



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SHAWN M. LATOURETTE
Commissioner

TAHESHA L. WAY
Lt. Governor

AIR, ENERGY AND MATERIALS SUSTAINABILITY
Division of Air Quality and Radiation Protection
Bureau of Stationary Sources
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

Air Pollution Control Preconstruction Permit and Certificate to Operate Construction of a New Source

Permit Activity Number: PCP220001

Program Interest No: 50078

Mailing Address	Plant Location
JOSE EDWARDS ASSISTANT VICE PRESIDENT - FACILITIES COOPER UNIVERSITY HOSPITAL 1 COOPER PLAZA Camden, NJ 08103	COOPER UNIVERSITY HOSPITAL 1 Cooper Plz Camden Camden County, New Jersey

Approval Date: Draft

Expiration Date: Draft

The New Jersey Department of Environmental Protection (Department) has reviewed the above referenced air pollution control permit application. On the basis of the information provided, the Department concludes that the application satisfies all applicable requirements of the New Jersey Air Pollution Control regulations codified at N.J.A.C. 7:27 et seq. This permit allows for inspection and evaluation of the equipment by the Department to assure conformance with all provisions of N.J.A.C. 7:27 et seq. and any other applicable federal requirements codified at 40 CFR 52, 60, 61 and 63.

The equipment, that is authorized to be installed and operated under this approval, is described in Section A, Source Operations and Section D, Equipment Inventory. Equipment at the facility referenced by this Permit shall be operated in accordance with the Conditions of Approval set forth in Section D, Facility Specific Requirements.

The Department hereby issues this permit and certificate under the authority of chapter 106, P.L. 1967(N.J.S.A 26:2C-9.2). You may construct, reconstruct, install, or modify the above referenced equipment and/or control apparatus consistent with the approval.

The approved Permit is available for download in PDF format which contains the facility's specific requirements (compliance plan) at: <https://dep.nj.gov/boss/>. After accessing the web site, click on "Approved PCP Permits" listed under "Reports" and then type in your Program Interest (PI) Number, 50078, as instructed on the screen. You will be able to view, print or electronically store your permit. If you have any questions regarding this permit approval, please contact the Department at the Preconstruction Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to

someone about any technical questions you may have. The Preconstruction Permit Technical Help Line number is 609-292-6716.

If, in your judgment as an applicant for an air pollution control permit, the Department is imposing any unreasonable Condition of Approval, you may contest the Department's decision and request a contested case hearing pursuant to the Administrative Code at N.J.A.C. 7:27-1.32(a). All requests for contested case hearings must be received in writing by the Department within twenty (20) calendar days of the date you receive this permit approval and must contain the information specified in the Administrative Hearing Request Checklist and Tracking Form.

If you have any non technical questions please use the Bureau's number 609- 292-0834. If you have any questions when filing a General Permit please use the General Permit Help number 609-633-2829.

Approved by:

Sunila Agrawal
Preconstruction Permits

Administrative Hearing Request Checklist and Tracking Form

I. Document Being Appealed

Name of the Facility	Facility ID Number	Permit Activity Number	Issuance Date
COOPER UNIVERSITY HOSPITAL	50078	PCP220001	

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. Two printed copies of the document being appealed – for submitting to address 1 below;
A PDF copy of the document being appealed on a CD – for submitting to address 2 below
- 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 Administrative Hearings and Dispute Resolution
Attention: Adjudicatory Hearing Requests
401 E. State Street
Mail Code 401-07A
P.O. Box 420
Trenton, New Jersey 08625-0420
2. New Jersey Department of Environmental Protection
Air Quality Program
401 E. State Street
Mail Code: 401-02
P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 633-2829

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 Administrative Hearings and Dispute Resolution
Attention: Adjudicatory Hearing Requests
401 E. State Street
Mail Code 401-07A
P.O. Box 420
Trenton, New Jersey 08625-0420
2. New Jersey Department of Environmental Protection
Air Quality Program
401 E. State Street
Mail Code: 401-02
P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 633-2829

Signature

Date

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

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Facility ID No.: 50078

Permit Activity No.: PCP220001

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AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section A

Facility Name: COOPER UNIVERSITY HOSPITAL

Facility ID No.: 50078

Permit Activity No.: PCP220001

AUTHORIZED SOURCE OPERATIONS

This Preconstruction Permit and the Certificate to Operate for the following equipment is issued pursuant to N.J.A.C. 7:27-8.

Description of Source Activity

Source Operation Type: Turbine and Duct Burner used for combined heat and power.

Source Operation Description: Natural gas-fired turbine (48.70 MMBtu/hr-HHV) and natural gas-fired duct burner (21.30 MMBtu/hr-HHV). Duct burner shall only be fired in conjunction with turbine firing.

Source Operation Details: The sources authorized by this permit shall be operated within the parameters specified in the Equipment, and/or Emission Unit Operating Scenario Details of this permit. Operation of the authorized sources within these parameters is required in addition to compliance with the conditions specified in Section D– Facility Specific Requirements.

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section B

Facility Name: COOPER UNIVERSITY HOSPITAL

Facility ID No.: 50078

Permit Activity No.: PCP220001

ACRONYMS

CEMS	Continuous Emissions Monitor System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitor System
EPA	United States Environmental Protection Agency
EMS	Emission Measurement Section - NJDEP
HAP	Hazardous Air Pollutant
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NO _x	Oxides of Nitrogen
PM-2.5	All particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns
PM-10	All particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns
PST	Performance Specification Test
REO	Regional Enforcement Office - NJDEP
SO ₂	Sulfur Dioxide
TSP	Total Suspended Particulate Matter
VOC	Volatile Organic Compounds

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section C

Facility Name: COOPER UNIVERSITY HOSPITAL

Facility ID No.: 50078

Permit Activity No.: PCP220001

GENERAL PROVISIONS AND AUTHORITIES Preconstruction Permits

1. The permittee shall not construct, reconstruct, install, or modify a significant source or control apparatus serving the significant source without first obtaining a preconstruction permit under N.J.A.C. 7:27-8. [N.J.A.C. 7:27-8.3(a)]
2. The permittee shall not operate (nor cause to be operated) a significant source or control apparatus serving the significant source without a valid operating certificate. [N.J.A.C. 7:27-8.3(b)]

3. **Permit Revisions:**

The permittee shall not take any action which requires a permit revision, compliance plan change, seven-day-notice change, amendment, or change to a batch plant permit, under any applicable provision at N.J.A.C. 7:27-8.17 through 8.23, without complying with that applicable provision.

The following summarize N.J.A.C. 7:27-8.18 through 8.21:

- a. The permittee shall file a permit revision request and receive approval from the Department prior to increasing any maximum allowable emission limit, increasing actual emissions, to a rate or concentration greater than a maximum allowable emission, causing the emissions of a new air contaminant, use a new raw material, reconstructing equipment, change the ground level concentration of an air contaminant in an area where the public has access, replace the permitted source, or constructing or installing a new significant source. [N.J.A.C. 7:27-8.18]
- b. The permittee shall file a compliance plan change request and receive approval from the Department prior to decreasing the frequency of testing, monitoring, recordkeeping, or reporting, changing the monitoring method, changing a level, rate, or limit of an operational parameter included in the conditions, or reducing a source's potential to emit. [N.J.A.C. 7:27-8.19]
- c. At least seven days prior to proceeding with a physical or operational change that is outside the scope of activities allowed by this permit, but will not increase emissions over the allowable emissions and will not alter the stack characteristics, the permittee shall file a seven-day-notice change. The permittee may proceed with the proposed changes seven days after such notice is filed with the Department. [N.J.A.C. 7:27-8.20].
- d. The permittee shall file an amendment within 120 days of making any change of the information which allows the Department to identify and contact the permittee, changing the name, number or designation of any equipment or stack

covered by this permit, changing the parameters of a stack in such a way to reduce the ground level concentration of an air contaminant, or correction of a typographical error that will not result in an increase of actual or allowable emissions. [N.J.A.C. 7:27-8.21]

The permittee shall review the provisions of N.J.A.C. 7:27-8.18 through 7:27-8.21 to determine the appropriate type of request to file.

4. The permittee shall make the preconstruction permit or certificate, together with any amendments, seven-day-notices, or other documents related to the permit and certificate, readily available for Department inspection on the operating premises. [N.J.A.C. 7:27-8.3(d)]
5. The permittee shall not use or cause to be used the equipment or control apparatus unless all components connected or attached to, or serving, the equipment or control apparatus, are functioning properly and are in compliance with the preconstruction permit and certificate and all conditions and provisions thereto. [N.J.A.C. 7:27-8.3(e)]
6. A preconstruction permit is not transferable either from the location authorized in the preconstruction permit to another location, or from any one piece of control apparatus or equipment to another piece of control apparatus or equipment. [N.J.A.C. 7:27-8.3(f)]
7. Once a permit or certificate is issued, the permittee is fully responsible for compliance with N.J.A.C. 7:27-8 and with the permit and certificate, including adequate design, construction, and operation of the source, even if employees, contractors, or others work on or operate the permitted source. If the Department issues any other requirement with the force of law, such as an order which applies to the source, the permittee is also responsible for compliance with that requirement. [N.J.A.C. 7:27-8.3(g)]
8. Preconstruction permits and certificates do not in any way relieve the permittee from the obligation to obtain necessary permits from other government agencies and to comply with all other applicable Federal, State, and local rules and regulations. [N.J.A.C. 7:27-8.3(h)]
9. The Department and its representatives have the right to enter and inspect any facility or property in accordance with N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-8.3(m)]
10. There shall be an affirmative defense to liability for penalties for a violation of a preconstruction permit or certificate occurring as a result of an equipment malfunction, an equipment start-up, an equipment shutdown, or during the performance of necessary maintenance. The affirmative defense shall be asserted and established as required pursuant to P.L. 1993. c.89 (adding N.J.S.A. 26:2C-19.1 through 2C-19.5) and any rules the Department promulgates thereunder, and shall meet all of the requirements thereof. [N.J.A.C. 7:27-8.3(n)]
11. Any person to whom the Department has issued a preconstruction permit or certificate shall comply with all terms and conditions of any order related to the preconstruction permit or certificate. [N.J.A.C. 7:27-8.13(a)]
12. The permittee shall maintain all records required in the permit for a period of five (5) calendar years. [N.J.A.C. 7:27-8.13(a)]

13. The Department may change the conditions of approval of any approved certificate to operate at the time of renewal of a temporary operating certificate; at the time of approval or renewal of a five-year operating certificate; or at any time during the period a certificate is in effect, if the Department determines that such change is necessary to protect human health or welfare or the environment. [N.J.A.C. 7:27-8.13(b)]
14. Upon request of the Department, the permittee shall submit to the Department information relevant to the operation of equipment and control apparatus including all information specified at N.J.A.C. 7:27-8.13(c). [N.J.A.C. 7:27-8.13(c)]
15. If the conditions of a preconstruction permit or certificate to operate require the Department to incur any of the following charges, the permittee shall reimburse the Department for the full amount of these charges: (1) The charges billed by any phone company for the maintenance of a dedicated telephone line required by this permit or the certificate to operate for the electronic transmission of data; or (2) The charges billed by any laboratory for performing the analysis of audit samples collected pursuant to testing or monitoring required by this permit or the certificate to operate. [N.J.A.C. 7:27-8.13(g)]
16. Any failure to comply with the operating requirements or exceedance of emission concentrations specified in a preconstruction permit shall be reported within three (3) business days by calling the Environmental Action Hotline at (877) 927-6337 AND in writing to the Regional Enforcement Office within 30 days of the failure or exceedance. [N.J.A.C. 7:27-8.13(h)]
17. The permittee shall, when requested by the Department, provide such testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the kind and amount of air contaminants emitted from the equipment or control apparatus. The testing facilities shall include the utilities, the structure to hold testing equipment and/or personnel, and any ports in stacks needed to carry out testing required by this permit. During testing by the Department, the equipment and control apparatus shall be operated under such conditions within their capacities as may be requested by the Department. The test facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws, regulations, and rules concerning safe construction and safe practice. Testing facilities, which contain platforms and other means of personnel access, shall conform to OSHA standards. [N.J.A.C. 7:27-8.13(i)]
18. Upon request of the Department, the permittee shall submit to the Department any record relevant to any permit or certificate. Such records shall be submitted to the Department within thirty (30) days of the request by the Department or within a longer time period if approved in writing by the Department. [N.J.A.C. 7:27-8.15(a)]
19. A permittee shall submit any required report in a format and on a schedule approved by the Department. Such report shall be transmitted on paper, by hand delivery, on computer disk, or electronically, at the discretion of the Department. [N.J.A.C. 7:27-8.15(b)]
20. Any report submitted to the Department, including but not limited to, a report submitted as an amendment of this permit or the certificate to operate pursuant to N.J.A.C. 7:27-8.3(c) shall include, as an integral part of the report, certifications complying with N.J.A.C. 7:27-1.39.

21. Upon request of the Department, the permittee shall report on forms obtained from the Department the air contaminant actual emissions and information relevant thereto, of any air contaminant or category of air contaminant emitted by the equipment, control apparatus, or source operation. [N.J.A.C. 7:27-8.15(d)]
22. Any emission limit values in a preconstruction permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of “1 lb/hr” means a limit of “1.00 lb/hr”) except for concentration limits less than 10 parts per million (ppm). For such concentration limits, the emission limit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to two significant figures (e.g. a printed limit of “1 ppm” means a limit of “1.0 ppm”).
23. This listing of requirements reflects the state rules and regulations that apply to a majority of sources. If a specific requirement in a rule or regulation that applies to a permittee is not included in this section or in the “Facility Specific Requirements” it does not relieve the permittee from the obligation to comply with that regulation.
24. The following Department offices may be referenced in a preconstruction permit. Please use the following addresses when submitting any correspondence to these offices:

Emission Measurement Section
Mail Code: 09-01, P.O. Box 420
Trenton, NJ 08625-0420

Central Regional Enforcement Office
Mail Code: 22-03A; P.O. Box 420
Trenton, NJ 08625-0420

Northern Regional Enforcement Office
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

Southern Regional Enforcement Office
2 Riverside Drive – Suite 201
Camden, NJ 08103
25. In accordance with N.J.A.C. 7:27-8.13(e), facilities are subject to 4 billable compliance inspections over the life of the Operating Certificate. Facilities will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted.
26. The permittee shall pay fees to the Department pursuant to N.J.A.C.7:27-8.

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section D

Facility Name: COOPER UNIVERSITY HOSPITAL

Facility ID No.: 50078

Permit Activity No.: PCP220001

PERMIT INFORMATION

FACILITY SPECIFIC REQUIREMENTS

REASON FOR APPLICATION

FACILITY PROFILE (GENERAL)

EQUIPMENT INVENTORY

EMISSION POINT INVENTORY

EMISSION UNIT INVENTORY

PCP220001

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item: FC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The Permittee shall not cause, suffer, or allow to emit into the outdoor atmosphere substances in quantities which shall result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27- 5]	None.	None.	None.
2	The permittee shall not suffer, allow, or permit any 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. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. In determining whether an odor unreasonably interferes with the enjoyment of life or property, the Department shall consider all of the relevant facts and circumstances, including, but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby. In considering these and other relevant facts and circumstances, no one factor shall be dispositive, but each shall be considered relevant in determining whether an odor interferes with the enjoyment of life and property, and, if so, whether such interference is unreasonable considering all of the circumstances. [N.J.A.C. 7:27- 8.3(j)]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	Process monitors must be operated at all times when the associated process equipment is operating except during outage time allowed by Department guidelines/procedures or as outlined in Technical Manual 1005. [N.J.A.C. 7:27-8.13(a)]	None.	Other: Keep records of parameters monitored by the process monitor(s) as instructed by the Department's guidelines/procedures or as outlined in Technical Manual 1005. [N.J.A.C. 7:27-8.13(d)].	None.
4	The permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the preconstruction permit. Whenever the permittee makes a replacement, modification, change or repair of a certified CEMS or COMS that may significantly affect the ability of the system to accurately measure or record data, the permittee must recertify the CEMS or COMS in accordance with Section V.B. and Appendix E of Technical Manual 1005. The permittee is responsible for contacting the Emission Measurement Section to determine the need for recertification and/or to initiate the recertification process. The permittee is responsible for any downtime associated with the replacement, modification, change or repair of the CEMS or COMS. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
5	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. A person who fails to so notify the department is liable to the penalties and procedures prescribed in this section. [N.J.S.A. 26: 2C-19(e)]	None.	None.	Notify by phone: Upon occurrence of event. The Permittee shall immediately notify the Department of any non-compliance by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26: 2C-19(e)]

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	<p>The permittee is required to submit annual emission statements of their actual emissions if the Potential-to-emit for the entire facility equals to or exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Emission Statement reports can be obtained by calling (609) 984-5483.</p> <p>Air Contaminant Threshold in Tons per Year:</p> <p>VOC: 10 tons per year NOx: 25 tons per year CO: 100 tons per year SO2: 100 tons per year TSP: 100 tons per year PM2.5: 100 tons per year PM10: 100 tons per year Ammonia (NH3): 100 tons per year Lead (Pb): 5 tons per year Methane (CH4): 100 tons per year [N.J.A.C. 7:27-21]</p>	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	<p>The permittee is required to submit a Title V Operating Permit application, within one year, if the potential-to-emit for the entire facility equal to or exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Operating Permits can be obtained by calling the Operating Permit Hotline at (609) 633 - 8248.</p> <p>Air Contaminant Threshold in Tons per Year:</p> <p>CO: 100 tons per year PM10: 100 tons per year PM2.5: 100 tons per year TSP: 100 tons per year SO2: 100 tons per year SO2 (as a PM2.5 precursor): 100 tons per year NOx: 25 tons per year NOx (as a PM2.5 precursor): 100 tons per year VOC: 25 tons per year Lead: 10 tons per year Any HAP: 10 tons per year All HAPs collectively: 25 tons per year Any other air contaminant, except CO2: 100 tons per year [N.J.A.C. 7:27-22]</p>	None.	None.	None.
8	<p>Potential to Emit (PTE) of all other air contaminants, not listed in this permit, shall be below their respective reporting thresholds for contaminants listed as N.J.A.C. 7:27-8, Appendix I, Table A, and N.J.A.C. 7:27-17.9(a), as applicable. [N.J.A.C. 7:27- 8.13(h)]</p>	None.	None.	None.
9	<p>The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-8, or portion thereof. [N.J.A.C. 7:27- 1.31]</p>	None.	None.	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Continuous recording for process monitors must be at a sufficient frequency and resolution to be able to document compliance or non-compliance in accordance with Technical Manual 1005 for CEMS (TM1005(B)(3)). [N.J.A.C. 7:27-8.13(a)]	None.	None.	None.
11	Consistent with EPA's National Stack Testing Guidance and Technical Manual 1004, a facility may not stop an ongoing stack test because it would have failed the test unless the facility also ceases operation of the equipment in question to correct the issue. Stopping an ongoing stack test in these instances will be considered credible evidence of emissions non-compliance. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
12	All information provided in the application as well as the information related to the application included as Attachments to the application shall be considered as a part of the permit and is subject to enforcement. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
13	Any information contained in an approved application and any condition of approval thereof, are subject to enforcement. This includes the following application information, which shall constitute maximum allowable limits, unless the Department establishes other limits in the conditions of approval: 1. Rates of emission of each air contaminant and each category of air contaminant listed; 2. Total hours of operation per time period; and 3. Any rate of production. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U18 Combustion Turbine with Duct Burner

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	CO <= 12.18 tons/yr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
2	HAPs (Total) <= 0.26 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
3	NOx (Total) <= 11.34 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
4	PM-10 (Total) <= 3.07 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
5	PM-2.5 (Total) <= 3.07 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
6	TSP <= 3.07 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
7	VOC (Total) <= 1.38 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
8	Acrolein <= 0.0019 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
9	Formaldehyde <= 0.22 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
10	Acetaldehyde <= 0.012 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
11	Benzene <= 0.00368 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
12	Ethylbenzene <= 0.00981 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
13	Methane <= 8.65 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
14	Benzo (A) Pyrene Emissions <= 0.000675 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
15	Propylene oxide <= 0.00889 tons/yr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	<p>INITIAL STACK TESTING SUMMARY The permittee shall conduct a stack test, using a protocol approved by the Department to demonstrate compliance with emission limits, as follows:</p> <p>1. For CO, NO_x, Formaldehyde and Benzo(a)pyrene, as specified in the Operating Scenario OS1 (Turbine E1102 without Duct Burner E1103 firing) and OS2 (Turbine E1102 operating with Duct Burner E1103 firing) of this permit, in accordance with the state requirements, and</p> <p>2. For NO_x as specified in the Operating Scenario OS2 of this permit for the Turbine E1102 and Duct Burner E1103, in accordance with the federal requirements, 40 CFR 60 Subpart KKKK.</p> <p>NO_x measurements shall be taken after the duct burner, which has to be in operation during the performance test.</p> <p>The permittee shall provide BTS with the turbine load performance curve with the protocol and provide any special circumstances such as operating range of the equipment. [N.J.A.C. 7:27- 8.4(f)]</p>	<p>Other: The stack test must be conducted within 180 days after initial startup of the new or modified source or within 60 days of approval of a timely submitted protocol, whichever comes later.</p> <p>For an extension of due dates, the permittee shall request the approval, with proper justification, from REO prior to the due date. If approved in writing by the REO prior to the due date, the extension of dates for the stack test protocol submittal, stack test performance, or stack test report submittal would not constitute a permit revision.</p> <p>If a source is subject to federal requirements, extending the testing date beyond 180 days after the source's initial start-up requires prior approval from US EPA. [N.J.A.C. 7:27- 8.13(d)1].</p>	<p>Other: Recordkeeping as required under the applicable Operating Scenarios(s). [N.J.A.C. 7:27- 8.13(d)3].</p>	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 within 60 days from the date of the approved preconstruction permit. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT), unless another format is approved by EMS. The ERT program can be downloaded at: https://www.epa.gov/chief.</p> <p>Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days from the date of testing. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27- 8.4(f)]</p>

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
17	<p>SUBSEQUENT STACK TESTING SUMMARY The permittee shall conduct a stack test, using a protocol approved by the Department to demonstrate compliance with emission limits, as follows:</p> <ol style="list-style-type: none"> 1. For CO and NO_x , as specified in the Operating Scenario OS2 (Turbine E1102 operating with Duct Burner E1103 firing) of this permit, in accordance with the state requirements, and 2. For NO_x as specified in the Operating Scenario OS1 (Turbine E1102 without Duct Burner E1103 firing) and OS2 of this permit (Turbine E1102 and Duct Burner E1103), in accordance with the federal requirements, 40 CFR 60 Subpart KKKK. <p>The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. NO_x measurements shall be taken after the duct burner, which has to be in operation during the performance test. [N.J.A.C. 7:27- 8.4(f)]</p>	Other: Monitoring as required under the applicable Operating Scenario(s).[N.J.A.C. 7:27- 8.13(d)1].	Other: Recordkeeping as required under the applicable Operating Scenarios(s).[N.J.A.C. 7:27- 8.13(d)3].	<p>Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Emission Measurement Section (EMS) at Mail Code: 09-01, PO Box 420, Trenton, NJ 08625 no later than 180 days prior to the testing due date , OR no later than 90 days prior to the testing due date for using a previously approved protocol. The protocol and test report must be prepared and submitted on a CD using the Electronic Reporting Tool (ERT) that is downloaded at: https://www.epa.gov/chief , unless another format is approved by EMS.</p> <p>Within 30 days of protocol approval or no less than 60 days prior to the testing deadline, whichever is later, the permittee must contact EMS at 609-984-3443 to schedule a mutually acceptable test date.</p> <p>A full stack test report must be submitted to EMS and a certified summary test report must be submitted to the Regional Enforcement Office within 60 days after performing the stack test. The test results must be certified by a licensed professional engineer or certified industrial hygienist. [N.J.A.C. 7:27- 8.4(f)]</p>
18	Duct Burner E1103 shall only be operated in conjunction with operation of Turbine E1102. [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.
19	Natural Gas Usage <= 521.74 MMft ³ /yr. [N.J.A.C. 7:27- 8.13(h)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27- 8.13(d)1]	Natural Gas Usage: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27- 8.13(d)3]	None.
20	Opacity: No visible emissions, exclusive of visible condensed water vapor [N.J.A.C. 7:27- 8.13(a)]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U18 Combustion Turbine with Duct Burner

Operating Scenario: OS1 Turbine operating with duct burner, duct burner not firing

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	HAPs (Total) <= 0.045 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
2	Acetaldehyde <= 0.00195 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
3	Acrolein <= 0.000312 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
4	Benzene <= 0.000584 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
5	Ethylbenzene <= 0.00156 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
6	Formaldehyde <= 0.035 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	Formaldehyde: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27- 8.13(d)1]	Formaldehyde: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
7	Propylene oxide <= 0.00141 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
8	Benzo (A) Pyrene Emissions <= 0.000107 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	Benzo (A) Pyrene Emissions: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27- 8.13(d)1]	Benzo (A) Pyrene Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
9	Methane <= 0.55 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
10	CO <= 1.08 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	CO: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 0.884 lb/hr. [N.J.A.C. 7:27-8.13(h)]	NOx (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
12	NOx (Total) <= 9.5 ppmvd @ 15% O ₂ . [N.J.A.C. 7:27- 8.13(h)]	NOx (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
13	PM-2.5 (Total) <= 0.487 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
14	TSP <= 0.487 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
15	PM-10 (Total) <= 0.487 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
16	VOC (Total) <= 0.123 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
17	The owner or operator shall comply with all applicable parts of the General Provisions in 40 CFR 60.1 through 60.19, as included in 40 CFR 60 Subpart A. [40 CFR 60.1]	None.	None.	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	NOx (Total) <= 42 ppmvd @ 15% O2 According to 40 CFR 60.4320(a), as an alternative, the owner or operator may demonstrate compliance with the output based emission limit of 2.3 lb/MW-hr of useful heat. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs, as required in 40 CFR 60.8 and annually (no more than 14 calendar months following the previous performance test) thereafter, in accordance with 40 CFR 60.4400. If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, the owner or operator may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, the owner or operator must resume annual performance tests. The ambient temperature must be greater than 0 °F during the performance test. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. 40 CFR 60.4340(a) and. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [40 CFR 60.4400]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary and Subsequent Stack Testing Summary in this permit. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
19	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain all maintenance records. [40 CFR 60.4333(a)]	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The owner or operator may elect not to monitor the total sulfur content of the fuel per 40 CFR 60.4360, if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu heat input per 40 CFR 60.4365. [40 CFR 60.4365]	Monitored by review of fuel delivery records once initially and per change of fuel contract. The owner or operator shall demonstrate that the total potential sulfur emissions from fuel do not exceed 0.060 lb SO ₂ per MMBtu heat input using a current valid purchase contract, tariff sheet or transportation contract specifying that the maximum total sulfur content in the natural gas supplied is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)]	Recordkeeping by fuel certification receipts upon occurrence of event. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that the maximum total sulfur content for natural gas supplied is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	Demonstrate compliance: Once initially and per change of fuel contract. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.4365(a) showing the maximum total sulfur content for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBtu heat input. [40 CFR 60.4365(a)]

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U18 Combustion Turbine with Duct Burner

Operating Scenario: OS2 Turbine operating with duct burner, duct burner firing

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	HAPs (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
2	Acetaldehyde <= 0.0028 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
3	Acrolein <= 0.000448 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
4	Benzene <= 0.00084 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
5	Ethylbenzene <= 0.00224 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
6	Formaldehyde <= 0.05 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	Formaldehyde: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27- 8.13(d)1]	Formaldehyde: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
7	Propylene oxide <= 0.00203 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
8	Benzo (A) Pyrene Emissions <= 0.000154 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	Benzo (A) Pyrene Emissions: Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. [N.J.A.C. 7:27- 8.13(d)1]	Benzo (A) Pyrene Emissions: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
9	Methane <= 1.98 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
10	CO <= 2.78 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	CO: Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	CO: Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial and Subsequent Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	NOx (Total) <= 2.59 lb/hr. [N.J.A.C. 7:27-8.13(h)]	NOx (Total): Monitored by stack emission testing once initially and every 5 years (based on completion date of the last stack test), based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial and Subsequent Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
12	NOx (Total) <= 9.5 ppmvd @ 15% O2. [N.J.A.C. 7:27- 8.13(h)]	NOx (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs. CO testing shall be conducted concurrently with NOx testing. [N.J.A.C. 7:27- 8.13(d)1]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary in this permit. [N.J.A.C. 7:27- 8.4(f)]
13	PM-2.5 (Total) <= 0.7 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
14	TSP <= 0.7 lb/hr. [N.J.A.C. 7:27- 8.13(h)]	None.	None.	None.
15	PM-10 (Total) <= 0.7 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
16	VOC (Total) <= 0.32 lb/hr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
17	The owner or operator shall comply with all applicable parts of the General Provisions in 40 CFR 60.1 through 60.19, as included in 40 CFR 60 Subpart A. [40 CFR 60.1]	None.	None.	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	NOx (Total) <= 42 ppmvd @ 15% O2 According to 40 CFR 60.4320(a), as an alternative, the owner or operator may demonstrate compliance with the output based emission limit of 2.3 lb/MW-hr of useful heat. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing once initially, based on the average of three Department validated stack test runs, as required in 40 CFR 60.8 and annually (no more than 14 calendar months following the previous performance test) thereafter, in accordance with 40 CFR 60.4400. If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, the owner or operator may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, the owner or operator must resume annual performance tests. The ambient temperature must be greater than 0 °F during the performance test. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. 40 CFR 60.4340(a) and. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results upon occurrence of event. [40 CFR 60.4400]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Initial Stack Testing Summary and Subsequent Stack Testing Summary in this permit. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
19	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator shall maintain all maintenance records. [40 CFR 60.4333(a)]	None.

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**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	The owner or operator may elect not to monitor the total sulfur content of the fuel per 40 CFR 60.4360, if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO ₂ /MMBtu heat input per 40 CFR 60.4365. [40 CFR 60.4365]	Monitored by review of fuel delivery records once initially and per change of fuel contract. The owner or operator shall demonstrate that the total potential sulfur emissions from fuel do not exceed 0.060 lb SO ₂ per MMBtu heat input using a current valid purchase contract, tariff sheet or transportation contract specifying that the maximum total sulfur content in the natural gas supplied is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)]	Recordkeeping by fuel certification receipts upon occurrence of event. The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that the maximum total sulfur content for natural gas supplied is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	Demonstrate compliance: Once initially and per change of fuel contract. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.4365(a) showing the maximum total sulfur content for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO ₂ /MMBtu heat input. [40 CFR 60.4365(a)]

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: **Number:** 0

Description of Modifications: Cooper is submitting this Preconstruction Permit Application (Application) for the following:

1. Cooper operates an existing Combined Heat and Power (CHP) unit consisting of a natural gas-fired turbine and duct burner which are permitted as E1 and E2, respectively, of emissions unit U1 under General Permit No. GEN170002 (General Permit). The General Permit is a GP-021 for CHP Combustion Turbine(s), which has been discontinued by the New Jersey Department of Environmental Protection (NJDEP) as of April 6, 2020. Cooper submitted an Application on 12/6/2022 in order to obtain an operating certificate for the CHP unit prior to the expiration of the General Permit on January 3, 2023. After receipt of the application, the permit was extended by the NJDEP for 6 months. Cooper received comments on the application on 12/27/2022, and is submitting this revised application to address those comments.
2. Cooper is proposing a federally enforceable annual fuel throughput limit of 521.74 million cubic feet per year (MMcf/yr) of natural gas for the CHP unit.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Cooper University Hospital

Facility ID (AIMS): 50078

Street 1 COOPER PLZ
Address: CAMDEN, NJ 08103

Mailing 1 COOPER PLZ
Address: CAMDEN, NJ 08103

County: Camden
Location Take I-95 S to Market St. in Camden; take
Description: Exit 5B from I-676.

State Plane Coordinates:
X-Coordinate: 490,072
Y-Coordinate: 4,421,212
Units: Meters

Datum:
Source Org.: Address Match
Source Type: Approx. Addr. Match

Industry:
Primary SIC:
Secondary SIC:
NAICS: 622110

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Air Permit Information Contact

Organization: Cooper University Hospital

Org. Type: Private

Name: Jose Edwards

NJ EIN:

Title: Assistant Vice President, Facilities

Phone: (609) 504-2760 x

Mailing Address: 1 Cooper Plaza
Camden, NJ 08103

Fax: () - x

Other: () - x

Type:

Email: edwards-jose@cooperhealth.edu

Contact Type: Consultant

Organization: ALL4 LLC

Org. Type: LLC

Name: Paul Mallon

NJ EIN:

Title: Managing Consultant

Phone: (215) 391-4696 x

Mailing Address: 1601 Cherry Street
Suite 800
Philadelphia, PA 19102

Fax: () - x

Other: () - x

Type:

Email: pmallon@all4inc.com

Contact Type: Fees/Billing Contact

Organization: Cooper University Hospital

Org. Type: Private

Name: Jose Edwards

NJ EIN:

Title: Assistant Vice President, Facilities

Phone: (609) 504-2760 x

Mailing Address: 1 Cooper Plaza
Camden, NJ 08103

Fax: () - x

Other: () - x

Type:

Email: edwards-jose@cooperhealth.edu

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Responsible Official

Organization: Cooper University Hospital

Org. Type: Private

Name: Jose Edwards

NJ EIN:

Title: Assistant Vice President, Facilities

Phone: (609) 504-2760 x

Mailing Address: 1 Cooper Plaza
Camden, NJ 08103

Fax: () - x

Other: () - x

Type:

Email: edwards-jose@cooperhealth.edu

COOPER UNIVERSITY HOSPITAL (50078)
PCP220001

Date: 9/9/2024

**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
E1102	Turbine	Turbine	Combustion Turbine	GEN170002	10/1/2018	No		
E1103	Burner	Duct Burner	Duct Burner	GEN170002	10/1/2018	No		

50078 COOPER UNIVERSITY HOSPITAL PCP220001 E1102 (Combustion Turbine)
Print Date: 5/2/2023

Make:	<input type="text" value="Caterpillar"/>		
Manufacturer:	<input type="text" value="Solar Turbines"/>		
Model:	<input type="text" value="Mercury 50-6400R"/>		
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	<input type="text" value="48.70"/>		
Type of Turbine:	<input type="text" value="Industrial"/>		
Type of Cycle:	<input type="text" value="Cogeneration"/>	Description:	<input type="text"/>
Industrial Application:	<input type="text" value="Electrical Generator"/>	Description:	<input type="text"/>
Power Output:	<input type="text" value="4.50"/>	Units:	<input type="text" value="Megawatts"/>
Is the combustion turbine using (check all that apply):			
A Dry Low NOx Combustor:	<input type="checkbox"/>		
Steam Injection:	<input type="checkbox"/>	Steam to Fuel Ratio:	<input type="text"/>
Water Injection:	<input type="checkbox"/>	Water to Fuel Ratio:	<input type="text"/>
Other:	<input type="checkbox"/>	Description:	<input type="text"/>
Is the turbine Equipped with a Duct Burner?	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Have you attached a diagram showing the location and/or the configuration of this equipment?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Comments:			

50078 COOPER UNIVERSITY HOSPITAL PCP220001 E1103 (Duct Burner)
Print Date: 5/2/2023

Make:	Caterpillar
Manufacturer:	Solar Turbines
Model:	Mercury 50-6400R
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	21.30
Equipment Type Description:	Dust burner associated with E1102.

Have you attached a diagram showing the location and/or the configuration of this equipment?

☐ Yes
☒ No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

☒ Yes
☐ No

Comments:

Include Emission Rates on the Potential to Emit Screen for each contaminant in ppmvd @ 7%O2 in addition to lbs/hr and tons/yr.

COOPER UNIVERSITY HOSPITAL (50078)
PCP220001

Date: 9/9/2024

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.		
PT35	CHP	CHP unit stack	Round	48	71	60	290.0	0.0	330.0	47,000.0	0.0	52,000.0	Up	

COOPER UNIVERSITY HOSPITAL (50078)
PCP220001

Date: 9/9/2024

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

U 18 CHP unit Combustion Turbine with Duct Burner

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Turbine/DB	Turbine operating with duct burner, duct burner not firing	Normal - Steady State	E1102		PT35	2-02-002-03	0.0	8,760.0		0.0	52,000.0	0.0	330.0
OS2	Turbine/DB	Turbine operating with duct burner, duct burner firing	Normal - Steady State	E1103		PT35	2-02-002-03	0.0	8,760.0		0.0	52,000.0	0.0	330.0

50078 COOPER UNIVERSITY HOSPITAL PCP220001 U18 OS1 (Fuel Information Table)

Print Date: 5/2/2023

Is this fuel a blend?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Fuel Category:	Commercial
Fuel Type:	Natural gas
Description (if other):	
Amount of Sulfur in Fuel (%):	0.0001
Amount of Ash in Fuel (%):	
Fuel Heating Value:	1,020.00
Units:	BTU/scf
Estimated Maximum Amount of Fuel Burned Annually:	52.00
Units:	MMft ³ /yr
Estimated Actual Amount of Fuel Burned Annually:	46
Units:	MMft ³ /yr
Amount of Oxygen in Flue Gas (%):	
Amount of Moisture in Flue Gas (%):	
Comments:	

50078 COOPER UNIVERSITY HOSPITAL PCP220001 U18 OS2 (Fuel Information Table)

Print Date: 5/2/2023

Is this fuel a blend?

☐ Yes ☒ No

Fuel Category:

Commercial

Fuel Type:

Natural gas

Description (if other):

Amount of Sulfur in Fuel (%):

0.0001

Amount of Ash in Fuel (%):

Fuel Heating Value:

1,020.00

Units:

BTU/scf

Estimated Maximum Amount of
Fuel Burned Annually:

470.00

Units:

MMft³/yrEstimated Actual Amount of
Fuel Burned Annually:

414

Units:

MMft³/yr

Amount of Oxygen in Flue Gas (%):

Amount of Moisture in Flue Gas (%):

Comments: