

# STATEMENT OF BASIS for STOCKTON UNIVERSITY

## TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 70871 / Permit Activity Number: BOP190001

### I. FACILITY INFORMATION

Stockton University is located at 101 Vera King Farris Dr., Galloway, Atlantic County, NJ and consists of a two-thousand-acre campus in the New Jersey Pinelands Reserve, consisting of various academic buildings, recreational facilities, and student housing complexes. The facility is publicly owned and operated by Stockton University.

The facility is classified as a major facility based on its potential to emit 61.5 tons per year of nitrogen oxides.

This permit allows individual hazardous air pollutants to be emitted at a rate not to exceed: 4.52 pounds per year Acrolein, 0.0218 pounds per year Arsenic, 0.584 pounds per year Cadmium, 0.00173 pounds per year Dimethylbenz(a)anthracene(7,12-), and 58 pounds per year Formaldehyde.

### 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 (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), 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 boilers and emergency generators.

This permit also incorporates 14 general operating permits (Activity # BOP170002 through BOP170011, BOP210001, BOP210002, BOP220001, and BOP220002) that the facility obtained for an emergency natural gas generator, three emergency diesel generators, and ten natural gas boilers. Heat input rates ranged from 1.04 to 8.1 MMBTU/hr (HHV). The generators are permitted to operate up to 100 hours per year on fuel oil or natural gas for testing and maintenance. The boilers are permitted to operate up to 8760 hours per year on natural gas. The total increase in facility emissions due to the addition of these new general operating permits is 12.8 tons of NO<sub>x</sub>, 0.17 tons of VOC and 14,600 tons of CO<sub>2</sub>(e) per year.

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. All general operating permits (for boilers and emergency generators) through BOP220002 were incorporated.

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2. HAPS were added to comply with the current NJDEP reporting thresholds.
3. PM-2.5 was added to comply with current NJDEP procedures.
4. SO<sub>2</sub> emissions were deleted everywhere (including insignificant sources) because emission rates have become de minimis since the requirement for fuel oil to limit sulfur to  $\leq 15$  ppm.
5. Gasoline tank E6000 in U6000 was deleted. Several boilers and emergency generators were deleted.

The changes made during this permitting action result in a net increase of allowable annual emissions as a result of the five changes described above.

#### 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.
3. For all boilers, the facility monitors fuel use as the surrogate for the long-term (TPY) emission limits for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, PM-10, PM-2.5, and HAPs. Surrogate monitoring for the short-term (lb/hr) emission limits for boilers  $\geq 5$  MMBtu/hr are combustion process adjustment for NO<sub>x</sub> and CO.
4. For emergency generators, the facility monitors the operating time as the surrogate for the long-term (TPY) emission limits for VOC, NO<sub>x</sub>, CO, TSP, PM-10, PM-2.5, and HAPs, and Surrogate monitoring for the short-term (lb/hr) emission limits are combustion process adjustment and periodic monitoring for NO<sub>x</sub> and CO, and fuel oil sulfur content for SO<sub>2</sub>.

#### 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 IIII: Stationary Compression Ignition Internal Combustion Engines

NSPS Subpart JJJJ: Stationary Spark Ignition Internal Combustion Engines

The Greenhouse Gas (GHG) emissions from this facility are 59,422 TPY CO<sub>2</sub>e and the GHG emissions increase is 11,222 TPY CO<sub>2</sub>e. This renewal is not subject to PSD rules at 40 CFR 52.21

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#### **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, 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
BOP220001	General Operating Permit	1.5 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U10000	4/18/22
BOP220002	General Operating Permit	1.5 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U10001	4/18/22
BOP210002	General Operating Permit	5.59 MMBTU/hr (HHV) Emerg. Gen. (615 kW) Diesel fuel, 100 hrs/yr Emission Unit U9001	9/10/21
BOP210001	General Operating Permit	6.47 MMBTU/hr (HHV) Emerg. Gen. (625 kW) Natural Gas, 100 hrs/yr Emission Unit U9000	5/6/21
BOP170002	General Operating Permit	5 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8001	11/15/17
BOP170003	General Operating Permit	2 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8003	11/15/17
BOP170004	General Operating Permit	2 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8004	11/15/17
BOP170005	General Operating Permit	2 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8005	11/15/17
BOP170006	General Operating Permit	2 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8006	11/15/17
BOP170007	General Operating Permit	2 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8007	11/15/17
BOP170008	General Operating Permit	5 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8000	11/15/17
BOP170009	General Operating Permit	1.04 MMBTU/hr (HHV) Emerg. Gen. (107 kW) Diesel fuel, 100 hrs/yr Emission Unit U7001	11/15/17
BOP170010	General Operating Permit	5 MMBTU/hr (HHV), Boiler Natural Gas Only Emission Unit U8002	11/15/17
BOP170011	General Operating Permit	8.1 MMBTU/hr (HHV) Emerg. Gen. (750 kW) Diesel fuel, 100 hrs/yr Emission Unit U7002	11/15/17
BOP160001	Administrative Amendment	<p>This Administrative Amendment is submitted to change the Responsible Official to Mr. Dan Cordle for the Stockton University Galloway, New Jersey facility.</p> <p>Dan Cordle, P.E.  Interim Director of Facilities &amp; Plant Ops  101 Vera King Farris Drive  Galloway, NJ 08205-9441  609-652-4792 dan.cordle@stockton.edu</p>	5/25/16

BOP140001	Initial	<p>The Richard Stockton College of New Jersey ("RSCNJ") is submitting this initial Title V Operating Permit Application for its Campus located in Galloway, New Jersey, pursuant to the Title V (Part 70) Operating Permit regulations and as provided in N.J.A.C. 7:27-22.</p> <p>RSCNJ has been classified as a Minor Source and has operated under the Subchapter 8 Minor Source Program. Due to recent new equipment additions, the facility, including insignificant sources has the potential to emit greater than the Title V Major Source Thresholds and is thus required to obtain a Title V Operating Permit.</p>	3/2/16
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FACILITY NAME (FACILITY ID NUMBER)

## Explanation Sheet for Facility Specific Requirements

BOP050001

Activity Number assigned by the Department

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