State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

Division of Air Quality
P.O. Box 027
Trenton, NJ 08625-0027

Environmental Quality Board
P. O. Box 8477
Harrisburg, PA 17105-8477

August 18, 2006

RE: **Comments on the Proposed Revisions to 25 PA Code Chapter 123 (Standards for Contaminants) Concerning Mercury Emissions**

Dear Pennsylvania Environmental Quality Board:

The New Jersey Department of Environmental Protection (NJDEP) would like to take this opportunity to comment on the proposed revisions to 25 PA Code Chapter 123 (Standards for Contaminants) concerning mercury emissions from coal-fired Electric Generating Units (EGUs).

With our mutual air quality goals in mind, we would like to express our strong support for the proposed revision to 25 PA Code Chapter 123. These proposals will help address some of the inadequacies found in EPA's Clean Air Mercury Rule (CAMR) concerning the control of mercury emissions from new and existing coal-fired EGUs. We especially support the following provisions:

1. There will be no inter-facility cap-and-trade program as part of the mercury rules. Compliance with the mercury emission limitations will be on a unit-by-unit basis or by facility-wide emissions averaging.

2. The proposed rule will achieve a greater reduction in mercury emissions in a shorter amount of time than EPA's CAMR. By the start of Phase II (2015), the proposed rule is expected to reduce mercury emissions by 90 percent. The Congressional Research Service predicts that by 2030, EPA's CAMR will only reduce mercury emissions by 70 percent.

There are changes to the proposed Chapter 123 revision we recommend Pennsylvania consider.

1. We believe that Phase II of the proposed mercury standards for new and modified existing pulverized coal units in § 123-205(a)(1) and (c) can be more stringent. The proposed pulverized coal-units mercury emission limits are 0.012 lbs per GWh or 90 percent reduction for existing units in Phase II. Add-on mercury controls currently available have been demonstrated to be more effective than 0.012 lbs per GWh . NJDEP recommends a 0.00600 lbs per GWh (3 milligrams per MW-hr) mercury emission limit for both new and existing pulverized coal units.

2. The Department is concerned about the proposed exemption to the mercury emission standards in § 123.206. This section specifies that existing EGU combusting 100 percent bituminous coal are in compliance with the mercury emission standard requirement without any additional compliance demonstration if the following controls are installed:

   Phase I - an electrostatic precipitator or baghouse for particulate control and a wet flue gas desulfurization for sulfur dioxide control,

   Phase II - an electrostatic precipitator or baghouse for particulate control, selective catalytic reduction for nitrogen oxides control, and wet flue gas desulfurization for sulfur dioxide control.

We recommend that activated carbon injection and baghouse control should be required if necessary to achieve 90% mercury control. Activated carbon injection (ACI) for mercury control is commercially available today and has been proven on Municipal Solid Waste (MSW) incinerators and coal plants.

Enclosed is latest mercury emission data from New Jersey MSW incinerators operating with ACI. Note that the best controlled MSW facilities with carbon adsorption and baghouse control achieve greater than 99 percent mercury control and mercury levels better than 0.5 μg/dscm, which is comparable to 3 mg/MWh for coal-fired power plants. Technology is clearly available for coal-fired plants to achieve 0.00600 lbs/GW-hr (3 mg/MWhr) or 90 percent control, which NJ adopted for all coal combustion on December 6, 2004.

According to a paper by Sid Nelson Jr., Ronald Landreth, Qunhui, and Jon Miller of Sorbent Technologies "Accumulated Power-Plant Mercury –Removal Experience with Brominated PAC Injection", We Energies' Valley Station plant burning low sulfur bituminous coal achieved 94 percent mercury control, and Great River Energy's Stanton Station Unit 10 in North Dakota achieved 95 percent control. Also, the Babcock and Wicox full-scale mercury control test at Mount Storm Power Station Grant County West VA reported 95 percent mercury control with SCR, ESP, and wet FGD. Sunflower Electric cooperative Holcomb plant in Holcomb Kensas injected DARCO Hg –LH brominated ACI and achieved greater than 90 percent mercury control. Meramec plant in Arnold, Missouri with DARCO Hg –LH ACI achieved greater than 95 percent mercury control.

Enclosed is recent data on pilot testing of carbon injection at the PSEG Mercer generating plant with ESP control. They achieved over 80% mercury control on these initial tests without optimization. Also, enclosed is a portion of the permit approved on August 1, 2006, for adding permanent carbon injection to these units. We have also been advised that PSEG has issued a Request For Proposals for adding baghouse control on these units to achieve over 90% mercury control.

Again, we appreciate the opportunity to comment on the proposed Mercury Rule and commend Pennsylvania on your leadership in this important area of air quality protection. If you have any questions regarding these comments, please contact me at (609) 984-1484.

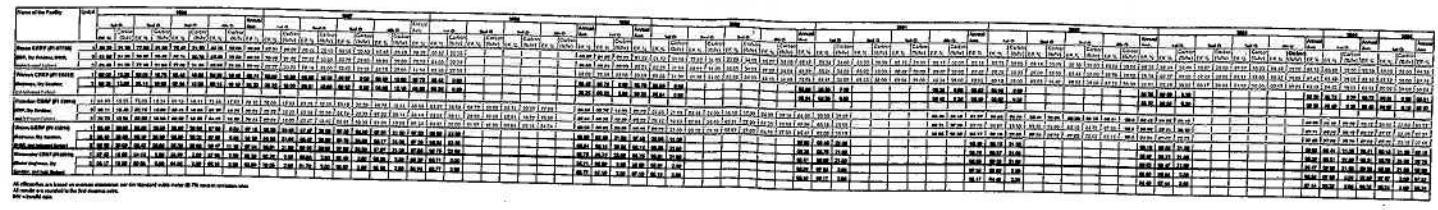
Sincerely,

William O'Sullivan, P.E.
Director

Enclosures: 3

c: Lisa P. Jackson, Commissioner
Nancy Wittenberg, Assistant Commissioner
Joyce Epps, Director, PADEP Bureau of Air Quality
John Preczewski, Assistant Director
Alan Dresser, Research Scientist
Sunila Agrawal

SUMMARY OF MERCURY REMOVAL EFFICIENCY AND CARBON USAGE OF NEW JERSEY MUNICIPAL WASTE INCINERATORS



SUMMARY OF OUTLET MERCURY TEST RESULTS OF NEW JERSEY MUNICIPAL WASTE INCINERATORS
(Mercury Concentrations in ug/dscm @7% Oxygen)

Name of the Facility	Unit #	1996 1st Q	1996 2nd Q	1996 3rd Q	1996 4th Q	1996 Annual Avg.	1997 1st Q	1997 2nd Q	1997 3rd Q	1997 4th Q	1997 Annual Avg.	1998 1st Q	1998 2nd Q	1998 3rd Q	1998 4th Q	1998 Annual Avg.
Essex CRRF (PI 67736)	1	18.0	27.3	42.4	21.5	26.8	19.4	22.3	38.7	23.0	26.1	12.3				12.3
(ESP, Dry Scrubber, SNCR,	2	15.3	25.2	17.0	20.4	19.4	19.5	24.7	66.7	18.0	31.8	13.2				13.2
and Activated Carbon)	3	18.0	32.1	36.0	22.3	28.8	15.8	19.8	87.3	29.1	38.0	14.2				14.2
Warren CRRF (PI 85455)	1	2.5	1.9	2.8	1.9	2.3	3.3	2.2	2.0	1.4	2.2	2.2				2.2
(Baghouse, Dry Scrubber,	2	1.8	2.1	4.0	2.9	2.7	2.4	3.7	2.0	1.5	2.4	1.7				1.7
and Activated Carbon)																
Camden CRRF (PI 61814)	1	53.8	254.7	30.2	53.0	98.1	227.3	28.9	121.3	45.8	106.0	37.3	45.3	0.5	38.9	41.0
(ESP, Dry Scrubber,	2	30.1	381.2	64.3	26.7	125.6	151.7	16.9	11.8	8.3	47.0	16.5	59.3	35.9	32.1	47.8
and Activated Carbon)	3	66.4	105.4	77.3	33.8	70.5	82.0	26.1	28.5	37.7	43.1	12.7	15.4	15.6	39.7	25.9
Union CRRF (PI 41814)	1	54.5	3.4	3.8	6.8	17.1	4.1	5.2	10.0	7.0	6.6	2.4				2.4
(Baghouse, Dry Scrubber,	2	8.8	1.8	3.8	5.8	4.8	10.7	6.4	12.3	8.1	9.4	6.1				6.1
SNCR, and Activated Carbon)	3	4.2	5.0	3.5	11.1	5.9	14.9	3.1	7.3	6.0	7.8	4.2				4.2
Gloucester CRRF (PI 55782)	1	7.2	12.2	20.0	16.7	14.0	14.0	8.9	2.8	10.9	8.8	6.1				6.1
(Shaker Baghouse, Dry	2	6.7	26.7	16.3	15.5	16.3	45.5	11.9	5.5	22.4	21.4	13.1				13.1
Scrubber, and Activ. Carbon)																

Name of the Facility	Unit #	1999 1st Q	1999 2nd Q	1999 3rd Q	1999 4th Q	1999 Annual Avg.	2000 1st Q	2000 2nd Q	2000 3rd Q	2000 4th Q	2000 Annual Avg.	2001 1st Q	2001 2nd Q	2001 3rd Q	2001 4th Q	2001 Annual Avg.
Essex CRRF (PI 67736)	1	18.5				18.5	11.9	22.5	17.4	39.9	22.9	51.7	22.3	14.5	10.2	27.1
(ESP, Dry Scrubber, SNCR,	2	18.6				18.6	10.9	35.8	23.0	28.1	21.4	29.2	29.9	17.3	29.8	26.6
and Activated Carbon)	3	271.2				271.2	15.5	15.3	29.8	23.9	21.1	30.5	196.1	33.3	31.2	73.3
Warren CRRF (PI 85455)	1	2.8				2.8	2.1				2.1	1.4			3.6	2.5
(Baghouse, Dry Scrubber,	2	2.4				2.4	4.7				4.7	6.4			2.1	4.2
and Activated Carbon)																
Camden CRRF (PI 61814)	1	14.2				14.2	15.1	9.1	13.0	11.6	12.2	19.1	INV	INV	16.7	17.6
(ESP, Dry Scrubber,	2	19.4				19.4	68.2	28.3	6.9	16.4	31.8	45.2	INV	INV	13.9	29.6
and Activated Carbon)	3	22.5				22.5	17.4	46.2	14.1	13.9	22.9	19.0	INV	INV	6.6	12.3
Union CRRF (PI 41814)	1	3.4				3.4	2.6				2.5	4.1				4.1
(Baghouse, Dry Scrubber,	2	5.8				5.8	2.8				2.8	3.7				3.7
SNCR, and Activated Carbon)	3	6.4				6.4	3.3				3.3	7.4				7.4
Gloucester CRRF (PI 55782)	1	7.7				7.7	4.5				4.5	2.1				2.1
(Shaker Baghouse, Dry	2	8.0				8.0	2.0				2.0	18.1				18.1
Scrubber, and Activ. Carbon)																

Name of the Facility	Unit #	2002 1st Q	2002 2nd Q	2002 3rd Q	2002 4th Q	2002 Annual Avg.	2003 1st Q	2003 2nd Q	2003 3rd Q	2003 4th Q	2003 Annual Avg.	2004 1st Q	2004 2nd Q	2004 3rd Q	2004 4th Q	2004 Annual Avg.
Essex CRRF (PI 67736)	1	18.1	28.3	22.0	34.1	20.0	17.4	30.7	19.6	18.4	18.8	7.2				7.2
(ESP, Dry Scrubber, SNCR,	2	29.6	19.5	30.0	33.6	25.7	22.8	16.2	24.2	22.4	21.2	8.0				8.0
and Activated Carbon)	3	19.0	18.4	18.4	22.2	19.7	9.4	18.7	42.5	20.8	22.5	8.2				8.2
Warren CRRF (PI 85455)	1	1.4				1.4	0.7				0.7	0.3				0.3
(Baghouse, Dry Scrubber,	2	2.1				2.1	1.1				1.1	0.5				0.5
and Activated Carbon)																
Camden CRRF (PI 61814)	1	8.2	6.9	13.0	7.4	9.3	1.8				1.8	18.1				18.1
(ESP, Dry Scrubber,	2	12.5	30.7	5.0	5.9	13.5	3.4				3.4	3.5				3.5
and Activated Carbon)	3	7.4	8.1	4.5	134.3	38.5	2.1				2.1	2.0				2.0
Union CRRF (PI 41814)	1	1.4				1.4	0.8				0.8	0.8				0.8
(Baghouse, Dry Scrubber,	2	4.4				4.4	1.2				1.2	2.5				2.5
SNCR, and Activated Carbon)	3	1.5				1.5	1.3				1.3	1.2				1.2
Gloucester CRRF (PI 55782)	1	7.9				7.9	6.5				6.5	4.3				4.3
(Shaker Baghouse, Dry	2	9.5				9.5	15.8				15.8	4.2				4.2
Scrubber, and Activ. Carbon)																

Name of the Facility	Unit #	2005 1st Q	2005 2nd Q	2005 3rd Q	2005 4th Q	2005 Annual Avg.	2006 1st Q	2006 2nd Q	2006 3rd Q	2006 4th Q	2006 Annual Avg.
Essex CRRF (PI 67736)	1	23.9				23.9	0.0				0.0
(ESP, Dry Scrubber, SNCR,	2	31.0				31.0	0.0				0.0
and Activated Carbon)	3	14.3				14.3	0.0				0.0
Warren CRRF (PI 85455)	1	0.4				0.4	0.0				0.0
(Baghouse, Dry Scrubber,	2	0.5				0.5	0.0				0.0
and Activated Carbon)											
Camden CRRF (PI 61814)	1	3.5				3.5	0.0				0.0
(ESP, Dry Scrubber,	2	3.7				3.7	0.0				0.0
and Activated Carbon)	3	4.1				4.1	0.0				0.0
Union CRRF (PI 41814)	1	1.1				1.1	0.0				0.0
(Baghouse, Dry Scrubber,	2	0.5				0.5	0.0				0.0
SNCR, and Activated Carbon)	3	0.4				0.4	0.0				0.0
Gloucester CRRF (PI 55782)	1	3.1				3.1	0.0				0.0
(Shaker Baghouse, Dry	2	8.3				8.3	0.0				0.0
Scrubber, and Activ. Carbon)											

ug/dscm = microgram per dry standard cubic meter
All results are rounded to the 1st decimal point.
INV = invalid data

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State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

Environmental Regulation
Division of Air Quality
Air Quality Permitting Element
P. O. Box 27
Trenton, NJ 08625-0027

Air Pollution Control Operating Permit
Minor Modification and Preconstruction Approval

Permit Activity Number: BOP060002 **Program Interest Number: 61057**

Mailing Address	Plant Location
FRANCIS X SULLIVAN DIR ASSET OPERATIONS PSE&G MERCER GENERATING STATION 2512 LAMBERTON RD Trenton, NJ 08611	PSEG FOSSIL LLC MERCER GENERATING STATION Lamberton Rd Hamilton Twp Mercer County

Initial Operating Permit Approval Date: **December 19, 2005**
Minor Modification Approval Date: **August 1, 2006**
Operating Permit Expiration Date: **December 18, 2010**

This minor modification is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). The equipment at the facility must be operated in accordance with the requirements of this permit.

This approval, in response to your application, merges the provisions of the previously approved operating permit and the changes from this minor modification into a single comprehensive permit that replaces the one previously issued. This minor modification includes the requirements for addition of two activated carbon injection systems, CD22 and CD 23, to meet the new mercury emission limit that will become effective on May 17, 2007, and to add the 10% opacity limits for Unit and Unit 2 that were in the preconstruction permits for these boilers but were missing in the Operating permit. This minor modification also includes a correction to a typo in Reference # 13 of emission unit U1501 OS Summary which refers to NOx instead of VOC. The NOx limit is covered in Ref # 11. This mistake has been verified and the word NOx has been replaced by VOC in Reference # 13.

Equipment at the facility referenced by this minor modification **is not covered by** the permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. Pursuant to N.J.A.C. 7:27-22.33(e), this minor modification consists of both a preconstruction approval and operating permit approval. This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. **The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect.** Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year, as required by paragraph 13 in Section F, *General Provisions and Authorities,* of this permit, if the annual compliance certification is submitted by January 30.

New Jersey Department of Environmental Protection
Air & Environmental Quality Compliance & Enforcement
401 East State Street, P. O. Box 422
Trenton, New Jersey 08625-0422

United States Environmental Protection Agency, Region II
Air Compliance Branch
290 Broadway
New York, New York 10007-1866

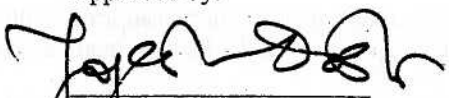
New Jersey Department of Environmental Protection
Air and Environmental Quality Compliance & Enforcement
Central Regional Enforcement Office
300 Horizon Center, P.O. Box 407
Robbinsville, New Jersey 08625-0407

We are including a diskette with an electronic file. This file contains the information included in the paper version of the operating permit. Upon importing this information into your personal computer with RADIUS software, you will have up-to-date information in RADIUS format. RADIUS software, instructions, and help are available at the Department's website at www.state.nj.us/dep/aqpp. We also have an Operating Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any questions you may have. The Operating Permit Help Line number is 609-633-8248.

If, in your judgment, the Department is imposing any unreasonable condition of approval in this permit modification action, you may contest the Department's decision on the modification and request an adjudicatory hearing pursuant to N.J.S.A. 52:14b-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information requested in N.J.A.C. 7:27-1.32 and the information on the enclosed Administrative Hearing Request Checklist and Tracking Form.

If you have any questions regarding this permit approval, please call your permit writer, Aliya M. Khan, at (609) 292-2169.

Approved by:



Yogesh Doshi
Air Quality Permitting Element

Enclosure

CC: S. Riva, USEPA Region II (diskette containing modified permit)
Chief CRO (w/o enclosure)
Aliya M. Khan (w/o enclosure)
K. Kalim (w/o enclosure)

Administrative Hearing Request Checklist and Tracking Form

I. Document Being Appealed

Name of the Facility	Program Interest (PI) Number	Permit Activity Number	Issuance Date
PSEG FOSSIL LLC MERCER GENERATING STATION	61057	BOP060002	

II. Contact Information

Name of Person Requesting Hearing	Name of Attorney (if applicable)
Address:	**Address:**
Telephone:	**Telephone:**

III. Please include the following information as part of your request:

A. The date the permittee received the permit decision,
B. **A copy of the document being appealed,**
C. The legal and factual questions you are appealing;
D. A statement as to whether or not you raised each legal and factual issues during the permit application process;
E. Suggested revised or alternative permit conditions;
F. An estimate of the time required for the hearing;
G. A request, if necessary, for a barrier-free hearing location for physically disabled persons;
H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Departments processing of your hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

1. New Jersey Department of Environmental Protection
Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
401 E. State Street, P.O. Box 402
Trenton, New Jersey 08625

2. Mr. John Preczewski
Bureau of Operating Permits
New Jersey Department of Environmental Protection
401 E. State Street, 2nd Floor, P.O. Box 027
Trenton, New Jersey 08625
Phone: (609) 292-0834

_____ _____
Signature **Date**

Administrative Hearing Request Checklist and Tracking Form

IV. If you are not the applicant but rather an interested person claiming to be aggrieved by the permit decision, please include the following information:

1. The date you or your agent received notice of the permit decision (include a copy of that permit decision with your hearing request);
2. Evidence that a copy of the request has been delivered to the applicant for the permit which is the subject of the permit decision;
3. A detailed statement of which findings of fact and/or conclusion of law you are challenging;
4. A description of your participation in any public hearings held in connection with the permit application and copies of any written comments you submitted;
5. Whether you claim a statutory or constitutional right to a hearing, and, if you claim such a right, a reference to the applicable statute or explanation of how your property interests are affected by the permit decision;
6. If the appeal request concerns a CAFRA permit decision, evidence that a copy of the request has been delivered to the clerks of the county and the municipality in which the project which is the subject of the permit decision is located;
7. Suggested revised or alternative permit conditions;
8. An estimate of the time required for the hearing;
9. A request, if necessary, for a barrier-free hearing location for physically disable persons;
10. A clear indication of any willingness to negotiate a settlement with the Department prior to the Department's transmittal of the hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

1. New Jersey Department of Environmental Protection
   Office of Legal Affairs
   Attention: Adjudicatory Hearing Requests
   401 East State Street, P.O. Box 402
   Trenton, New Jersey 08625-0402

2. Mr. John Preczewski
   Bureau of Operating Permits
   New Jersey Department of Environmental Protection
   401 E. State Street, 2nd Floor, P.O. Box 027
   Trenton, New Jersey 08625
   Phone: (609) 292-0834

_____ _____

Signature **Date**

Table of Contents

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

Section A

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

FACILITY PROFILE

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): PSEG Mercer Generating Station

Facility ID (AIMS): 61057

Street Address: 2512 LAMBERTON RD
HAMILTON, NJ 08611

Mailing Address: PSEG POWER LLC
2512 LAMBERTON RD
HAMILTON, NJ 08611

State Plane Coordinates:
X-Coordinate:
Y-Coordinate:
Units:
Datum:
Source Org.:
Source Type:

County: Mercer
Location Description:

Industry:
Primary SIC: 4911
Secondary SIC:
NAICS:

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: BOP - Operating Permits

Organization: PSEG Services Corporation
Name: Jon D. Perry
Title: Licensing Project Manager
Phone: (973) 430-5275 x
Fax: (973) 624-9047 x
Other: ( ) - x
Type:
Email: jon.perry@pseg.com

Org. Type: Corporation
NJ EIN: 00585211015

Mailing Address: PSEG Services Corporation
80 Park Plaza, T-17
Newark, NJ 07102

Contact Type: General Contact

Organization: PSEG Power LLC
Name: Mark D. Schwartzkopf
Title: Senior Environmental Engineer
Phone: (609) 599-7004 x
Fax: (609) 393-3866 x
Other: ( ) - x
Type:
Email: Mark.Schwartzkopf@pseg.com

Org. Type: Corporation
NJ EIN: 00585211019

Mailing Address: Mercer Generating Station
2512 Lamberton Road
Hamilton, NJ 08611

Contact Type: On-Site Manager

Organization: PSEG Power LLC
Name: John P. Robertson
Title: Production Manager
Phone: (609) 599-7001 x
Fax: (609) 393-3866 x
Other: ( ) - x
Type:
Email: John.Robertson@pseg.com

Org. Type: Corporation
NJ EIN: 00585211019

Mailing Address: Mercer Generating Station
2512 Lamberton Road
Hamilton, NJ 08611

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Operator

Organization:
Name:
Title:
Phone: ( ) - x
Fax: ( ) - x
Other: ( ) - x
Type:
Email:

Org. Type:
NJ EIN:

Mailing Address:

Contact Type: Owner (Current Primary)

Organization: PSEG Power LLC
Name: PSEG Fossil LLC
Title:
Phone: ( ) - x
Fax: ( ) - x
Other: ( ) - x
Type:
Email:

Org. Type: Corporation
NJ EIN: 00585211019

Mailing Address:

Contact Type: Responsible Official

Organization: PSEG Power LLC
Name: Francis X. Sullivan
Title: Director-Asset Operations
Phone: (973) 430-8122 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: Francis.Sullivan@pseg.com

Org. Type: Corporation
NJ EIN: 00585211019

Mailing Address: Mercer Generating Station
80 Park Plaza T-25P
Newark, NJ 07102

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Responsible Party

Organization:

Org. Type:

Name:

NJ EIN:

Title:

Phone: ( ) - x

Fax: ( ) - x

Other: ( ) - x

Type:

Email:

Mailing Address:

Section B

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

REASON FOR PERMIT

The reason for issuance of this permit is to comply with the air pollution control permit provisions of Title V of the federal Clean Air Act, federal rules promulgated at 40 CFR 70, and state regulations promulgated at N.J.A.C. 7:27-22, which requires the state to issue operating permits to major facilities and minor facilities that are in certain designated source categories. This is the operating permit for the facility listed on the cover page, which includes a minor modification for the proposed addition of two activated carbon injection systems, CD22 and CD 23, to meet the new mercury emission limit that will become effective on May 17, 2007, and to add the 10% opacity limits for Unit and Unit 2 that were in the preconstruction permits for these boilers but were missing in the Operating permit.

The activated carbon injection system consists of two lime silos, E1801 and E1802, designated as emission unit U1800 ACI System Silos, for storing the powdered activated carbon. Piping and related equipment will convey the PAC to the ducts of the flue gas of Mercer Generating Station's two coal-fired boilers Unit # 1 and Unit # 2. The particulate emissions from the two silos will be controlled with two cartridge filters, CD24 and CD 25.

This minor modification also includes a correction to a typo in Reference # 13 of emission unit U1501 OS Summary which refers to NOx instead of VOC. The NOx limit is covered in Ref # 11. This mistake has been verified and the word NOx has been replaced by VOC.

New Jersey has elected to integrate its Title I New Source Review (NSR) preconstruction permits with the new Title V operating permits instead of issuing separate permits. Consequently, the existing preconstruction permit provisions that were previously approved for this facility have been consolidated into this permit. This permit may also include applicable requirements for grandfathered sources.

This permit action consolidates previously approved permit terms and conditions into one single permit for the facility. The New Jersey Department of Environmental Protection (Department) issues this operating permit authorizing the facility to operate equipment and air pollution control devices. In the operating permit application, the facility represented that it meets all applicable requirements of the federal Clean Air Act and the New Jersey Air Pollution Control Act codified at N.J.S.A. 26:2C. Based on an evaluation of the data contained in the facility's application, the Department has approved this operating permit.

This permit allows this facility to operate the equipment and air pollution control devices specified in this permit and emit up to a level specified for each source operation. The signatories named in the application are responsible for ensuring that the facility is operated in a manner consistent with this permit, its conditions, and applicable rules.

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: BOP **Number:** 60001

Description of Modifications: PSEG Fossil LLC ("PSEG Fossil") requests a Title V Operating Permit Minor Modification in order to install and operate Activated Carbon Injection ("ACI") systems at Mercer Generating Station Unit No. 1 and 2.

The ACI systems have been incorporated into the existing Title V Operating Permit through the creation of two (2) new pieces of equipment (E1801and E1802), four (4) additional control devices (CD22, CD23, CD24, and CD25), and two (2) new emission points (PT1801and PT1802) in the inventory sections of RADIUS.

The Emission Unit/Batch Process Inventory was updated to add a new emission unit (U1800) for the ACI System Silos. Compliance plan requirements associated with the activated carbon storage silos were also included in the RADIUS application.

Revisions that are required to the existing air permit as a result of the Project have been identified below and provided as markups in Appendix C of the minor modification application. To avoid overlap with existing air permit provisions, these additional changes are not contained in this RADIUS diskette. Therefore, PSEG Fossil requests that the Department make these changes to the air permit in NJEMS:

Emission Unit/ Batch Inventory - U1
OS2, OS4, OS5: Add the language "w/wo ACI" to the UOS Description and add CD22 (ACI Unit 1) as a tertiary control device for all operating scenarios in U1.

Emission Unit/ Batch Inventory - U2
OS2, OS4, OS5, OS8: Add the language "w/wo ACI" and add CD23 (ACI Unit 2) as a tertiary control device for all operating scenarios in U2.

Compliance Plan - U1 and U2 OS Summary
Add an applicable requirement for each unit that states "The ACI system shall be operated at the facility's discretion to reduce mercury emissions. N.J.A.C. 7:27-22.16(o)."

Please refer to the application submittal package for markups of the existing Title V Operating Permit, and a detailed discussion of all of the requested permit changes.

Section C

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's Potential to Emit (PTE) emissions summary:

Source Categories	Facility Total Potential to Emit (tons per year)								
	Primary						Secondary		
	VOC (total)	NO_x	CO	SO_2	TSP (total)	Other (total)	PM_{10} (total)	Pb	HAPs (total)
Emission Unit Summary	2,032	13,526	9.097	40,562	1,829	0	3,636	2	5,692
Batch Process Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-Source Fugitive Emissions[1]	2	0	0	0	26	0	19	0	0
Group Summary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Emissions[2]	2.034	13,526	9,097	40,562	1,855	0	3.655	2	5,692

VOC Volatile Organic Compounds
NO_x Nitrogen Oxides
CO Carbon Monoxide
SO_2 Sulfur Dioxide
TSP Total Suspended Particulates
Other Any other air contaminant regulated under the Federal Clean Air Act
PM_{10} Particulates under 10 microns
Pb Lead
HAPs Hazardous Air Pollutants

[1] Not applicable to this facility.
[2] Total emissions from this facility do not include emissions from Insignificant Sources.

Section C

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's hazardous air pollutants (HAP) emissions summary:[3]

HAP	TPY
1,3-Butadiene	0.2
1-Methylnaphthalene	0.02
Acrolein	.28
Arsenic	2.4
Benzene	1.3
Benzyl chloride	0.7
Beryllium	0.2
Cadmium	2.95
Chlorine	44
Cromium	4.46
Cromium, hexavalent	0.08
Cobalt	0.1
Cyanide	2.48
Dibenz(a,h)anthracene	0.028
Dimethylbenz(a)anthracene	0.14
Dimethyl sulfate	0.048
1,2-dimethyl hydrazine	0.06
Formaldehyde	4.9
n-hexane	23
Hexachlorobenzene	0.0024
Hexachloropentadiene	0.06
Hydrogen Chloride	3504
Hydrogen Fluoride	2102
Lead	2.3
Manganese	8.48
Mercury	3.02
Methyl chloride	0.6
Methylhydrazine	0.2
Nickel	1.66
Phosphorus	2.8
POM	0.76
PAH	0.6
Quinoline	0.0022
Selenium	1.6
2,3,7,8-TCDD	0.0002

[3] Do not sum these values for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

Section D

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

POLLUTION PREVENTION REPORTING

General Pollution Prevention Conditions

The following evaluation requirements are included to track the facility's progress in several critical areas identified in the National Environmental Performance Partnership System (NEPPS). Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) are precursors to the air pollutant Ozone, for which New Jersey is non-attainment with the air quality standard for the protection of public health. The control of hazardous air pollutants (HAPs) is also a focus item for the next decade in order to minimize localized hot spots and general urban air toxics levels. Therefore, the Department is requiring evaluation of emission trends at 5-year intervals for major sources of these air contaminants. Also, as part of significant modification applications, proposed major increases of these air contaminants requires evaluation of pollution prevention and cross media effects.

The evaluation of these trends requires no increased monitoring. Rather it utilizes existing monitoring data, as reported annually in Emission Statements (for NOx and VOC) and annual Release and Pollution Prevention Reports (for HAPs). The intent of this evaluation is to better utilize the existing data by having the company, the public and the Department review major source trends periodically, as part of the 5-year renewal review and public comment process. The Department requests that the facility-wide trends be presented on graphs for attachment to the public information document for the 5-year renewal.

Pollution prevention includes changes that result in the reduction in use or generation of non-product output per unit of product. Cross media effects are practices that result in transferring the ultimate release or disposal of a contaminant from one environmental medium (e.g. air) to another environmental medium (e.g. water, solid or hazardous wastes).

Information to include with the renewal application:

1. The facility will evaluate annual emission trends over the last five years for actual air contaminant emissions of Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), if the facility's potential to emit VOC or NOx is greater than 25 tons per year, or any Hazardous Air Pollutants (HAP), for which the facility's potential to emit is greater than 10 tons per year. The VOC and NOx emission data should reflect annual emission statement reports submitted pursuant to N.J.A.G. 7:27-21, and the HAP emissions data should reflect the annual Release and Pollution Prevention Report submitted pursuant to N.J.A.C. 7:1G-4 and 5 and N.J.A.C. 7:1K-6. Although not required, the Department encourages the facility to explain the reason for any significant trend, including whether it is the result of cross media shifts (to air, water, or solid waste) and/or pollution prevention. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

2. The facility will summarize annual potential to emit limits (allowable emissions) for VOC, NOx, and HAPs, which are subject to reporting under 1 above, for the last five years. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

3. The facility will summarize five-year trends in annual VOC, NOx, and HAP emissions, which are subject to reporting under 1 above, on a pound per unit of product basis, based on annual actual emissions and

annual production over the five year period. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.

4. The facility will discuss five-year trends in actual air contaminant emissions of non-source VOC and HAP fugitives, which are subject to reporting under 1 above; explain measures taken to minimize such fugitives; and provide an explanation for any significant changes.

Information to include with an application for a Significant Modification to this permit:

1. For any significant modifications, the facility is encouraged to explain any cross media shifts of VOC and HAP air contaminants as part of the significant modification application. If an explanation is provided, the facility should identify the pollutant and the specific environmental media to which the pollutant is anticipated to be transferred, whether it be from air to solid waste or water, or from water or solid waste to the air.

Section E

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

DEFINITIONS

The terms used in this permit are used consistent with the definitions at N.J.A.C. 7:27-1 and N.J.A.C. 7:27-22. Any terms defined in this section are not defined at N.J.A.C. 7:27-1 or N.J.A.C. 7:27-22, and are needed for clarifying the permit.

"Permitting Authority" means the New Jersey Department of Environmental Protection (NJDEP).

"The EPA," or "the Administrator," means the Administrator of the EPA or his designee.

"M" preceding a unit of measure means one thousand. For example, "10 M gal." means ten thousand gallons.

"MM" preceding a unit of measure means one million. For example, "10 MM gal." means ten million gallons.

"Grandfathered" means, in reference to equipment or control apparatus, that construction, reconstruction, or modification occurred prior to enactment of N.J.S.A. 26:2C-9.2 on June 15, 1967, or prior to the subsequent applicable revisions to rules and regulations codified at N.J.A.C. 7:27-8 that occurred March 5, 1973, June 1, 1976, April 5, 1985, and October 31, 1994, and no construction, reconstruction, or modification of the equipment or control apparatus has occurred since.

"Compliance Plan" means the applicable requirements, monitoring requirements, recordkeeping requirements, and submittal/action requirements detailed in Section J, Facility Specific Requirements, of the operating permit.

Section F

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

GENERAL PROVISIONS AND AUTHORITIES

Operating Permits

1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant that occurs only in areas over which the permittee has exclusive use or occupancy. Conditions relative only to nuisance situations, including odors, are not considered Federally enforceable. [N.J.A.C. 7:27-22.16(g)8]

2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

   If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

   i. Immediately on the Department hotline at 1-877-927-6337, pursuant to N.J.S.A. 26:2C-19(e); and

   ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

   If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

   If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 P.M. of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]

4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]

6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]

7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]

8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]

9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]

10. The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-22, or portion thereof, pursuant to N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-22.16(g)9]

11. The permittee shall pay fees to the Department pursuant to N.J.A.C. 7:27. [N.J.A.C. 7:27-22.16(g)10]

12. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]

13. In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d) 3, each permittee shall submit to the Department, on forms provided by the Department, a six month deviation report relating to testing and monitoring required by the operating permit, not including information for testing and monitoring which have other reporting schedules specified in the permit. Normally, stack testing reporting is submitted within 45 days of test completion and continuous monitoring reporting is done quarterly. The six month report must address other specified monitoring, including, but not limited to, continuous and periodic monitoring data required by this permit. (See column two and three entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, in the Facility Specific Requirements section of this permit.). The six month reports for the testing and monitoring performed from January 1 through June 30, shall be reported by July 30 of the same calendar year; or from July 1 through December 31, shall be reported by January 30 of the following calendar year. Pursuant to N.J.A.C. 7:27-22.19(e), these six month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions taken. Any "None" listed in the Submittal/Action Requirement in the operating permit is not intended to override the six-month deviation report. The report shall be certified pursuant to N.J.A.C. 7:27-1.39 by a responsible official. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22.19(d) 3 and N.J.A.C. 7:27-22.19(e)]

    An annual compliance certification required by paragraph 2 above and required by N.J.A.C. 7:27-19(f) may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year if the annual compliance certification is submitted by January 30.

14. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described in 15 below may not be applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.

15. For situations other than those covered by 14 above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:

    i. The violation occurred as a result of an equipment malfunction, an equipment start-up or shutdown, or during the performance of necessary equipment maintenance; and

    ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(l)]

16. Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. N.J.A.C. 7:27-22.18(j)]

The following paragraphs of this section are included for the permittee's convenience to remind them of their obligations with certain key applicable requirements. These paragraphs are not enforceable since they paraphrase areas of the operating permits rule. Also, these paragraphs do not reference all the applicable requirements with which the permittee must comply.

17. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22.

18. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid.

19. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22, unless emission of the air contaminant is authorized by this operating permit.

20. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this Operating Permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.

21. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.

22. The permittee shall file a timely and complete application for:

    Administrative Amendments;
    Seven-Day-Notice changes;
    Minor Modifications;
    Significant Modifications; and
    Renewals.

Section G

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

COMPLIANCE SCHEDULES

The facility has represented compliance with all the applicable requirements. Therefore, there are no compliance schedules included with this permit approval.

Section H

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

STATE-ONLY APPLICABLE REQUIREMENTS

N.J.A.C. 7:27-22.16(b)5 requires the Department to specifically designate as not being federally enforceable any permit conditions based only on applicable state requirements. The applicable state requirements to which this provision applies are listed in the table titled "State-Only Applicable Requirements."

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

SECTION	SUBJECT ITEM	ITEM #	REF. #
F	---	15	---
J	FC	---	3
J	FC	---	10

Section I

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
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FACILITY SPECIFIC REQUIREMENTS
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Section J

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
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FACILITY SPECIFIC REQUIREMENTS

New Jersey Department of Environmental Protection
Facility Specific Requirements

2547

Subject Item: FC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	General Provisions: Defines numerous terms used in N.J.A.C. 7:27. Specifies procedures for making confidentiality claims, certifying applications, reports, and other documents to the Department, and requesting adjudicatory hearings and stays of the effective date of departmental decisions. Also, provides provisions regarding applicability, severability, and liberal construction of N.J.A.C. 7:27. [N.J.A.C. 7:27- 1]	None.	None.	None.
2	Control and Prohibition of Open Burning: Prohibits any person from open burning of rubbish, garbage, trade waste, buildings, structures, leaves, other plant life and salvage. Open burning of infested plant life or dangerous material may only be performed with a permit from the Department. [N.J.A.C. 7:27- 2]	None.	None.	Obtain an approved permit: Prior to occurrence of event (prior to open burning). [N.J.A.C. 7:27- 2]
3	Prohibition of Air Pollution: Notwithstanding compliance with other subchapters of N.J.A.C. 7:27, no person shall suffer, allow, or permit to be emitted into the outdoor atmosphere substances in quantities that result in air pollution as defined at N.J.A.C. 7:27-5.1. Applicable to all facilities located in New Jersey. [N.J.A.C. 7:27- 5]	None.	None.	None.
4	Prevention and Control of Air Pollution Control Emergencies: Requires that written Standby Plans, consistent with good industrial practice and safe operating procedures, be prepared for reducing the emission of air contaminants during periods of an air pollution alert, warning, or emergency. Any person responsible for the operation of a source of air contamination not set forth in Table 1 of N.J.A.C. 7:27-12 is not required to prepare such a plan unless requested by the Department in writing. [N.J.A.C. 7:27-12]	None.	None.	Comply with the requirement: Upon occurrence of event. Upon proclamation by the Governor of an air pollution alert, warning, or emergency, the permittee shall put the Standby Plan into effect. In addition, the permittee shall ensure that all of the applicable emission reduction objectives of N.J.A.C. 7:27-12.4, Table I, II, and III are complied with whenever there is an air pollution alert, warning, or emergency. [N.J.A.C. 7:27-12]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Emission Offsets Rules. [N.J.A.C. 7:27-18]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Comply with the requirement: Upon occurrence of event. Submit an administratively complete application when applying for a minor modification pursuant to N.J.A.C. 7:27-22.23 or a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
6	Emissions Statements: Submit an annual emission statement (if required) electronically to the NJDEP by May 15 of each year (or by mutually agreed upon date, but no later than June 15 of each year). [N.J.A.C. 7:27-21]	Other: The emission statement will be based on monitoring, recording and recordkeeping of actual emissions, capture and control efficiencies, process rate and operating data for source operations with the potential to emit certain air contaminants. [N.J.A.C. 7:27-21].	Other: The emission statement and all supporting records shall be maintained on the operating premises for a period of five (5) years from the due date of each emission statement. [N.J.A.C. 7:27-21].	Submit an Annual Emission Statement: Annually (if required) electronically by May 15 or by any mutually agreed upon date, but not later than June 15 of each year. [N.J.A.C. 7:27-21]
7	Compliance Certification: Submit annual compliance certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f), within 60 days after the end of each calendar year during which this permit was in effect. [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and EPA on forms provided by the Department within 60 days after the end of each calendar year during which this permit was in effect. The annual compliance certification reporting period will cover the calendar year ending December 31. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Architectural Coatings and Consumer Products. [N.J.A.C. 7:27-23]	None.	None.	None.
9	For equipment subject to NOx Budget Program, comply with N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31]	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-31]
10	Any operation of equipment which may cause off-property effects, including odors, shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26:2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26:2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26:2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Comply with the requirement: Upon occurrence of event. If subject to PSD, the permittee shall submit an administratively complete application when applying for a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
12	National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Asbestos. [40 CFR 61]	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61]
13	Protection of Stratospheric Ozone:1) 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 at 40 CFR 82, Subpart A; 2) If the permittee performs a service on motor "fleet" vehicles when this service involves an ozone depleting substance refrigerant (or regulated substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified at 40 CFR 82, Subpart B. 3) The permittee shall comply with the standards for labeling of products containing or manufactured with ozone depleting substances pursuant to 40 CFR 82, Subpart E. 4). The permittee shall comply with the standards for recycling and emission reductions of Class I and Class II refrigerants or a regulated substitute substance during the service, maintenance, repair, and disposal of appliances pursuant to 40 CFR 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. 5) The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program (SNAP) promulgated pursuant to 40 CFR 82, Subpart G. [40 CFR 82]	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Deviation Report: In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d)3, the permittee shall submit to the Department, on forms provided by the Department, a certified six-month deviation report relating to testing and monitoring required by the operating permit, not including information for stack emissions testing or continuous emissions monitoring which have other reporting schedules specified in the permit (normally, stack test report is submitted within 45 days of test completion and continuous monitor reporting is done quarterly). Pursuant to N.J.A.C. 7:27-22.19(e), the six-month report must address other specified monitoring, including continuous and periodic monitoring requirements found in column 2 and 3, entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, of the Facility Specific Requirements section of this permit. These six-month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions or preventive measures taken. If no deviations occurred, the report should say so. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. [N.J.A.C. 7.27-22.19(d)3, N.J.A.C. 7.27-22.19(e), and [N.J.A.C. 7:27-22.19(c)]	None.	Other: The permittee shall maintain deviation reports for a period of five years from the date each report is submitted to the Department. [N.J.A.C. 7:27-22.19(a)].	Submit a report: As per the approved schedule. The six-month reports for other specified testing or monitoring required by the operating permit performed from January 1 through June 30 shall be submitted by July 30 of the same calendar year, and from July 1 through December 31, shall be submitted by January 30 of the following calendar year. The report shall be submitted to the Regional Enforcement Office and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
15	No person shall combust used oil except as authorized pursuant to N.J.A.C. 7:27-20. [N.J.A.C. 7:27-20.2]	None.	None.	Comply with the requirement: Prior to occurrence of event (prior to burning used oil) either register with the Department pursuant to N.J.A.C. 7:27-20.3 or obtain a permit issued by the Department pursuant to N.J.A.C. 7:27-8 or 7:27-22, whichever is applicable. [N.J.A.C. 7:27-20.2(d)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS1 Non-applicable VOC (<0.02 psia) storage tanks with capacities < 10,000 gallons**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel: If the tank contains distillate fuel for use in Mercer County New Jersey (Zone 3), the maximum allowable sulfur content is 0.2 percent by weight. If the tank contains No. 6 Fuel Oil for use in Mercer County New Jersey (Zone 3), the maximum allowable sulfur content is 0.5 percent by weight. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery, based on no averaging period. The permittee shall check the fuel oil sulfur content on the invoices/bills of lading. [N.J.A.C. 7:27-22.16(o)]	None.	None.
2	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The tank shall be subject to the NSPS requirements to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. The tank shall not be subject to any other NESHAPS, MACT, or NSPS air pollution control standards. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-22, Appendix. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS2 Commercial Fuel Equipment < 1MMBtu/hr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visble condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: Monitored by periodic visual inspections.[N.J.A.C. 7:27- 3.5].	None.	None.
2	Sulfur Content in Fuel <= 0.2 % by weight while combusting distillate oil. [N.J.A.C. 7:27- 9.2(b)]	Other: Monitored by review of invoices/bills of lading, showing fuel sulfur content, per delivery.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining invoices/bills of lading, showing fuel sulfur content, per delivery.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS5 Surface coating operations < 0.5 gallons/hour & <2.5 gallons per day**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions: limit shall be in accordance with N.J.A.C.7:27-6.2(a). [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity: No person shall cause, suffer, allow or permit particles to be emitted from any stack or chimney into the outdoor air the shade or appearance of which is greater than 20 percent opacity, exclusive of condensed water vapor, except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27- 6.2(e)]	Opacity: Monitored by other method (provide description) at the approved frequency Monitored by visual determination monthly. The permittee shall conduct visual opacity inspections during daylight hours. Visual inspections shall consist of a visual survey to identify if the stack has visible emissions, (other than condensed water vapor). [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by manual logging or electronic data storage of observations. Monthly.[N.J.A.C. 7:27-22.16(o)].	None.
3	Maximum surface coating formulation usage <2.5 gal/day. [N.J.A.C. 7:27-16.7(e)1]	Monitored by other method (provide description) at the approved frequency Monitoring by surface coating formulation usage. [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by manually or electronically logging surface coating formulation usage records sufficient to determine compliance.[N.J.A.C. 7:27-22.16(o)].	None.
4	Maximum surface coating formulation usage <0.5 gal/hr. [N.J.A.C. 7:27-16.7(e)1]	Monitored by other method (provide description) at the approved frequency Monitoring by surface coating formulation usage. [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by manually or electronically logging surface coating formulation usage records sufficient to determine compliance.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS6 Satellite accumulation areas<100 ppbw each TXS & <3500 ppbw total VOC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Concentration in the water of any TXS must be less than 100 parts per billion by weight or the total concentration in the water of VOC must be less than 3500 parts per billion by weight. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS9 Building sumps <100 ppbw each TXS & <3500 ppbw total VOC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Concentration in the water of any TXS must be less than 100 parts per billion by weight or the total concentration in the water of VOC must be less than 3500 parts per billion by weight. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS14 Coal pile and coal pile maintenance**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS15 Stationary gas turbine starters < 1 MMBTU/Hr**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visble condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: Monitored by periodic visual inspections.[N.J.A.C. 7:27- 3.5].	None.	None.
2	Sulfur Content in Fuel <= 0.2 % by weight while combusting distillate oil. [N.J.A.C. 7:27- 9.2(b)]	Other: Monitored by review of invoices/bills of lading, showing fuel sulfur content, per delivery.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining invoices/bills of lading, showing fuel sulfur content, per delivery.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS17 Wet cell batteries-Group 1 or Group 2 TXS (or a combination thereof)<0.1 lb/hr PTE**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Concentration in the water of any TXS must be less than 100 parts per billion by weight or the total concentration in the water of VOC must be less than 3500 parts per billion by weight. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS18 Dry Wells <100 ppbw each TXS & <3500 ppbw total VOC**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Concentration in the water of any TXS must be less than 100 parts per billion by weight or the total concentration in the water of VOC must be less than 3500 parts per billion by weight. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **IS19 Aqueous Urea Storage Tank - 250,000 Gallons**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Sulfur Content in Fuel: If the tank contains distillate fuel for use in Mercer County New Jersey (Zone 3), the maximum allowable sulfur content is 0.2 percent by weight. If the tank contains No. 6 Fuel Oil for use in Mercer County New Jersey (Zone 3), the maximum allowable sulfur content is 0.5 percent by weight. [N.J.A.C. 7:27- 9.2(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery, based on no averaging period. The permittee shall check the fuel oil sulfur content on the invoices/bills of lading. [N.J.A.C. 7:27-22.16(o)]	None.	None.
2	The operating temperature shall not be greater than 350 degrees F. [N.J.A.C. 7:27-22.1]	None.	None.	None.
3	The vapor pressure of the liquid, excluding the vapor pressure of water, shall be less than 0.02 psia at the liquid's actual temperature or at 70 degrees F, whichever is higher. [N.J.A.C. 7:27-22.1]	None.	None.	None.
4	The tank shall have no visible emissions, exclusive of water vapor, to the outdoor atmosphere. [N.J.A.C. 7:27-22.1]	None.	None.	None.
5	The tank shall not emit any air contaminants which may cause an odor detectable outside the property boundaries of the facility. [N.J.A.C. 7:27-22.1]	None.	None.	None.
6	The tank shall be subject to the NSPS requirements to maintain a record of the contents of the tank, the period of storage of these contents, and the maximum true vapor pressure of the liquid stored. The tank shall not be subject to any other NESHAPS, MACT, or NSPS air pollution control standards. [N.J.A.C. 7:27-22.1]	None.	None.	None.
7	The tank's potential to emit each TXS and each HAP shall not exceed the de minimis reporting thresholds as specified in N.J.A.C. 7:27-22, Appendix. [N.J.A.C. 7:27-22.1]	None.	None.	None.
8	The percentage by weight of all HAPs collectively in the raw material stored in the tank shall be less than 1.0 percent. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	The owner or operator shall have readily available upon Department request a statement certified in accordance with N.J.A.C. 7:27-1.39, signed by the responsible official, as defined at N.J.A.C. 7:27-1.4, that: (1) specifies the contents of the tank; (2) affirms that the tank meets the applicable requirements of Ref. #2 to #8 above and (3) attests that the tank is in compliance with all other applicable State or federal air pollution requirements. [N.J.A.C. 7:27-22.1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: GR7 Consent Decree

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall comply with all Applicable Requirements of the Consent Decree, Civil Action No. 02CV340(JCL). For the purposes of this permit, "Consent Decree" shall mean the Consent Decree lodged with the United States District Court for the District of New Jersey on January 24, 2002 in the action entitled United States of America, State of New Jersey v. PSEG Fossil LLC, Civil Action No. 02CV340 (JCL). [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall comply with all Monitoring Requirements of the Consent Decree, Civil Action No.02CV340(JCL).[N.J.A.C. 7:27-22.16(a)].	Other: The permittee shall comply with all Recordkeeping Requirements of the Consent Decree, Civil Action No.02CV340(JCL).[N.J.A.C. 7:27-22.16(a)].	Submit documentation of compliance: As per the approved schedule The permittee shall comply with all Submittal/Action Requirements of the Consent Decree, Civil Action No.02CV340(JCL). [N.J.A.C. 7:27-22.16(a)]
2	As required by Paragraph 155 of the Consent Decree, within 180 days after completing construction of each control technology, PSEG Fossil must conduct performance tests and submit performance test reports that demonstrate compliance with all the Emission Rates in the Consent Decree. Performance test reports shall be submitted to both EPA and NJDEP. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. As required by Paragraph 155 of the Consent Decree, within 180 days after completing construction of each control technology, PSEG Fossil must conduct performance tests and submit performance test reports that demonstrate compliance with all the Emission Rates in the Consent Decree. Performance test reports shall be submitted to both EPA and NJDEP. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Submit annual progress report on January 31 of every year for the duration of the Consent Decree, to EPA and NJDEP. (Consent Decree Paragraph: 156). [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit a progress report: Annually by January 31 each year, for the duration of the Consent Decree, to EPA and NJDEP. Such progress report shall provide: (a) all information necessary to determine compliance with the Consent Decree, including compliance with Paragraphs 47, 53, 55, 57-61, 63, 68, 71, 72, 78, 80, 85, 87-90, 100, 102-104, 107, 109, 129, 136-139, 141, 142, 145, 147, 150 and 160; (b) all information necessary to determine whether PSEG Fossil has complied with the restrictions in Paragraphs 123 and 124 on the future federal and state covenants; (c) information relating to emission allowances and credits that PSEG Fossil claims to have generated in accordance with Paragraphs 106 and 113 by compliance beyond the requirements of the Consent Decree; and (d) information indication that the installation and commencement of operation date for a pollution control device may be delayed, including the nature and cause of the potential delay, and any steps taken by PSEG Fossil to mitigate such delay. Each PSEG Fossil progress report shall be signed by PSEG Fossil's Vice President, Fossil Operations, or, in his or her absence, another company Vice President, or higher ranking official, and contain the certification required in the Consent Decree. [N.J.A.C. 7:27-22.16(a)]
4	PSEG Fossil shall report to EPA and NJDEP any violation of the requirements of the Consent Decree, including Emission Rate exceedances, within 10 days of any such violation. (Consent Decree Paragraph: 159). [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit a report: As per the approved schedule. PSEG Fossil shall report to EPA and NJDEP any violation of the requirements of the Consent Decree, including Emission Rate exceedances, within 10 days of any such violation. PSEG Fossil shall also summarize any such violations, and any other anticipated violations, in the periodic progress reports submitted. (Consent Decree Paragraph: 159). [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	All notifications to or communications with the EPA and NJDEP required by the Consent Decree shall be addressed as follows: (a) U.S. EPA Branch Chief, Air Compliance Branch DECA, EPA Region 2 290 Broadway New York, NY 10007 Branch Chief, Air Branch Office of Regional Counsel EPA Region 2 290 Broadway New York, NY 10007 (b) State of New Jersey Administrator, Air and Environmental Quality Enforcement 401 East State Street, 4th Floor, East Wing P.O. Box 422 Trenton, NJ 08625 Deputy Attorney General Section Chief, Environmental Permitting and Counseling Division of Law - L&PS Dept., State of New Jersey R.J. Hughes Justice Complex P.O. Box 093 Trenton, NJ 08625 [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule All notifications to or communications with the EPA and NJDEP required by the Consent Decree shall be addressed as follows: (a) U.S. EPA Branch Chief, Air Compliance Branch DECA, EPA Region 2 290 Broadway New York, NY 10007 Branch Chief, Air Branch Office of Regional Counsel EPA Region 2 290 Broadway New York, NY 10007 (b) State of New Jersey Administrator, Air and Environmental Quality Enforcement 401 East State Street, 4th Floor, East Wing P.O. Box 422 Trenton, NJ 08625 Deputy Attorney General Section Chief, Environmental Permitting and Counseling Division of Law - L&PS Dept., State of New Jersey R.J. Hughes Justice Complex P.O. Box 093 Trenton, NJ 08625. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	PSEG Fossil shall be entitled to an extension of any deadline specified in Consent Decree paragraphs 51, 54, 55, 56, 57, 66, 69, 71, 72, 74, 75, 77, 82, 83, 84, 85, 117, 141, 143, 144, 145, 146, 147,151, 152 and shall not be liable for any exceedance of a 30-day or 24-hour emission rate set forth in Consent Decree paragraphs 54, 55, 56, 57, 71, 72 provided PSEG Fossil establishes that a Force Majeure Event caused the delay or the excess emissions. If NJDEP and USEPA do not accept PSEG Fossil's claim of a Force Majeure Event, PSEG Fossil may submit the matter to the U.S. District Court for the District of New Jersey for determination. (Consent Decree paragraphs: 171, 172, 173). [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. PSEG Fossil shall notify NJDEP and USEPA of the Force Majeure Event as soon as practicable but in no event less than seven (7) business days following the date PSEG Fossil first knew or within ten (10) business days following the date PSEG Fossil should have known by the exercise of due diligence that the Force Majeure Event caused or may cause such delay or exceedance. Reference: Consent Decree paragraph 168. [N.J.A.C. 7:27-22.16(a)]
7	Failure by PSEG Fossil to comply with the notice requirements of the Force Majeure event shall render the Force Majeure section voidable by EPA and NJDEP, as to the specific event for which PSEG Fossil has failed to comply with such notice requirement. If voided, the provisions of the Force Majeure Event section in the Consent Decree shall have no effect as to the particular event involved. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	A Force Majeure Event shall mean an event that causes a delay in performing a requirement or a unit malfunction that causes PSEG Fossil to exceed a 30-day or 24-hour emission rate, which has been or will be caused by circumstances beyond the control of PSEG Fossil, and which PSEG Fossil could not have prevented by the exercise of due diligence. A Force Majeure Event could include, but is not limited to: failure of a permitting authority to issue a necessary permit in a timely fashion; construction, labor or equipment delay or failures; natural gas and gas transportation availability delay or failures; acts of God; acts of war, acts of terrorism; and orders by government officials acting under and authorized by applicable law that direct PSEG Fossil to supply electricity in response to a legally declared system-wide (or state-wide) emergency (Consent Decree paragraphs: 167, 175, 176). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	By December 31, 2008, PSEG Fossil shall submit to EPA and NJDEP for approval the proposed design parameters for an FGD at Mercer Unit 1 to achieve a 30-Day Rolling Average Emission Rate for SO2 of no greater than 0.150 lbs/mmBTU (no trailing zero implied). Reference: Consent Decree Paragraph 54. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule , in accordance with the Cosent Decree requirements. By December 31, 2008, PSEG Fossil shall submit to EPA and NJDEP for approval the proposed design parameters for an FGD at Mercer Unit 1 to achieve a 30-Day Rolling Average Emission Rate for SO2 of no greater than 0.150 lbs/mmBTU (no trailing zero implied). Submit a modification application to the NJDEP requesting to modify the operating permit. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	By no later than December 31, 2010, PSEG Fossil shall install and commence operation of an FGD at Mercer Unit 1 in accordance with the design parameters approved by EPA and NJDEP. PSEG Fossil shall operate the FGD at Mercer Unit 1 to achieve and maintain SO2 Emission Rates of no greater than 0.150 lb/mmBTU (no trailing zero implied), based on a 30-Day Rolling Average Emision Rate, and 0.250 lb/mmBTU (no trailing zero implied), based on a 24-Hour Emission Rate. Reference: Consent Decree Paragraph 55. [N.J.A.C. 7:27-22.16(a)]	Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	Submit documentation of compliance: As per the approved schedule. At least 9 months prior to the commencement of operation of FGD required by the Consent Decree, and in accordance with N.J.A.C.7:27-22.18, submit to EPA and NJDEP for review and approval, a proposed protocol for determining SO2 emission rate. Use Methods specified in 40 CFR Part 75, Appendix F and 40 CFR Part 60, Appendix A. The proposed protocol shall set forth the methods by which PSEG Fossil proposes to convert data from its CEMS to a 30-day emission rate and a 24-hour emission rate after the installation of the FGD. Submit a modification application to the NJDEP requesting to modify the operating permit. Reference: Consent Decree Paragraphs 48 and 51. [N.J.A.C. 7:27-22.16(a)]
11	By December 31, 2010, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an FGD at Mercer Unit 2 to achieve a 30-Day Rolling Average Emission Rate for SO2 of no greater than 0.150 lbs/mmBTU (no trailing zero implied). Reference: Consent Decree Paragraph 56. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule , in accordance with the Cosent Decree requirements. By December 31, 2010, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an FGD at Mercer Unit 2 to achieve a 30-Day Rolling Average Emission Rate for SO2 of no greater than 0.150 lbs/mmBTU (no trailing zero implied). Submit a modification application to the NJDEP requesting to modify the operating permit. Reference: Consent Decree Paragraph 56. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	By no later than December 31, 2012, PSEG Fossil shall install and commence operation of an FGD at Mercer Unit 2 in accordance with the design parameters approved by EPA and NJDEP. PSEG Fossil shall operate the FGD at Mercer Unit 2 to achieve and maintain SO2 Emission Rates of no greater than 0.150 lb/mmBTU (no trailing zero implied), based on a 30-Day Rolling Average Emision Rate, and 0.250 lb/mmBTU (no trailing zero implied), based on a 24-Hour Emission Rate. Reference: Consent Decree Paragraph 57. [N.J.A.C. 7:27-22.16(a)]	Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	Submit documentation of compliance: As per the approved schedule. At least 90 months prior to the commencement of operation of FGD required by the Consent Decree, and in accordance with N.J.A.C.7:27-22.18, submit to EPA and NJDEP for review and approval, a proposed protocol for determining SO2 emission rate. Use Methods specified in 40 CFR Part 75, Appendix F and 40 CFR Part 60, Appendix A. The proposed protocol shall set forth the methods by which PSEG Fossil proposes to convert data from its CEMS to a 30-day emission rate and a 24-hour emission rate after the installation of the FGD. Submit a modification application to the NJDEP requesting to modify the operating permit. Reference: Consent Decree Paragraph 48 and 51. [N.J.A.C. 7:27-22.16(a)]
13	Each FGD shall be operated at all times that the Unit it serves operates, except that PSEG Fossil need not operate an FGD when the Unit that it is servicing is not fired with coal. Reference: Consent Decree Paragraph 47. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	The 30-day rolling average emission rate shall be determiend by calculating the emission rate of an operating day, and then arithmetically averaging that emission rate with the emission rate for the previous twenty-nine (29) operating days. A new 30-day rolling average shall be calculated for each new operating day. In calculating the 30-day rolling average SO2 emission rate at a Unit that has ceased firing fuel oil, PSEG may exclude the period, not to exceed two hours, from the restart of that unit to the time that the Unit is fired with any coal. In calculating the 24-hour emission rate, PSEG Fossil shall exclude the pounds of pollutant emssions and MMBTU of heat input (lb/MMBTU) pertaining to the period of time in which the Unit is not fired with coal. The 24-hour emission rate shall be determined by dividing the total pounds of pollutant by the total million Btu of heat input (lb/MMBtu) for a 24-hour operating day. A new 24-hour emission rate shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. Reference: Consent Decree Paragraphs 9, 10, 30, 49 and 50. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	PSEG Fossil may install technology other than the FGD systems described above in satisfaction of the obligations of the Consent Decree if the alternative technology achieves the same or better SO2 Emission Rates as required of the FGD systems and is approved in writing by EPA and NJDEP in advance of the installation of the alternative technology. Reference: Consent Decree paragraph 58. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	Upon the commencement of operation of an FGD at Mercer Unit 1 and Mercer Unit 2, PSEG Fossil shall only burn coal that has a monthly average sulfur content of no greater than 2.00% at Mercer Unit 1 and Mercer Unit 2. The monthly average sulfur content shall be determined in accordance with the New Jersey permits for Mercer Unit 1 and Mercer Unit 2. Reference: Consent Decree paragraph 59. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	Within one year after commencement of operation of each pollution control device in Section IV (Emission Reductions and Controls) of the Consent Decree, PSEG Fossil shall submit a proposed modification to its Title V permit(s) and applications to reflect the new Emission Rates pursuant to Section IV (Emission Reduction and Controls) and, to the extent applicable, the surrender of allowances under Section V (Allowances, Credits) of the Consent Decree Reference: Consent Decree paragraph 117. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. Within one year after commencement of operation of each pollution control device in Section IV (Emission Reductions and Controls) of the Consent Decree, PSEG Fossil shall submit a proposed modification to its Title V permit(s) and applications to reflect the new Emission Rates pursuant to Section IV (Emission Reduction and Controls) and, to the extent applicable, the surrender of allowances under Section V (Allowances, Credits) of the Consent Decree. Reference: Consent Decree paragraph 117. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Resolution of Future Federal Claims - Subject to the limitations specified in Paragraphs 123 and 124 of the Consent Decree, the United States convenants not to sue PSEG Fossil and its successors and assigns for civil claims arising from the PSD or Nonattainment NSR provisions of Parts C and D in Title I of the Clean Air Act, 42 U.S.C. Section 7401 et seq. at Mercer Unit 1 and Mercer Unit 2 based on failure to obtain PSD or Nonattainment NSR permits for: (a) physical changes or changes in the method of operation at Mercer Units 1 and 2, after the date of lodging of the Consent Decree, that the Consent Decree expressly directs PSEG Fossil to undertake; or (b) physical changes or changes in the method of operation at Mercer Units 1 and 2, after the date of lodging of the Consent Decree, that are not required by the Consent Decree, if and only if PSEG Fossil is otherwise in compliance with: Section IV (Emission Reductions and Controls), other than the 30-Day, 24-Hour and PM Emission Rates contained in Paragraphs 53, 55, 57, 68, 71, 72, 80 and 85; Section V (Allowances, Credits); and Paragraph 117 of the Consent Decree. Reference: Consent Decree paragraph 121. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Resolution of Future State Claims - Subject to the limitations specified in Paragraphs 123 and 124 of the Consent Decree, New Jersey convenants not to sue PSEG Fossil and its successors and assigns for civil claims arising from the PSD or Nonattainment NSR provisions of Parts C and D in Title I of the Clean Air Act, 42 U.S.C. Section 7401 et seq. and N.J.A.C. 7:27-18.1 et seq. at Mercer Unit 1 and Mercer Unit 2 based on failure to obtain PSD or Nonattainment NSR permits for: (a) physical changes or changes in the method of operation at Mercer Units 1 and 2, after the date of lodging of the Consent Decree, that the Consent Decree expressly directs PSEG Fossil to undertake; or (b) physical changes or changes in the method of operation at Mercer Units 1 and 2, after the date of lodging of the Consent Decree, that are not required by the Consent Decree, if and only if PSEG Fossil is otherwise in compliance with: Section IV (Emission Reductions and Controls), other than the 30-Day, 24-Hour and PM Emission Rates contained in Paragraphs 53, 55, 57, 68, 71, 72, 80 and 85; Secion V (Allowances, Credits); and Paragraph 117 of the Consent Decree. Reference: Consent Decree paragraph 122. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Through the installation and optimization of the FGD systems to be installed pursuant to Paragraphs 53, 55 and 57 of the Consent Decree, or through the installation and operation of any alternate SO2 emissions reduction system approved by EPA and NJDEP under Paragraph 58 of the Consent Decree, PSEG Fossil shall use best efforts to achieve a 90% reduction of PSEG Fossil's mercury emissions from year 2000 levels at Mercer Unit 1 and Mercer Unit 2, within one year after the installation of each FGD system at these Units. Reference: Consent Decree paragraph 141. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
21	By December 31, 2004, PSEG Fossil shall install and commence operation of a Mercury CEMS demonstration technology selected by EPA and NJDEP, in consultation with PSEG Fossil. It shall be presumed that PSEG Fossil will install the Mercury CEMS demonstration technology at Hudson Unit 2, unless PSEG Fossil demonstrates to the satisfaction of EPA and NJDEP that installation at an alternative Unit is more appropriate. Reference: Consent Decree paragraph 145. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Beginning on December 31, 2004, PSEG Fossil shall consult with EPA, NJDEP, and the Mercury CEMS supplier(s) to optimize and evaluate the performance of the Mercury CEMS demonstration technology. On or before December 31 of 2005, 2006 and 2007, PSEG Fossil shall submit to EPA and NJDEP a report summarizing the performance and accuracy of the Mercury CEMS demonstration technology. Reference: Consent Decree paragraph 146. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit a report: As per the approved schedule. On or before December 31 of 2005, 2006 and 2007, PSEG Fossil shall submit to EPA and NJDEP a report summarizing the performance and accuracy of the Mercury CEMS demonstration technology. Reference: Consent Decree paragraph 146. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	By December 31, 2008, PSEG Fossil shall also install and commence operation of Mercury CEMS at the two remaining Units at which the Mercury CEMS demonstration technology was not installed, unless by March 31, 2008, EPA and NJDEP determine, based on the results of the Mercury CEMS demonstration technology and the results from other available Mercury CEMS, that it is infeasible to operate Mercury CEMS at these two remaining Units. If by March 31, 2008, EPA and NJDEP determine that it is infeasible to operate Mercury CEMS at these two remaining Units, PSEG Fossil shall be entitled to discontinue operation of and remove the Mercury CEMS demonstration technology. Reference: Consent Decree paragraph 147. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	By December 31, 2008, PSEG Fossil shall also expend not less than $1.0 million in the development technology for monitoring mercury emissions from cola-fired units. Each dollar spent by PSEG Fossil pursuant to Paragraph 143 through 147 shall be counted as a Project Dollar, for purposes of this Consent Decree. (Consent Decree Paragraph: 142). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	"Infeasible" shall mean: (a) that the CEMS cannot be kept in proper condition for sufficient periods of time without chronic and serious interference with the operation of the Unit: (b) the CEMS demonstrate persistent and unusual equipment adjustment and servicing needs that cannot be resolved without an unreasonable expenditure of resources; or (c) the data generated cannot be used to assess mercury emissions from the Unit and the Unit's pollution control devices. Reference: Consent Decree paragraph 148. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	Any determination by EPA and NJDEP as to the feasibility of operating Mercury or PM CEMS shall be subject to the dispute resolution provisions of the Consent Decree, but shall be upheld upon judicial review unless the Court concludes that the Agencies' determination was arbitrary and capricious. Reference: Consent Decree paragraph 149. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	If on or before March 31, 2008, EPA and NJDEP determine that it is infeasible to operate Mercury CEMS at the two remaining Units, using either the Mercury CEMS demonstration technology or any other Mercury CEMS technology, and if PM CEMS are commercially-available in the United States, then within two years from the date of such determination of infeasibility, PSEG Fossil shall install and commence continuous operation of PM CEMS on Mercer Unit 1 and Mercer Unit 2 in accordance with 40 C.F.R. Part 60, Appendix B and Appendix F, unless the available technical literature indicates that PM CEMS are technically infeasible given the flue gas stack conditions of Mercer Unit 1 and Mercer Unit 2. Reference: Consent Decree Paragraph 150. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	Until the Mercury CEMS referenced above is installed on Mercer Unit 1 and Mercer Unit 2 and EPA and NJDEP determine that such technology produces reliable results, PSEG Fossil shall conduct stack tests in accordance with NJDEP regulations and permits as well as 40 C.F.R. Part 60, Appendix A, EPA Method 29 or Method 101A. By July 1st of each year following the entry of the Consent Decree, and annually thereafter, PSEG Fossil shall conduct these stack tests to determine emissions and concentrations of mercury. PSEG Fossil shall report to EPA and NJDEP the results of its stack tests within 60 days of conducting such tests, unless NJDEP provides PSEG Fossil with additional time in which to submit such test results. Reference: Consent Decree paragraph 151. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing annually. See U1 and U2 for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by stack test results annually. See U1 and U2 for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See U1 and U2 for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]
29	PSEG Fossil shall submit a revised protocol proposal to EPA and NJDEP for review and approval prior to any change, concurrent with or subsequent to the installation of a control technology required pursuant to the Consent Decree, in location, type, or operation of a CEMs employed by PSEG Fossil for measuring NOx or SO2 emissions. Reference: Consent Decree paragraphs 51 and 66. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit an equipment protocol: As per the approved schedule. PSEG Fossil shall submit a revised protocol proposal to EPA and NJDEP for review and approval prior to any change, concurrent with or subsequent to the installation of a control technology required pursuant to the Consent Decree, in location, type, or operation of a CEMs employed by PSEG Fossil for measuring NOx or SO2 emissions. Reference: Consent Decree paragraphs 51 and 66.. Submit a revised protocol proposal to EPA and NJDEP for review and approval prior to any change, sebsequent to the intallation of SCR required pursuant to the Consent Decree, in the location, Type, or operation of a CEMS employed for measuring NOx emission. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Upon the dates specified in Paragaraphs 53, 55 and 57, for commencement of each SO2 emission control required by this Consent Decree, PSEG Fossil may use any SO2 allowances allocated by EPA to Hudson, Mercer Unit 1 and Mercer Unit 2 only to satisfy the operational needs of these Units, and shall neither: (a) use such allowances at any other Unit, including any other PSEG Fossil Unit not covered by the Consent Decree; nor (b) sell or transfer any SO2 allowances allocated to these Units to a third party, other than for purposes of retiring such SO2 allowances in accordance with Paragraphs 100 and 109. Within one year from the date of commencement of operation of each SO2 emission control device required by paragraphs 53, 55 and 57, PSEG Fossil shall retire to EPA, or transfer to a non-profit third party selected by PSEG Fossil for retirement, any SO2 allowances that exceed the operational SO2 allowance needs of Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, collectively. PSEG Fossil shall retire SO2 allowances by the use of the applicable United States Environmental Protection Agency Acid Rain Program Allowance Transfer Form. (Consent Decree paragraphs: 99 and 100). [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	NOx (Total): After December 31, 2005, in any calendar year, NOx (Total) shall be calculated for Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 collectively. If emissions from Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, collectively exceed more than 16,444 tons of NOx in any calendar year after December 31, 2005, or more than 29,948 tons of SO2 in any calendar year after December 31, 2006, then the covenants not to sue in Paragraphs number 121 and 122 of the Consent Decree shall not apply to any physical change or change in the method of operation at these Units within the five-year period preceding the exceedance. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
32	The Covenants not to sue in Paragraphs 121 and 122 of the Consent Decree do not apply to physical changes or changes in the method of operation, either individually or collectively for a Unit, at Mercer Unit 1 or Mercer Unit 2 that would incease the maximum hourly emission rates, as determined by 40CFR60.14, of NOx, SO2, or any other pollutant regulated under the applicable New Source Performance Standard by more than 10 percent. To determine the allowable maximum hourly emission rate increase, PSEG shall use the following formula: PostCI = (ER current x (1 - CE)) x 0.10 PreCI = ER current x 0.10 where PostCI = Allowable post control maximum hourly emission rate increase (lbs/hr) ER current = Maximum hourly emission rate (lbs/hr), as determined by 40CFR60.14 at the time of lodging (1/24/02) Consent Decree between PSEG, DEP and USEPA. CE = Control Efficiency, expressed as a decimal fraction, expected from a given control as determined by comparing the average 30-day Rolling Average Emission Rate achieved at the Unit during the year prior to entry of the Consent Decree (8/16/02) to the 30-day Rolling Average Emission Rate required by the Consent Decree. PreCI = Allowable pre-control maximum hourly emission rate increase (lbs/hr) [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
33	Not withstanding any other provisions of the Consent Decree, the provisions of Paragraph 121 and 122 (Resolution of Future Federal and State Civil Claims) shall terminate on December 31, 2015, are are without any force or effect as to any physical change or change in the method of operation of a Unit commenced or complete after that date. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item: **GR8 Non Source Fugitive sources and Insignificant sources**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No additional applicable requirements. [N.J.A.C. 7:27-22]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Wet bottom, face fired utility boiler used for electric power generation
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C.7:27-3.2(b)] &. [N.J.A.C. 7:27- 3.2(c)]	Opacity: Monitored by continuous opacity monitoring system continuously, based on any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(e)]	Opacity: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously . [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
2	Opacity levels above 8% will trigger increased scrutiny and inspection of ESP operations, based on the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 335 lb/hr. Particulate emissions limit from the combustion of fuel based on the gross heat input rate of 3,350 MMBTU/Hr for the boiler. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	VOC (Total) <= 50 ppm @ 7% O2. [N.J.A.C. 7:27-16.8(b)1]	VOC (Total): Monitored by stack emission testing every 5 years, based on the average of three 1-hour tests. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-16.23(a)2]	VOC (Total): Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
5	CO <= 100 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)2]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Adjust the combustion process in accordance with N.J.A.C. 7:27-16.24 by May 1 of each year. [N.J.A.C. 7:27-16.8(b)3i]	Monitored by periodic emission monitoring annually. The owner or operator of the equipment or source operation shall: 1. Inspect the burner, and clean or replace any components of the burner as necessary to minimize total emissions NOx and CO; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter annually. The owner or operator of the adjusted equipment or source operation shall record each adjustment conducted under N.J.A.C. 7:27-19.16(a) in a permanently bound log book containing the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; 4. The CO concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; and 5. The concentration of O2 at which the CO and NOx concentrations pursuant to (3) and (4) were measured. [N.J.A.C. 7:27-19.16(c)]	None.
7	Permittee must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. The current NOx averaging plan will be filed with the operaing permit at the Department. [N.J.A.C. 7:27-19.14(f)]	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other (provide description): As per the approved schedule PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.14(f)]
8	NOx (Total) <= 0.8 lb/MMBTU based on each calendar day per generating unit. Applicable to Mercer Unit 1 (U1) and Mercer Unit 2 (U2) during ozone season. This emission limit shall be attained partly through the combusion of higher percentate of natural gas during the ozone season and partly through the use of SNCR or other NOx control measures. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by continuous emission monitoring system continuously. The calendar day emission limit shall be calculated within three working days after the data is collected. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The calculations shall be recorded in a permanently bound log book or in readily accessible computer memories. [N.J.A.C. 7:27-19.6]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-19.6]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	NOx (Total) <= 1.8 lb/MMBTU based on 30-day rolling average, per generating unit. Applicable to Mercer Unit 1 (U1) and Mercer Unit 2 (U2) during non-ozone season. This emission limit shall be attained partly through the combusion of higher percentate of natural gas during the ozone season and partly through the use of SNCR or other NOx control measures. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by continuous emission monitoring system continuously. The 30-day rolling average shall be determined by calculating the emission rate of an day, and then arithmetically averaging that emission rate with the emission rates for the previous twenty-nine (29) days. A new 30-day rolling average shall be calculated for each new day. The calcuations shall be peformed by the fifteenth day of each month, for all 30 day periods ending in the preceding month for the 30 day peirod. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The calculations shall be recorded in a permanently bound log book or in readily accessible computer memories. [N.J.A.C. 7:27-19.6]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-19.6]
10	SO2 <= 1.5 lb/MMBTU [N.J.A.C.7:27-10.2(c)] and. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
11	Maximum Gross Heat Input <= 3,350 MMBTU/hr (HHV). The total combined fuel fired shall not exceed this limit for Unit # 1 boiler and duct burner. [N.J.A.C.7:27-19.6] and. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input; Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(e)]	None.	None.

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Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Maximum Gross Heat Input: <=2,628 x E10 BTU (HHV) per any consecutive 365-day period, for the combined fuel use for the Unit 1 boiler and duct burner. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C.7:27-22.16(e)] and. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by manual logging of parameter daily Manually or electronically log the gross heat input in MMBTU in any consecutive 365 day period in a log book or electronically (computer, DAS or electronic operating system). The Annual Gross Heat Input in MMBTU per nay consecutive 365 day period is computed by adding the gross heat input for any day to the gross heat input for the preceding 364 days. The gross heat input for a given day shall be the total of 24 reading taken once per you. The gross heat input for a given year shall be the total of the daily heat inputs for the year. This procedure shall begin when the operating permit is issued. This accounting will not include the MMBTU calculations prior to approval of the Operating Permit. . [N.J.A.C.7:27-22.16(e)] and. [N.J.A.C. 7:27-22.16(o)]	None.
13	TSP <= 0.03 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing annually, based on any 60 minute period by July 31 of each year. The reference methods for determining emission rates shall be those specified in 40 CFR Part 60 Appendix A, Method 5, from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results annually from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule from Consent Decree. Conduct stack test by July 31, of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
14	For each shipment of coal received at the Mercer Generating Station, PSEG Fossil LLC shall record in its computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Office for a period of 5 years after the date of each record. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	The electrostatic precipitator (ESP) must operate at all times that Mercer Unit No. 1 is in operation. Applies to CD1. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Sulfur consumption rate for the flue gas conditioning system <= 100 lb/hr. PSEG Fossil is permitted to operate a flue gas conditioning sytem at its discretion to enhance ESP performance. The flue gas conditioning sytem involves the injection of SO3 into the flue gas stream, prior to the ESP, but works in conjunction with the ESP to improve particulate collection. Applies to CD1. [N.J.A.C. 7:27-22.16(e)]	Monitored by material feed/flow monitoring continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(e)]	None.
17	SO3 injection system will not be operational during compliance stack testing, in accordance with the the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. Applies to CD1. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Records shall be maintained of dates and times that the SNCR and AEFLGR systems are operated. Applies to CD2 and CD17. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Records shall be maintained of dates and times that the SNCR and AEFLGR systems are operated.[N.J.A.C. 7:27-22.16(e)].	None.
19	Urea and Ammonia: when the SNCR system is operating, daily and cumulative records of urea usage shall be maintained Applies to CD2. [N.J.A.C. 7:27-22.16(e)]	Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain daily and cumulative urea storage records per day. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	Required Periods of Operation: PSEG Fossil shall operate the SCR at all times that the Unit operates during the 2005 ozone season and year round after May 1, 2006, except that PSEG Fossil need not operate the SCR: (a) for a Unit that has ceased firing fuel, during the period of time not to exceed eight hours from the restart of the Unit to the time that the Unit is fired with coal; (b) for a Unit that is to be shutdown, during the period of time that the Unit is no longer synchronized with any utility electric distribution system and is no longer fired with coal. The Ozone Control Period is defined as the period of time from May 1 through September 30. Applies to CD19. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
21	The SCR must be designed as approved by EPA and NJDEP (see the Department's letters to PSEG dated May 6, 2002 and November 15, 2002, and EPA's letter to PSEG dated May 31, 2002) to: a. achieve and maintain a NOx Removal efficiency of no less than 90% of peak hourly firing rate. (CD19). b. utilize supplemental duct burners and a gas reheat system to maintain (at all times that the SCR is required under the Consent Decree to be operated) the catalyst within the optimum temperature range to remove NOx. c. be controlled by a process control system which maximizes NOx Removal efficiency. d. utilize an ammonia injection system and air flow in a manner which minimizes NOx emissions at all electrical loads. [N.J.A.C. 7:27-22.16(e)]	Other: NOx Control Efficiency: As an indicator for how much NOx is reduced by the SCR system, PSEG Fossil LLC shall use the SCR inlet and outlet NOx emissions data to monitor the NOx control Efficiency at Unit 1. The SCR inlet NOx emissions data will be obtained from the single in situ SCR inlet NOx process monitor, and the SCR outlet NOx emissions data will be obtained from the three in situ outlet NOx process monitors.[N.J.A.C. 7:27-22.16(e)].	Recordkeeping by manual logging of parameter at the approved frequency. The data on the NOx control efficiency shall be recorded continuously, for 12 calendar months of continuous operation. Records will be mainted for a period of 5 years. [N.J.A.C. 7:27-22.16(e)]	Submit a report: As per the approved schedule. Submit a report within 30 days after 12 calendar months of continuous operation of the SCR. [N.J.A.C. 7:27-22.16(e)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	The permittee shall replace the catalyst bed as necessary to ensure that NOx emissions do not exceed the permit allowable emission rate. Applies to CD19. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
23	Temperature at Catalyst Bed >= 500 and Temperature at Catalyst Bed <= 840 degrees F. Applies to CD19. [N.J.A.C. 7:27-22.16(e)]	Temperature at Catalyst Bed: Monitored by temperature instrument continuously, based on an instantaneous determination. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(e)]	Temperature at Catalyst Bed: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
24	Maximum Gross Heat Input <= 120 MMBTU/hr (HHV) (HHV) for the duct burner. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Burner Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
25	NOx (Total) <= 1,708.2 tons/yr. Annual emission limit based on 30-day rolling average and annual gross heat input. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.
26	TSP <= 394.2 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
27	PM-10 (Total) <= 394.2 tons/yr , from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Acrolein <= 0.14 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
29	Arsenic Emissions <= 1.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
30	Benzene <= 0.65 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
31	Polynuclear aromatic hydrocarbons (PAH's) <= 0.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
32	Benzyl chloride <= 0.35 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
33	Beryllium Emissions <= 0.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
34	Cadmium Emissions <= 1.45 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
35	Chlorine <= 22 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
36	Chromium Emissions <= 2.23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
37	Chromium (Hexavalent) Emissions <= 0.04 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
38	CO <= 1,559.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
39	Cobalt Emissions <= 0.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Cobalt Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Cobalt Emissions: Recordkeeping by stack test results annually. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]
40	Cyanide compounds <= 1.24 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
41	Dibenz(a,h)anthracene <= 0.014 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
42	Dimethylbenz(a)anthracene [7,12-] <= 0.07 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
43	Dimethyl sulfate <= 0.024 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
44	Diphenylhydrazine (1,2-) <= 0.03 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
45	Hexachlorobenzene <= 0.0012 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
46	Formaldehyde <= 1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
47	Hexachlorocyclopentadiene <= 0.03 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
48	HCl Emissions <= 1,752 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
49	Hydrogen fluoride <= 1,051 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
50	Lead compounds <= 1.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
51	Manganese compounds <= 0.24 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Manganese compounds: Monitored by stack emission testing annually, based on any 60 minute period. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by stack test results annually. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]
52	Mercury compounds <= 1.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
53	Methyl chloride <= 0.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
54	Methylhydrazine <= 0.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
55	The permittee shall implement the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", in accordance with NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. Reference: Consent Decree paragraph 86. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
56	Nickel compounds <= 0.83 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
57	SO3 <= 2,190 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
58	Phosphorus <= 1.4 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Phosphorus: Monitored by stack emission testing every 5 years, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Phosphorus: Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
59	VOC (Total) <= 670.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
60	Quinoline <= 0.0011 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
61	Sulfuric Acid Mist Emissions <= 1,358 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
62	Polycyclic organic matter <= 0.23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
63	Selenium Emissions <= 0.65 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Selenium Emissions: Monitored by stack emission testing every 5 years, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Selenium Emissions: Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
64	SO2 <= 19,272 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
65	TCDD Emissions (2,3,7,8-) <= 0.0001 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
66	Pentane (-n) <= 34.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
67	Conduct a comprehensive stack test at emission point PT1 between April 1 and October 31, 2008, and between April 1 and October 31 each fifth years thereafter, to demonstrate compliance with the CO, VOC(Total), SO2, NOx, H2SO4, Polycyclic Organic Matter (POM), Ammonia, Phosphorus, Selenium and Total Dioxins/Furans. The stack tests shall be subject to the following: a) New Jersey Air Test Method 1 or an alternative method approved by the Department shall be used to measure particulate emissions, b) three consecutive one hour tests shall be conducted, c) one test run will be conducted during soot blowing operations. The procedure for soot blowing shall be included in the test protocol required in this permit, d) the coal used during compliance tests shall represent, to the extent reasonable, the worst case conditions for particulate emissions. e) The POM emissions of the following 16 constituents shall be speciated and reported: naphthalene, acenaphthene, acenaphthylene, fluorene, phenanthrene, anthracene, pyrene, benzo(ghi)perylene, Benz(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene. [N.J.A.C.7:27-22.16(e)] and [N.J.A.C. 7:27-22.16(o)]	Monitored by stack emission testing every 5 years. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results every 5 years. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Stack Test - Submit a protocol, conduct stack tests, submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 before February 1, 2008, and before February 1 of each fifth year thereafter. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted between April 1 and October 31, 2008, and between April 1 and October 31, of each fifth year thereafter. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall report lbs/hour, lbs/MM Btu, ppm [N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
68	Shutdown Period: Emission limits set forth in this permit do not apply during periods of shutdown for all pollutants except NOx. The 3-hr shutdown exemption for NOx emission rates applies until May 1, 2006, except for the 2005 ozone season (May 1, through September 30). After May 1, 2006, and during the 2005 ozone seasons, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
69	Mercury Concentration in Fuel: Determine mercury content of representative samples of the coal being burned during the stack test each year and correlate the amount of mercury in the coal to the amount being emitted to the air for that year. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Monitored by fuel sampling (e.g. coal) annually during the annual mercury stack test. The coal sampling and analysis conducted during these annual stack tests may also serve as the monthly mercury sampling and analysis for that month in which the annual test was conducted. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Recordkeeping by certified lab analysis results each month during operation. Maintian mercury analytical results along with all calculation pertaining to the applicable requirement. [N.J.A.C. 7:27-22.16(a)]	Submit a report: Annually by January 31, of each year, to EPA and NJDEP. The report shall include the results of mercury coal analyses for the previous year. [N.J.A.C. 7:27-22.16(a)]
70	Shutdown Period <= 3 hours Shutdown commences with the initial lowering of the unit output below 45% of full load condition and concludes with the cessation of fuel consumption. Continuous operation of the unit at less than 45% of full load for more than three consecutive hours does not constitute a shutdown condition. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
71	Mercury Emissions: On and after December 15, 2007, each owner or operator of a coal-fired boiler of any size shall operate the coal-fired boiler in accordance with 1 or 2 below: 1. The mercury emissions from any coal-fired boiler shall not exceed 3.00 mg/MW-hr. 2. The reduction efficiency for control of mercury emissions of the air pollution control apparatus for control of mercury of any coal-fired boiler shall be at least 90 percent. The above standards shall be based on an annual weighted average of all valid stack emission tests performed for four consecutive quarters weighted by megawatt hours produced each quarter. [N.J.A.C. 7:27-27.7(a)]	Mercury Emissions: Monitored by stack emission testing quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. Conduct stack emission testing every quarter 1. If complying with the 3 mg/MW-hr standard - to measure mercury in the gas stream in the stack in accordance with a stack test protocol approved by the Department. or 2. If complying with the 90% control standard - to measure mass emissions of mercury in the gas stream at the inlet of the air pollution control apparatus and simultaneously conduct stack emission testing every quarter to measure mercury in the gas stream at the exit of the air pollution control apparatus in accordance with a stack test protocol approved by the Department. Any owner or operator who achieves and maintains compliance with [N.J.A.C. 7:27-27.7(a)] for eight consecutive quarters for all applicable coal-fire boilers, may reduce the frequency of stack emission testing from each quarter to stack emission testing performed every fourth quarter after the eigth quarter test in which annual weighted average compliace was determined. [N.J.A.C. 7:27-27.7(b)] and . [N.J.A.C. 7:27-27.7(c)]	Mercury Emissions: Recordkeeping by stack test results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-27.9]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 90 calendar days prior to conducting its first quarter stack testing. There shall be at least three valid stack tests runs per quarter and at least 45 days between the stack test performed for the preceding quarter. The stack test report must be submitted to BTS within 60 calendar days after performing the stack test pursuant to N.J.A.C. 7:27-27.9(a) for that quarter to the regional air and compliance enforcement office and BTS. The test results must be certified by a licensed professional engineer or certified industrial hygienist. A summary of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall be reported in milligram per megawatt of net electricity generation. [N.J.A.C. 7:27-27.]. [N.J.A.C. 7:27-22.18]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
72	Mercury Emissions: The mercury emissions standard of [N.J.A.C. 7:27-27.7(a)] are applicable on and after December 15, 2012, for each owner or operator of a coal fired boiler who has entered into an enforceable agreement with the Department by December 15, 2007, to install and operate air pollution control systems to meet the following standards by December 15, 2012, provided compliance with [N.J.A.C. 7:27-27.7(a)] is achieved by December 15, 2007 for approximately 50 percent of the total NJ coal-fired megawatt capacity of the company: 1. NOx emission <=0.130 lbs/MMBTU based on 30-day rolling average for wet bottom utility boilers. 2. SO2 emissions<=0.150 lbs/MMBTU based on 30-day rolling average, and 3. PM emissions<=0.03 lbs/MMBTU based on the average of three test runs using USEPA Test Method-5. [N.J.A.C. 7:27-27.7(d)]	None.	None.	None.
73	Start-up Period <= 12 hours. Start-up commences with boiler light off and concludes when the unit reaches normal minimum load (approximately 45% of full load). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
74	Conduct a comprehensive stack test at emission point PT1 by July 31 each year, to demonstrate compliance with TSP, PM-10, As, Be, Cd, Cr, Co, Pb, Mn, Ni, HCl and HF limits and by July 1 each year to demonstrate compliance with Mercury emissions and concentrations. The stack tests shall be subject to the following: a) The tests for TSP shall use 40 CFR Part 60 Appendix A Method 5. b) The tests for PM-10 shall use 40 CFR Part 51 Appendix M Method 202 and Method 201 or 201A. c) The TSP and PM-10 emission rates shall be calculated in accordance with 40 CFR 60.8(f). d) The tests for Mercury shall use 40 CFR Part 60 Appendix A Method 29 or Method 101A. e) Three consecutive one hour tests shall be conducted, f) One test run will be conducted during soot blowing operations. The procedure for soot blowing shall be included in the test protocol required in this permit, g) the coal used during compliance tests shall represent, to the extent reasonable, the worst case conditions for TSP and PM-10 emissions. [N.J.A.C.7:27-22.16(a)] and [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing annually. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by stack test results annually. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 and EPA annually. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted annually before July 1 each year for Mercury and before July 31, each year for all other compounds. The stack test report must be submitted to BTS within 60 days after performing the stack test. The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. Copies of all test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall report lbs/hour, lbs/MM Btu and ppm. [N.J.A.C.7:27-22.16(a)], [N.J.A.C.7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
75	Mercury Concentration in Fuel: Determine Mercury content in coal monthly. Reference: Consent Decree paragraph 152. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Monitored by fuel sampling (e.g. coal) each month during operation. Composite samples shall be collected and analyzed. After 24 months of mercury coal analysis, EPA and NJDEP may approve quarterly testign if EPA and NJDEP determine that the annual average does not change significantly from twelve samples per year. PSEG Fossil shall revert to monthly sampling and analysis, however, if EPA and NJDEP determine that monthly sampling is warranted by the quarterly results. Reference: Consent Decree paragraph 152. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Recordkeeping by certified lab analysis results upon occurrence of event. [N.J.A.C. 7:27-22.16(a)]	Submit a report: As per the approved schedule by January 31, of each year, to EPA and NJDEP. The report shall include the results of mercury coal analyses for the previous year. The test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Reference: Consent Decree paragraph 154. [N.J.A.C. 7:27-22.16(a)]
76	Emission limits set forth in this permit do not apply during periods of start-up for all pollutants except NOx. The 12-hr start-up exemption for NOx emission rates applies until May 1, 2006, except for the 2005 ozone season (May 1, through September 30). After May 1, 2006, and during the 2005 ozone seasons, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
77	Volume of Gas Discharged at Stack Conditions >= 250,000 ACFM. Limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	Volume of Gas Discharged at Stack Conditions: Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(o)]	Volume of Gas Discharged at Stack Conditions: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
78	Saturated or partially used adsorption material shall be disposed of in a manner that minimizes releases of air contaminants to the atmosphere. This shall be done in accordance with all applicable State and Federal solid waste management regulations. Applies to CD22. [N.J.A.C. 7:27-22.16(a)]			

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
79	Until December 15, 2007, the permittee shall operate CD22 at its discretion to remove mercury from the flue gas of Unit 1 by the carbon adsorption unit. Applies to CD22. [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall monitor the following parameters when this control device i.e. CD22 is operational: 1. the time period during which CD22 is operational, 2. the amount of activated carbon being injected, 3. the type of carbon being used, 4. the type of fuel that is being burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the permittee shall, beginning in the first calendar quarter of 2007, measure the concentration of mercury in the flue gas, simultaneously before and after CD22 at least once per calendar quarter. These measurements shall be made using a sorbent trap in accordance with the protocol approved by BTS, and shall be used to determine the effectiveness of carbon injection system.[N.J.A.C. 7:27-22.16(o)].	Other: The permittee shall record the following parameters when CD22 is operational: 1. the time period during which CD22 is operational, 2. the amount of activated carbon being injected, 3. the type of carbon being used, 4. the type of fuel that is being burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the permittee shall, beginning in the first calendar quarter of 2007, measure the concentration of mercury in the flue gas, simultaneously before and after CD22 at least once per calendar quarter. These measurements shall be made using a sorbent trap in accordance with the protocol approved by BTS, and shall be used to determine the effectiveness of carbon injection system.[N.J.A.C. 7:27-22.16(o)].	Submit a report: As per the approved schedule. The permittee shall submit to the Chief, BTS, at PO Box 437, Trenton NJ within 90 calendar days of the approval of this modification, a protocol providing details on the sorbent trap methodology to be used for measuring the concentration of mercury in the flue gas, and the effectiveness of carbon injection system. The permittee shall submit to the Chief, Bureau of Operating Permits and the REO, a report by November 15, 2007 containing the following information. 1. the time period during which CD22 is operational, 2. the amount and rate of activated carbon being injected, 3. the type of carbon being used, 4. the type of fuel that is being burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the concentration of Hg in the flue gas and the effectiveness of carbon injection system. The report shall also state whether the use of this activated carbon injection system i.e. CD22 will be sufficient to achieve the mercury limits as per N.J.A.C. 7:27-27.4(k), applicable to the unit on and after December 15, 2007. If not what other measures will PSEG use to comply with the above mentioned mercury limit. The report shall state the carbon injection rate that the facility will use after December 15, 2007, the type of carbon that it will use, the fuel type that the facility will be burning when the ACI system will be operating, how it will monitor and record the carbon injection rate, and how it will dispose off the spent carbon. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
80	On and after December 15, 2007, the permittee shall operate the activated carbon injection system, CD22, at all times the unit is burning coal or a combination of coal and natural gas, to achieve mercury emissions as required by N.J.A.C 7:27-27(a). The permittee shall monitor and record the following parameters as per their report, required by Reference # 79, U1 Unit No. 1, OS0 Summary in this permit, submitted by November 15, 2007, and approved by the Department: 1. the amount and the rate of carbon injection that the facility will use after December 15, 2007 2. the type of carbon that will be used [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously when the unit is being fired with coal or with a combination of coal and natural gas. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system continuously when the unit is being fired with coal or with a combination of coal and natural gas. [N.J.A.C. 7:27-22.16(o)]	None.
81	Opacity <= 10 % exclusive of visible water vapor, except for 3 minutes in any consecutive 30 minute period, except for the start up and shut down periods. [N.J.A.C. 7:27- 3.2(b)]	Opacity: Monitored by continuous opacity monitoring system continuously, based on any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(e)]	Opacity: Recordkeeping by strip chart or data acquisition (DAS) system continuously. [N.J.A.C. 7:27-21.16(e)]	Other (provide description): As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS2 Utility boiler firing coal or cofiring coal & natural gas - w/wo SNCR and/or AEFLGR, non-ozone season prior to SCR operation. WILL EXPIRE MAY 1, 2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Operating Scenario OS2 will expire on May 1, 2006. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 4,500 lb/hr firing 100 % coal or co-firing natural gas with coal. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) <= 1.5 lb/MMBTU firing 100% coal or co-firing natural gas with coal. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 90 lb/hr , from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
19	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS4 Utility boiler firing natural gas - w/without SNCR and/or AEFLGR, non-ozone season, prior to SCR operation. WILL EXPIRE MAY 1, 2006.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Operating Scenario OS4 will expire on May 1, 2006. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 3,000 lb/hr firing 100 % natural gas. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27- 8.13]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) <= 1 lb/MMBTU firing 100 % natural gas. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 90 lb/hr , from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
19	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS5 Utility boiler firing coal, natural gas or co-firing coal and natural gas, with SCR and duct burner, w/without SNCR and or AEFLGR,w/wo ACI

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 0.13 lb/MMBTU based on a 30-day rolling average (no trailing zero implied). The 30-day rolling average emission rate shall be determined by calculating the emission rate of an operating day, and then arithmetically averaging that emission rate with the emission rated for the previous twenty-nine (29) operating days. A new 30-day rolling average shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. This emission rate limitation shalltake effect on May 1, 2005 and shall apply when the unit is operating during the year 2005 ozone season which is defined as the period of time from May 1 through September 30. This limitation shall apply year round beginning on May 1, 2006. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 30 day rolling average. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain the 30-day rolling average calculations. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	NOx (Total) <= 0.15 lb/MMBTU based on a 24-hour block average (no trailing zero implied). The 24-hour emission rate shall be determined by dividing the total pounds of pollutant by the total million Btu of heat input (lb/MMBtu) for a 24-hour operating day. A new 24-hour emission rate shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. This emission rate limitation shalltake effect on May 1, 2005 and shall apply when the unit is operating during the year 2005 ozone season which is defined as the period of time from May 1 through September 30. This limitation shall apply year round beginning on May 1, 2006. In calculating the 24-hour NOx emission rate, PSEG Fossil shall exclude: (i) for a Unit that has ceased firing fossil fuel, the period of time, not to exceed eight hours, from the restart of that Unit to the time that the Unit is either fired with coal or synchronized with a utility electric distribution system; and (ii) for a Unit that is to be shut down, the period of time in which the Unit is no longer synchronized with any utility electric distribution system, and is no longer fired with coal. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 24 hour period. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain 24-hour emission data. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
3	Boiler fuel limited to coal and natural gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing annually, based on any 60 minute period. Conduct stack test using 40 CFR Part 60 Appendix A, Method 5, by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) <= 90 lb/hr , from operating permit application. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing annually, based on any 60 minute period. Stack testing shall be conducted annually as required by the Consent Decree. The reference methods for determining emission rates shall be those specified in 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A, from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Beryllium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Cadmium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Chromium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Lead Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Mercury Emissions: Monitored by stack emission testing annually, based on any 60 minute period by July 1, using 40 CFR 60 Appendix A EPA Method 29 or Method 101A. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Recordkeeping by stack test results annually. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Nickel Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
15	Manganese Emissions <= 0.055 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Manganese Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
16	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
17	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
18	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Hydrogen fluoride: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Hydrogen fluoride: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
19	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	HCl Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	HCl Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
20	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
23	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]

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Emission Unit: U2 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 % , exclusive of visible condensed water vapor, not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C.7:27-3.2(b)] &. [N.J.A.C. 7:27- 3.2(c)]	Opacity: Monitored by continuous opacity monitoring system continuously, based on any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(e)]	Opacity: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
2	Opacity levels above 8% will trigger increased scrutiny and inspection of ESP operations, based on the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 335 lb/hr. Particulate emissions limit from the combustion of fuel based on the gross heat input rate of 3,350 MMBTU/Hr for the boiler. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
4	VOC (Total) <= 50 ppm @ 7% O2. [N.J.A.C. 7:27-16.8(b)1]	VOC (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
5	CO <= 100 ppmvd @ 7% O2. [N.J.A.C. 7:27-16.8(b)2]	CO: Monitored by continuous emission monitoring system continuously, based on one calendar day. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Adjust the combustion process in accordance with N.J.A.C. 7:27-16.24 by May 1 of each year. Record NOx and CO concentration after each adjustment and the O2 concentration at which NOx and CO were measured. [N.J.A.C. 7:27-16.8(b)3i]	Monitored by periodic emission monitoring annually. The owner or operator of the equipment or source operation shall: 1. Inspect the burner, and clean or replace any components of the burner as necessary to minimize total emissions NOx and CO; 2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and 3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter annually. The owner or operator of the adjusted equipment or source operation shall record each adjustment conducted under N.J.A.C. 7:27-19.16(a) in a permanently bound log book containing the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who made the adjustment; 3. The NOx concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; 4. The CO concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; and 5. The concentration of O2 at which the CO and NOx concentrations pursuant to (3) and (4) were measured. [N.J.A.C. 7:27-19.16(c)]	None.
7	PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. The current NOx averaging plan will be filed with the operaing permit at the Department. [N.J.A.C. 7:27-19.14(f)]	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other (provide description): As per the approved schedule PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.14(f)]
8	NOx (Total) <= 0.8 lb/MMBTU based on each calendar day per generating unit. Applicable to Mercer Unit 1 (U1) and Mercer Unit 2 (U2) during ozone season. This emission limit shall be attained partly through the combusion of higher percentate of natural gas during the ozone season and partly through the use of SNCR or other NOx control measures. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by continuous emission monitoring system continuously. The calendar day emission limit shall be calculated within three working days after the data is collected. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The calculations shall be recorded in a permanently bound log book or in readily accessible computer memories. [N.J.A.C. 7:27-19.6]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-19.6]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	NOx (Total) <= 1.8 lb/MMBTU based on 30-day rolling average, per generating unit. Applicable to Mercer Unit 1 (U1) and Mercer Unit 2 (U2) during non-ozone season. This emission limit shall be attained partly through the combusion of higher percentate of natural gas during the ozone season and partly through the use of SNCR or other NOx control measures. [N.J.A.C. 7:27-19.6]	NOx (Total): Monitored by continuous emission monitoring system continuously. The 30-day rolling average shall be determined by calculating the emission rate of an day, and then arithmetically averaging that emission rate with the emission rates for the previous twenty-nine (29) days. A new 30-day rolling average shall be calculated for each new day. The calcuations shall be peformed by the fifteenth day of each month, for all 30 day periods ending in the preceding month for the 30 day peirod. [N.J.A.C. 7:27-19.6]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The calculations shall be recorded in a permanently bound log book or in readily accessible computer memories. [N.J.A.C. 7:27-19.6]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-19.6]
10	SO2 <= 1.5 lb/MMBTU [N.J.A.C.7:27-10.2(c)] and. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
11	Maximum Gross Heat Input <= 3,350 MMBTU/hr (HHV). The total combined fuel fired shall not exceed this limit for Unit # 2 boiler and duct burner. [N.J.A.C.7:27-19.6] and. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(e)]	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Maximum Gross Heat Input: <=2,628 x E10 BTU (HHV) per any consecutive 365-day period, for the combined fuel use for the Unit 1 boiler and duct burner. [N.J.A.C. 7:27-22.16(e)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling 1 day basis). [N.J.A.C.7:27-22.16(e)] and. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by manual logging of parameter daily Manually or electronically log the gross heat input in MMBTU in any consecutive 365 day period in a log book or electronically (computer, DAS or electronic operating system). The Annual Gross Heat Input in MMBTU per any consecutive 365 day period is computed by adding the gross heat input for any day to the gross heat input for the preceding 364 days. The gross heat input for a given day shall be the total of 24 reading taken once per you. The gross heat input for a given year shall be the total of the daily heat inputs for the year. This procedure shall begin when the operating permit is issued. This accounting will not include the MMBTU calculations prior to approval of the Operating Permit. . [N.J.A.C.7:27-22.16(e)] and. [N.J.A.C. 7:27-22.16(o)]	None.
13	TSP <= 0.03 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing annually, based on any 60 minute period by July 31 of each year. The reference methods for determining emission rates shall be those specified in 40 CFR Part 60 Appendix A, Method 5, from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results annually from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule from Consent Decree. Conduct stack test by July 31, of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
14	For each shipment of coal received at the Mercer Generating Station, PSEG Fossil LLC shall record in its computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Office for a period of 5 years after the date of each record. [N.J.A.C. 7:27-22.16(e)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
15	The electrostatic precipitator (ESP) must operate at all times that Mercer Unit No. 2 is in operation. Applies to CD3. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	The permittee shall implement the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", in accordance with NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. Reference: Consent Decree paragraph 86. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring shall be in accordance with NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004, regarding "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2". Reference: Consent Decree paragraph 86.[N.J.A.C. 7:27-22.16(a)].	Other: Recordkeeping shall be in accordance with NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004, regarding "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2". Reference: Consent Decree paragraph 86.[N.J.A.C. 7:27-22.16(a)].	Submit documentation of compliance: As per the approved schedule. Submit compliance documents in accordance with NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004, regarding "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2". Reference: Consent Decree paragraph 86. [N.J.A.C. 7:27-22.16(a)]
17	Sulfur consumption rate for the flue gas conditioning system <= 100 lb/hr. PSEG Fossil is permitted to operate a flue gas conditioning sytem at its discretion to enhance ESP performance. The flue gas conditioning sytem involves the injection of SO3 into the flue gas stream, prior to the ESP, but works in conjunction with the ESP to improve particulate collection. Applies to CD3. [N.J.A.C. 7:27-22.16(e)]	Monitored by material feed/flow monitoring continuously, based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by data acquisition system (DAS) / electronic data storage each hour during operation. [N.J.A.C. 7:27-22.16(e)]	None.
18	SO3 injection system will not be operational during compliance stack testing, in accordance with the the operational practices of the "PSEG Fossil LLC ESP Optimization Study for Mercer Generating Station Units No.1 and No.2", NJ State Department of Law and Public Safety approval letter to PSEG Fossil Environmental Affairs, dated November 10, 2004. Applies to CD3. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Records shall be maintained of dates and times that the SNCR and AEFLGR systems are operated. Applies to CD4 and CD18. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Records shall be maintained of dates and times that the SNCR and AEFLGR systems are operated.[N.J.A.C. 7:27-22.16(e)].	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The In-Duct SCR system shall be operated at PSEG Fossil's discretion. Records shall be maintained of dates and times that the In-Duct SCR system is operated. Applies to CD21. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
21	Urea and Ammonia: when the SNCR system is operating, daily and cumulative records of urea usage shall be maintained Applies to CD4. [N.J.A.C. 7:27-22.16(e)]	Monitored by material feed/flow monitoring continuously. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain daily and cumulative urea storage records per day. [N.J.A.C. 7:27-22.16(e)]	None.
22	Required Periods of Operation: PSEG Fossil shall operate the SCR at all times that the Unit operates during the 2005 ozone season and year round after May 1, 2006, except that PSEG Fossil need not operate the SCR: (a) for a Unit that has ceased firing fuel, during the period of time not to exceed eight hours from the restart of the Unit to the time that the Unit is fired with coal; (b) for a Unit that is to be shutdown, during the period of time that the Unit is no longer synchronized with any utility electric distribution system and is no longer fired with coal. The Ozone Control Period is defined as the period of time from May 1 through September 30. Applies to CD20. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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23	The SCR must be designed as approved by EPA and NJDEP (see the Department's letters to PSEG dated May 6, 2002 and November 15, 2002, and EPA's letter to PSEG dated May 31, 2002) to: a. acheive and maintain a NOx Removal efficiency of no less than 90% of peak hourly firing rate. (CD20). b. utilize supplemental duct burners and a gas reheat system to maintain (at all times that the SCR is required under the Consent Decree to be operated) the catalyst within the optimum temperature range to remove NOx. c. be controlled by a process control system which maximizes NOx Removal efficiency. d. utilize an ammonia injection system and air flow in a manner which minimizes NOx emissions at all electrical loads. [N.J.A.C. 7:27-22.16(e)]	Monitored by other method (provide description) at the approved frequency NOx Control Efficiency: As an indicator for how much NOx is reduced by the SCR system, PSEG Fossil LLC shall use the SCR inlet and outlet NOx emissions data to monitor the NOx control Efficiency at Unit 1. The SCR inlet NOx emissions data will be obtained from the single in situ SCR inlet NOx process monitor, and the SCR outlet NOx emissions data will be obtained from the three in situ outlet NOx process monitors. The NOx control efficiency date collected using the in situ inlet and outlet NOx process monitors will not be used for the enforcement purposes. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter at the approved frequency. The data on the NOx contril efficiency shall be recorded continuously, for 12 calendar months of continuous operation. Records will be maintained for a period of 5 years. [N.J.A.C. 7:27-22.16(e)]	Submit a report: As per the approved schedule Submit a report within 30 days after 12 calendar months of continuous operation. [N.J.A.C. 7:27-22.16(e)]
24	The permittee shall replace the catalyst bed as necessary to ensure that NOx emissions do not exceed the permit allowable emission rate. Applies to CD20. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
25	Temperature at Catalyst Bed >= 500 and Temperature at Catalyst Bed <= 840 degrees F. Applies to CD20 an CD21. [N.J.A.C. 7:27-22.16(e)]	Temperature at Catalyst Bed: Monitored by temperature instrument continuously, based on an instantaneous determination. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(e)]	Temperature at Catalyst Bed: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
26	Maximum Gross Heat Input <= 120 MMBTU/hr (HHV) (HHV) for the duct burner. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Burner Rated Capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
27	NOx (Total) <= 1,708.2 tons/yr. Annual emission limit based on 30-day rolling average and annual gross heat input. [N.J.A.C. 7:27-22.16(o)]	None.	None.	None.

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28	TSP <= 394.2 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
29	PM-10 (Total) <= 394.2 tons/yr , from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
30	Acrolein <= 0.14 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
31	Arsenic Emissions <= 1.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
32	Benzene <= 0.65 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
33	Polynuclear aromatic hydrocarbons (PAH's) <= 0.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
34	Benzyl chloride <= 0.35 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
35	Beryllium Emissions <= 0.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
36	Cadmium Emissions <= 1.45 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
37	Chlorine <= 22 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
38	Chromium Emissions <= 2.23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
39	Chromium (Hexavalent) Emissions <= 0.04 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
40	CO <= 1,559.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
41	Cobalt Emissions <= 0.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Cobalt Emissions: Monitored by stack emission testing annually, based on any consecutive 30-minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Cobalt Emissions: Recordkeeping by stack test results annually. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
42	Cyanide compounds <= 1.24 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
43	Dibenz(a,h)anthracene <= 0.014 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
44	Dimethylbenz(a)anthracene [7,12-] <= 0.07 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
45	Dimethyl sulfate <= 0.024 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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46	Diphenylhydrazine (1,2-) <= 0.03 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
47	Formaldehyde <= 1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
48	Hexane (-n) <= 23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
49	Hexachlorobenzene <= 0.0012 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
50	Hexachlorocyclopentadiene <= 0.03 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
51	HCl Emissions <= 1,752 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
52	Hydrogen fluoride <= 1,051 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
53	Lead compounds <= 1.05 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
54	Manganese compounds <= 0.24 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Manganese compounds: Monitored by stack emission testing annually, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Manganese compounds: Recordkeeping by stack test results annually. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
55	Mercury compounds <= 1.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
56	Methyl chloride <= 0.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
57	Methylhydrazine <= 0.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
58	Nickel compounds <= 0.83 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
59	Pentane (-n) <= 34.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
60	Phosphorus <= 1.4 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Phosphorus: Monitored by stack emission testing every 5 years, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Phosphorus: Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
61	Polycyclic organic matter <= 0.23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
62	Propane <= 21.23 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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63	Quinoline <= 0.0011 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
64	Selenium Emissions <= 0.65 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Selenium Emissions: Monitored by stack emission testing every 5 years, based on any 60 minute period. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Selenium Emissions: Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
65	SO2 <= 19,272 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
66	Sulfuric Acid Mist Emissions <= 1,358 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
67	SO3 <= 2,190 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
68	TCDD Emissions (2,3,7,8-) <= 0.0001 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
69	VOC (Total) <= 670.1 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
70	Conduct a comprehensive stack test at emission point PT1 between April 1 and October 31, 2008, and between April 1 and October 31 each fifth years thereafter, to demonstrate compliance with the CO, VOC(Total), SO2, NOx, H2SO4, Polycyclic Organic Matter (POM), Ammonia, Phosphorus, Selenium and Total Dioxins/Furans. The stack tests shall be subject to the following: a) New Jersey Air Test Method 1 or an alternative method approved by the Department shall be used to measure particulate emissions, b) three consecutive one hour tests shall be conducted, c) one test run will be conducted during soot blowing operations. The procedure for soot blowing shall be included in the test protocol required in this permit, d) the coal used during compliance tests shall represent, to the extent reasonable, the worst case conditions for particulate emissions. e) The POM emissions of the following 16 constituents shall be speciated and reported: naphthalene, acenaphthene, acenaphthylene, fluorene, phenanthrene, anthracene, pyrene, benzo(ghi)perylene, Benz(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene. [N.J.A.C.7:27-22.16(e)] and [N.J.A.C. 7:27-22.16(o)]	Monitored by stack emission testing every 5 years. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results every 5 years. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Stack Test - Submit a protocol, conduct stack tests, submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 before February 1, 2008, and before February 1 of each fifth year thereafter. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted between April 1 and October 31, 2008, and between April 1 and October 31, of each fifth year thereafter. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall report lbs/hour, lbs/MM Btu, ppm [N.J.A.C. 7:27-22.16(e)], [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
71	Conduct a comprehensive stack test at emission point PT1 by July 31 each year, to demonstrate compliance with TSP, PM-10, As, Be, Cd, Cr, Co, Pb, Mn, Ni, HCl and HF limits and by July 1 each year to demonstrate compliance with Mercury emissions and concentrations. The stack tests shall be subject to the following: a) The tests for TSP shall use 40 CFR Part 60 Appendix A Method 5. b) The tests for PM-10 shall use 40 CFR Part 51 Appendix M Method 202 and Method 201 or 201A. c) The TSP and PM-10 emission rates shall be calculated in accordance with 40 CFR 60.8(f). d) The tests for Mercury shall use 40 CFR Part 60 Appendix A Method 29 or Method 101A. e) Three consecutive one hour tests shall be conducted, f) One test run will be conducted during soot blowing operations. The procedure for soot blowing shall be included in the test protocol required in this permit, g) the coal used during compliance tests shall represent, to the extent reasonable, the worst case conditions for TSP and PM-10 emissions. [N.J.A.C.7:27-22.16(a)] and [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing annually. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by stack test results annually. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 and EPA annually. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted annually before July 1 each year for Mercury and before July 31, each year for all other compounds. The stack test report must be submitted to BTS within 60 days after performing the stack test. The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. Copies of all test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall report lbs/hour, lbs/MM Btu and ppm. [N.J.A.C.7:27-22.16(a)], [N.J.A.C.7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
72	Mercury Concentration in Fuel: Determine Mercury content in coal monthly. [N.J.A.C.7:27-22.16(a)] and [N.J.A.C. 7:27-22.16(o)]	Mercury Concentration in Fuel: Monitored by fuel sampling (e.g. coal) each month during operation. Composite samples shall be collected and analyzed. After 24 months of mercury coal analysis, EPA and NJDEP may approve quarterly testign if EPA and NJDEP determine that the annual average does not change significantly from twelve samples per year. PSEG Fossil shall revert to monthly sampling and analysis, however, if EPA and NJDEP determine that monthly sampling is warranted by the quarterly results. Reference: Consent Decree paragraph 152. [N.J.A.C.7:27-22.16(a)] and. [N.J.A.C. 7:27-22.16(o)]	Mercury Concentration in Fuel: Recordkeeping by certified lab analysis results upon occurrence of event. [N.J.A.C.7:27-22.16(a)] and. [N.J.A.C. 7:27-22.16(o)]	Submit a report: As per the approved schedule by January 31, of each year, to EPA and NJDEP. The report shall include the results of mercury coal analyses for the previous year. The test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Reference: Consent Decree paragraph 154. [N.J.A.C.7:27-22.16(a)] and. [N.J.A.C. 7:27-22.16(o)]
73	Mercury Concentration in Fuel: Determine mercury content of representative samples of the coal being burned during the stack test each year and correlate the amount of mercury in the coal to the amount being emitted to the air for that year. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Monitored by fuel sampling (e.g. coal) annually during the annual mercury stack test. The coal sampling and analysis conducted during these annual stack tests may also serve as the monthly mercury sampling and analysis for that month in which the annual test was conducted. [N.J.A.C. 7:27-22.16(a)]	Mercury Concentration in Fuel: Recordkeeping by certified lab analysis results each month during operation. Maintian mercury analytical results along with all calculation pertaining to the applicable requirement. [N.J.A.C. 7:27-22.16(a)]	Submit a report: Annually by January 31, of each year, to EPA and NJDEP. The report shall include the results of mercury coal analyses for the previous year. [N.J.A.C. 7:27-22.16(a)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
74	Mercury Emissions: On and after December 15, 2007, each owner or operator of a coal-fired boiler of any size shall operate the coal-fired boiler in accordance with 1 or 2 below: 1. The mercury emissions from any coal-fired boiler shall not exceed 3.00 mg/MW-hr. 2. The reduction efficiency for control of mercury emissions of the air pollution control apparatus for control of mercury of any coal-fired boiler shall be at least 90 percent. The above standards shall be based on an annual weighted average of all valid stack emission tests performed for four consecutive quarters weighted by megawatt hours produced each quarter. [N.J.A.C. 7:27-27.7(a)]	Mercury Emissions: Monitored by stack emission testing quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. Conduct stack emission testing every quarter 1. If complying with the 3 mg/MW-hr standard - to measure mercury in the gas stream in the stack in accordance with a stack test protocol approved by the Department. or 2. If complying with the 90% control standard - to measure mass emissions of mercury in the gas stream at the inlet of the air pollution control apparatus and simultaneously conduct stack emission testing every quarter to measure mercury in the gas stream at the exit of the air pollution control apparatus in accordance with a stack test protocol approved by the Department. Any owner or operator who achieves and maintains compliance with [N.J.A.C. 7:27-27.7(a)] for eight consecutive quarters for all applicable coal-fire boilers, may reduce the frequency of stack emission testing from each quarter to stack emission testing performed every fourth quarter after the eigth quarter test in which annual weighted average compliace was determined. [N.J.A.C. 7:27-27.7(b)] and . [N.J.A.C. 7:27-27.7(c)]	Mercury Emissions: Recordkeeping by stack test results quarterly: once per quarter; quarters shall begin on January 1, April 1, July 1, and October 1 of each year. [N.J.A.C. 7:27-27.9]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 90 calendar days prior to conducting its first quarter stack testing. There shall be at least three valid stack tests runs per quarter and at least 45 days between the stack test performed for the preceding quarter. The stack test report must be submitted to BTS within 60 calendar days after performing the stack test pursuant to N.J.A.C. 7:27-27.9(a) for that quarter to the regional air and compliance enforcement office and BTS. The test results must be certified by a licensed professional engineer or certified industrial hygienist. A summary of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall be reported in milligram per megawatt of net electricity generation. [N.J.A.C. 7:27-27.]. [N.J.A.C. 7:27-22.18]

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75	Mercury Emissions: The mercury emissions standard of [N.J.A.C. 7:27-27.7(a)] are applicable on and after December 15, 2012, for each owner or operator of a coal fired boiler who has entered into an enforceable agreement with the Department by December 15, 2007, to install and operate air pollution control systems to meet the following standards by December 15, 2012, provided compliance with [N.J.A.C. 7:27-27.7(a)] is achieved by December 15, 2007 for approximately 50 percent of the total NJ coal-fired megawatt capacity of the company: 1. NOx emission <=0.130 lbs/MMBTU based on 30-day rolling average for wet bottom utility boilers. 2. SO2 emissions<=0.150 lbs/MMBTU based on 30-day rolling average, and 3. PM emissions<=0.03 lbs/MMBTU based on the average of three test runs using USEPA Test Method-5. [N.J.A.C. 7:27-27.7(d)]	None.	None.	None.
76	Start-up Period <= 12 hours. Start-up commences with boiler light off and concludes when the unit reaches normal minimum load (approximately 45% of full load). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
77	Emission limits set forth in this permit do not apply during periods of start-up for all pollutants except NOx. The 12-hr start-up exemption for NOx emission rates applies until May 1, 2006, except for the 2005 ozone season (May 1, through September 30). After May 1, 2006, and during the 2005 ozone seasons, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

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78	Shutdown Period <= 3 hours Shutdown commences with the initial lowering of the unit output below 45% of full load condition and concludes with the cessation of fuel consumption. Continuous operation of the unit at less than 45% of full load for more than three consecutive hours does not constitute a shutdown condition. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
79	Shutdown Period: Emission limits set forth in this permit do not apply during periods of shutdown for all pollutants except NOx. The 3-hr shutdown exemption for NOx emission rates applies until May 1, 2006, except for the 2005 ozone season (May 1, through September 30). After May 1, 2006, and during the 2005 ozone seasons, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
80	Volume of Gas Discharged at Stack Conditions >= 250,000 ACFM. Limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	Volume of Gas Discharged at Stack Conditions: Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(o)]	Volume of Gas Discharged at Stack Conditions: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
81	Until December 15, 2007, the permittee shall operate CD23 at its discretion to remove mercury from the flue gas of Unit 2 by the carbon adsorption unit. Applies to CD23. [N.J.A.C. 7:27-22.16(a)]	Other: The permittee shall monitor the following parameters when this control device i.e. CD23 is operational: 1. the time period during which CD23 is operational, 2. the amount and rate of activated carbon being injected during each time period, 3. the type of carbon that was used during each time period, 4. the type of fuel that was burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the permittee shall, beginning in the first calendar quarter of 2007, measure the concentration of mercury in the flue gas, simultaneously before and after CD23 at least once per calendar quarter. These measurements shall be made using a sorbent trap in accordance with the protocol approved by BTS, and shall be used to determine the effectiveness of carbon injection system.[N.J.A.C. 7:27-22.16(o)].	Other: The permittee shall record the following parameters when this control device i.e. CD23 is operational: 1. the time period during which CD23 is operational, 2. the amount and rate of activated carbon being injected during each time period, 3. the type of carbon that was used during each time period, 4. the type of fuel that was burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the permittee shall, beginning in the first calendar quarter of 2007, measure the concentration of mercury in the flue gas, simultaneously before and after CD23 at least once per calendar quarter. These measurements shall be made using a sorbent trap in accordance with the protocol approved by BTS, and shall be used to determine the effectiveness of carbon injection system.[N.J.A.C. 7:27-22.16(o)].	Submit a report: As per the approved schedule. The permittee shall submit to the Chief, BTS, at PO Box 437, Trenton NJ within 90 calendar days of the approval of this modification, a protocol providing details on the sorbent trap methodology to be used for measuring the concentration of mercury in the flue gas, and the effectiveness of carbon injection system. The permittee shall submit to the Chief, Bureau of Operating Permits and the REO, a report by November 15, 2007 containing the following information. 1. the time period during which CD23 is operational, 2. the amount and rate of activated carbon being injected, 3. the type of carbon being used, 4. the type of fuel that is being burned in the unit, i.e. coal or a combination of coal and natural gas, 5. the concentration of Hg in the flue gas and the effectiveness of carbon injection system. The report shall also state whether the use of this activated carbon injection system i.e. CD23 will be sufficient to achieve the mercury limits as per N.J.A.C. 7:27-27.4(k), applicable to the unit on and after December 15, 2007. If not what other measures will PSEG use to comply with the above mentioned mercury limit. The report shall state the carbon injection rate that the facility will use after December 15, 2007, the type of carbon that it will use, the fuel type that the facility will be burning when the ACI system will be operating, how it will monitor and record the carbon injection rate, and how it will dispose off the spent carbon. [N.J.A.C. 7:27-22.16(o)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
82	On and after December 15, 2007, the permittee shall operate the activated carbon injection system, CD23 at all times the unit is burning coal or a combination of coal and natural gas, to achieve mercury emissions as required by N.J.A.C 7:27-27(a). The permittee shall monitor and record the following parameters as per their report, required by Reference # 81, U2 Unit No. 2, OS0 Summary in this permit, submitted by November 15, 2007, and approved by the Department: 1. the amount and the rate of carbon injection that the facility will use after December 15, 2007 2. the type of carbon that will be used . [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously when the unit is being fired with coal or with a combination of coal and natural gas. [N.J.A.C. 7:27-22.16(o)]	when the unit is being fired with coal or with a combination of coal and natural gas. Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(o)]	None.
83	Opacity <= 10 % exclusive of visible water vapor, except for 3 minutes in any consecutive 30 minute period, except for the start up and shut down periods. [N.J.A.C. 7:27- 3.2(b)]	Opacity: Monitored by continuous opacity monitoring system continuously, based on any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(e)]	Opacity: Recordkeeping by strip chart or data acquisition (DAS) system continuously. [N.J.A.C. 7:27-22.16(e)]	Other (provide description): As per the approved schedule. Refer to CEM requirements specified in this permit. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U2 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS2 Utility boiler firing coal or cofiring coal & natural gas - w/wo SNCR and/or AEFLGR, non-ozone season prior to SCR operation. WILL EXPIRE MAY 1, 2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Operating Scenario OS2 will expire on May 1, 2006. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 4,500 lb/hr firing 100 % coal or co-firing natural gas with coal. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) <= 1.5 lb/MMBTU firing 100 % coal or co-firing natural gas with coal. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 90 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
19	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U2 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS4 Utility boiler firing natural gas - with/without SNCR and/orAEFLGR, non-ozone season, prior to SCR operation. WILL EXPIRE MAY 1, 2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Operating Scenario OS4 will expire on May 1, 2006. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	NOx (Total) <= 3,000 lb/hr firing 100 % natural gas. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27- 8.13]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
3	NOx (Total) <= 1 lb/MMBTU firing 100 % natural gas. This limitation shall apply when the unit is operating outside the ozone season. This is defined as the period of time from October 1 of one year through April 30 of the following year. After May 1, 2006, the NOx emission limits set forth in operating scenario OS5 apply. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a rolling 30 day average (rolling 1 day basis) excluding periods of start-up or shutdown (as defined in the conditions of this permit). [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 90 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
19	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
20	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U2 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS5 Utility boiler firing coal, natural gas or co-firing coal and natural gas, with SCR and Duct Burner, with/without SNCR and/or AEFLGR

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 0.13 lb/MMBTU based on a 30-day rolling average (no trailing zero implied). The 30-day rolling average emission rate shall be determined by calculating the emission rate of an operating day, and then arithmetically averaging that emission rate with the emission rated for the previous twenty-nine (29) operating days. A new 30-day rolling average shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel.This limit is applicable during all periods of SCR (CD19) operation. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 30 day rolling average. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain 30-Day Rolling average data. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	NOx (Total) <= 0.15 lb/MMBTU based on a 24-hour block average (no trailing zero implied). The 24-hour emission rate shall be determined by dividing the total pounds of pollutant by the total million Btu of heat input (lb/MMBtu) for a 24-hour operating day. A new 24-hour emission rate shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. In calculating the 24-hour NOx emission rate, PSEG Fossil shall exclude: (i) for a Unit that has ceased firing fossil fuel, the period of time, not to exceed eight hours, from the restart of that Unit to the time that the Unit is either fired with coal or synchronized with a utility electric distribution system; and (ii) for a Unit that is to be shut down, the period of time in which the Unit is no longer synchronized with any utility electric distribution system, and is no longer fired with coal. This limit is applicable during all periods of SCR (CD19) operation. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 24 hour period. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain 24-hour emission data. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
3	Boiler fuel limited to coal and natural gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing annually, based on any 60 minute period by July 31 of each year. The reference methods for determining emission rates shall be those specified in 40 CFR Part 60 Appendix A, Method 5, from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results annually , from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule , from Consent Decree. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	PM-10 (Total) <= 90 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing annually, based on any 60 minute period. The reference methods for determining emission rates shall be those specified in 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A, from Consent Decree. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Beryllium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Cadmium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Chromium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Lead Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Mercury Emissions: Monitored by stack emission testing annually, based on any 60 minute period by July 1, using 40 CFR 60 Appendix A EPA Method 29 or Method 101A. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Recordkeeping by stack test results annually. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Nickel Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
15	Manganese Emissions <= 0.055 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Manganese Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
16	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
17	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
18	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Hydrogen fluoride: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Hydrogen fluoride: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
19	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	HCl Emissions: Monitored by stack emission testing annually, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	HCl Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
20	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
21	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
22	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U2 Wet bottom, face fired utility boiler used for electric power generation

Operating Scenario: OS8 Utility boiler firing coal, natural gas or co-firing coal and natural gas, w/in-duct SCR, with/without SNCR and/or AEFLGR,w/wo ACI

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 0.13 lb/MMBTU based on a 30-day rolling average (no trailing zero implied). This limit is applicable during all periods of SCR (CD19) operation. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 30 day rolling average. The 30-day rolling average emission rate shall be determined by calculating the emission rate of an operating day, and then arithmetically averaging that emission rate with the emission rated for the previous twenty-nine (29) operating days. A new 30-day rolling average shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain 30-Day Rolling average data. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2	NOx (Total) <= 0.15 lb/MMBTU based on a 24-hour block average (no trailing zero implied). This limit is applicable during all periods of SCR (CD19) operation. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 24 hour period. In calculating the 24-hour NOx emission rate, PSEG Fossil shall exclude: (i) for a Unit that has ceased firing fossil fuel, the period of time, not to exceed eight hours, from the restart of that Unit to the time that the Unit is either fired with coal or synchronized with a utility electric distribution system; and (ii) for a Unit that is to be shut down, the period of time in which the Unit is no longer synchronized with any utility electric distribution system, and is no longer fired with coal. The 24-hour emission rate shall be determined by dividing the total pounds of pollutant by the total million Btu of heat input (lb/MMBtu) for a 24-hour operating day. A new 24-hour emission rate shall be calculated for each new operating day. Operating day for a Unit shall mean any calendar day on which the Unit fires fossil fuel. [N.J.A.C. 7:27-22.16(e)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Maintain 24-hour emission data. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
3	Boiler fuel limited to coal and natural gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP <= 90 lb/hr. [N.J.A.C. 7:27-22.16(e)]	TSP: Monitored by stack emission testing annually, based on any 60 minute period. Conduct stack test using 40 CFR Part 60 Appendix A, Method 5, by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
5	PM-10 (Total) <= 90 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing annually, based on any 60 minute period. Conduct stack test using 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Conduct stack test by July 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	VOC (Total) <= 153 lb/hr (as CH4). [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. Stack tests must be conducted between April 1 and October 31, 2008, and between April 1 and October 31 each fifth year thereafter. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	VOC (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
7	CO <= 356 lb/hr. [N.J.A.C. 7:27-22.16(e)]	CO: Monitored by stack emission testing every 5 years, based on any 60 minute period. Stack tests must be conducted between April 1 and October 31, 2008, and between April 1 and October 31 each fifth year thereafter. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	CO: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
8	Arsenic Emissions <= 0.25 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Arsenic Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Arsenic Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
9	Beryllium Emissions <= 0.016 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Beryllium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Beryllium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
10	Cadmium Emissions <= 0.33 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Cadmium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Cadmium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
11	Chromium Emissions <= 0.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Chromium Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Chromium Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	Lead Emissions <= 0.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Lead Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Lead Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
13	Mercury Emissions <= 0.34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Mercury Emissions: Monitored by stack emission testing annually, based on any 60 minute period by July 1, using 40 CFR 60 Appendix A EPA Method 29 or Method 101A. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Mercury Emissions: Recordkeeping by stack test results annually. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
14	Nickel Emissions <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Nickel Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Nickel Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
15	Cobalt Emissions <= 0.0114 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Cobalt Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Cobalt Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
16	Manganese Emissions <= 0.055 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Manganese Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Manganese Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
17	Polycyclic organic matter <= 0.052 lb/hr (polycyclic aromatic hydrocarbons). [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Monitored by stack emission testing every 5 years, based on any 60 minute period. Stack tests must be conducted between April 1 and October 31, 2008, and between April 1 and October 31 each fifth year thereafter. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Polycyclic organic matter: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
18	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
19	Ammonia <= 10 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	Ammonia: Monitored by continuous emission monitoring system continuously. [N.J.A.C. 7:27-22.16(o)]	Ammonia: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(o)]
20	Hydrogen fluoride <= 240 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Hydrogen fluoride: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Hydrogen fluoride: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
21	HCl Emissions <= 400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	HCl Emissions: Monitored by stack emission testing annually, based on any 60 minute period. The test shall be conducted beween April 1 and October 31 of each year. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	HCl Emissions: Recordkeeping by stack test results annually. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
22	Sulfuric Acid emissions <= 310 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
23	SO2 <= 610 ppmvd @ 7% O2. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). [N.J.A.C. 7:27-22.16(e)]
24	SO2 <= 4,400 lb/hr. [N.J.A.C. 7:27-22.16(e)]	SO2: Monitored by stack emission testing every 5 years, based on any 60 minute period. Stack tests must be conducted between April 1 and October 31, 2008, and between April 1 and October 31 each fifth year thereafter. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	SO2: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(e)]
25	Phosphorus <= 0.32 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Phosphorus: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Phosphorus: Recordkeeping by stack test results every 5 years. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	Selenium Emissions <= 0.148 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Selenium Emissions: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Selenium Emissions: Recordkeeping by stack test results every 5 years. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]
27	Dioxins/Furans (Total) <= 2.0E-9 lb/hr. Maximum emission limit from certified operating permit application. [N.J.A.C. 7:27-22.16(a)]	Dioxins/Furans (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Dioxins/Furans (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]
28	SO3 <= 500 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U3 Non-utility boiler used for miscellaneous operations firing Natural Gas, 33.5 MMBTU/Hr

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of visible condensed water vapor, except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C.7:27-3.2(a)] & [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Particulate Emissions <= 9.35 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Adjust the combustion process in accordance with N.J.A.C. 7:27-16.24 each calendar year. Record NOx and CO concentration after each adjustment and the O2 concentration at which NOx and CO were measured. [N.J.A.C. 7:27-16.8(c)]	Monitored by periodic emission monitoring (portable instrument) annually, based on no averaging period. The owner or operator of the equipment or source operation shall: □1. Inspect the burner, and clean or replace any components of the burner as necessary to minimize total emissions NOx and CO; □2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and □3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter annually. The owner or operator of the adjusted equipment or source operation shall record each adjustment conducted under N.J.A.C. 7:27-19.16(a) in a permanently bound log book containing the following information for each adjustment: □1. The date of the adjustment and the times at which it began and ended; □2. The name, title and affiliation of the person who made the adjustment; □3. The NOx concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; □4. The CO concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; and □5. The concentration of O2 at which the CO and NOx concentrations pursuant to (3) and (4) were measured. [N.J.A.C. 7:27-19.16(c)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Annual heat input based on maximum annual fuel use (13.4 MMCUFT/YR) is 2.9346E 11 Btu/any consecutive 12 month period. [N.J.A.C.7:27-22.16(e)] and [N.J.A.C. 7:27-22.16(o)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter daily. Manually or electronically log the gross heat input in MM Btu in any consecutive 12 month period days in a logbook or electronically (computer, DAS or electronic operating system). The Annual Gross Heat Input in MM Btu per consecutive 12 month period is computed by adding the gross heat input for any month to the gross heat input for the preceding 11 months. The gross heat input for a given day shall be the total of 24 readings taken once per hour. The gross heat input for a given month shall be the total of the daily heat inputs for the month. This procedure will begin the first full month following the final issuance of the Operating Permit. This accounting will not include MM Btu calculations during the months prior to the approval of the Operating Permit. The permittee will select the time period for accounting, such as fiscal month, calendar month or production month. Once selected, the period must not be changed without prior approval from NJDEP. [N.J.A.C. 7:27-22.16(o)]	None.
5	Boiler fuel limited to Natural Gas [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	Maximum Gross Heat Input <= 33.5 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	Other: Fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
7	NOx (Total) <= 7.4 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	VOC (Total) <= 0.4 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	CO <= 12 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	TSP <= 0.7 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	PM-10 (Total) <= 0.7 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U3 Non-utility boiler used for miscellaneous operations firing Natural Gas, 33.5 MMBTU/Hr

Operating Scenario: OS1 Non-utility boiler firing natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 1.68 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	VOC (Total) <= 0.2 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	CO <= 2.75 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP < 0.17 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 0.17 lb/hr. Maximum emission rate from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U4 Non-utility boiler used for miscellaneous operations firing Natural Gas, 25.2 MMBTU/Hr

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No visible emissions exclusive of visible condensed water vapor, except for a period of not longer than three minutes in any consecutive 30-minute period. [N.J.A.C.7:27-3.2(a)] & [N.J.A.C. 7:27-3.2(c)]	None.	None.	None.
2	Particulate Emissions <= 8.52 lb/hr. Particulate emission limit from the combustion of fuel based on rated heat input of source. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Adjust the combustion process in accordance with N.J.A.C. 7:27-16.24 each calendar year. Record NOx and CO concentration after each adjustment and the O2 concentration at which NOx and CO were measured. [N.J.A.C. 7:27-16.8(c)]	Monitored by periodic emission monitoring (portable instrument) annually, based on no averaging period. The owner or operator of the equipment or source operation shall: □1. Inspect the burner, and clean or replace any components of the burner as necessary to minimize total emissions NOx and CO; □2. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and □3. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. [N.J.A.C. 7:27-19.16(a)]	Recordkeeping by manual logging of parameter annually. The owner or operator of the adjusted equipment or source operation shall record each adjustment conducted under N.J.A.C. 7:27-19.16(a) in a permanently bound log book containing the following information for each adjustment: □1. The date of the adjustment and the times at which it began and ended; □2. The name, title and affiliation of the person who made the adjustment; □3. The NOx concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; □4. The CO concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; and □5. The concentration of O2 at which the CO and NOx concentrations pursuant to (3) and (4) were measured. [N.J.A.C. 7:27-19.16(c)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Annual heat input based on maximum annual fuel use (10.0 MMCUFT/YR) is 2.21E 11 Btu/any consecutive 12 month period. [N.J.A.C.7:27-22.16(e)] and [N.J.A.C. 7:27-22.16(o)]	Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) and calculations. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter daily. Manually or electronically log the gross heat input in MM Btu in any consecutive 12 month period days in a logbook or electronically (computer, DAS or electronic operating system). The Annual Gross Heat Input in MM Btu per consecutive 12 month period is computed by adding the gross heat input for any month to the gross heat input for the preceding 11 months. The gross heat input for a given day shall be the total of 24 readings taken once per hour. The gross heat input for a given month shall be the total of the daily heat inputs for the month. This procedure will begin the first full month following the final issuance of the Operating Permit. This accounting will not include MM Btu calculations during the months prior to the approval of the Operating Permit. The permittee will select the time period for accounting, such as fiscal month, calendar month or production month. Once selected, the period must not be changed without prior approval from NJDEP. [N.J.A.C. 7:27-22.16(o)]	None.
5	Boiler fuel limited to Natural Gas [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	Maximum Gross Heat Input <= 25.2 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(e)]	Other: Fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
7	NOx (Total) <= 8.8 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	VOC (Total) <= 0.3 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	CO <= 12 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	TSP <= 0.6 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	PM-10 (Total) <= 0.6 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U4 Non-utility boiler used for miscellaneous operations firing Natural Gas, 25.2 MMBTU/Hr

Operating Scenario: OS1 Non-utility boiler firing natural gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 2 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	VOC (Total) <= 0.07 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	CO <= 2.75 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	TSP < 0.13 lb/hr. Maximum emission rate from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	PM-10 (Total) <= 0.13 lb/hr. Maximum emission rate from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U5 Eight simple-cycle stationary gas turbines used for electric power generation, each 288 MMBTU/Hr

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for a period of more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Other: Periodic Visual Observations. Once every 100 operating hours of oil firing operation. A certified smoke reader shall conduct visual observations once every 100 hours of oil firing operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at the lesser frequency shall also be recorded.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by manual logging of visual observations in a permanently bound log book once every 100 hours of oil firing operation. The permittee shall record the date and time when visible emissions are observed during operation of the four (4) modules under the operating conditions specified in this section. All records shall be kept on-site at least for five (5) years, and readily made available to the Department upon request.[N.J.A.C. 7:27-22.16(o)].	None.
2	Particulate Emissions <= 28.8 lb/hr per turbine. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.2 % sulfur by weight based on fuel oil type/viscosity and geographical zone. [N.J.A.C. 7:27- 9.2(b)]	Other: Monitored by invoices/bills of lading per delivery.[N.J.A.C. 7:27-22.16(o)].	Sulfur Content in Fuel: Recordkeeping by invoices / bills of lading per delivery showing sulfur content. [N.J.A.C. 7:27-22.16(o)]	None.
4	CO <= 250 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing once initially and every 5 years, based on the average of three tests , each performed over a consecutive 60-minute period. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and every 5 years. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 50 ppmvd @ 15% O2. [N.J.A.C. 7:27-16.9(c)]	VOC (Total): Monitored by stack emission testing once initially and every 5 years, based on the average of three tests , each performed over a consecutive 60-minute period. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and every 5 years. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Adjust the combustion process in accordance with N.J.A.C. 7:27-16.24 before May 1 of each year. [N.J.A.C. 7:27-16.9(f)]	Other: Evaluate and calibrate turbine, if necessary, to verify that it is being operated within the manufacturer's operational limits. In addition, ensure that inspections and maintenance are being performed in support of running the turbine with these operating limits.[N.J.A.C. 7:27-22.16(a)].	Recordkeeping by manual logging of parameter annually. The owner or operator of the adjusted equipment or source operation shall record each adjustment conducted under N.J.A.C. 7:27-19.16(a) in a permanently bound log book containing the following information for each adjustment: □1. The date of the adjustment and the times at which it began and ended; □2. The name, title and affiliation of the person who made the adjustment; □3. The NOx concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; □4. The CO concentration in the effluent stream, in either ppmv or ppmvd, after each adjustment was made; and □5. The concentration of O2 at which the CO and NOx concentrations pursuant to (3) and (4) were measured. Maintain the Gas Generator log, PJM test data sheet and Gas Turbine Engine Hour Report. . [N.J.A.C. 7:27-19.16(c)]	None.
7	Calibrate turbine temperature control system which governs the firing of the combustion turbine. [N.J.A.C. 7:27-22.16(a)]	Other: Calibrate turbine temperature control system which governs the firing of the combustion turbine one per calendar year.[N.J.A.C. 7:27-22.16(a)].	Other: The owner or operator shall maintain records of Gas Generator Log, PJM Test Data Sheet, and Gas Turbine Engine Hour Report. Annually.[N.J.A.C. 7:27-22.16(a)].	None.
8	Perform inspections, cleanings and repairs as necessary to maintain the mechanical integrity based on the manufacturer's recommendations. [N.J.A.C. 7:27-22.16(a)]	Other: During the manufacturer's recommended combustion inspections and planned shutdowns, inspect and clean fuel nozzle burner assemblies and replace or repair any defective components, inspect the combustion burners and repairs as necessary to maintain mechanical integrity.[N.J.A.C. 7:27-22.16(a)].	Other: The owner or operator shall maintain records of Gas Generator Log, PJM Test Data Sheet, and Gas Turbine Engine Hour Report. Every 1500 operating hours and during planned shutdowns.[N.J.A.C. 7:27-22.16(a)].	None.
9	PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. The current NOx averaging plan will be filed with the operaing permit at the Department. [N.J.A.C. 7:27-19.14(f)]	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other: PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department.[N.J.A.C. 7:27-19.14(f)].	Other (provide description): As per the approved schedule PSEG must comply with the requirements of its NOx Emissions Averaging Plan as approved and modified by the Department. [N.J.A.C. 7:27-19.14(f)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	NOx (Total) <= 1 lb/MMBTU. [N.J.A.C.7:27-19.5(a)] and. [N.J.A.C. 7:27-19.14(f)]	NOx (Total): Monitored by stack emission testing every 5 years, based on the average of three tests , each performed over a consecutive 60-minute period. See elsewere in OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(o)]
11	Combustion turbine fuel limited to distillate oil. Distillate oil includes #2 fuel oil, kerosene, or a mixture of these distillate products. [N.J.A.C. 7:27-22.16(a)]	Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(o)]	Other: Keep records of invoices/bills of lading showing materials delivered. Per Delivery.[N.J.A.C. 7:27-22.16(o)].	None.
12	VOC (Total) <= 686.3 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	NOx (Total) <= 10,091.5 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	CO <= 5,954.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	SO2 <= 2,018.3 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	TSP <= 1,009.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
17	PM-10 (Total) <= 2,816.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. The owner or operator shall submit an operating permit modification application requesting a PM-10 emission limit pursuant to N.J.A.C.7:27-22.23 or N.J.A.C.7:27-22.24, within 24 months of the approval of the initial operating permit. [N.J.A.C. 7:27-22.16(a)]
18	Arsenic compounds <= 0.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
19	Cadmium compounds <= 0.05 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
20	Lead compounds <= 0.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Manganese compounds <= 8 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
22	Mercury compounds <= 0.02 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
23	Butadiene (1,3-) <= 0.2 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
24	Formaldehyde <= 2.9 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
25	Polynuclear aromatic hydrocarbons (PAH's) <= 0.5 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
26	Polycyclic organic matter <= 0.3 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Selenium Emissions <= 0.3 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	1-Methylnaphthalene<=0.02 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Maximum Gross Heat Input <= 288 MMBTU/hr (HHV) for each turbine. Maximum heat input limit from preconstruction permit. [N.J.A.C. 7:27-22.16(a)]	Other: Fuel burner's rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
30	Annual Gross Heat Input <= 2.0183 x 10^13 BTU/any period of 365 consecutive day, for the combined operation of all 8 turbines, based on 288 MMBtu/hr and 8760 hours of operation per year. [N.J.A.C. 7:27-22.16(a)]	Monitored by other method (provide description) at the approved frequency Monitored by electrical output meter. Continuously. [N.J.A.C. 7:27-22.16(a)]	Other: Manually or electronically log the gross heat input in MMBTU and fuel use in gallons for any period of 365 consecutive days in a log book or electronically (computer, DAS or electronic operating system) each day. The Annual Gross Heat Input in MMBTU per any consecutive 365 day period is computed by adding the gross heat input for any day to the gross heat input for the preceding 364 days. The gross heat input for a given day shall be the total of 24 reading taken once per you. Hourly actual heat input (MMBTU) shall be calculated as follows: (xMMBTU) x 15.65 MMBTU/MW-hr, where "x" is the actural electrical output and 15.65 is the heat rate based on the value listed in NOx emissions averaging plan. Calculate the hourly actual fuel use. The gallons for any period of 365 consecutive days in computed by adding the gallons on a given day to the gallons comsumed during the preceeding 364 days. This procedure will begin the first day following the final issuance of the Operating Permit. The accounting will not include MMBTU calculations or fuel used during the 365 days prior to the approval of the Operating Permit.[N.J.A.C. 7:27-22.16(o)].	Other (provide description): As per the approved schedule. If the turbine no longer qualifies as a peaking unit, the permittee will be required to install, certify, and operate a fuel flow meter and data acquisition system/electronic data storage to monitor fuel use continuously and record data hourly. The deadline to monitor and record fuel use instead of complying with annual MMBtu limit will not be later than December 31 of the calendar year that the turbine is no longer considered a peaking unit. Monitoring and recordkeeping to determine compliance with the heat input limit will continue to be a requirement until the date that a fuel flow meter and data acquisition system/electronic data storage is used to monitor and record fuel use. [N.J.A.C. 7:27-22.16(o)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	Conduct a comprehensive stack test at emission points PT6 at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the the VOC, CO, NOx and TSP emission limits When conducting stack emission testing, three one-hour tests shall be conducted at maximum load. [N.J.A.C. 7:27-22.16(o)]	Other: Stack emission testing. Stack test shall be conducted for NOx, CO, VOC and TSP based on any 60 minute period.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by stack test results every 5 years. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit. Test results shall report lbs/hour and ppmvd @ 15% O2 [N.J.A.C. 7:27-22.18(e)] and. [N.J.A.C. 7:27-22.18(h)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U5 Eight simple-cycle stationary gas turbines used for electric power generation, each 288 MMBTU/Hr

Operating Scenario: OS1 Turbine firing distillate oil, OS2 Turbine firing distillate oil, OS3 Turbine firing distillate oil, OS4 Turbine firing distillate oil, OS5 Turbine firing distillate oil, OS6 Turbine firing distillate oil, OS7 Turbine firing distillate oil, OS8 Turbine firing distillate oil

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 288 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
2	CO <= 169.9 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
3	VOC (Total) <= 19.6 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(o)]
4	SO2 <= 57.6 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	TSP <= 28.8 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing every 5 years, based on any 60 minute period. See OS Summary for stack test requirments. [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results every 5 years. See OS Summary for stack test requirments. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirments. [N.J.A.C. 7:27-22.16(o)]
6	PM-10 (Total) <= 28.8 lb/hr. Maximum emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period. See OS Summary for stack testing requirments. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See OS Summary for stack testing requirments. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack testing requirments. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U7 Gasoline Storage Tank - 2,500 Gallons
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maintain records specifying each VOC stored in each tank, and the vapor pressure of each VOC at standard conditions. [N.J.A.C. 7:27-16.2(k)]	None.	Other: Maintain records specifying each VOC stored in the tanks, and the vapor pressure of each VOC at standard conditions. The required information shall be recorded in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-16.2(k)].	None.
2	No person shall cause, suffer, allow or permit the transfer of gasoline into any receiving vessel having a capacity of 2,000 gallons or greater unless such transfer is made through a submerged fill pipe, which shall be permanently affixed to the receiving vessel. Each tank is equipped with a submerged fill permanently affixed to the tank. [N.J.A.C. 7:27-16.3(c)1]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	No person shall cause, suffer, allow, or permit the transfer of gasoline from a delivery vessel into any stationary storage tank having a maximum capacity of 2,000 gallons or greater unless 1. The sotrage tank is equipped with and operating one of the following emission controls: i A vapor control system that : (1) reduces the total applicable VOC emissions into the outdoor atmosphere by no less than 98 percent of the concentration of applicable VOC by volume in the air vapor mixture displaced during the transfer of gasoline: and (2) includes a pressure/vacuum relief valve on each atmospheric vent which remains closed during the gasoline transfer; or ii A floating roof; and 2. The storage tank meets the requirements of N.J.A.C.7:27-16.2. [N.J.A.C. 7:27-16.3(d)]	None.	None.	None.
4	Maintain records for a period of no less than five years. [N.J.A.C. 7:27-16.22(a)]	None.	Other: Maintain the required records for a period of no less than five years and make those records available upon the request of the Department or EPA, or any duly authorized representative of the Department or EPA.[N.J.A.C. 7:27-16.22(a)].	None.
5	The contents of the tank shall be limited to gasoline. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by invlices/bills-of lading per change of material per tank.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining invoices/bills-of-lading showing material stored in the tanks, vapor pressure and date the tank contents (material) was replaced or added to each tank.[N.J.A.C. 7:27-22.16(o)].	None.
6	Total Material Transferred <= 9,500 gallons per year through the tank, from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by tank gauging per occurrence.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping my manual logging of throughput, in a permanently bound log book or in readily accessible computer memories, per usage event.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U10 Clamshell unloader, hopper, breaker, and conveyors used to transfer coal from barges to coal pile

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr. Maximum emission limit based on 99% efficiency. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	The equipment shall not be used in a manner which will cause visible emissions, exclusive of condensed water vapor. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	Material processed in the Coal Receiving System shall be limited to coal. This system includes Barge Unloading, Open Coal Conveyor, Conveyor Towe, Break House, Swing Boom Tower and Coal Piling. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by invoices/bills-of loading, for each receiving operation, showing material received.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter per change of material. Recordkeeping by invoices/bills-of-lading per coal delivery, showing the material delivered. [N.J.A.C. 7:27-22.16(o)]	None.
5	Total Material Transferred <= 940 tons/hr. Coal throughput limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring by computerized coal tracking system, per bulk shipment.[N.J.A.C. 7:27-22.16(o)].	Total Material Transferred: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. . [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Total Material Transferred <= 8.2344 tons (Million) per year based on 8760 hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring by computerized coal tracking system, per bulk shipment.[N.J.A.C. 7:27-22.16(o)].	Total Material Transferred: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. Also record the year-to-date coal received. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(o)]	None.
7	TSP <= 6.7 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	TSP: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total) <= 6.7 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	PM-10 (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.
9	The Coal Boom Dust Supression System performance shall be determined by periodic inspection of the system in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by inspecting the system in accordance with manufacturer's specification at the startup of each time the system is operated.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter upon occurrence of event in a permanently bound logbook, readily accessible computer memories. Record the following information: (1) Date and time of inspection. (2) Control Device Number. (3) Observed results and conclusions. (4) Description of corrective action if taken. (5) Name(s) of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U10 Clamshell unloader, hopper, breaker, and conveyors used to transfer coal from barges to coal pile

Operating Scenario: OS1 Coal receiving system-Clamshell unloader, hopper, breaker, and conveyors used to transfer coal from barges to coal pile

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 1.53 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	TSP: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.
2	PM-10 (Total) <= 1.53 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	PM-10 (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Conveyors and hoppers used to transfer coal from coal pile to storage silos
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 4 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	TSP: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.
2	PM-10 (Total) <= 4 tons/yr. Annual emission limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	PM-10 (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.
3	Material processed in the Coal Reclaim System shall be limited to coal. This system includes Coal Tower, Open Coal Conveyor and Pulverizers. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by process records, showing material material processed in the system.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter per change of material. Recordkeeping by process reocrds showing the material processed in the system. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Total Material Transferred <= 300 tons/hr. Coal throughput limit from operating permit application. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring by computerized tracking system or process records.[N.J.A.C. 7:27-22.16(o)].	Total Material Transferred: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date and amount of coal usage. [N.J.A.C. 7:27-22.16(o)]	None.
5	Total Material Transferred <= 2.628 tons (Million) per year based on 8760 hours per year of operation. [N.J.A.C. 7:27-22.16(a)]	Other: Monitoring by computerized tracking system or process records.[N.J.A.C. 7:27-22.16(o)].	Total Material Transferred: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date and amount of coal along with the year-to-date usage. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U11 Conveyors and hoppers used to transfer coal from coal pile to storage silos

Operating Scenario: OS1 Coal reclaim system

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 1.53 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	TSP: Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.
2	PM-10 (Total) <= 1.53 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	PM-10 (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage once per bulk fuel shipment. Record in computerized coal tracking system, the date coal was received, the coal suppliers name and address, the quantity of coal received and the sulfur content of the coal. PSEG Fossil LLC shall make this information available to the Department upon request. All log books, and records of shipping receipts pursuant to this permit shall be maintained in a manner acceptable to the Regional Enforcement Officer for a period of 5 years after the date of each record, and shall be made available upon request of the Department. [N.J.A.C. 7:27-22.16(e)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U12 Salable Flyash Silo and Pneumatic Conveyor
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 19.73 lb/hr. Maximum emission limit based on 99 percent control efficiency. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	TSP <= 10.4 tons/yr. Annual emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	PM-10 (Total): Tons per year annual emission limit to be established from stack test(s) results. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. The owner or operator shall submit an operating permit modification application requesting a PM-10 emission limit pursuant to N.J.A.C.7:27-22.23 or N.J.A.C.7:27-22.24, within 24 months of the approval of the initial operating permit. [N.J.A.C. 7:27-22.16(o)]
5	Total Material Transferred <= 154,176 tons/yr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.
6	The material processed in the equipment shall be limited to fly ash. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Baghouse performance for particulates shall be determined by periodic visual inspection of the bags and maintenance of the baghouse in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by daily visual check and and biweekly inspections in accordance with the manufacturer's specifications.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter once initially , at the startup of transfer operation, in a permanently bound logbook, readily accessible computer memories or other method approved in advance by the Regional Enforcement Office. Record the following information: (1) Date and time of inspection. (2) Control Device Number. (3) Observed results and conclusions. (4) Description of corrective action if taken. (5) Name(s) of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total): The owner or operator shall conduct a series of stack tests for PM-10. The test results shall be submitted to BTS for approval after each test. In addition all the test results shall be submitted to the BOP with a operating permit modification application requesting a PM-10 lb/hr and tons per year emission limit. The owner or operator shall determine the number of stack tests needed to establish the PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period When conducting stack tests three tests shall be performed at maximum loading. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 90 days of the approved operating permit modification BOP040001. The protocol shall include a schedule for the initial and additional stack tests. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. Additional stack tests shall be conducted at frequencies established by the facility. Within 24 months of the approval of the operating permit modification BOP040001, copies of all test results must be submitted to the Bureau of Operating Permit along with the operating permit modification application requesting a PM-10 lbs per hour and tons per year emission limits. Test results shall report lbs/hour. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U12 Salable Flyash Silo and Pneumatic Conveyor
Operating Scenario: OS1 Salable fly ash handling system

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 2.35 lb/hr. Maximum emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	PM-10 (Total): Hourly emission limit to be established from stack tests. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period. See OS Summary for stack test requirements. Upon establishing the limit, stack testing shall be conducted annually as required by the Consent Decree. The reference methods for determining emission rates shall be those specified in 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A, from Consent Decree. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
3	Total Material Transferred <= 17.6 tons/hr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U13 Storage of kiln dust
Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 0.5 lb/hr. Maximum emission limit based on 0.02 grains per scf. [N.J.A.C. 7:27- 6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	TSP <= 0.5 tons/yr. Annual emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	PM-10 (Total): Tons per year annual emission limit to be established from stack test(s) results. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. The owner or operator shall submit an operating permit modification application requesting a PM-10 emission limit pursuant to N.J.A.C.7:27-22.23 or N.J.A.C.7:27-22.24, within 24 months of the approval of the initial operating permit. [N.J.A.C. 7:27-22.16(o)]
5	Total Material Transferred <= 219,000 tons/yr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.
6	The material processed in the equipment shall be limited to Kiln Dust. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Baghouse performance for particulates shall be determined by periodic visual inspection of the bags and maintenance of the baghouse in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by daily visual check and and biweekly inspections in accordance with the manufacturer's specifications.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter once initially , at the startup of transfer operation, in a permanently bound logbook, readily accessible computer memories or other method approved in advance by the Regional Enforcement Office. Record the following information: (1) Date and time of inspection. (2) Control Device Number. (3) Observed results and conclusions. (4) Description of corrective action if taken. (5) Name(s) of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total): The owner or operator shall conduct a series of stack tests for PM-10. The test results shall be submitted to BTS for approval after each test. In addition all the test results shall be submitted to the BOP with a operating permit modification application requesting a PM-10 lb/hr and tons per year emission limit. The owner or operator shall determine the number of stack tests needed to establish the PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period When conducting stack tests three tests shall be performed at maximum loading. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 90 days of the approved operating permit modification BOP040001. The protocol shall include a schedule for the initial and additional stack tests. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. Additional stack tests shall be conducted at frequencies established by the facility. Within 24 months of the approval of the operating permit modification BOP040001, copies of all test results must be submitted to the Bureau of Operating Permit along with the operating permit modification application requesting a PM-10 lbs per hour and tons per year emission limits. Test results shall report lbs/hour. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U13 Storage of kiln dust

Operating Scenario: OS1 Kiln Dust Silo

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.103 lb/hr. Maximum emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	PM-10 (Total): Hourly emission limit to be established from stack tests. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period. See OS Summary for stack test requirements. Upon establishing the limit, stack testing shall be conducted annually as required by the Consent Decree. The reference methods for determining emission rates shall be those specified in 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A, from Consent Decree. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
3	Total Material Transferred <= 50,000 lb/hr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U14 Non-salable flyash Silo and Pneumatic Conveyor

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Particulate Emissions <= 19.78 lb/hr. Maximum emission limit based on 99 percent control efficiency. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Opacity <= 20 %. Opacity greater than 20%, exclusive of condensed water vapor, shall not exceed a period of 3 minutes in any consecutive 30 minute period. [N.J.A.C.7:27-6.2(d)] &. [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	TSP <= 8.93 tons/yr. Annual emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	PM-10 (Total): Tons per year annual emission limit to be established from stack test(s) results. See elsewhere in OS Summary for stack testing requirements. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submit documentation of compliance: As per the approved schedule. The owner or operator shall submit an operating permit modification application requesting a PM-10 emission limit pursuant to N.J.A.C.7:27-22.23 or N.J.A.C.7:27-22.24, within 24 months of the approval of the initial operating permit. [N.J.A.C. 7:27-22.16(o)]
5	Total Material Transferred <= 154,176 tons/yr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.
6	The material processed in the equipment shall be limited to fly ash. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	Other: Recordkeeping by maintaining production records showing type of material processed in the tank.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Baghouse performance for particulates shall be determined by periodic visual inspection of the bags and maintenance of the baghouse in accordance with the manufacturer's specifications. [N.J.A.C. 7:27-22.16(o)]	Other: Monitored by daily visual check and and biweekly inspections in accordance with the manufacturer's specifications.[N.J.A.C. 7:27-22.16(o)].	Recordkeeping by manual logging of parameter once initially , at the startup of transfer operation, in a permanently bound logbook, readily accessible computer memories or other method approved in advance by the Regional Enforcement Office. Record the following information: (1) Date and time of inspection. (2) Control Device Number. (3) Observed results and conclusions. (4) Description of corrective action if taken. (5) Name(s) of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	PM-10 (Total): The owner or operator shall conduct a series of stack tests for PM-10. The test results shall be submitted to BTS for approval after each test. In addition all the test results shall be submitted to the BOP with a operating permit modification application requesting a PM-10 lb/hr and tons per year emission limit. The owner or operator shall determine the number of stack tests needed to establish the PM-10 emission limit. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period When conducting stack tests three tests shall be performed at maximum loading. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 90 days of the approved operating permit modification BOP040001. The protocol shall include a schedule for the initial and additional stack tests. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist. Additional stack tests shall be conducted at frequencies established by the facility. Within 24 months of the approval of the operating permit modification BOP040001, copies of all test results must be submitted to the Bureau of Operating Permit along with the operating permit modification application requesting a PM-10 lbs per hour and tons per year emission limits. Test results shall report lbs/hour. [N.J.A.C. 7:27-22.16(a)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U14 Non-salable flyash Silo and Pneumatic Conveyor

Operating Scenario: OS1 Non-salable fly ash handling system

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 2.04 lb/hr. Maximum emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	PM-10 (Total): Hourly emission limit to be established from stack tests. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period. See OS Summary for stack test requirements. Upon establishing the limit, stack testing shall be conducted annually as required by the Consent Decree. The reference methods for determining emission rates shall be those specified in 40 CFR Part 51 Appendix M, Method 202 and Method 201 or 201A, from Consent Decree. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. See OS Summary for stack test requirements. [N.J.A.C. 7:27-22.16(a)]
3	Total Material Transferred <= 17.6 tons/hr , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Total Material Transferred: Monitored by production records monthly.[N.J.A.C. 7:27-22.16(o)].	Other: Total Material Transferred: Recordkeeping by manual logging of material usage monthly, along with the year-to-date usage, in a permanently bound log book or in readily accessible computer memories.[N.J.A.C. 7:27-22.16(o)].	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U15 Emergency Fire Pump, 2.5 MMBTU/Hr

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	No person shall cause, suffer, allow or permit smoke the shade or appearance of which is darker than number 1 on the Ringelmann smoke chart or greater than 20 percent opacity, exclusive of visible water vapor, to be emitted into the outdoor air for a period of more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	None.	None.	None.
2	Particulate Emissions <= 1.5 lb/hr , based on Maximum Gross Heat Input. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Opacity <= 10 % , exclusive of condensed water vapor. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
4	Fire pump fuel limited to natural gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	Maximum Gross Heat Input <= 2.5 MMBTU/hr (HHV) , from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel burner rated capacity.[N.J.A.C. 7:27-22.16(o)].	None.	None.
6	Total Hours of Operation <= 500 hr/yr. Total operating time of the fire pump. [N.J.A.C. 7:27-22.16(e)]	Total Hours of Operation: Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(e)]	Total Hours of Operation: Recordkeeping by manual logging of parameter annually. [N.J.A.C. 7:27-22.16(o)]	None.
7	TSP < 0.05 lb/hr. Maximum emission limit from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	NOx (Total) <= 1.64 tons/yr. Annual emission limit based on 500 hours/year of operation, from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	CO <= 1.64 tons/yr. Annual emission limit based on 500 hours/year of operation, from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	VOC (Total) <= 0.04 tons/yr. Annual emission limit based on 500 hours/year of operation, from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1501 External Fuel Combustion Unit, Port Boiler#1 and Port Boiler #2, each <10 MMBTU/Hr

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The permittee shall ensure combustion equipment is easily identifiable, by clear and conspicuous labeling, using Subject Item E-NJID and its Facility Designation. The permittee shall also maintain a process flow diagram showing locations of all combustion units and fuel monitoring device(s). [N.J.A.C. 7:27-22.16(e)]	None.	The permittee shall maintain on site a copy of the equipment manufacturer's specifications and instructions manual for the life of each combustion unit and fuel monitoring device. All records including permit and certificate relating to this GP shall be made readily available for the Department's inspection on the operating premises. Recordkeeping by other recordkeeping method (provide description) once initially. [N.J.A.C. 7:27-22.16(e)]	None.
2	The permittee shall not use the equipment in a manner which will cause visible emissions, exclusive of visible condensed water vapor, except for a period of no more than 3 minutes in any consecutive 30 minute period. [N.J.A.C. 7:27- 3.2]	The permittee shall visually observe the stack once each month if the equipment is used for more than 2 continuous hours during the month. Note: Visual Observation may be performed by a non-certified smoke reader. The intent here, is to look for unusual smoking of equipment. Monitored by visual determination each month during operation, based on any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(e)]	The permittee shall record in either a permanent bound log book, or in readily accessible computer memories, that the stack was observed (date and time) and if operation of the equipment causes visible emissions (exclusive of condensed water vapor) for a period longer than 3 minutes in any consecutive 30 minute period. All records shall be maintained on-site for a minimum of 5 years. All records including the permit and certificate relating to this GP shall be made readily available for the Department's inspection on the operating premises. Recordkeeping by manual logging of parameter upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]	If visible emissions are observed, the permittee shall refer to the operator manual for corrective action. If measures fail to correct visible emissions within 24 hours of observation, the permittee shall report the incident in writing to the Regional Enforcement Office within 3 working days. Repair equipment: Upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]
3	Particulate Emissions <= 6 lb/hr per boiler, based on the gross heat input rate. [N.J.A.C. 7:27- 4.2]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	This equipment shall not cause any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration, which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property, except in areas over which the owner or operator has exclusive use or occupancy. [N.J.A.C. 7:27-22.16(e)]	None.	The permittee shall record in either a permanently bound log book, or in readily accessible computer memories, instances (date and time) when the operation of the equipment causes off-property effects. All records shall be maintained on-site for a minimum of 5 years. All records including the permit and certificate relating to this GP shall be made readily available for the Department's inspection on the operating premises. Recordkeeping by manual logging of parameter upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]	Any operation of the equipment which may cause a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare, or the environment or which might reasonably result in citizen complaints shall be reported by the Permittee as required by the Air Pollution Control Act. The Permittee shall immediately notify the Department of any non-compliance by calling the Environmental Action Hotline at (877) 927-6337 Notify by phone: Upon occurrence of event. [N.J.S.A. 26:2C-19(e)]
5	Fuel Oil Usage <= 100,000 gal/yr. Maximum liquid fuel (total No.2 Fuel Oil, Diesel and/or Kerosene) limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	The permittee shall install and operate a totalizing fuel flow meter monitoring the total amount of fuel burned per year based on a 12 consecutive month period (rolling 1 month basis) by a single unit or group of multiple units. Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(e)]	The permittee shall record from readings from the totalizer monthly in either a permanently bound logbook or readily accessible computer memory. All records shall be maintained on-site for a minimum of five 5 years. All records including the permit and certificate relating to this GP shall be made readily available for the Department's inspection on the operating premises. Fuel Oil Usage: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(e)]	In the event the 12 month consecutive period limit is exceeded, the permittee shall submit a notification, in writing to the Regional Enforcement Office within 3 working days, from the date of the occurrence of the event. Submit a report: Upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]
6	The maximum allowable fuel oil (Number 2 commercial fuel oil, diesel or kerosene) sulfur content shall be less than or equal to 0.2 weight percent. [N.J.A.C. 7:27- 9.2]	For each fuel delivery, the permittee shall review the certificate of analysis from the oil distributor for fuel oil sulfur content. Monitored by review of fuel delivery records once per bulk fuel shipment. [N.J.A.C. 7:27-22.16(e)]	The permittee shall record in either a permanently bound log book or in readily accessible computer memories the fuel oil sulfur content for each delivery received. All records shall be maintained on-site for a minimum of five 5 years. All records including the permit and certificate relating to this GP shall be made readily available for the Department's inspection on the operating premises. Recordkeeping by manual logging of parameter once per bulk fuel shipment. [N.J.A.C. 7:27-22.16(e)]	In the event the sulfur content is exceeded, the permittee shall submit a notification, in writing to the Regional Enforcement Office within 3 working days, from the date of the occurrence of the event. Submit notification: Upon occurrence of event. [N.J.A.C. 7:27-22.16(e)]
7	The conditions of approval specified in the Facility Specific Requirements and any condition contained in the General Provisions [pursuant to N.J.A.C. 7:27-8.3], shall be subject to enforcement. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Boiler fuel limited to natural gas, propane, kerosene, diesel oil or No.2 fuel oil exclusively. [N.J.A.C. 7:27-22.16(e)]	Monitored by review of fuel delivery records once per bulk fuel shipment. [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by maintaining fuel delivery records per bulk shipment.[N.J.A.C. 7:27-22.16(o)].	None.
9	TSP <= 0.1 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	SO2 <= 1.42 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	NOx (Total) <= 1 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	CO <= 0.25 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	VOC (Total) <= 0.03 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1701 Cold Cleaning Machine-Open Top, Non-HAP VOC with vapor pressure<0.02 psia at 68 deg F

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Maximum solvent purchased for any 12-month period<=1,250 gallons of VOC solvent. [N.J.A.C. 7:27-22.16(e)]	Monitored by other method (provide description) each month during operation, based on a consecutive 12 month period (rolling 1 month basis). Each month during operation the permittee shall monitor the amount of solvent purchased for all cleaning machines covered by this general permit and determine the total solvent purchased in the previous 12 consecutive months. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter each month during operation. The permittee shall record the amount of solvent purchased for all registered machines, sum and record all monthly solvent purchased to determine the monthly total solvent purchased, sum and record the monthly total solvent purchased with the previous eleven- (11) month totals to determine the consecutive twelve- (12) month total. Records shall be maintained onsite in either a logbook or computer data system or readily accessible computer memory for a minimum of five (5) years. . [N.J.A.C. 7:27-22.16(e)]	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
2	Each cleaning machine shall be fully enclosed, a tightly fitting working-mode cover that shall be kept closed at all times except when parts are placed into or being removed from the machine or when solvent is being added or removed. The cover shall: 1. Completely cover the machine's opening; 2. Be free of cracks, holes and other defects; and 3. If the machine is a batch or in-line vapor-cleaning machine it must be able to be readily opened or closed without disturbing the vapor zone. If the opening is > 10 square feet, the cover shall be opened and closed by a powered mechanism. [N.J.A.C. 7:27-16.6]	Monitored by visual determination each month during operation. Each month during operation the permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the machine openings when closed, and is free of cracks, holes, and other defects. [N.J.A.C. 7:27-22.16(e)]	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Flushing or spraying of parts with a solvent spray, using a spray head attached to a flexible hose or other flushing device, shall be performed within the following areas: 1. The freeboard area of the machine (cold or heated cleaning machines). 2. The vapor zone or within a section of the machine that is not exposed to ambient air (batch or in-line vapor cleaning machines). The solvent spray shall be a continuous fluid stream, not an atomized or shower spray, and shall be under a pressure that does not exceed 10 pounds per square inch gauge (Psig). [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
4	Parts being cleaned shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back into the machine. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
5	Spills during solvent transfer and use of the machine shall be cleaned up immediately or the machine shall be shut down. Wipe rags or other sorbent material shall be immediately stored in covered containers with tightly fitting lids for disposal or recycling. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
6	Waste solvent, still bottoms and sump bottoms shall be collected and stored in closed containers with tightly fitting lids. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	The machine shall be maintained as recommended by the manufacturer of the equipment. [N.J.A.C. 7:27-16.6]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. The Permittee shall maintain the manufacturer's recommended maintenance instructions and a record of any maintenance performed on each machine. Records shall be maintained onsite in either a logbook or computer data system or readily accessible computer memory for a minimum of five (5) years. . [N.J.A.C. 7:27-22.16(e)]	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
8	The working and downtime covers shall be closed at all times except during parts entry and exit from the machine, during maintenance of the machine when the solvent has been removed, and during addition of solvent to the machine. When the machine's cover is open, the machine shall not be exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between one and two meters (between 3.3 and 6.6 feet) upwind and at the same elevation as the tank lip. Work area fans shall be located and positioned so that they do not blow across the opening of the machine. [N.J.A.C. 7:27-16.6]	Monitored by the Department approved testing method each month during operation. The Permittee shall test monthly according to the following procedure: 1. Measure the draft within 6 inches above the freeboard area by determining the direction of the draft by slowly rotating a velometer or similar device until the maximum speed is located. 2. Orient the velometer in the direction of the draft at each of the four corners of the machine, record the reading for each corner, and average the four readings and record the average draft. . [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter each month during operation. The Permittee shall maintain records of the monthly tests including: 1. The dates the tests were conducted for each machine. 2. The speed at each corner of each machine. 3. The average speed of the four corners of each machine. Records shall be maintained onsite in either a logbook or computer data system or readily accessible computer memory for a minimum of five (5) years. . [N.J.A.C. 7:27-22.16(e)]	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
9	The following specifications and requirements are applicable to the solvent cleaning machine: 1. The machine shall have a freeboard ratio of 0.75 or greater (only for immersion cold cleaning machine). 2. The machine shall have a tightly working-mode cover that completely covers the machine's opening. 3. The solvent spray shall be continuous fluid stream, not an atomized shower spray and be at a pressure less than 10 psig. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	The owner or operator of each cleaning machine shall have a permanent, conspicuous label placed in a prominent location on the machine listing applicable requirements 3 through 8 inclusively. In addition, for a cold or heated machine, a label shall list applicable requirements 3 through 4 inclusively, that are listed in compliance plan for GP-010 Degreasing Operations (Cold Cleaning Machine) or applicable requirements 3 through 5 inclusively, that are listed in compliance plan for GP-010 Degreasing Operations (Heated Cleaning Machine). In addition, for a vapor machine, a label shall list applicable requirements 3 through 4 inclusively, that are listed in compliance plan for GP-010 Degreasing Operations (Batch Vapor Cleaning Machine) or applicable requirements 3 through 5 inclusively, that are listed in compliance plan for GP-010 Degreasing Operations (In-line Cleaning Machine). [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance within three working days after the event in writing to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
11	VOC (Total) <= 5 tons/yr. Annual emission limit from General Permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit: U1701 Cold Cleaning Machine-Open Top, Non-HAP VOC with vapor pressure<0.02 psia at 68 deg F

Operating Scenario: OS1 Cold Cleaning Machine

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The solvent used in the equipment shall not have any HAPs as defined at 40 CFR 63.1(a)(2) and have a vapor pressure of < 1 millimeter of mercury (<0.02 psia), measured at 20 degrees Centigrade (68 degrees Fahrenheit). [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. The permittee shall maintain, on-site, for not less than two years, after the date of purchase of solvent for use in the machine, the following information: (1) The name and address of the person selling the solvent. An invoice, bill of sale or a certificate that corresponds to a number of sales, if it has the seller's name and address on it, may be used to satisfy this requirement; (2) A list of VOC(s) and their concentration in the solvent; (3) Information about each VOC listed in (2) above. A Material Safety Data Sheet (MSDS) may be used to satisfy this requirement; (4) The solvents product number assigned by the manufacturer; and (5) The vapor pressure of the solvent measured in millimeters of mercury at 20 degrees Centigrade (68 degrees Fahrenheit). The Permittee shall provide this information to the Department upon request of the Department or its representative. [N.J.A.C. 7:27-16.6]	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
2	Each cold and heated cleaning machine shall be equipped with the following: 1. A visible fill line; 2. A visible high level liquid mark. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]
3	When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of solvent against the tank walls or the parts being cleaned. [N.J.A.C. 7:27-16.6]	None.	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]

New Jersey Department of Environmental Protection
Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The solvent level in the machine: 1. Shall not exceed the fill line when there are no parts in the machine for cleaning and 2. Shall not exceed the high level liquid mark during cleaning operations. [N.J.A.C. 7:27-16.6]	Other: The Permittee shall monitor solvent level whenever solvent is added or when parts are placed in the machine for cleaning.[N.J.A.C. 7:27-22.16(e)].	None.	Submit a report: Upon occurrence of event. The Permittee shall report any non-compliance with any Applicable Requirement, Monitoring Requirement, or Recordkeeping Requirement within three working days to the Regional Enforcement Office. [N.J.A.C. 7:27-22.16(e)]

Section K

Facility Name: PSEG FOSSIL LLC MERCER GENERATING STATION
Program Interest Number: 61057
Permit Activity Number: BOP060002

INVENTORIES

Insignificant Source Emissions
Non-Source Fugitive Emissions
Equipment Inventory
Control Device Inventory
Control Device Detail Sheets
Emission Point Inventory
Emission Unit/Batch Process Inventory
Subject Item Group Inventory

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1	Non-applicable VOC (<0.02 psia) storage tanks with capacities < 10,000 gallons	Storage Vessel										
IS2	Commercial Fuel Equipment < 1MMBtu/hr	Fuel Combustion Equipment (Other)										
IS3	Waste or water treatment equiment<100 ppbw each TXS & <3500 ppbw total VOC	Other Equipment										
IS5	Surface coating operations < 0.5 gallons/hour & <2.5 gallons per day	Surface Coating Equipment (Non-Fabric Material)										
IS6	Satellite accumulation areas<100 ppbw each TXS & <3500 ppbw total VOC	Other Equipment										
IS7	Fuel reclaim area <50 lb/hr raw material	Other Equipment										
IS8	Fire protection systems <50 lb/hr raw material	Other Equipment										
IS9	Building sumps <100 ppbw each TXS & <3500 ppbw total VOC	Other Equipment										
IS10	Chemical cleaning systems <50 lb/hr raw material	Other Equipment										

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS11	Generator purge system <50 lb/hr raw material	Other Equipment										
IS12	Bottom ash transfer operations <50 lb/hr raw material	Other Equipment										
IS13	Sulfur injection system < 50 lb/hr raw material	Other Equipment										
IS14	Coal pile and coal pile maintenance	Manufacturing and Materials Handling Equipment										
IS15	Stationary gas turbine starters < 1 MMBTU/Hr	Stationary Reciprocating Engine										
IS16	Coal conditioner < 50 lb/hr raw material	Other Equipment										
IS17	Wet cell batteries-Group 1 or Group 2 TXS (or a combination thereof)<0.1 lb/hr PTE	Other Equipment										
IS18	Dry Wells <100 ppbw each TXS & <3500 ppbw total VOC	Other Equipment										
IS19	Aqueous Urea Storage Tank - 250,000 Gallons	Storage Vessel										
Total				82.940	113.200	1,577.400	9.100	7.800	7.800	0.000	0.00000000	0.000

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 08/01/2006

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Fuel Handling Systems (Pipes. Valves, Fittings etc.)										
FG2	Miscellaneous Oil Systems (Pipes. Valves, Fittings etc.)										
FG3	Miscellaneous Hand Solvent Uses										
FG4	Ash Handling Systems (fly ash transfer to trucks and transport in trucks)										
FG5	Miscellaneous pipes, flanges, fittings										
Total			1.900	0.000	0.000	0.000	26.300	19.000	0.000	0.00000000	0.000

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E1	001-01	Unit No. 1	Boiler	PCP030004	12/19/1960	No	3/5/1999	
E2	002-01	Unit No. 2	Boiler	PCP030005	6/4/1961	No		
E3	017-01	House Heating Boiler No. 1	Boiler	103959	1/1/1992	No		
E4	006-01	House Heating Boiler No. 2	Boiler	104240	1/1/1958	No	1/1/1992	
E5	007-01	Unit No. 3, 31A	Combustion Turbine		11/30/1967	Yes		
E6	007-02	Unit No. 3, 31B	Combustion Turbine		11/30/1967	Yes		
E7	007-03	Unit No. 3, 32A	Combustion Turbine		11/30/1967	Yes		
E8	007-04	Unit No. 3, 32B	Combustion Turbine		11/30/1967	Yes		
E9	007-05	Unit No. 3, 33A	Combustion Turbine		11/30/1967	Yes		
E10	007-06	Unit No. 3, 33B	Combustion Turbine		11/30/1967	Yes		
E11	007-07	Unit No. 3, 34A	Combustion Turbine		11/30/1967	Yes		
E12	007-08	Unit No. 3, 34B	Combustion Turbine		11/30/1967	Yes		
E14	008-01	Gasoline Storage Tank	Storage Vessel	083227	1/1/1988	No		
E17	Receiv. Sys.	Coal Receiving System	Manufacturing and Materials Handling Equipment		12/19/1960	Yes		
E18	Reclaim. Sys	Coal Reclaim System	Manufacturing and Materials Handling Equipment		12/19/1960	Yes		
E19	S. Fly Ash	Salable Fly Ash Handling System	Storage Vessel	100544	5/1/1982	No	1/1/1991	
E20	012-01	Kiln Dust Silo	Storage Vessel	100545		No	1/1/1991	

Date: 8/1/2006

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E21	NS Fly Ash	Non-Salable Fly Ash Handling System	Storage Vessel	100546		No	1/1/1991	
E22	Fire Pump	Fire Pump	Emergency Generator	127125	6/18/1996	No		
E1501	PortBoiler#1	PortBoiler#1	GP-Boiler Heater	GEN040001	4/7/2025	No		
E1601	PortBoiler#2	PortBoiler#2	GP-Boiler Heater	GEN040001	4/7/2004	No		
E1701	PartsCleaner	Cold Cleaning Machine	Cleaning Machine (Open Top: Cold)	GEN050001	3/15/2005	No		
E1801	ACI Silo 1	ACI System Silo No. 1	Storage Vessel			No		
E1802	ACI Silo 2	ACI System Silo No. 2	Storage Vessel			No		

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	ESP on Unit1	ESP on Unit No. 1	Electrostatic Precipitator	4/1/1994	No		
CD2	SNCR Unit 1	SNCR on Unit No. 1	Selective Non-Catalytic Reduction	2/22/1995	No	3/5/1999	
CD3	ESP on Unit2	ESP on Unit No. 2	Electrostatic Precipitator	7/4/1991	No		
CD4	SNCR Unit 2	SNCR on Unit No. 2	Selective Non-Catalytic Reduction	2/22/1995	No	3/5/1999	
CD6	VB Sys GasST	Vapor Balance System on Gasoline Storage Tank	Other	1/1/1988	No		
CD7	VF Stack 003	Vent Filter Stack 003	Particulate Filter (Baghouse)	1/1/1991	No		
CD8	VF Stack 009	Vent Filter Stack 009	Particulate Filter (Baghouse)	1/1/1991	No		
CD9	VF Stack 010	Vent Filter Stack 010	Particulate Filter (Baghouse)	1/1/1991	No		
CD10	VF Stack 011	Vent Filter Stack 011	Particulate Filter (Baghouse)	1/1/1991	No		
CD11	Kiln Dust Si	Kiln Dust Silo Filter	Particulate Filter (Baghouse)	1/1/1991	No		
CD12	VF Stack 013	Vent Filter Stack 013	Particulate Filter (Baghouse)	1/1/1991	No		
CD13	VF Stack 014	Vent Filter Stack 014	Particulate Filter (Baghouse)	1/1/1991	No		
CD14	VF Stack 015	Vent Filter Stack 015	Particulate Filter (Baghouse)	1/1/1991	No		
CD15	VF Stack 016	Vent Filter Stack 016	Particulate Filter (Baghouse)	1/1/1991	No		
CD16	Dust Supress	Coal Boom Dust Suppression System	Other	3/15/1994	No		

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD17	AEFLGR#1	Amine Enhanced Fuel Lean Gas Reburn Unit No. 1	Other	3/5/1999	No		
CD18	AEFLGR#2	Amine Enhanced Fuel Lean Gas Reburn Unit No. 2	Other	3/5/1999	No		
CD19	SCR Unit 1	SCR on Unit 1 & Duct Burner	Selective Catalytic Reduction	5/1/2005	No		
CD20	SCR Unit 2	SCR on Unit 2 & Duct Burner	Selective Catalytic Reduction	5/1/2004	No		
CD21	In-Duct SCR2	In-Duct SCR System on Unit No.2	Selective Catalytic Reduction	5/1/2003	No		
CD22	ACI Unit 1	Activated Carbon Injection (ACI) System on Unit No. 1	Other		No		
CD23	ACI Unit 2	Activated Carbon Injection (ACI) System on Unit No. 2	Other		No		
CD24	ACI Silo 1	ACI System Silo No. 1 Cartridge Filter	Particulate Filter (Cartridge)		No		
CD25	ACI Silo 2	ACI System Silo No. 2 Cartridge Filter	Particulate Filter (Cartridge)		No		

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61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD24 (Particulate Filter (Cartridge))
Print Date: 7/31/2006

Make:	Torit
Manufacturer:	Torit
Model:	TBV-4
Number of Cartridges:	4
Size of Cartridges (ft²):	226.00
Total Cartridge Area (ft²):	904.00
Maximum Design Temperature Capability (°F):	350.0
Maximum Design Air Flow Rate (acfm):	350.0
Maximum Air Flow Rate to Filter Area Ratio:	0.40
Minimum Operating Pressure Drop (in. H2O):	
Maximum Operating Pressure Drop (in. H2O):	6.00
Maximum Inlet Temperature (°F):	150.0
Maximum Operating Exhuast Gas Flow Rate (acfm):	350.0
Method for Determining When Cartridge Replacement is Required:	Differential pressure drop
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	TBD
Have you attached a Particle Size Distribution Analysis?	● Yes ○ No
Have you attached data from recent performance testing?	● Yes ○ No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	● Yes ○ No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD25 (Particulate Filter (Cartridge))
Print Date: 7/31/2006

Make:	Torit
Manufacturer:	Torit
Model:	TBV-4
Number of Cartridges:	4
Size of Cartridges (ft²):	226.00
Total Cartridge Area (ft²):	904.00
Maximum Design Temperature Capability (°F):	350.0
Maximum Design Air Flow Rate (acfm):	350.0
Maximum Air Flow Rate to Filter Area Ratio:	0.40
Minimum Operating Pressure Drop (in. H2O):	
Maximum Operating Pressure Drop (in. H2O):	6.00
Maximum Inlet Temperature (°F):	150.0
Maximum Operating Exhuast Gas Flow Rate (acfm):	350.0
Method for Determining When Cartridge Replacement is Required:	Differential pressure drop
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	TBD
Have you attached a Particle Size Distribution Analysis?	(●) Yes ( ) No
Have you attached data from recent performance testing?	(●) Yes ( ) No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	(●) Yes ( ) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	(●) Yes ( ) No
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD23 (Other)
Print Date: 7/31/2006

Make:	ADA-ES
Manufacturer:	ADA-ES
Model:	ADA-ES
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	350
Minimum Temperature of Vapor Stream to Control Device (°F):	150
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	6
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	TBD
Have you attached data from recent performance testing?	(●) Yes ( ) No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	(●) Yes ( ) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	(●) Yes ( ) No
Comments:	For informational purposes only. Maximum Air flow rate to control device (acfm) = 1,500,000

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD22 (Other)
Print Date: 7/31/2006

Make:	ADA-ES
Manufacturer:	ADA-ES
Model:	ADA-ES
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (°F):	350
Minimum Temperature of Vapor Stream to Control Device (°F):	150
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	6
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	TBD
Have you attached data from recent performance testing?	(●) Yes ( ) No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	(●) Yes ( ) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	(●) Yes ( ) No
Comments:	For informational purposes only. Maximum Air flow rate to control device (acfm) = 1,500,000

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD19 (Selective Catalytic Reduction)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	840
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	840
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	0.75
Minimum NOx to Reagent Mole Ratio:	1
Maximum NOx to Reagent Mole Ratio:	1
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Tunsten/Vanadium petoxide
Volume of Catalyst (ft^3):	20000
Form of Catalyst:	Universal
Anticipated Life of Catalyst:	3
Units:	Years
Have you attached a catalyst replacement schedule?	(●) Yes ( ) No
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	(●) Yes ( ) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	(●) Yes ( ) No

Comments:	For informational purposes only. Includes duct burner, approximately 120 MMBTU/hr.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD20 (Selective Catalytic Reduction)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	840
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	840
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	7800
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	1
Maximum NOx to Reagent Mole Ratio:	0.75
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Tungsten/Vanadium Pentoxide
Volume of Catalyst (ft^3):	20000
Form of Catalyst:	Universan
Anticipated Life of Catalyst:	3
Units:	Years
Have you attached a catalyst replacement schedule?	(●) Yes ( ) No
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	( ) Yes (●) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	( ) Yes (●) No

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD20 (Selective Catalytic Reduction)
Print Date: 7/31/2006

Comments: Maximum Reagent Charge Rate is in lbs/hr not gpm

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD21 (Selective Catalytic Reduction)
Print Date: 7/31/2006

Make:	
Manufacturer:	Siemens
Model:	
Minimum Temperature at Catalyst Bed (°F):	500
Maximum Temperature at Catalyst Bed (°F):	840
Minimum Temperature at Reagent Injection Point (°F):	500
Maximum Temperature at Reagent Injection Point (°F):	840
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	NH3
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	1600
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	1.55
Maximum NOx to Reagent Mole Ratio:	0.86
Maximum Anticipated Ammonia Slip (ppm):	10
Type of Catalyst:	Vanadium pentoxide
Volume of Catalyst (ft^3):	2200
Form of Catalyst:	Plate
Anticipated Life of Catalyst:	1
Units:	Years
Have you attached a catalyst replacement schedule?	(●) Yes ( ) No
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	(●) Yes ( ) No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	(●) Yes ( ) No

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD21 (Selective Catalytic Reduction)
Print Date: 7/31/2006

Comments: Maximum Reagent Charge Rate is In lbs/hr not gpm.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD1 (Electrostatic Precipitator)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Unit Type:	Plate
Description:	
Number of Stages:	
Method of Operation:	
Method of Cleaning:	Rapping
Description:	
Capacity (acfm):	1300000
Maximum Gas Velocity (ft/sec):	
Type of Rectifier:	
Maximum Inlet Gas Stream Moisture (%):	2 to 7
Maximum Inlet Gas Stream Temperature (deg F):	250-320
Number of Plates:	620
Number of Fields:	
Aspect Ratio:	
Plate Surface Area (ft2):	
Spacing Between Plates (in):	12
Cross Sectional Area of Precipitator (ft2):	6000
Treatment Time (sec.):	
Maximum Corona Power (Volt):	
Minimum Apparent Migration Velocity (ft/min):	
Maximum Particle Resistivity (ohm-cm):	

Average Particle Size (Micrometers):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM for Opacity
Have you attached data from recent performance testing?	no
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	no
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - A diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD2 (Selective Non-Catalytic Reduction)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Minimum Temperature at Reagent Injection Point (deg F):	1600
Maximum Temperature at Reagent Injection Point (deg F):	2100
Type of Reagent:	Urea and water solution
Description:	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum Reagent Charge Rate (gpm):	0
Maximum Reagent Charge Rate (gpm):	75
Maximum NOx to Reagent Mole Ratio:	1 to 1
Number of Reagent Injectors:	
Location of Reagent Injectors:	
Reagent Injection Method:	
Maximum Anticipated Ammonia Slip (ppm):	
Description of Feedback System which Controls the Amount of Reagent Charged to the Control Apparatus:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1

Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD3 (Electrostatic Precipitator)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Unit Type:	Plate
Description:	
Number of Stages:	
Method of Operation:	
Method of Cleaning:	Rapping
Description:	
Capacity (acfm):	1300000
Maximum Gas Velocity (ft/sec):	
Type of Rectifier:	
Maximum Inlet Gas Stream Moisture (%):	2 to 7
Maximum Inlet Gas Stream Temperature (deg F):	250-320
Number of Plates:	620
Number of Fields:	
Aspect Ratio:	
Plate Surface Area (ft2):	
Spacing Between Plates (in):	12
Cross Sectional Area of Precipitator (ft2):	6000
Treatment Time (sec.):	
Maximum Corona Power (Volt):	
Minimum Apparent Migration Velocity (ft/min):	
Maximum Particle Resistivity (ohm-cm):	

Average Particle Size (Micrometers):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	CEM for Opacity
Have you attached data from recent performance testing?	no
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	no
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - A diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD4 (Selective Non-Catalytic Reduction)
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Minimum Temperature at Reagent Injection Point (deg F):	1600
Maximum Temperature at Reagent Injection Point (deg F):	2100
Type of Reagent:	Urea and water solution
Description:	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum Reagent Charge Rate (gpm):	0
Maximum Reagent Charge Rate (gpm):	75
Maximum NOx to Reagent Mole Ratio:	1 to 1
Number of Reagent Injectors	
Location of Reagent Injectors:	
Reagent Injection Method:	
Maximum Anticipated Ammonia Slip (ppm):	
Description of Feedback System which Controls the Amount of Reagent Charged to the Control Apparatus:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1

Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes.only.

Make:	
Manufacturer:	
Model:	
Maximum Air Flow Rate to Control Device (acfm):	N/A
Maximum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Moisture Content of Vapor Stream to Control Device (%):	N/A
Minimum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.

Comments: For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD7 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	170
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	9900
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD8 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	170
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	9900
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD9 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	170
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	9900
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD10 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	170
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	9900
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD11 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	16
Size of Bags (ft2):	9 ft
Total Bag Area (ft2):	232
Bag Fabric:	Polyester
Fabric Weight (oz/ft):	16 oz/sq. yd
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Calendared and Heat Set
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	2.6 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	80
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	600
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD12 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	2
Maximum Operating Pressure Drop (in. H2O):	12
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	240
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	10500
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD13 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	2
Maximum Operating Pressure Drop (in. H2O):	12
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	240
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	10500
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD14 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	84
Size of Bags (ft2):	7 ft
Total Bag Area (ft2):	853
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.45 to 1
Minimum Operating Pressure Drop (in. H2O):	2
Maximum Operating Pressure Drop (in. H2O):	12
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	240
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	10500
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

61057 PSEG FOSSIL LLC MERCER GENERATING STATION BOP060002 CD15 (Particulate Filter (Baghouse))
Print Date: 7/31/2006

Make:	
Manufacturer:	
Model:	
Number of Bags:	49
Size of Bags (ft2):	9 ft
Total Bag Area (ft2):	710
Bag Fabric:	NOMEX
Fabric Weight (oz/ft):	14 oz/sq. yard
Fabric Weave:	Needle punch Non-Woven Felt
Fabric Finish:	Singed on one side
Maximum Design Temperature Capability (deg F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	4.1 to 1
Minimum Operating Pressure Drop (in. H2O):	3
Maximum Operating Pressure Drop (in. H2O):	17
Method of Monitoring Pressure Drop:	
Maximum Inlet Temperature (deg F):	255
Minimum Inlet Temperature (deg F):	
Dew Point of Gas Stream (deg F):	
Maximum Operating Exhaust Gas Flow Rate (acfm):	10500
Maximum Inlet Gas Stream Moisture Content (%):	

Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	pulse jet
Is Bag Cleaning Conducted On-Line?	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	No
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.
Comments:	For informational purposes only.

Make:	
Manufacturer:	
Model:	
Maximum Air Flow Rate to Control Device (acfm):	N/A
Maximum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Moisture Content of Vapor Stream to Control Device (%):	N/A
Minimum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No - a diagram was included in original November 1995 Title V Application submittal.

Comments: For information purposes only.

Make:	
Manufacturer:	
Model:	
Maximum Air Flow Rate to Control Device (acfm):	N/A
Maximum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Moisture Content of Vapor Stream to Control Device (%):	N/A
Minimum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No

Comments: For information purposes only.

Facility Id: L7303 **Reviewed By:** Mayra Reves

PCP 06-0001 **Facility:** MODELCLEANERS & LAUNDERERS

EVALUATION SUMMARY

* Does a previous permit need to be cancelled? ☐ No ☐ Yes
If yes, then PCP/CT number (s) : _____

* Description of process(es) : Two 3rd Generation Dry to Dry Cleaning Machines – Multimatic Shop Star SS65 65Lb Capacity and Permac Bowe Passant P546 45Lb Capacity. Operation consumes 282 gallons of Perchloroethylene per twelve (12) month period.

* Reason for application: Increase perc consumption from 90 gallons to 282 gallons per year

* ☐ SOTA requirements do not apply because:

- ☐ Emissions are deminimis
- ☐ Other _____

☐ Emissions are significant, but control is NOT SOTA – DENY
☐ Emissions are significant, and control represents SOTA
Which is: _____

* ☐ Application does not contain TCPA regulated chemicals.
☐ Application contains TCPA regulated chemicals and a copy has been forwarded to TCPA by memo for their information.

* ☐ Application is not subject to NSPS review
☐ Application is subject to NSPS review, subpart _____

* ☐ Application does not contain any TVOS as per subchapter 17.
☐ Application contains TVOS, see separate review sheet.

* ☐ Application involves:

- ☐ wastewater treatment- coordinate w/ DSWM and/ or HWRP.
- ☐ sewage sludge- coordinate w/ DSWM
- ☐ wastewater treatment- coordinate w/ Water Discharge Regulation Program

☐ Application does not involve waste treatment, sewage sludge, and/ or wastewater treatment

☐ Sub 18: Not major Facility

Applicable subchapters for this review are NJAC 7: 27 - :

5 8 _____ _____

Comments: Perc Annual Emission rate is equal to 1228 lbs/year => 0.61 tpy (1228 based on 2200 hr/year = 0.56 lb/hr @70% recovery)

Risk Screening Evaluation was requested. Maximum Risk: 5.4E-05 and Maximum Risk to residences 21.7E-05. Application is approvable. Attached is copy of risk screening results.

Emissions calculations based on percent of recovery

Sources subject to MACT (Subpart M).

☐ Approve ☐ No permit required ☐ Deny
☐ Approve with conditions ☐ Cancel

Make:	
Manufacturer:	
Model:	
Maximum Air Flow Rate to Control Device (acfm):	N/A
Maximum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Temperature of Vapor Stream to Control Device (deg F):	N/A
Minimum Moisture Content of Vapor Stream to Control Device (%):	N/A
Minimum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Pressure Drop Across Control Device (in. H20):	N/A
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	No

Comments: For information purposes only.

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PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1	Unit No. 1	Unit No. 1	Round	210	326	240	300.0	200.0	600.0	1,300,000.0	250.0	1,500,000.0	Up	
PT2	Unit No. 2	Unit No. 2	Round	210	326	240	300.0	200.0	600.0	1,300,000.0	250,000.0	1,500,000.0	Up	
PT3	H H Boiler 1	House Heating Boiler No. 1	Round	25	36	350	380.0	300.0	420.0	11,000.0	9,850.0	12,100.0	Horizontal	
PT4	H H Boiler 2	House Heating Boiler No. 2	Round	40	36	350	350.0	320.0	390.0	11,000.0	9,850.0	12,100.0	Horizontal	
PT5	# 3, 31A-31B	Unit No. 3, 31A-31B	Rectangle	203	43	725	600.0	550.0	700.0	1,200,000.0	1,000,000.0	1,600,000.0	Up	
PT6	#3, 32A-32B	Unit No. 3, 32A-32B	Rectangle	203	43	725	600.0	550.0	700.0	1,200,000.0	1,000,000.0	1,600,000.0	Up	
PT7	# 3, 33A-33B	Unit No. 3, 33A-33B	Rectangle	203	43	680	600.0	550.0	700.0	1,200,000.0	1,000,000.0	1,600,000.0	Up	
PT8	#3, 34A-34B	Unit No. 3, 34A-34B	Rectangle	203	43	680	600.0	550.0	700.0	1,200,000.0	1,000,000.0	1,600,000.0	Up	
PT9	Gas Sto Tank	Gasoline Storage Tank	Round	3	4	700							Down	
PT11	Fly Ash Syst	Salable Fly Ash Handling System	Round	12	15	250	170.0	165.0	185.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT12	Fly Ash Syst	Salable Fly Ash Handling System	Round	12	15	250	170.0	165.0	185.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT13	Fly Ash Syst	Salable Fly Ash Handling System	Round	12	15	250	170.0	165.0	185.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT14	Fly Ash Filt	Salable Fly Ash Silo Vent Filter	Round	15	120	250	165.0	165.0	185.0	2,300.0			Up	
PT15	Kiln Dust Si	Kiln Dust Silo Vent	Round	12	75	300	80.0			600.0			Up	
PT16	NS Fly Ash	Non-Salable Fly Ash Handling System	Round	12	15	300	240.0	240.0	280.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT17	NS Fly Ash	Non-Salable Fly Ash Handling System	Round	12	15	300	240.0	240.0	280.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT18	NS Fly Ash	Non-Salable Fly Ash Handling System	Round	12	15	300	240.0	240.0	280.0	3,800.0	3,400.0	4,200.0	Horizontal	
PT19	NSAsh Filt	Non-Salable Fly Ash Silo Vent Filter	Round	15	120	300	255.0	240.0	280.0	2,300.0			Up	
PT20	Fire Pump	Fire Pump	Round											

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1501	PortBoiler#1	PortBoiler#1												
PT1601	PortBoiler#2	PortBoiler#2												
PT1701	PartsCleaner	Cold Cleaning Machine												
PT1801	ACI Silo 1	ACI System Vent: Silo No. 1	Round	48	80					400.0	0.0	600.0	Up	
PT1802	ACI Silo 2	ACI System Vent: Silo No. 2	Round	48	80					400.0	0.0	600.0	Up	

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 1 Unit No. 1 Wet bottom, face fired utility boiler used for electric power generation

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS2	UICOAL_NO	Utility boiler firing coal or cofiring coal & natural gas - w/wo SNCR and/or AEFLGR, non-ozone season prior to SCR operation. WILL EXPIRE MAY 1, 2006	Normal - Steady State	E1	CD1 (P) CD17 (T) CD2 (S) CD22 (T)	PT1	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0
OS4	U1NG_NO	Utility boiler firing natural gas - w/without SNCR and/or AEFLGR, non-ozone season, prior to SCR operation. WILL EXPIRE MAY 1, 2006.	Normal - Steady State	E1	CD1 (P) CD17 (S) CD2 (P) CD22 (T)	PT1	1-01	0.0	8,760.0		25,000.0	1,500,000.0	200.0	600.0
OS5	U1SCR	Utility boiler firing coal, natural gas or co-firing coal and natural gas, with SCR and duct burner, w/without SNCR and or AEFLGR,w/wo ACI	Normal - Steady State	E1	CD1 (P) CD17 (T) CD19 (P) CD2 (S) CD22 (T)	PT1	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 2 Unit No. 2 Wet bottom, face fired utility boiler used for electric power generation

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS2	U2COAL_NO	Utility boiler firing coal or cofiring coal & natural gas - w/wo SNCR and/or AEFLGR, non-ozone season prior to SCR operation. WILL EXPIRE MAY 1, 2006	Normal - Steady State	E2	CD18 (T) CD23 (T) CD3 (P) CD4 (S)	PT2	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0
OS4	U2NG_NO	Utility boiler firing natural gas - with/without SNCR and/orAEFLGR, non-ozone season, prior to SCR operation. WILL EXPIRE MAY 1, 2006	Normal - Steady State	E2	CD18 (S) CD23 (T) CD3 (P) CD4 (P)	PT2	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0
OS5	U2SCR	Utility boiler firing coal, natural gas or co-firing coal and natural gas, with SCR and Duct Burner, with/without SNCR and/or AEFLGR	Normal - Steady State	E2	CD18 (T) CD20 (P) CD23 (T) CD3 (P) CD4 (S)	PT2	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0
OS8	U2In-DuctSCR	Utility boiler firing coal, natural gas or co-firing coal and natural gas, w/in-duct SCR, with/without SNCR and/or AEFLGR,w/wo ACI	Normal - Steady State	E2	CD18 (T) CD20 (P) CD21 (S) CD23 (T) CD3 (P) CD4 (S)	PT2	1-01	0.0	8,760.0		250,000.0	1,500,000.0	200.0	600.0

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 3 H H Boiler 1 Non-utility boiler used for miscellaneous operations firing Natural Gas, 33.5 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	HH Boiler 1	Non-utility boiler firing natural gas	Normal - Steady State	E3		PT3	1-02	0.0	8,760.0		9,850.0	12,100.0	300.0	420.0

U 4 H H Boiler 2 Non-utility boiler used for miscellaneous operations firing Natural Gas, 25.2 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	HH Boiler 2	Non-utility boiler firing natural gas	Normal - Steady State	E4		PT4	1-02	0.0	8,760.0		9,850.0	12,100.0	320.0	390.0

U 5 Unit No. 3 Eight simple-cycle stationary gas turbines used for electric power generation, each 288 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Unit 3-31A	Turbine firing distillate oil	Normal - Steady State	E5		PT5	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS2	Unit 3-31B	Turbine firing distillate oil	Normal - Steady State	E6		PT5	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 5 Unit No. 3 Eight simple-cycle stationary gas turbines used for electric power generation, each 288 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS3	Unit 3-32A	Turbine firing distillate oil	Normal - Steady State	E7		PT6	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS4	Unit 3-32B	Turbine firing distillate oil	Normal - Steady State	E8		PT6	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS5	Unit 3-33A	Turbine firing distillate oil	Normal - Steady State	E9		PT7	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS6	Unit 3-33B	Turbine firing distillate oil	Normal - Steady State	E10		PT7	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS7	Unit 3-34A	Turbine firing distillate oil	Normal - Steady State	E11		PT8	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0
OS8	Unit 3-34B	Turbine firing distillate oil	Normal - Steady State	E12		PT8	2-01	0.0	8,760.0		500,000.0	800,000.0	550.0	700.0

U 7 Gasoline Tk Gasoline Storage Tank - 2,500 Gallons

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Gasoline Tk	Storage of gasoline	Normal - Steady State	E14	CD6 (P)	PT9	4-07	0.0	8,760.0					

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 10 Coal Receivi Clamshell unloader, hopper, breaker, and conveyors used to transfer coal from barges to coal pile

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Coal Receive	Coal receiving system-Clamshell unloader, hopper, breaker, and conveyors used to transfer coal from barges to coal pile	Normal - Steady State	E17	CD16 (P)			0.0	8,760.0					

U 11 Coal Reclaim Conveyors and hoppers used to transfer coal from coal pile to storage silos

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Coal Reclaim	Coal reclaim system	Normal - Steady State	E18				0.0	8,760.0					

PSEG FOSSIL LLC MERCER GENERATING STATION (61057)
BOP060002

Date: 8/1/2006

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 12 Salable Flya Salable Flyash Silo and Pneumatic Conveyor

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Salable F/A	Salable fly ash handling system	Normal - Steady State	E19	CD10 (P) CD7 (P) CD8 (P) CD9 (P)	PT11 PT12 PT13 PT14		0.0	8,760.0		3,400.0	4,200.0	165.0	185.0

U 13 Kiln Dust Si Storage of kiln dust

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Kiln Dust Si	Kiln Dust Silo	Normal - Steady State	E20	CD11 (P)	PT15		0.0	8,760.0					

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 14 Nonsalabflya Non-salable flyash Silo and Pneumatic Conveyor

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	NonS Fly Ash	Non-salable fly ash handling system	Normal - Steady State	E21	CD12 (P) CD13 (P) CD14 (P) CD15 (P)	PT16 PT17 PT18 PT19		0.0	8,760.0		3,400.0	4,200.0	240.0	280.0

U 15 Fire Pump Emergency Fire Pump, 2.5 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	Fire Pump	Emergency Fire Pump burning Natural Gas	Normal - Steady State	E22		PT20		0.0	500.0					

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 1501 BHC1 External Fuel Combustion Unit, Port Boiler#1 and Port Boiler #2, each <10 MMBTU/Hr

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	PortBoiler#1	Port Boiler #1	Normal - Steady State	E1501		PT1501								
OS2	PortBoiler#2	Port Boiler #2	Normal - Steady State	E1601		PT1601								

U 1701 GP10 SD-6 Cold Cleaning Machine-Open Top, Non-HAP VOC with vapor pressure<0.02 psia at 68 deg F

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	GP10 SD-6	Cold Cleaning Machine	Normal - Steady State	E1701		PT1701								

U 1800 ACI Silos ACI System Silos

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	ACI System 1	ACI System: Silo No. 1	Normal - Steady State	E1801	CD24 (P)	PT1801		0.0	8,760.0					

PSEG FOSSIL LLC MERCER GENERATING STATION (61057) Date: 8/1/2006

BOP060002

New Jersey Department of Environmental Protection

Emission Unit/Batch Process Inventory

U 1800 ACI Silos ACI System Silos

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS2	ACI System 2	ACI System: Silo No. 2	Normal - Steady State	E1802	CD25 (P)	PT1802		0.0	8,760.0					

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR7 ConsentDecre

Members:

Type	ID	OS	Step
FG	FG0		
U	U 1	OS0 Summary	
U	U 1	OS2 UICOAL_NO	
U	U 1	OS4 U1NG_NO	
U	U 1	OS5 U1SCR	
U	U 2	OS0 Summary	
U	U 2	OS2 U2COAL_NO	
U	U 2	OS4 U2NG_NO	
U	U 2	OS5 U2SCR	
U	U 2	OS8 U2In-DuctSCR	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Consent Decree

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR8 FG and IS

Members:

Type	ID	OS	Step
FG	FG1		
FG	FG2		
FG	FG3		
FG	FG4		
FG	FG5		
IS	IS10		
IS	IS11		
IS	IS12		
IS	IS13		
IS	IS16		
IS	IS7		
IS	IS8		

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Stream line similar requirements

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR7 ConsentDecre

Members:

Type	ID	OS	Step
FG	FG0		
U	U 1	OS0 Summary	
U	U 1	OS2 UICOAL_NO	
U	U 1	OS4 U1NG_NO	
U	U 1	OS5 U1SCR	
U	U 2	OS0 Summary	
U	U 2	OS2 U2COAL_NO	
U	U 2	OS4 U2NG_NO	
U	U 2	OS5 U2SCR	
U	U 2	OS8 U2In-DuctSCR	

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Consent Decree

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

New Jersey Department of Environmental Protection
Subject Item Group Inventory

Group NJID: GR8 FG and IS

Members:

Type	ID	OS	Step
FG	FG1		
FG	FG2		
FG	FG3		
FG	FG4		
FG	FG5		
IS	IS10		
IS	IS11		
IS	IS12		
IS	IS13		
IS	IS16		
IS	IS7		
IS	IS8		

Formal Reason(s) for Group/Cap:

☑ Other

Other (explain): Stream line similar requirements

Condition/Requirements that will be complied with or are no longer applicable as a result of this Group:

Operating Circumstances:

Smi 9

PSEG Fossil LLC
Mercer Generating Station
2512 Lamberton Road, Hamilton, NJ 08611
fax: 609.393.3866

VIA FEDERAL EXPRESS

2547

PSEG
Fossil LLC

September 12, 2005

Mr. Louis Mikolajczyk
New Jersey Department of Environmental Protection
Chief, Bureau of Preconstruction Permits
401 E. State St., 2nd Floor
Trenton, NJ 08625

Reference: PSEG Fossil LLC
Mercer Generating Station, Unit No. 2
Facility ID No. 60001, Permit Activity ID No. EIP050001
Environmental Improvement Pilot Test - Report

Dear Mr. Mikolajczyk:

PSEG Fossil LLC ("PSEG Fossil") hereby submits the enclosed report related to testing of an Activated Carbon Injection ("ACI") system at Unit No. 2 of PSEG Fossil's Mercer Generating Station ("Mercer"). This testing was conducted under an Environmental Improvement Pilot Test ("EIPT") permit approved by the Bureau of Preconstruction Permits on June 30, 2005. The purpose of the EIPT program is to evaluate the effectiveness of injecting activated carbon into the unit's existing Electrostatic Precipitator to reduce mercury emissions. This report is required to be submitted pursuant to the conditions of approval of the above-referenced EIPT permit[1].

A certification statement prepared in accordance with N.J.A.C. 7:27-1.39 is also enclosed.

Please call Mr. Jon Perry at (973) 430-5275 if you have any questions.

Sincerely,

Francis X. Sullivan
Director – Asset Operations

Enclosure

[1] See U2, OS9, Ref. #5 of EIP050001.

bcc: E. Augustyn
M. Cullen
M. Lagerstrom
C. McAuliffe
C. Neely
J. Pantazes
J. Ribardo
M. Schwartzkopf
R. Tripodi
E. Waugh

PSEG Fossil LLC

Activated Carbon Injection (ACI) Testing
PSEG Fossil Mercer Generating Station

Submitted to:

New Jersey Department of Environmental Protection
Bureau of Preconstruction Permitting

September 2005

SUBMITTED BY: **PSEG FOSSIL LLC**
80 PARK PLAZA, T17
NEWARK, NEW JERSEY 07102

Executive Summary

PSEG is evaluating options for mercury (Hg) emission control at its Mercer Generating Station in order to meet impending state regulations. PSEG wanted to evaluate whether sorbent injection upstream of an existing Mercer Unit 2 Electrostatic Precipitator (ESP) could achieve ESP outlet mercury emissions that would meet the state regulations. URS Corporation conducted a test program for PSEG to evaluate the effectiveness of activated carbon injection (ACI) for the removal of flue gas mercury across the ESP. These tests were conducted on 22 ESP, one of the two ESPs on Mercer Unit 2.

A series of short-term parametric tests were conducted over three 1-week periods to evaluate the performance of two mercury sorbents injected upstream of the Mercer 22 ESP. A carbon injection skid was installed at the plant and used to deliver carbon to the flue gas duct.

The ACI test program was divided into three phases. Phase 1 of the ACI test program was conducted on Eastern Bituminous coal. Phase 2 and 3 were conducted on a blend of bituminous coals.

Two activated carbon sorbents were used, herein referred to as "Carbon No. 1" and "Carbon No. 2". Mercury emission levels close to the NJ limit of 3 mg/MWh were obtained when injecting 12 lb/Mmacf of Carbon No. 1 and firing Low sulfur eastern bituminous coal. Higher mercury emissions were observed when injecting similar rates of carbon while firing the typical blends of bituminous coals in the unit.

Introduction

Mercer Unit 2 is a wet-bottom, wall-fired steam electric-generating unit that primarily burns low sulfur bituminous coal blends.

Two activated carbon sorbents were tested on Unit 2, Carbon No.1 and Carbon No.2. Carbon No. 1 is a standard activated carbon. The second tested carbon, Carbon No. 2, was a chemically treated carbon.

Description of Carbon Injection Equipment

A Port-a-Pac dosing system, supplied by Norit Americas, was used to feed activated carbon into the flue gas entering 22 ESP. This dry injection system (Figure 1) pneumatically conveys a predetermined and adjustable amount of sorbent from bulk bags into the flue gas stream. The unit consists of two (2) eight-foot tall sections. The lower or base section consists of a small hopper with level detector, volumetric screw feeder, and pneumatic eductor. The upper or top section consists of an electric hoist and monorail to handle bulk bags of sorbent of up to 1,000 pounds. When fully assembled, the system has a total height of 16-feet. Powdered activated carbon is metered using a volumetric feeder into a pneumatic eductor, where the air supplied from a regenerative blower provides the motive force needed to transport the carbon to the flue gas duct via six (6) sorbent injection lances (Figure 2). The sorbent injection system can deliver approximately 20 – 300 lb/hr of activated carbon.

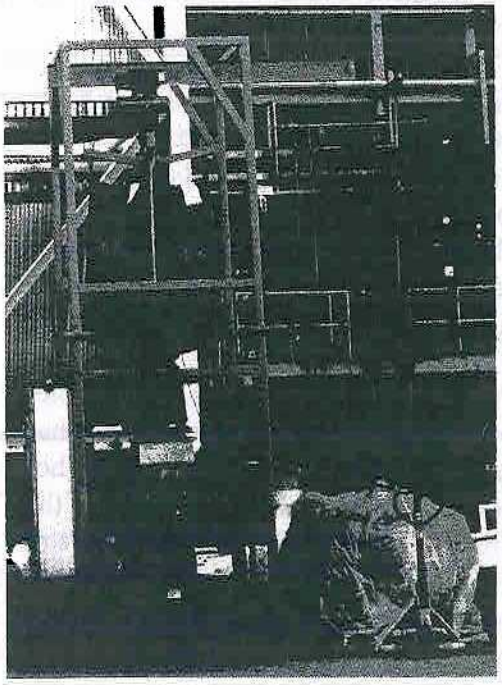

Figure 1. Norit Port-a-Pac Carbon Feeding System.

The injection lances were fabricated from 1 inch pipe and were placed at equal spacing across the width of the two ducts entering the Unit 22 ESP. Each lance projected 8 feet horizontally into the 8.5-foot deep duct. Each lance was close-ended with several orifices along the length of the lance. The pneumatically conveyed sorbent exited the lance end and mixed with the flue gas flowing vertically in the duct before entering the ESP.

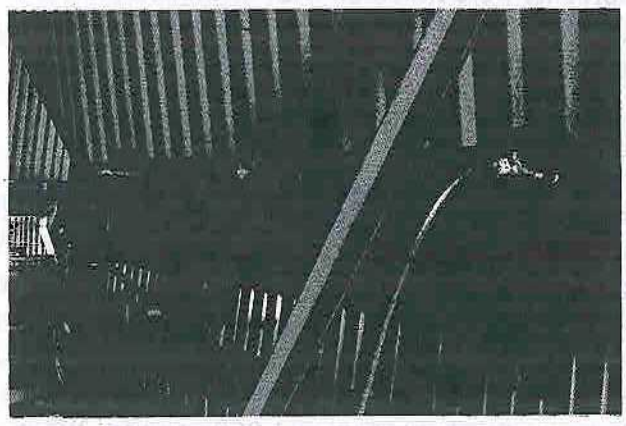

Figure 2. Carbon injection lances in one of the two ESP inlet ducts.

Location of Carbon Injection and Sampling Equipment

A schematic of the Unit 22 ESP, along with the carbon injection locations and flue gas mercury sampling locations, is shown in Figure 3. Carbon was injected into six ports upstream of the ESP.

Flue gas mercury concentrations were measured at the air heater outlet and ESP outlet locations using emission monitors developed by the Electric Power Research Institute (EPRI) (see Figures 3 and 4). Data were gathered around-the-clock during the test program, with the exception of occasional downtime due to analyzer or extraction probe maintenance/calibration. The inlet flue gas mercury concentration was measured upstream of the carbon injection ports. The outlet flue gas mercury concentration was measured just downstream of the ESP.

During the first phase of the test program, flue gas was sampled from the locations labeled W and X in Figure 3. During the second and third phases of the test program, flue gas was sampled from the locations labeled Y and Z. The original ESP outlet port (labeled X) was in a location where gas from both halves of the ESP had joined together (although the flue gas can mix in the ESP itself since there is no physical barrier inside the ESP). In order to improve the probability of measuring only the treated half of the ESP, the outlet sampling location was moved to the location labeled Z in Figure 3. Correspondingly, the inlet sampling location was moved to the point labeled Y.

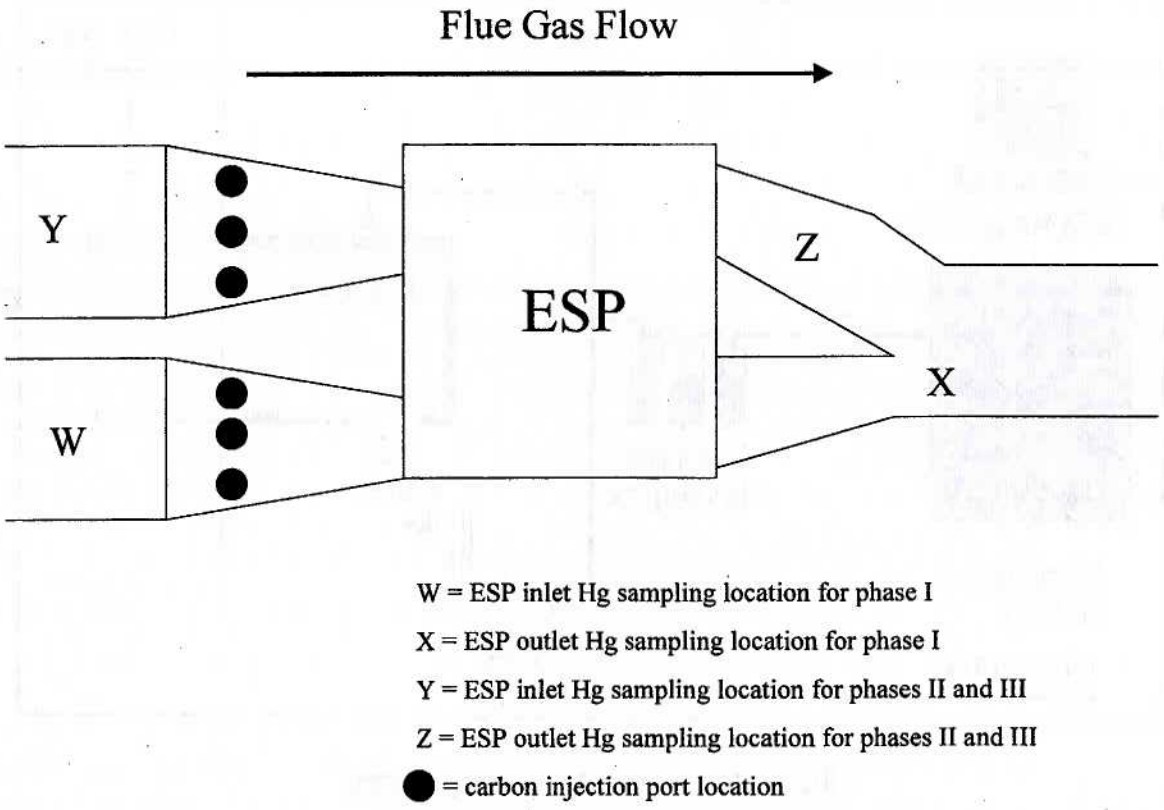

Figure 3. Schematic of Mercer Unit 22 ESP showing carbon injection and mercury flue gas sampling locations.

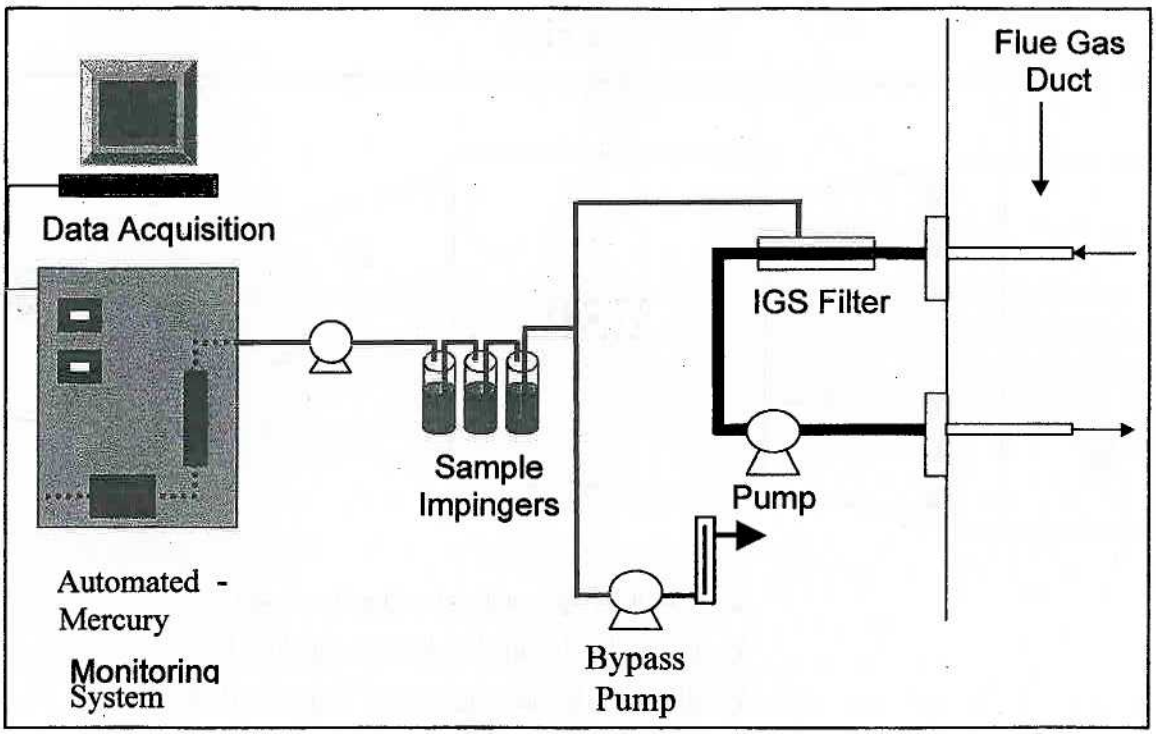

Figure 4. Mercury Monitoring System

Description of Analytical Methods

Coal and ash samples were collected daily. Selected samples were then analyzed for mercury, chloride, and Loss on Ignition (LOI), i.e. unburned carbon, content. Coal samples were digested with ASTM 3684 and analyzed for mercury by CVAA. The coal was digested by ASTM D4208 and analyzed for chloride by ion chromatography (EPA Method 300). The coal samples were sent to a subcontractor for ultimate/proximate analyses. Ash samples were digested by a standard hydrofluoric acid digestion and analyzed for mercury by CVAA. Fly ash LOI concentration was determined by ASTM D3174.

Schedule of Executed Testing

The testing for this carbon injection program was performed in three phases. The first phase (heretofore referred to as Phase 1) was conducted March 28 – April 8, 2005. Low sulfur Eastern bituminous coal was burned during the Phase 1 test program. Both Carbon No. 1 and Carbon No. 2 were tested in Phase 1.

As testing continued into Phase 2, it was desired to test activated carbon while the plant burned its normal blend of bituminous coals. This test series was conducted May 16 through May 20, 2005. During this time period, Carbon No. 1 was tested at various injection rates. A boiler tube leak on the evening of May 20 prematurely ended the Phase 2 test program. As a result, Carbon No. 2 testing was not completed.

Testing for Phase 3 of the test program occurred on July 26 and 27, 2005. Carbon No. 2 was tested at three different injection rates. It had been desired to inject Carbon No. 2 into only half the ESP on July 28, in order to effectively double the carbon injection rate; however, a boiler tube leak occurred during the night of July 27 and ended the third phase of the test program.

Tables 1, 2, and 3 show the testing schedule, as executed, for Phases 1, 2, and 3. The start and stop time for each test is given, along with the carbon injection rate in terms of lb/hr and lb/Macf.

Each phase of the test program started with an initial measurement day to characterize baseline mercury emissions. Parametric tests were then conducted during subsequent two-day periods to evaluate the performance of each selected sorbent material. At the end of each test day, the carbon injection was stopped and the flue gas mercury concentrations returned to baseline.

Table 1. Test Program for Phase 1 Activated Carbon Injection.

Start Time (CT)	Stop Time (CT)	Carbon Type	Injection Rate (lb/hr)	Injection Rate (lb/Macf)
3/30/05 12:50	4/1/05 9:48		0	0
4/1/05 9:48	4/1/05 12:05	Carbon 1	115	4.5
4/1/05 12:05	4/1/05 16:52	Carbon 1	224	8.8
4/1/05 16:52	4/2/05 8:50		0	0
4/2/05 8:50	4/2/05 17:57	Carbon 1	305	12
4/2/05 17:57	4/6/05 12:15		0	0
4/6/05 12:15	4/6/05 15:30	Carbon 2	173	8.2
4/6/05 15:30	4/6/05 17:00	Carbon 2	312	14.9
4/6/05 17:00	4/7/05 9:00		0	0
4/7/05 9:00	4/7/05 12:30	Carbon 2	242	9.4
4/7/05 12:30	4/7/05 14:00	Carbon 2	277	10.8
4/7/05 14:00	4/7/05 16:00	Carbon 2	312	12.1

Table 2. Test Program for Phase 2 Activated Carbon Injection.

Start Time (CT)	Stop Time (CT)	Carbon Type	Full or Half ESP Injection	Injection Rate (lb/hr)	Injection Rate (lb/Macf)
5/18/05 12:00	5/19/05 9:35		-	0	0
5/19/05 9:35	5/19/05 18:00	Carbon 1	Full-ESP	269	12.8
5/19/05 18:00	5/20/05 11:10		-	0	0
5/20/05 11:10	5/20/05 19:30	Carbon 1	Half-ESP	292	Unknown value* between 10 and 20
5/20/05 19:30	5/20/05 21:20		-	0	0

* Because of migration of carbon across the ESP, the actual carbon injection rate in lb/Macf is not known for the half-ESP injection case. The actual value lies somewhere in between the full ESP case (10 lb/Mmacf) and double that value (20 lb/Mmacf).

Table 3. Executed Test Program for Phase 3 Activated Carbon Injection

Start Time (CT)	Stop Time (CT)	Carbon Type	Full or Half ESP Injection	Injection Rate (lb/hr)	Injection Rate (lb/Macf)
7/25/05 18:00	7/26/05 13:46		-	0	0
7/26/05 13:46	7/26/05 18:00	Carbon 2	Full-ESP	235*	7.8
7/26/05 18:00	7/27/05 9:20		-	0	0
7/27/05 9:20	7/27/05 12:40	Carbon 2	Full-ESP	167	5.5
7/27/05 12:40	7/27/05 15:30	Carbon 2	Full-ESP	65	2.2
7/27/05 15:30	7/27/05 21:50		-	0	0

*The pre and post-test carbon injection skid calibrations predicted 212 lb/hr and 258 lb/hr injection rates. An average of 235 lb/hr is reported.

Flue Gas Mercury Results – Low Sulfur Bituminous Coal Tests

During baseline (no injection), the inlet and outlet mercury concentrations were generally within ±10% of each other, with a few data periods within ±20%. These data indicate little or no baseline removal of mercury across the ESP.

Baseline mercury concentrations typically ranged from 6 to 9 $\mu g/Nm^3$ at full load. At lower loads, the mercury concentration dropped to as low as 2.5 $\mu g/Nm^3$. In units of mg/MWh, the baseline mercury emissions from the ESP ranged from 15 to 25 mg/MWh at full load.

The test results are summarized in Table 4. For each injection rate, the percent removal of mercury was computed by comparing the average ESP outlet mercury concentration to the average ESP inlet mercury concentration. Each morning's baseline mercury measurements are also given. Because baseline measurements indicated no removal of

mercury across the ESP, the percent reduction of mercury at the outlet of the ESP is equivalent to the percent mercury removed across the ESP.

Table 4. Average Mercury Concentrations Measured During Phase 1 Injection Tests

Carbon Type	Date	Start Time (CT)	End Time (CT)	Injection Rate (lb/MMacf)	ESP Inlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration (mg/MWh)	% Vapor Phase Hg Removal Across ESP
Carbon 1	4/1/05	8:40	9:46	0.0	6.2±0.4	5.8±0.3	19.3	7%
Carbon 1	4/1/05	12:05	12:05	4.5	7.0±0.3	3.0±0.2	9.9	58%
Carbon 1	4/1/05	12:12	16:37	8.8	7.7±0.8	1.6±0.6	5.4	79%
Carbon 1	4/2/05	6:00	8:33	0.0	6.5±0.4	5.1±0.6	*17.0	21%
Carbon 1	4/2/05	9:47	17:57	12.0	5.5±0.5	0.9±0.2	*2.9	84%
Carbon 2	4/6/05	11:08	12:15	0.0	5.8±0.3	6.6±0.2	23.0	-13%
Carbon 2	4/6/05	13:00	15:00	8.2	5.8±0.3	2.0±0.2	6.9	65%
Carbon 2	4/6/05	15:45	16:54	14.9	5.6±0.3	1.0±0.2	3.4	82%
Carbon 2	4/7/05	8:26	9:00	0.0	5.2±0.2	4.5±1.3	15.2	13%
Carbon 2	4/7/05	9:30	12:30	9.4	5.8±0.5	1.5±0.4	5.0	75%
Carbon 2	4/7/05	12:35	14:10	10.8	5.9±0.5	1.5±0.4	5.2	74%
Carbon 2	4/7/05	15:12	16:00	12.1	5.2±0.4	1.4±0.2	4.6	74%

Start and End Times indicate the averaging period for the data, not the start and end time for the specified injection rates.
* Plant data not available on 4/2/05, so for calculation of mg/MWh emission rate, load of 286 MW, temperature of 259°F. and flow rate of 833 kacfm were assumed. These are the average values from the plant data the previous two days.

A few caveats should be attached to these results. Firstly, it should be recognized that the test was conducted over an eight-hour injection period. This test period is not long enough to characterize variations in mercury removal performance with unit operation and coal variations.

Secondly, these results were measured at a single point in the ESP outlet duct. Neither the ESP outlet ports nor the automated monitoring system are conducive to traverse measurements. The relatively good correlation between baseline inlet and outlet mercury concentrations does suggest that the ESP outlet sampling point was representative of the average flue gas condition.

Thirdly, these results were obtained while burning Low Sulfur bituminous coal, which has a relatively high chloride content and therefore may provide more optimum conditions for mercury removal over blended coals.

Finally, the error associated with mercury monitoring system measurements is typically ± 20%.

Flue Gas Mercury Results – Low Sulfur Bituminous Coal Blends

The second phase of tests was conducted in May 2005. During the second phase, Mercer burned its typical blend of bituminous coal.

During baseline (no injection), the inlet and outlet mercury concentrations were generally within ±10% of each, with a few data periods within ±20%. These data indicate little or no baseline removal of mercury across the ESP.

Baseline mercury concentrations typically ranged from 3 to 4.5 $\mu g/Nm^3$ at full load. At low load, the mercury concentration dropped to as low as 0.7 $\mu g/Nm^3$. The baseline flue gas mercury concentrations were lower for the bituminous blend than for the firing of a single bituminous coal.

The test results are summarized in Table 5.

Table 5 Mercury Removal Results for Phase 2 Carbon No. 1 Injection Tests.

Carbon Type	Date	Start Time (CT)	End Time (CT)	Injection Rate (lb/MMacf)	ESP Inlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration (mg/MWh)	% Vapor Phase Hg Removal Across ESP
Carbon 1	5/19/05	9:00	9:35	0.0	3.8±0.2	4.3±0.2	17.0	-14%
Carbon 1	5/19/05	10:25	18:00	9.7	2.9±0.6	1.1±0.2	4.3	62%
Carbon 1	5/20/05	10:30	11:10	0.0	2.4±0.2	4.1±0.3	16.5	NA
Carbon 1	5/20/05	11:55	19:30	15.4	3.0±0.5	1.0±0.1	4.2	66%

NA=not available, Mercer Unit 2 went through a swing in load just prior to injection test. Inlet mercury concentration appeared to have levelled out, but outlet mercury concentration was not yet level when injection test began.

The third phase of the Mercer ACI test program occurred at the end of July 2005. During the third phase, Mercer burned its typical blend of bituminous coal. The Carbon 2 sorbent was tested at various injection rates. The results are shown in Table 6.

There was significant baseline mercury removal measured across the ESP during this test week. Baseline mercury removal was as high às 38%. In all of the previous test weeks, the baseline removal had ranged from 0 to 20%. The mercury content of the fly ash collected in the July test was not any higher than the mercury content of fly ash collected from earlier tests. It is unclear whether the higher baseline removal measured during the July testing was caused by a sampling artifact. Both the inlet and outlet analyzers passed their respective quality control checks.

In order to isolate the effect of the carbon from the native removal of mercury by the fly ash, the percent reduction at the ESP is shown in Table 5. The percent reduction is computed by comparing the outlet mercury concentration measured during an injection test to the baseline outlet mercury concentration measured in the morning prior to starting injection. This calculation method differs from the previously shown results, in which the percent removal across the ESP was given. When the baseline removal across the ESP is zero, the removal across the ESP is the same as the percent reduction at the ESP outlet.

Table 6. Mercury Removal Results for Phase 3 Carbon No. 2 Injection Tests

Carbon Type	Date	Start Time (CT)	End Time (CT)	Injection Rate (lb/MMacf)	ESP Inlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration ($\mu g/Nm^3$)	ESP Outlet Total Hg Concentration (mg/MWh)	% Vapor Phase Hg Removal Across ESP
Carbon 2	7/26/05	12:33	13:43	0.0	NA	4.8±0.2	18.3	30%
Carbon 2	7/26/05	13:46	18:00	7.8	6.8±0.5	1.2±0.1	4.8	82%
Carbon 2	7/27/05	9:10	9:20	0.0	NA	4.0	15.4	38%
Carbon 2	7/27/05	9:20	12:40	5.5	6.4±0.2	2.3±0.1	8.8	64%
Carbon 2	7/27/05	12:40	15:30	2.2	6.2±0.3	3.0±0.1	11.8	51%

NA = ESP inlet Hg concentration just started to steady out at beginning of injection test. There was not enough data to report an average
* Baseline % removal across ESP calculated with ESP inlet concentration measured in period just after baseline.

Conclusion

This report summarizes the results to date of the activated carbon injection testing conducted on Mercer No. 22 ESP for control of mercury emissions. Two different activated carbons were utilized in the test program while firing low sulfur eastern bituminous and blends of bituminous coal. Reductions in mercury emissions were noted as a result of the injection of activated carbon into the flue gas stream directly in front of the ESP. Mercury concentrations in the flue gas were measured at the inlet and outlet ducting of 22 ESP. During the relatively brief testing runs, ESP performance appeared to be unaffected. However, long-term impacts on ESP performance remain unanswered.

Previous testing at other test sites has indicated that Carbon 2 can provide mercury removal advantages. In these tests, Carbon 2 did not provide significantly improved mercury removal performance in comparison to Carbon 1.

Mercer Generating Station In-Duct SCR Permit Application
New Jersey Department Of Environmental Protection
Mercer Generating Station Activated Carbon Injection Testing

Company Name PSEG Fossil LLC **Facility ID** 60001

1. **Responsible Official** – This first tier of this certification is to be signed by a Responsible Official as defined in N.J.A.C. 7:27-1.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in the attached document and, based on my inquiry of those officials immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I certify that, based on my inquiry of those officials immediately responsible for obtaining the information, I believe that any estimates are the result of good faith application of sound professional judgement, using techniques, factors, or standards approved by the Department or EPA, or generally accepted in the trade. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."

Name (type or print) Francis X. Sullivan Title Director – Asset Operations

Signature  Date 9/12/05

2. **Individuals with direct knowledge** – This second tier of certification is to be signed by the individual or individuals with direct knowledge and/or responsibility for the information contained in the attached spreadsheet. Please use a copy of this form if you need to have this certified by more than two individuals.

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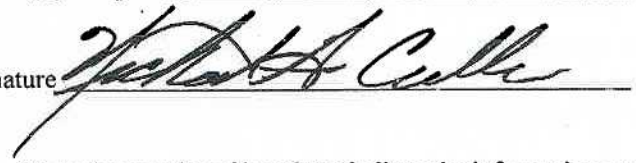
Name (type or print) MICHAEL G. CULLEN Title SR. ENVIRO ENGR

Signature  Date 09/12/05

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