40 CFR Parts 72, 73, and 76. <p>Each Acid Rain Permit is deemed to incorporate the definitions of terms under §72.2 of 40 CFR Part 72.</p>		

Condition 3 – Table 1: Specific Requirements (continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
o. 7 DE Admin Code 1139-Nitrogen Oxides Budget Trading		
1. <u>NO_x Budget Trading</u> The NO _x Budget Trading Permit is included as a complete and separable part of this operating permit as an enclosure, Permit: <u>AQM-003/00007-I</u> . Permit: <u>AQM-003/00007-I</u> contains the following elements in a format prescribed by the Administrator: A. All elements required for a complete NO _x Budget Trading Permit Application under 7 DE Admin Code 1139 Section 7.2; B. The applicable NO _x Budget Program emission limitation for nitrogen oxides; and C. The Company shall maintain allowances as required by 7 DE Admin Code 1139. Each NOX Budget Trading Permit is deemed to incorporate the definitions of terms under 7 DE Admin Code 1139 Section 4.		
p. 40 CFR Part 97-CAIR		
The CAIR Permit is included as a complete and separable part of this operating permit as an enclosure, Permit: <u>AQM-003/00007-CAIR</u> . Permit: <u>AQM-003/00007-CAIR</u> contains the following elements in a format prescribed by the Administrator: A. All elements required for a complete CAIR Permit Application under 40 CFR Part 97 and 7 DE Admin Code 1130; B. The applicable CAIR emission units; C. The Company shall maintain allowances as required by 40 CFR Part 97; and D. Each CAIR permit is deemed to incorporate the definitions of terms under 40 CFR Part 97.		

Permit: AQM-003/00007 (Renewal 1)

Calpine Mid-Atlantic Generation, LLC. Edge Moor Power Plant

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Condition 4- Operational Flexibility

- a. In addition to the operational flexibility specifically provided in the terms and conditions detailed in Condition 3 – Table 1 of this permit, the Owner and/or Operator is authorized to make any changes within the facility which contravenes the terms and conditions of this permit without a permit revision if the change:
1. Is not a modification or otherwise prohibited under any provision of Title I of the Act or the State Implementation Plan (SIP); and [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
 2. Does not involve a change in any compliance schedule date; and [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
 3. Does not result in a level of emissions exceeding the emissions allowable under this permit, whether expressed herein as a rate of emissions or in terms of total emissions. [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
- b. Before making a change under the provisions of Condition 4(a) of this permit, the Owner and/or Operator shall provide advance written notice to the Department and to the EPA in accordance with Condition 3(c)(2)(iii) of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
- c. The Owner and/or Operator shall keep records of any changes made under Condition 4 of this permit in accordance with Condition 3(b)(2)(iv) of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]

Condition 5- Compliance Schedule

This permit does not contain a compliance schedule. [Reference: 7 DE Admin. Code 1130 Section 6.3.3 dated 12/11/00]

Condition 6. Permit Shield.

- a. Permit Shield: Compliance with the terms and conditions of this permit shall constitute compliance with 7 Del. C. Ch 60 for the discharge of any air contaminant specifically identified in the permit application as of the day of permit issuance. However, nothing in this permit shield shall in any way limit or affect the following:
1. The provisions of section 303 (Emergency Orders) of the Act, including the authority of the Administrator under that section; or
 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
 3. The applicable requirements of the acid rain program consistent with section 408(a) of the Act; or
 4. The ability of EPA to obtain information from a source pursuant to section 114 of the Act. [Reference: 7 DE Admin. Code 1130 Sections 6.6.4 dated 12/11/00]
- b. The permit shield granted in Condition 6 of this permit shall not extend to any changes made pursuant to Condition 2(m)(3) [Minor Permit Modifications] or Condition 4 [Operational Flexibility] of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.8.2 dated 12/11/00, 7.5.1.6 dated 12/11/00, and 7.5.2.6 dated 12/11/00]

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APPENDIX A

In addition to those New Source Review (NSR) requirements, concerning the construction of the three (3) additional combined cycle units at the existing Hay Road facility, the Company is also required to comply with the requirements contained in the State of Delaware's "**Regulations Governing Delaware's Coastal Zone**" since the location of the expansion project is located in Delaware's Coastal Zone. As part of the Coastal Zone Permitting Requirements, the Company is required to more than offset all negative impacts of the project or activity. The Company opted to offset all air emissions [Sulfur Dioxide (SO₂), Sulfuric Acid Mist (H₂SO₄), Carbon Monoxide (CO), Particulate Matter (PM-10), Ammonia (NH₃), and Hazardous Air Pollutants (HAPS)] via equivalent SO₂ reductions at Edge Moor Unit 3. A variety of operating and fuel procurement measures will be instituted on Edge Moor Unit 3 in order to accomplish this SO₂ offset. These measures include the procurement of lower sulfur fuels (coal and oil), and/or increased burning of natural gas at Edge Moor Unit 3, when viable. The methodology which will be used is noted below:

In order to calculate the equivalent SO₂ tons to offset, the initial idea was to use the National Ambient Air Quality Standards (NAAQS) or similar threshold limits. However, this was not a suitable method as not all of the pollutant species listed have established NAAQS. Moreover, each NAAQS pollutant has different averaging times and therefore could not be weighted. Because of these confounding factors, an offset method with a "common denominator" approach was necessary. The Company opted to use the average of the Occupational Safety and Health Organization's (OSHA) Permissible Exposure Limits (PELs) and the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) in order to determine the offset weighting required. The resulting equation was placed in operating **Permit: APC-2000/0281-CONSTRUCTION(EOP)(PSD)(NSPS)(NO_x RACT)** as a **State Enforceable Only Condition** and reads as follows:

$$EM3_{cap}SO_2 = 2906 - [(HR_{57}SO_2) + (HR_{57}H_2SO_4 * 5.23) + (HR_{57}CO * 0.15) + (HR_{57}PM_{10} * 1.05) + (HR_{57}NH_3 * 0.25) + (HR_{57}Hrs * 0.0024) + 15]$$

Where:

- EM3_{cap}SO₂ = Maximum permitted calendar annual tons of SO₂ emitted by Edge Moor Unit 3.
- HR₅₇SO₂ = Actual calendar annual tons of SO₂ emitted from Hay Road Units 5 through 7. *(As calculated and reported through EDR Reports.)*
- HR₅₇H₂SO₄ = Actual calendar annual tons of H₂SO₄ emitted from Hay Road Units 5 through 7. *(As calculated by EPA emission factors.)*
- HR₅₇CO = Actual calendar annual tons of CO emitted from Hay Road Units 5 through 7. *(As monitored through CEM data.)*
- HR₅₇PM₁₀ = Actual calendar annual tons of PM₁₀ emitted from Hay Road Units 5 through 7. *(As calculated through EPA emission factors, or compliance testing.)*
- HR₅₇NH₃ = Actual calendar annual tons of NH₃ emitted from Hay Road Units 5 through 7. *(As monitored through CEM data or as calculated by EPA emission factors.)*
- HR₅₇Hrs = Actual unit hours operated by Hay Road Units 5 through 7.

Note: 2906 is the baseline of Edge Moor Boiler 3 in tons of SO₂.
 Weighting of 0.0024 is the offset weighting of potential HAPs determined as below in **Table No. 2**.

The offset weightings were determined as follows in **Table No. 2** below:

Table No. 2						
Pollutant	OSHA Permissible Exposure Limit		ACGIH Threshold Limit Values		OSHA/ACGIH Average	Offset Weighting
	ppm	Mg/M³	ppm	Mg/M³	Mg/M³	Tons SO₂/Ton
SO ₂	2	5.2	2	5.2	5.2	1.00
H ₂ SO ₄		1.0		1.0	1.0	5.23
CO	35	40.1	25	28.6	34.3	0.15
PM ₁₀		5.0		NA	5.0	1.05
NH ₃	35	24.3	25	17.4	20.9	0.25

The Company is required to conduct periodic reviews and updates of the offset ratios on the basis of changes in any established TLV's. This review must occur at a minimum before issuance of the operating permit and prior to any renewals thereof. In addition, the Company must surrender SO₂ allowances, equal in tons, to those calculated offsets annually.

Attachment "A"- Revision History

<u>Date</u>	<u>Number</u>	<u>Revision Type</u>	<u>Description</u>	<u>Pages Revised</u>
12/23/2004	AQM-003/00007	Initial Permit	Initial Permit	All
3/11/2005	AQM-003/00007(Revision 1)	Administrative Permit Amendment	Change of the Responsible Official	Page 1
6/12/2009	AQM-003/00007(Revision 2)	Administrative Permit Amendment	Change of the Responsible Official	Page 1
7/31/2009	AQM-003/00007(Revision 3)	Administrative Permit Amendment	Change of the Responsible Official	Page 1
7/1/2010	AQM-003/00007(Revision 5)	Administrative Permit Amendment	Change of the name of the Company and the Responsible Official	Page 1
7/22/2010	AQM-003/00007(Revision 4)	Administrative Permit Amendment	Change of DNREC- Division of Air Quality Dover office address and name change from Air Quality Management Section to Division of Air Quality	Page 4
9/22/2010	AQM-003/00007(R-1)	Permit Renewal	Renewal of Permit	All