

STATEMENT OF BASIS for LANXESS CORPORATION

TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 18050 / Permit Activity Number: BOP22001

I. FACILITY INFORMATION

Lanxess Corporation is located at 1020 King Georges Rd, Fords, Middlesex County, NJ, 08863 and consists of an industrial lubrication production facility equipped with combustion units, batch production processes, and a variety of storage tanks. The facility is owned and operated by Lanxess Corporation.

The facility is classified as a major facility based on its potential to emit 64.2 tons per year of nitrogen oxides and 29.13 tons per year of volatile organic compounds to the atmosphere.

This permit does not contain any hazardous air pollutants.

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: four process heaters, two 97.7 MMBtu/hr dual fuel fired boilers, four pilot plant reactors, an emergency generator with a capacity of 1.96 MMBTU/hr, receiver tanks, hold tanks, storage tanks, feed tanks, reactors, strippers, refiners and dryers.

This permit also incorporates one general operating permit (Activity # BOP230001). Details for each GOP, including the type of source operation and air emissions from that source operation are provided in Table 1 below.

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, significant modifications, or General Operating Permits (GOP) 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.

This is a Permit Renewal and includes the following changes:

- Removal of BP6 and U8290 with all associated equipment and emission points.
- Removal of the following Insignificant Sources: IS1501, IS1502, IS2001 - IS2009, IS2012, IS2013, IS2014, IS2015, IS2017 - IS2022, IS2029, IS2030, IS2102 - IS2104, IS2106, IS8007 – IS8010, and Equipment SH-7 (E8290).
- Removal of all control devices.
- Removal of U2500 OS2, OS5, OS9 and OS23.
- Updating the tank size to 12,000 gallon for IS1134, IS1135 and IS1136.

The changes made during this permitting action result in allowable annual emissions changes as follows: VOC decreased 6.77 tons per year, NO_x decreased 6.69 tons per year, CO decreased 2.66 tons per year, SO₂ decreased 0.06 tons per year, TSP, PM₁₀ and PM_{2.5} decreased 1.09 tons per year each.

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:

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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 boiler U8243, 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.

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 (40 CFR 60):	General Provisions
NSPS Subpart Dc (40 CFR 60):	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
NSPS Subpart IIII (40 CFR 60):	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
MACT Subpart A (40 CFR 63):	General Provisions
MACT Subpart ZZZZ (40 CFR 63):	National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

The Greenhouse Gas (GHG) emissions from this facility are 134,673 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

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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
BOP230003	Administrative Amendment	An administrative amendment to the Title V air permit is submitted to change the Responsible Official (RO) from Patrick Jannuzzi, to Sanjay Singh. The RO change will be effective immediately.	9/18/2023
BOP230002	Administrative Amendment	This Administrative Amendment contains the following changes: The Responsible Official was changed from Lucy Azak, to Patrick Jannuzzi.	5/11/2023
BOP230001	General Operating Permit	1.41 MMBTU/hr (HHV) Fire Pump (142 kW) Diesel fuel, 100 hrs/yr Emission Unit U8012. The total increase in facility emission resulting from installation and operation of this source operation is: 0.0025 tpy of VOC, 0.0565 tpy of NOx, 0.0188 tpy of CO, and 0.0021 tpy of TSP, PM10 and PM2.5.	1/13/2023
BOP210001	Administrative Amendment	<p>The facility manufactures synthetic lubricants and lubricant-grade esters, as well as other specialty chemicals for industrial applications. The facility employs various processes in the two batch manufacturing operations on site which can include (but is not limited to) charging, mixing, heating and reacting raw materials to create their final ester product. In addition to the two batch operations, there are several insignificant source and significant source operations at the facility that contribute to the manufacturing process as a whole. This application seeks the removal of the following two tanks* :</p> <ul style="list-style-type: none"> - Spill Containment Tank M-1C (U2125, E2125, PT2125); and - Storage Tank T-270 (IS2027 / U2500, E2508, PT2508) <p>Tank M-1C will be taken out of service and removed from the facility. Tank T-270 will no longer be used as either an insignificant source (IS2027) for the 'storage of Non-HAP, Non-Applicable VOC' or as a significant source (U2500, E2508, PT2508) for the 'storage of 3GO Product'. Rather, T-270 will be used for the storage of stormwater which is classified as an exempt activity under N.J.A.C. 7:27-22.1.</p> <p>*Due to the overall decrease in VOC emissions by 0.104 tpy from the removal of both tanks from the permit, an administrative amendment is being submitted in accordance with N.J.A.C. 7:27-22.20(b)(5)i.</p>	1/12/2022
BOP200001	Administrative Amendment	An administrative amendment to the Title V air permit pursuant to N.J.A.C.7:27-22.20(b)(1) is hereby submitted to change the company name from Lanxess Solutions US Inc to LANXESS Corporation. The name change will be effective October 1, 2020.	10/1/2020

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