



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

**Sprague Energy Corp
Waldo County
Searsport, Maine
A-97-71-I-M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Sprague Energy Corp (Sprague) was issued Air Emission License A-97-71-H-R/A on June 2, 2006 permitting the operation of emission sources associated with their facility.
2. The equipment addressed in this license is located at Mack Point – Trundy Rd in Searsport, Maine.
3. Sprague has requested a minor revision to their license in order to de-rate their two boilers to below the threshold for opacity monitoring.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler #1	29.4*	196	#6 fuel oil, 0.5%	1
Boiler #2	29.4*	196	#6 fuel oil, 0.5%	1

*These boilers were previously licensed at 33.5 MMBtu/hr each. Sprague has requested this amendment in order to reduce their maximum licensed capacity.

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17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
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106 HOGAN ROAD, SUITE 6
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PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6305

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

C. Application Classification

This amendment will not increase emissions of any pollutant. Therefore, this modification is determined to be a minor revision and has been processed as such.

D. Revision Description

In 1989 Sprague installed two Boilers each rated at 33.5 MMBtu/hr firing #6 fuel oil. These boilers are subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Sprague has proposed physically reducing the heat input capacities (derating) Boilers #1 and #2 by installing on each boiler a new impeller, oil stem, orifice, and wiring which are properly sized for a 700 hp boiler (29.4 MMBtu/hr). This derate would put Boilers #1 and #2 below the threshold for requiring opacity monitoring.

EPA has a policy in regard to boiler derations for the purpose of limiting NSPS program requirements. This policy requires that any boiler derate must be done through physical changes to the boiler that are permanent in nature and cannot be reversed easily without the need for a source shutdown of extended duration. Each proposal for a boiler derate is evaluated on a case-by-case basis. Changes which are made only to the fuel feed systems are not acceptable. An acceptable derate must consist of a permanent physical change which prevents the boiler from operating at a capacity greater than the derated value.

Based on the changes proposed, the Department approves Sprague's derate proposal. If Sprague wants to increase the capacity of Boilers #1 or #2 after it has been derated, a modification to this license will be required.

E. Annual Emissions

Sprague shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers #1 & #2	7.5	7.5	39.4	37.5	2.5	0.1
Generator	0.1	0.1	0.1	1.6	0.3	0.1
Total TPY	7.6	7.6	39.5	39.1	2.8	0.2

ORDER

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

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

The Department hereby grants Air Emission License A-97-71-I-M subject to the conditions found in Air Emission License A-97-71-H-R/A and in the following conditions.

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

The following shall replace Condition (16) of Air Emission License A-97-71-H-R/A upon completion of the work required to derate each boiler:

(16) Boilers #1 & #2

- A. Total fuel use for Boilers #1 and #2 combined shall not exceed 1,000,000 gal/yr of #6 fuel oil with a maximum sulfur content not to exceed 0.5% by weight. Compliance shall be demonstrated by fuel records from the supplier showing the quantity of fuel. Fuel sulfur content shall be documented per 40 CFR 60.46c. Records of annual fuel use shall be kept on a 12-month rolling total basis. [40 CFR 60.42c(d), 06-096 CMR 115, BPT]
- B. Boilers #1 and #2 shall be operated with impellers, oil stems, orifices, and wiring such that the heat input of each boiler shall not exceed 29.4 MMBtu/hr. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.10	06-096 CMR 115, BPT
Boiler #2	PM	0.10	06-096 CMR 115, BPT

D. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.94	2.94	15.44	14.70	0.98	0.05
Boiler #2	2.94	2.94	15.44	14.70	0.98	0.05

- E. O₂ monitoring and recording equipment shall be maintained per the manufacturer' specifications. This is a non-spec. monitor. [06-096 CMR 115, BPT]
- F. Automatic soot blowers shall be maintained per the manufacturer's specifications. [06-096 CMR 115, BPT]
- G. Emissions from the boilers shall be vented through a common 60 foot stack. [06-096 CMR 115, BPT]
- H. Visible Emissions from Stack #1 (servicing both Boiler #1 and Boiler #2) shall not exceed 20% opacity, measured as 6 minute block averages, except for one 6-minute block average period per hour of not more than 27% opacity. [40 CFR 60.43c(c)]
- I. Sprague shall record and maintain records of the amounts of fuel combusted during each day. [40 CFR 60.48c(g)]
- J. The following address for EPA shall be used for any reports or notifications required to be copied to them [40 CFR Part 60, Subpart Dc]:

Compliance Clerk
USEPA Region 1
1 Congress Street
Suite 1100
Boston, MA 02114-2023

Conditions (21) and (22) of Air Emission License A-97-71-H-R/A shall be deleted upon completion of the work required to derate each boiler.

Sprague Energy Corp
Waldo County
Searsport, Maine
A-97-71-I-M

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The following shall replace Condition (25) of Air Emission License A-97-71-H-R/A:

(25) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended November 8, 2008), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

Condition (26) of Air Emission License A-97-71-H-R/A is deleted.

DONE AND DATED IN AUGUSTA, MAINE THIS 11th DAY OF December, 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-97-71-H-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/23/09

Date of application acceptance: 10/26/09

Date filed with the Board of Environmental Protection:

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



