

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

DEPARTMENT ORDER

Portland Pipe Line Corporation Cumberland County South Portland, Maine A-197-70-G-A

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

FINDINGS OF FACT

After review of the Part 70 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 (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Portland Pipe Line Corporation (PPLC)
LICENSE TYPE	Part 70 Minor License Modification
NAICS CODES	42271 (Petroleum Bulk Stations and Terminals)
NATURE OF BUSINESS	Crude Petroleum Storage Facility
FACILITY LOCATION	30 Hill Street, South Portland, Maine

Portland Pipe Line Corporation (PPLC) is an existing stationary source currently operating under the Part 70 License A-197-70-E-R, issued February 2, 2015, Part 70 Administrative Revision A-197-70-F-A, issued February 22, 2018, and licenses to construct issued under the New Source Review (NSR) Program as found in Minor and Major Source Air Emission License Regulations, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

PPLC has requested an amendment to the facility's Part 70 license to incorporate the terms and conditions of NSR License A-197-77-3-M (4/9/18). This NSR license was issued for an increase in Boilers' #3 and #4 annual fuel limit from 50,000 gallons per year to 250,000 gallons per year of distillate fuel, to update the PM, PM₁₀, SO₂, and NO_x emission factors for Boilers #3 and #4, and to correct the fee table so the emissions from the emergency generators are based on 100 hours/year of operation instead of 500 hours/year of operation.

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B. Emission Equipment

The following emission units are addressed by this Part 70 License Amendment:

Boilers

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Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Manuf. Date	Install. <u>Date</u>	Stack #
Boiler #3	01 5 11	140 5 [1-]	Distillate feet 0.50/	1983	1983	1
Boiler #4	21 [each]	149.5 [each]	Distillate fuel, 0.5%	1983	1983	1

Generators

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output (kW)	Fuel Type, % sulfur	Mfr. <u>Date</u>	Install. <u>Date</u>	Stack #
Pier 2 Emergency Generator	2.42	18.8	250	D: (11 + C 1 0 00150/	2002	2002	2
Portable Emergency Generator	1.0	7.5	100	Distillate fuel, 0.0015%	2011	2011	3

C. Definitions

Distillate Fuel. For the purposes of this license, 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.

D. 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.

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A Part 70 Minor License Modification is for a license change that meets the following criteria:

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- · Does not violate any Applicable requirement;
- Does not involve a Part 70 Significant License Modification to existing monitoring, reporting, or recordkeeping requirements in the license;
- Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impact or a visibility or increment analysis;
- Does not seek to establish or change a Part 70 license term or condition for which there is no corresponding underlying Applicable requirement, and that the source has assumed to avoid an Applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a Title I modification or a modification or reconstruction under any provision of Section 111, or 112 of the Clean Air Act (CAA); and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the CAA;
- Is not a Title I modification or a modification or reconstruction under any provision of Section 111 or 112 of the CAA, and
- Is not required by the Department to be processed under Part 70 Significant License Modification procedures.

The request to incorporate the requirements of NSR License A-197-70-3-M (4/9/18), which authorized an increase in the annual fuel limit for Boilers #3 and #4, updated emission factors for Boilers #3 and #4, and corrected the fee table for emergency generator emissions, is not a Part 70 Significant License Modification. The facility is not proposing substantial changes to existing monitoring and testing requirements, nor is it proposing the relaxation of existing license conditions (definition of Part 70 Significant Modification); therefore, the facility's request is classified as a Part 70 Minor License Modification and has been processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. NSR License Description

NSR License A-197-77-3-M

The Department issued NSR License A-197-77-3-M to PPLC on April 9, 2018. The license was issued to increase the annual fuel use limit for Boilers #3 and #4 combined from 50,000 gallons per year to 250,000 gallons per year, based on a calendar year total. The license also updated the PM, PM₁₀, SO₂, and NO_x emission factors for Boilers #3 and #4 and corrected the fee table so the emissions from the emergency generators are based on 100 hours/year of operation instead of 500 hours/year of operation.

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B. Best Practical Treatment (BPT)

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

C. Boilers #3 and #4

Boilers #3 and #4 are both Cleaver Brooks model CB 500-60# boilers manufactured and installed in 1983. Boilers #3 and #4 were designed with a heat input capacity of 21 MMBtu/hr and combust distillate fuel with a maximum sulfur content of 0.5%, by weight. Boilers #3 and #4 are operated to heat crude oil in the storage tanks during the winter months to prevent damage to the tanks resulting from snow and/or ice buildup on the external floating roofs.

Emissions from both units exit through Stack #1, which has an inside diameter of 2.8 feet and an above ground level (AGL) height of 50 feet.

1. Fuel Use Limit Increase

NSR License A-197-77-3-M (4/9/18) authorized an increase in the annual fuel use limit for Boilers #3 and #4 combined from 50,000 gallons per year to 250,000 gallons per year, on a calendar year total basis. Compliance with this limit shall be demonstrated by fuel use records kept on a monthly and calendar year total basis.

2. Emission Limits and Streamlining

For Boilers #3 and #4, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. The limits below are based on changes made as part of NSR License A-197-77-3-M (4/9/18).

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<u>Pollutant</u>	Applicable Emission Standard(s)	Origin and Authority	Licensed Emission Limit(s)
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.B.(1)(a)	0.08 lb/MMBtu*
PM	0.08 lb/MMBtu	A-197-77-3-M (4/9/18), BPT	
	1.68 lb/hr	A-197-77-3-M (4/9/18), BPT	1.68 lb/hr
PM_{10}	0.08 lb/MMBtu	A-197-77-3-M (4/9/18), BPT	0.08 lb/MMBtu
1 1/110	1.68 lb/hr	A-197-77-3-M (4/9/18), BPT	1.68 lb/hr
SO ₂	0.03 lb/hr (based on 0.0015% S limit, by weight)**	A-197-77-3-M (4/9/18), BPT	0.03 lb/hr
NO _x	3.00 lb/hr	A-197-77-3-M (4/9/18), BPT (AP-42, Table 1.3-1, dated 5/10)	3.00 lb/hr
СО	0.75 lb/hr	06-096 C.M.R. ch. 140, BPT (AP-42, Table 1.3-1, dated 5/10)	0.75 lb/hr
VOC	0.03 lb/hr	06-096 C.M.R. ch. 140, BPT (AP-42, Table 1.3-1, dated 5/10)	0.03 lb/hr

Table Notes:

- % S = percent fuel sulfur, by weight
- * streamlining requested
- ** although licensed to burn distillate fuel with a maximum sulfur content of 0.5% by weight, 38 M.R.S. § 603-A(2)(A)(3) states that as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight; therefore, the boilers' updated lb/hr licensed emission limits have been based on the lower 0.0015% sulfur content limit. The facility shall still be permitted to use any 0.5% sulfur content fuel obtained prior to July 1, 2018.

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D. Facility Annual Emissions

PPLC is licensed for the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on firing 250,000 gallons of distillate fuel per year in Boilers #3 and #4 combined, 100 hours per year of operation for each emergency generator, and a throughput of 11.0 billion gallons per year for the storage tanks:

Total Licensed Annual Emissions for the Facility Tons/year

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(used to calculate the annual license fee)

	<u>PM</u>	PM ₁₀	SO ₂	NO _x	<u>CO</u>	VOC
Boilers #3 and #4	1.4	1.4	0.03	2.5	0.6	0.03
Emergency Generators	0.03	0.03	0.01	0.8	0.2	0.07
Storage Tanks						219.9
Total TPY	1.4	1.4	0.1	3.3	0.8	220.0

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III.AMBIENT AIR QUALITY ANALYSIS

According to 06-096 C.M.R. ch. 140, an existing Part 70 source shall be exempt from an impact analysis with respect to a regulated pollutant whose allowable emissions do not exceed the following:

Pollutant	Tons/year	
PM	25	
PM ₁₀	25	
SO_2	50	
NO _x	50	
СО	250	

Based on facility license allowed emissions, PPLC is below the emissions level required for modeling and monitoring; therefore, an ambient air quality impact analysis is not required as part of this Part 70 minor license modification.

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Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License Amendment A-197-70-G-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Air Emission License A-197-70-E-R, in amendment A-197-70-F-A, and the following conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

<u>Severability</u>. 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

The following shall replace Condition (14)(A.) and (C.) of Air Emission License A-197-70-E-R (2/2/2015):

(14) Boilers #3 and #4

A. Allowable Fuels

- 1. Boilers #3 and #4 are licensed to fire distillate fuel. [A-197-77-3-M (4/9/18), BPT]
- 2. Total fuel use for Boilers #3 and #4 combined shall not exceed 250,000 gallons per year of distillate fuel, on a calendar year total basis. [A-197-77-3-M (4/9/18), BPT]
- 3. Compliance shall be demonstrated by fuel use records kept on a monthly and calendar year total basis. [A-197-77-3-M (4/9/18), BPT]

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C. Boilers #3 and #4 Emission Limits

1. Emissions from Boilers #3 and #4 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.08	A-197-77-3-M (4/9/18), BPT	-
PM_{10}	0.08	A-197-77-3-M (4/9/18), BPT	Enforceable by State-only

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	1.68	A-197-77-3-M (4/9/18), BPT	Enforceable by State-only
PM ₁₀	1.68	A-197-77-3-M (4/9/18), BPT	Enforceable by State-only
SO ₂	0.03	A-197-77-3-M (4/9/18), BPT	Enforceable by State-only
NO _x	3.00	A-197-77-3-M (4/9/18), BPT	Enforceable by State-only
СО	0.75	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC	0.03	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only

2. Visible emissions from the combined stack serving Boilers #3 and #4 shall not exceed 20% opacity on a six-minute block average basis, except no more than two six-minute block averages in a three-hour block period. [06-096 C.M.R. ch. 101]

DONE AND DATED IN AUGUSTA, MAINE THIS

DAY OF June

, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-197-70-E-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/23/2018 Date of application acceptance:

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

State of Maine Board of Environmental Protection