

STATEMENT OF BASIS for HOPEWELL CAMPUS OWNER, LLC

TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 61053 / Permit Activity Number: BOP180002

I. FACILITY INFORMATION

Hopewell Campus Owner, LLC is located at 311 Pennington-Rocky Hill Rd, Pennington, Mercer County, NJ 08534 and consists of a pharmaceutical research and development facility. The facility is owned and operated by Hopewell Campus Owner, LLC.

The facility is classified as a major facility based on its potential to emit (PTE) 58.04 tons per year (tpy) of nitrogen oxides and 74.21 tpy of carbon monoxide.

This permit allows individual hazardous air pollutants to be emitted at a rate not to exceed: 3.94 tpy of Formaldehyde and 0.09 tpy of Acrolein.

II. AREA ATTAINMENT CLASSIFICATION

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>.

III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility include: natural gas and distillate fuel oil fired boilers, diesel emergency generators, diesel emergency fire pumps and natural gas fired stationary internal combustion engines equipped with selective catalytic reduction to control nitrogen oxides emissions and catalytic oxidizers to control carbon monoxide emissions.

Table 1 - Operating Permit Revision History (located at the end of this document) provides a summary of all the changes that have been incorporated into the operating permit through seven-day notice changes, administrative amendments, minor modifications, or significant modifications since the approval of the initial operating permit or the most recent renewal thereof. Please refer to the attached explanation sheet for the structure and configuration of conditions of approval, included in the Facility Specific Requirements section of this permit.

A Facility-Wide Risk Assessment was conducted as part of the review of this permit application and health risk was determined to be negligible consistent with NJDEP Technical Manual 1003.

This is a permit renewal and includes the following changes:

1. Emission unit (EU) U5, 6 MMBtu/hr Boiler #1 B27 (E44) taken out of service and removed from the Title V Operating Permit. EU U5 PTE emissions decreased for NO_x from 2.4 to 1.38 tpy and for CO from 4.86 to 2.77 tpy.
2. Emission point (PT) parameters for PT500 and PT501 were corrected; Stack diameter 23.75 in; Stack temperature as 765 deg F; Exhaust flow 15000 ACFM; Distance to the property line 430 feet; and Discharge direction is up.
3. Updated compliance plan state requirements (N.J.A.C. 7:27-3, 4, 9, 16, 19, 22) and Federal requirements (40 CFR 60 subpart A; 40 CFR 63 subpart A; 40 CFR 60 subpart Dc; 40 CFR 60 subpart IIII, 40 CFR 63 subpart ZZZZ, 40 CFR 63 subpart JJJJJ) for EU U2 emergency generators, EU U4 boilers, EU U5 boilers, EU U6 emergency generators and fire pumps and EU U500 CHP engines.

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4. Included PM-2.5 PTE emissions for EU U1, U2, U4, U5, U6, U400 and U500 consistent with N.J.A.C. 7:27-22.; based on PM10 PTE emissions.
5. Corrected EU U2 tpy emission limits based on current hourly emission rates and hours per year limit; Reduced SO2 tpy emission limits for EU U4 based on percent sulfur in fuel limit; and reduced EU U6 CO, NOx and SO2 tpy emission limit based on manufacturer emission factors.

The changes made during this permitting action result in allowable annual emissions changes as follows: CO decreased from 76.6 to 74.2 tpy; NOx decreased from 60.9 to 58.04 tpy; SO2 decreased from 24.2 to 4.38 tpy; PM10 decreased from 20.5 to 20.3 tpy and PM2.5 was updated from 8.13 to 20.3 tpy consistent with N.J.A.C. 7:27-22.

IV. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and
2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit.

For boilers EU U4 two 63.3 MMBtu/hr Boilers firing natural gas and distillate fuel oil, the facility monitors fuel use as the surrogate for the long-term (TPY) emission limits for VOC, NOx, CO, SO2, TSP, PM-10 and PM-2.5. Surrogate monitoring for the short-term (lb/hr) emission limits are combustion process adjustment for NOx and CO, and fuel oil sulfur content for SO2.

For EU U500 control device Selective Catalytic Reduction (SCR), CD1, CD3 the facility monitors Temperature at catalyst bed, NOx outlet concentration and reactant flowrate for the long-term (TPY) emission limits for NOx. Surrogate monitoring for the short-term (lb/hr) emission limits are combustion process adjustment for NOx and CO.

3. In some cases, direct periodic monitoring of emissions and/or surrogate parameters is not required due to one or more of the following:
 - Equipment size and capacity limitations,
 - Subject equipment being permitted at the maximum rated capacity,
 - There is no specific state or Federal standard that applies to this piece of equipment,
 - Not a pollutant of concern for this piece of equipment,
 - Agreements with EPA on the frequency of testing and monitoring for combustion sources.

V. APPLICABLE STATE AND FEDERAL RULES

The facility is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at: <http://www.nj.gov/dep/aqm/rules27.html>

The facility is also subject to Federal regulations listed below.

NSPS Subpart A: General Provisions

NSPS Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

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TITLE V OPERATING PERMIT RENEWAL

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NSPS Subpart IIII:	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
NSPS Subpart JJJJ:	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
MACT Subpart A:	General Provisions
NESHAP Subpart ZZZZ :	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
NESHAP Subpart JJJJJJ:	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

The Greenhouse Gas (GHG) emissions from this facility are 105,000 TPY CO₂e and there is no GHG emissions increase. This renewal is not subject to PSD rules at 40 CFR 52.21.

VI. FACILITY'S COMPLIANCE STATUS

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

The facility has submitted a timely and complete application to renew their operating permit and an application shield is in effect.

This operating permit also includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Also, prior to the expiration of the five-year period, the facility will be required to apply for a renewal of this operating permit, at which time the Department will evaluate the facility and issue a public notice with its findings.

VII. EXEMPT ACTIVITIES

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.

Table 1 - Operating Permit Revision History

Permit Activity Number	Type of Revision	Description of Revision	Final Action Date
BOP200001	Administrative Amendment	Administrative Amendment including the following changes: Transfer of ownership from Bristol-Myers Squibb Company, Inc. to Hopewell Campus Owner, LLC. Updated the Facility Profile contact information for new Responsible Official, Air Permit Information contact, Fees/Billing Contact, Operator and Owner (Current Primary).	10/13/2020
BOP180003	Minor Modification	U500, OS Summary: - reduce Formaldehyde emission limit from 9.2 TPY to 3.94 TPY - add Acrolein emission limit of 0.09 TPY U500, OS1 and OS2: - reduce Formaldehyde emission rates from 1.04 lb/hr to 0.45 lb/hr - add Acrolein emission rate of 0.01 lb/hr U6: incorporate diesel fired emergency generator (OS7) previous permitted under BOP160002 (GOP-003).	5/20/2019
BOP180001	Administrative Amendment	To change the Responsible Official from Mr. David Brienza to Mr. Dennis Flynn, update the Air Permit Information Contact, Fees/Billing Contact, and mailing address for the facility.	1/24/2018
BOP170001	Administrative Amendment	Administrative Amendment to change the Responsible Official: - Replacing the Responsible Official from Mr. Anton Lemli to Mr. David Brienza.	5/25/2017
BOP160002	General Operating Permit	2.72 MMBTU/hr (HHV) Emerg. Gen. (250 kW) Diesel fuel, 100 hrs/yr Emission Unit U700	12/5/2016
BOP160001	Minor Modification	To remove U4, OS Summary Ref #33 because COMS is not used to monitor opacity and include GOP BOP150002 with the operating permit as Operating Scenario U6-OS5.	6/6/2016
BOP150002	General Operating Permit	1.6 MMBTU/hr (HHV) Emerg. Gen. (125 kW) Diesel fuel, 100 hrs/yr Emission Unit U600	10/22/2015

FACILITY NAME (FACILITY ID NUMBER)
BOP050001

Activity Number assigned by the Department

New Jersey Department of Environmental Protection
Facility Specific Requirements

Emission Unit Number assigned by the Facility

Brief description of emission unit

Emission Unit: U40 Sewage Sludge Incinerators
Operating Scenario: OS Summary

OR OS2 Fluidized Bed Incinerator

OS Summary lists all rules and requirements that apply to an emission unit. An emission unit may contain one or more pieces of equipment and corresponding operating scenarios.

OSX denotes the operating scenario number and lists the rules and requirements that apply to a scenario. An operating scenario represents various ways (or scenarios) a piece of equipment is permitted to operate.

Item Number

Description of applicable requirement

Monitoring method to ensure compliance

Recordkeeping to show facility's compliance

Actions and submittals required for the facility

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change. [40 CFR 62.16000(a)]	Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a). [40 CFR 62.16000(a)].	Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [40 CFR 62.16025(e)].	Submit a report: Annually to the Administrator and to the Department. The permittee shall submit an annual compliance report as specified in 40 CFR 62. [40 CFR 62.16000(d)]

Rule citation for applicable requirement

Rule citation for monitoring requirement

Rule citation for recordkeeping requirement

Rule citation for submittal/ action requirement

Explanation Sheet for Facility Specific Requirements