STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Danisco USA Inc. **Knox County** **Rockland, Maine** **A-366-77-9-A**	**Departmental** **Findings of Fact and Order** **NO_x RACT**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Danisco USA Inc.
LICENSE TYPE	06-096 C.M.R. ch. 138, NO_x RACT
NAICS CODES	311999, 325412
NATURE OF BUSINESS	Refined Hydrocolloid Products
FACILITY LOCATION	Crocketts Point, Rockland

B. License Description

Danisco USA Inc. (Danisco) has requested an amendment to their air emission license to address new requirements contained in *Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides (NO_x RACT)*, 06-096 Code of Maine Rules (C.M.R.) ch. 138.

C. Emission Equipment

The following emission units are addressed in this license:

Boilers

Equipment (Asset #)	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate	Fuel Type	Install. Date	Stack #
Boiler #3 (E9030)	85.6	83,107 scf/hr	natural gas	1966	5-1
		611 gal/hr	distillate fuel		
Boiler #4 (E9040)	48.6	47,184 scf/hr	natural gas	1965	5-1
		347 gal/hr	distillate fuel		
Boiler #5 (E9050)	48.4	46,990 scf/hr	natural gas	1963	5-1
		346 gal/hr	distillate fuel		

D. Definitions

Distillate fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Mid-size boiler means a steam generating unit that has a heat input equal to or greater than 50 MMBtu/hr and less than 1,500 MMBtu/hr.

Records or *Logs* mean either hardcopy or electronic records.

Small boiler means a steam generating unit that has a heat input equal to or greater than 20 MMBtu/hr and less than 50 MMBtu/hr.

E. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application was submitted to comply with the requirements of 06-096 C.M.R. ch. 138, § 5(A) and has been processed pursuant to the requirements for minor modifications under *Minor and Major Source Air Emission License Regulations,* 06-096 C.M.R. ch. 115.

F. NO_x RACT Requirements

Danisco operates three mid-size boilers (Boilers #3, #4, and #5) that are licensed to fire distillate fuel and natural gas.

Boiler #3 (also known as Unit #20 or E9030) was manufactured by Union Iron Works in 1966 with a heat input capacity of 85.6 MMBtu/hr.

Boiler #4 (also known as Unit #21 or E9040) was manufactured by Union Iron Works in 1965 with a heat input capacity of 48.6 MMBtu/hr.

Boiler #5 (also known as Unit #22 or E9050) was manufactured by Union Iron Works in 1963 with a heat input capacity of 48.4 MMBtu/hr.

The boilers were all originally designed to fire #6 fuel oil. However, New Source Review License A-366-77-6-A (issued 3/26/14) addressed the conversion of the boilers from firing #6 fuel oil to firing natural gas or distillate fuel. With this conversion, the ability to fire #6 fuel oil was removed from the facility.

Revisions to 06-096 C.M.R. ch. 138 went into effect May 7, 2025. These changes included the establishment of new standards for emission units located within the 2022 Ozone Transport Region, as defined in that chapter. Danisco is located within the 2022 Ozone Transport Region.

Danisco must either comply with the new applicable standards in 06-096 C.M.R. ch. 138, § 4 by May 1, 2026, or apply for and receive approval of an alternative RACT determination pursuant to 06-096 C.M.R. ch. 138, § 4(H). Danisco has elected to comply with the applicable requirements in section 4 of the rule.

Boilers #3 is a mid-size boiler with a heat input less than 100 MMBtu/hr and fires only distillate fuel and natural gas. Boilers #4 and #5 are small boilers each with a heat input less than 50 MMBtu/hr. Pursuant to 06-096 C.M.R. ch. 138, §§ 4(B)(1) and 4(C), these boilers are each subject to the following work practice standards in section 4(C) of the rule.

1. Each boiler shall be equipped with an oxygen trim system that automatically maintains an optimum air-to-fuel ratio.

2. Danisco shall perform a boiler tune-up at least once every five years. The first boiler tune-up is due no later than May 1, 2031. A tune-up conducted to comply with 40 C.F.R. Part 63, Subpart JJJJJJ shall satisfy this requirement provided it complies with the requirements of the following paragraph.

3. Boiler tune-ups shall be performed as specified below:

    a. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection.

    b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications.

    c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection.

    d. If a unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of start-up.

4. Danisco shall keep the following records in a form suitable and readily available for expeditious review:

    a. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

    b. Records of the occurrence and duration of each malfunction of each boiler; and

    c. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore operation of the malfunctioning boiler.

Danisco does not demonstrate compliance with NO_x standards for Boilers #3, #4, or #5 through use of a CEMS. Therefore, the alternative emission limits for startup and shutdown in 06-096 C.M.R. ch. 138, § 6 do not apply.

G. Incorporation Into the Part 70 Air Emission License

Pursuant to *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted to the Department.

H. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

ORDER

The Department hereby grants NO_x RACT amendment A-366-77-9-A pursuant to the licensing requirements of 06-096 C.M.R. chs. 115 and 138 and subject to the specific conditions below.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

(1) **Boilers #3, #4, and #5**

Boilers #3, #4 and #5 are each subject to the following work practice standards beginning May 1, 2026:

A. Each boiler shall be equipped with an oxygen trim system that automatically maintains an optimum air-to-fuel ratio.

B. Danisco shall perform a boiler tune-up at least once every five years. The first boiler tune-up is due no later than May 1, 2031. A tune-up conducted to comply with 40 C.F.R. Part 63, Subpart JJJJJJ shall satisfy this requirement provided it complies with the requirements of the following paragraph.

C. Boiler tune-ups shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection.

2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications.

3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection.

4. If a unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of start-up.

D. Danisco shall keep the following records in a form suitable and readily available for expeditious review

1. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

2. Records of the occurrence and duration of each malfunction of each boiler; and

3. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore operation of the malfunctioning boiler.

[06-096 C.M.R. ch. 138, §§ 4(B)(1) and 4(C)]

DONE AND DATED IN AUGUSTA, MAINE THIS 20th DAY OF OCTOBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/18/2025
Date of application acceptance: 8/20/2025

This Order prepared by Lynn Muzzey, Bureau of Air Quality.