



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

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COMMISSIONER

**Sprague Energy  
Cumberland County  
South Portland, Maine  
A-179-71-N-R/M (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License**

After review of the air emissions license amendment and renewal 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 (Sprague) has applied to renew their Air Emission License permitting the operation of emission sources associated with their bulk petroleum storage and distribution facility.
2. The equipment addressed in this license is located at 59 Main Street, South Portland, Maine.
3. Sprague has requested a minor revision to their license in order to include the firing of natural gas in addition to #2 fuel oil.

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**Fuel Burning Equipment**

<b>Equipment</b>	<b>Maximum Capacity (MMBtu/hr)</b>	<b>Maximum Firing Rate</b>	<b>Fuel Type, % sulfur</b>	<b>Stack #</b>
Heater 1	9.90	70.7 gal/hr	#2 fuel oil, 0.5%	1
		9610 scf/hr	Natural gas, negligible	
Heater 2	9.90	70.7 gal/hr	#2 fuel oil, 0.5%	2
		9610 scf/hr	Natural gas, negligible	
Heater 3	9.90	70.7 gal/hr	#2 fuel oil, 0.5%	3A
		9610 scf/hr	Natural gas, negligible	
Boiler 3	1.00	7.60 gal/hr	#2 fuel oil, 0.5%	3B
Boiler 5	2.00	14.4 gal/hr	#2 fuel oil, 0.5%	5

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**Bulk Storage Equipment**

<u>Tank Number</u>	<u>Capacity (bbls)</u>	<u>Product Stored</u>	<u>Tank Type</u>
3	77,388	#2 Fuel Oil	Vertical Fixed Roof
4	31,424	Jet Kerosene	Vertical Fixed Roof
5	31,844	Jet Kerosene	Internal Floating Roof
7	92,190	# 6 Oil	Vertical Fixed Roof
13	73,863	#2 Fuel Oil	Vertical Fixed Roof
14	104,557	#2 Fuel Oil	Vertical Fixed Roof
28	40,835	Aviation gasoline	Internal Floating Roof
42	148,485	#2 Fuel Oil	Vertical Fixed Roof
101	29,439	ULSK	Vertical Fixed Roof
103	13,940	None	Vertical Fixed Roof
104	37,435	ULSD	Vertical Fixed Roof
105	89,464	#2 Fuel Oil	Vertical Fixed Roof
111	53,849	#2 Fuel Oil	Vertical Fixed Roof
112	58,529	#2 Fuel Oil	Vertical Fixed Roof
113	59,698	Jet Kerosene	Vertical Fixed Roof
114	62,912	Kerosene	Vertical Fixed Roof
118	92,290	#2 Fuel Oil	Vertical Fixed Roof
201	14,062	Asphalt	Vertical Fixed Roof
202	14,101	Asphalt	Vertical Fixed Roof
207	35,768	Kerosene	Vertical Fixed Roof
208	108,423	Asphalt	Vertical Fixed Roof
209	74,019	Asphalt	Vertical Fixed Roof
210	408	#2 Fuel Oil	Horizontal
211	411	#2 Fuel Oil	Horizontal
215	24,630	Asphalt	Vertical Fixed Roof
229*	18,708 gal	Emulsion	Vertical Fixed Roof
AD-4*	456 gal	Lubricity	Horizontal
AD-6*	456 gal	Additive	Horizontal
AD-8*	5,043 gal	Additive	Horizontal
AD-9*	2,791 gal	Additive	Horizontal
B1	28,764 gal	Biodiesel	Vertical Fixed Roof
B2*	9,500 gal	Biodiesel	Vertical Fixed Roof
Boiler Chem 1*	250 gal	Polytreat TL	Vertical Fixed Roof
Boiler Chem 2*	250 gal	Volamine	Vertical Fixed Roof
Boiler Chem 3*	250 gal	Oxotrol DS	Vertical Fixed Roof
CHEM 1*	6,720 gal	Peroxide	Vertical Fixed Roof
CHEM 2 *	5,976 gal	CMI 150	Vertical Fixed Roof
CHEM 3*	3,800 gal	MET 550 (Glutaraldehyde)	Vertical Fixed Roof

FOAM1*	546 gal	Fire Suppressant	Horizontal
FOAM2*	273 gal	Fire Suppressant	Horizontal
FOAM3*	1,953 gal	Fire Suppressant	Horizontal
HO1*	1,008 gal	#2 Fuel Oil	Horizontal
HO2*	269 gal	#2 Fuel Oil	Horizontal
HO3*	269 gal	#2 Fuel Oil	Horizontal
HO4*	269 gal	#2 Fuel Oil	Horizontal
HO5*	323 gal	#2 Fuel Oil	Horizontal
HO6*	323 gal	#2 Fuel Oil	Horizontal
HO9*	462 gal	Distillate	Horizontal
Hot Oil Expansion Tank*	1,260 gal	Thermal Oil	Horizontal
KO1*	710,556 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO2*	711,312 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO3*	198,534 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO4*	196,392 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO5*	735,714 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO6*	854,070 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO7*	610,386 gal	Kaolin (Clay Slurry)	Vertical Fixed Roof
R1*	294 gal	#2 Fuel Oil	Horizontal
RD-1*	315 gal	Red Dye	Vertical Fixed Roof
WO1*	462 gal	Waste Oil	Horizontal
WO2*	462 gal	Waste Oil	Horizontal
WO3*	462 gal	Waste Oil	Horizontal

\* These tanks are noted for completeness only

**Process Equipment**

<u>Equipment</u>	<u>Control Rate</u>
(2) McGill Carbon Absorption Units	35 mg/liter (each)

C. Application Classification

The application for Sprague includes the installation of new dual burners on Heaters 1, 2, and 3. Therefore, the license is considered to be a renewal of current licensed emission units and minor modification and has been processed through *Major and Minor Source Air Emission License Regulations, 06-096 CMR 115* (as amended). With the fuel limit of 600,000 gal/yr of #2 fuel oil and 84,000,000 scf/yr of natural gas for the facility, the facility is licensed below the major source thresholds and is considered a synthetic minor.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

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 CMR 100 (as amended). 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 emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. Heaters 1, 2, 3 and Boilers 3, 5

Heaters 1, 2, and 3 are used to heat asphalt in storage tanks at the Sprague facility in South Portland. Each heater is rated at 9.9 MMBtu/hr and will fire natural gas and #2 fuel oil. Boilers 3 and 5 are rated 1.0 MMBtu/hr and 2.0 MMBtu/hr, respectively. Boilers 3 and 5 will fire #2 fuel oil and are used to provide heat.

The heaters and boilers are each rated under 10 MMBtu/hr and are therefore not subject to the 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.

Boilers 3 and 5 are subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). The units are each rated under 10 MMBtu/hr and are thus not subject to PM, CO, or Mercury emission limits from 40 CFR Part 63 Subpart JJJJJ.

A summary of the BPT analysis for Heaters 1, 2, and 3 (9.9 MMBtu/hr each) and Boilers 3 and 5 (1.0 MMBtu/hr and 2.0 MMBtu/hr respectively) is the following:

1. The total fuel oil use for the facility shall not exceed 600,000 gal/year of #2 fuel oil, based on a 12 month rolling total.
2. Total natural gas use for the facility shall not exceed 84,000,000 scf/yr, based on a 12 month rolling total.
3. The SO<sub>2</sub> emission limits are based on the firing of fuel which meets the criteria in ASTM D396 for #2 fuel oil.

4. PM emission limits are given in 06-096 CMR 103 (as amended). The PM<sub>10</sub> limits are derived from the PM limits.
5. When firing #2 fuel oil, NO<sub>x</sub> emission limits are based on data from similar #2 oil fired boilers of this size and age.
6. When firing #2 fuel oil, CO and VOC emission limits are based upon AP-42 data dated 9/98.
7. When firing #2 fuel oil, visible emissions from each of the units shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.
8. When firing natural gas, NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 7/98 for the combustion of natural gas.
9. When firing natural gas, visible emissions from the units shall each not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.
10. Pursuant to 40 CFR Part 63 Subpart JJJJJ, Sprague shall implement a boiler tune-up program for Boilers 3 and 5.

C. Vapor Recovery Units

Sprague operates two separate loading racks at the facility. Loading rack 1 is equipped with two top loading positions and one bottom loading position. Loading rack 2 is equipped with six loading bays for all products at the facility. Each of these racks is controlled by the use of a McGill absorption unit, vapor recovery unit 1 at loading rack 1 and vapor recovery unit 2 at loading rack 2. Each vapor recovery unit is rated at 35 milligrams of VOC per liter of product transferred.

Loading rack 2 processes only distillate material. However, since Sprague is required to control vapors from the loading of any truck whose most recent previous load was gasoline, Sprague utilizes vapor recovery unit 2 for this purpose. Sprague will conduct periodic compliance tests to demonstrate that each of these units is meeting the required efficiency. The last compliance test for Loading Rack 2 was performed in April 2009 and resulted in a tested emission rate of 23.93 milligram per liter.

D. Distillate and Asphalt Storage Tanks

Sprague currently operates twenty-three vertical fixed roof tanks and two horizontal tanks capable of storing petroleum products. Five of these tanks are used for asphalt storage. Each of the tanks varies in size and throughput depending on the demand for distillates throughout the year. Tank 5 has an internal floating roof in addition to the fixed roof. Tank 103 is currently out of service but has been included in the license in order to permit future storage of distillate.

E. Gasoline Storage Tanks

In addition to the above mentioned distillate storage, Sprague also operates one tank with an internal floating roof (Tank 28) capable of storing gasoline. Tank 28 is equipped with an internal floating roof with a mechanical shoe seal and an auxiliary wiper in addition to a vertical fixed roof. Tank 28 is subject to New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*. Tank 28 is also subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart BBBBBB, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*. However, in 40 CFR Part 63 Subpart BBBBBB it states that "if your gasoline storage tank is subject to, and complies with, the control requirement of 40 CFR Part 60 Subpart Kb of this chapter, your storage tank will be deemed in compliance with this section. You must report this determination in the Notification of Compliance Status report under 63.11093(b)."

F. Annual Emissions

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

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

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	Total HAPs
Heaters/Boilers	5.52	5.52	21.2	16.8	5.03	0.33	--
Facility Wide Limit	--	--	--	--	--	49.6	9.9
<b>Total TPY</b>	<b>5.5</b>	<b>5.5</b>	<b>21</b>	<b>17</b>	<b>5.0</b>	<b>49.9</b>	<b>9.9</b>

### III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	25
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	100
CO	250

Based on the total facility licensed emissions, Sprague is below the emissions level required for modeling and monitoring.

### 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-179-71-N-R/M (SM) subject to 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.

### STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or

2. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

**SPECIFIC CONDITIONS**

**(16) Boilers/Heaters**

A. Total fuel use for facility shall not exceed:

1. 600,000 gallons per year (12 month rolling total) of #2 fuel oil. Compliance shall be demonstrated by fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel (ASTM D396 compliant). Records of annual fuel use shall be kept on a 12 month rolling total basis. [06-096 CMR 115, BPT]
2. 84,000,000 standard cubic feet per year (12 month rolling total) of natural gas. Records of annual fuel use shall be kept on a 12 month rolling total basis. Compliance shall be demonstrated by fuel receipts from the supplier.

B. When firing #2 fuel oil, emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Heaters 1, 2, 3 (each)	PM	0.08	06-096 CMR 103(2)(B)(1)(a)

C. When firing #2 fuel oil, emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Heaters 1, 2, 3 (each)	0.79	0.79	4.99	2.97	0.35	0.02

Boiler 3	0.09	0.09	0.54	0.32	0.04	0.01
Boiler 5	0.16	0.16	1.02	0.60	0.07	0.01

D. When firing natural gas, emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Heaters 1, 2, 3 (each)	PM	0.05	06-096 CMR 103(2)(B)(1)(a)

E. When firing natural gas, emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Heaters 1, 2, 3 (each)	0.50	0.50	0.01	0.96	0.81	0.05

F. When firing #2 fuel oil, visible emissions from each of the boilers/heaters shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

G. When firing natural gas, visible emissions from each of Heaters 1, 2, and 3 shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

H. Sprague shall implement a boiler tune-up program to include the tune-up of Boilers 3 and 5 within one year of the date of publication of 40 CFR Part 63 Subpart JJJJJ in the federal register. [40 CFR Part 63.11196(a)(1)]

I. Sprague shall submit a Notification of Compliance status report no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.9(h)]

J. The initial Notification of Compliance status report shall include:

1. The following certification of compliance signed by a responsible official, "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler." [40 CFR Part 63.11225(a)(4)(i)]
2. The methods used to determine compliance [40 CFR Part 63.9(h)(2)(i)(A)]

3. Results of opacity/visible emission observations, and/or other monitoring procedures or methods that were conducted [40 CFR Part 63.9(h)(2)(i)(B)]
  4. Methods that will be used for determining continuing compliance [40 CFR Part 63.9(h)(2)(i)(C)]
  5. Type and quantity of HAPs emitted by Sprague [40 CFR Part 63.9(h)(2)(i)(D)]
  6. An analysis demonstrating that Sprague is an area source of HAPs [40 CFR Part 63.9(h)(2)(i)(E)]
  7. A description of air pollution control equipment for each emission point, including each control device for each hazardous air pollutant and the control efficiency for each control device [40 CFR Part 63.9(h)(2)(i)(F)]
- K. After the initial tune-up and initial compliance report has been submitted, Sprague shall implement a biennial boiler tune-up program and submit biennial compliance reports. The following are requirements of the boiler tune-up program:
1. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR Part 63.11223(a)]
  2. Each biennial tune-up shall include the following, as applicable:
    - a. Inspection of the burner, cleaning/replacing any component of the burner, as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
    - b. Inspection of the flame pattern, and adjustment of the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
    - c. Inspection of the system controlling the air-to-fuel ratio, to ensure proper calibration and that it is functioning properly. [40 CFR Part 63.11223(b)(3)]
    - d. Optimization of total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]

- e. Measurement of concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]
- f. Maintenance of reports onsite and submit reports to EPA and the Department demonstrating compliance. Reports shall include the following:
  - i. Concentration of CO in the effluent stream in ppm, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)(i)]
  - ii. A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)(ii)]
  - iii. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. [40 CFR Part 63.11223(b)(6)(iii)]
- 3. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]
- 4. The biennial compliance reports shall include the following [40 CFR Part 63.11225 (b)]:
  - a. Company name and address
  - b. Statement by responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63 Subpart JJJJJ.
  - c. A description of any deviations (if any) from the applicable requirements during the reporting period, the time periods which the deviations occurred, and the corrective actions taken.

(17) **Loading Racks and Carbon Absorption Units**

- A. The bulk terminal shall be equipped and maintained with a carbon absorption unit that captures displaced VOC vapors whenever gasoline (or aviation gas) is being transferred to a tank truck at each loading rack. [06-096 CMR 112]
- B. All loading and vapor lines shall be equipped and maintained in good working order such that vapor tight fittings close automatically when disconnected and the pressure in the vapor collection system shall not be allowed to exceed +18 inches of water or a vacuum exceeding -6 inches of water. [06-096 CMR 112, 120]
- C. Gasoline loading shall be allowed only into tank trucks and trailers that have been properly certified pursuant to 40 CFR Appendix A, Method 27 and maintained and labeled as vapor-tight in accordance with MEDEP Chapter 120. [06-096 CMR 112, 120]
- D. As part of Sprague's Best Management Practices plan for controlling emissions, any tank truck carrying gasoline or which has carried gasoline as the most recent previous load shall utilize the vapor collection system during the entire loading process. [06-096 CMR 115, BPT]
- E. 100% of the lower explosive limit (LEL) obtained within one inch around any potential leak source of the tank truck, including all loading couplings, vapor lines and fittings employed in the transfer of gasoline, are prohibited. [06-096 CMR 120]
- F. VOC emissions from the carbon absorption units shall not exceed 35 milligrams per liter of product transferred. Compliance with this limit shall be determined by methods promulgated in 40 CFR Part 60.503 or other methods approved by the Department. [06-096 CMR 112]
- G. Sprague shall conduct an annual compliance test of vapor recovery unit #1 prior to May 15<sup>th</sup> of each year. A report containing the test results shall be submitted to the Department within 30 days of the completion of testing in accordance with the Department's stack test protocol. [06-096 CMR 115, BPT]
- H. Sprague shall conduct a compliance test of vapor recovery unit #2 in 2012 and every third year thereafter. A report containing the test results shall be submitted to the Department within 30 days of the completion of testing in accordance the Department's stack test protocol. [06-096 CMR 115, BPT]
- I. Sprague shall conduct a leak inspection of all equipment at the loading racks and around the carbon absorption units, utilizing sight, sound and smell at a minimum of once per month. All leaks must be repaired as quickly as possible, but within 15 calendar days, with the first attempt at repair made no

later than 5 days from the initial detection of the leak. [06-096 CMR 115, BPT]

- J. Sprague shall maintain an inspection log documenting all leak inspections. The log shall include date of inspection, any detected leaks, nature of the leak and detection method, date of repair attempts and methods used, details of any delays in repairs and the final date of repair. Sprague shall make these records available for inspection by the Department. [06-096 CMR 115, BPT]

**(18) Distillate and Asphalt Storage Tanks**

- A. Sprague shall conduct routine inspections of all distillate storage tanks at a minimum of once every month around the perimeter of the tank and roof. [06-096 CMR 115, BPT]
- B. The following records shall be maintained at the source and available for inspection by the Department [06-096 CMR 115, BPT]:
1. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken, and
  2. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage.

**(19) Gasoline Storage Tanks**

- A. Tank 28 shall be equipped, maintained and operated such that:
1. There is an internal floating roof with closure seal(s) between the roof edge and the tank wall and these are maintained so as to prevent vapor leakage, [06-096 CMR 111]
  2. The internal floating roof and the closure seal(s) will be maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof, [06-096 CMR 111]
  3. All storage tank openings, except stub drains, are equipped with covers, lids or seals which remain closed at all times, [06-096 CMR 111]
  4. All automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports, [06-096 CMR 111]

5. All rim vents, if provided, are to be set to open only when the roof is being floated off leg supports or at the manufacturers recommended setting, [06-096 CMR 111]
6. If any holes, tears, or other openings are present the source shall make repairs as soon as practicable, but no later than 15 calendar days with the first attempt at repair to be made no later than 5 days from the initial detection of the leak. [06-096 CMR 115, BPT]
7. Upon removing an internal floating roof tank from service for cleaning and/or repair, Sprague shall install double seals on the internal floating roofs prior to the storage tank going back into gasoline service to ensure reduction in emissions. [06-096 CMR 115, BPT]
8. Sprague shall not empty and degas Tank 28 for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. [06-096 CMR 111]
9. Notwithstanding Condition 19 (A)(8), Sprague may empty and degas Tank 28 for the purpose of performing a repair which is immediately necessary for the proper function of the vessel. Sprague must notify the Department within 24 hours if Tank 28 is emptied and degassed under these circumstances. [06-096 CMR 111]
10. The internal floating roof shall rest or float on the liquid surface inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during times when the vessel is being completely emptied. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as quickly as possible. [40 CFR Part 60.112b(a)(1)(i)]
11. Each internal floating roof shall be equipped with a mechanical shoe seal between the wall of the storage vessel and the edge of the internal floating roof. [40 CFR Part 60.112b(a)(1)(ii)]
12. Each opening, except for the automatic bleeder vents and the rim space vents, in a noncontact internal floating roof is to provide a projection below the liquid surface. [40 CFR Part 60.112b(a)(1)(iii)]
13. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except for when they are in use. [40 CFR Part 60.112b(a)(1)(iv)]

14. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR Part 60.112b(a)(1)(v)]
15. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR Part 60.112b(a)(1)(vi)]
16. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR Part 60.112b(a)(1)(vii)]
17. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR Part 60.112b(a)(1)(vii)]
18. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR Part 60.112b(a)(1)(ix)]

B. Sprague shall comply with the following source inspection requirements:

1. Routine inspections of floating roofs shall be conducted through roof hatches once every month [06-096 CMR 111]
2. A complete inspection of the cover and seal shall be performed at least once every ten years and each time the tank is emptied and degassed. These inspections shall be conducted by visually inspecting the floating roof deck, deck fittings and rim seals. [06-096 CMR 111]
3. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if applicable) prior to filling the storage vessel with volatile organic liquid (VOL). If there are holes, tears, or other openings in the primary seal, secondary seal, or the seal fabric or seal defects in the internal floating roof, or both, Sprague shall repair the items before filling the storage vessel. [40 CFR Part 60.113b(a)(1)]
4. Sprague shall visually inspect the internal floating roof and the primary seal or the secondary seal (if applicable) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, Sprague shall repair

the items or empty and remove the storage vessel from service within 45 days. [40 CFR Part 60.113b(a)(2)]

5. Sprague shall visually inspect the internal floating roof, the primary seal, the secondary seal (if applicable), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, Sprague shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years. [40 CFR Part 60.113b(a)(4)]
  6. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs 19(B)(3) and 19(B)(5) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph 19(B)(3) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Department at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR Part 60.113b(a)(5)]
- C. The following records shall be maintained at the source and available for inspection by the Department:
1. Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include explanation of any excessive increases in LEL readings as compared to normal operating conditions, [06-096 CMR 115, BPT]
  2. Inspection log documenting all complete inspections of cover and seal to be performed whenever tank is emptied and degassed, at a minimum of once every ten years, [06-096 CMR 111]
  3. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken, [06-096 CMR 115, BPT]

4. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage, and [06-096 CMR 111]
  5. Average monthly product storage temperatures and maximum true vapor pressures or Reid vapor pressures of volatile petroleum liquids. [06-096 CMR 111]
- D. For those tanks that are equipped for dual storage Sprague shall comply with all requirements, as applicable, for storage of gasoline whenever the tank in question is put into gasoline service. No notification is required when products are switched provided the tank is equipped with an internal floating roof for proper storage. [06-096 CMR 115, BPT]
- E. Sprague shall submit an initial Notification of Compliance status to the Department and the EPA explaining that the facility is subject to 40 CFR Part 63 Subpart BBBB, and is demonstrating compliance by complying with 40 CFR Part 60 Subpart Kb. The initial Notification of Compliance shall include: the methods used to determine compliance, results of monitoring procedures or methods, methods that will be used for determining continuing compliance, type and quantity of HAPs emitted by Sprague, an analysis demonstrating that Sprague is an area source of HAPs, and a description of air pollution control equipment for each emission point, including each control device for each hazardous air pollutant and the control efficiency for each control device [40 CFR Part 63.9(h)]
- (20) Sprague shall be limited to an annual facility VOC emission limit of 49.9 tons per 12 month rolling total, and total HAPs to 9.9 tons per 12 month rolling total. These limits shall be enforceable by record keeping requirements given in Condition 21. [06-096 CMR 115]
- (21) **Record Keeping**
- For all record keeping required by this license the licensee shall maintain records of the most current six year period.
- A. Records shall be maintained showing the average annual information for each of the petroleum storage tanks in order to calculate annual VOC emissions [06-096 CMR 115, BPT]:
1. Quantity and type of petroleum liquid stored in each tank,
  2. Reid vapor pressure,
  3. Maximum true vapor pressure,
  4. Average storage temperature,
  5. Average throughput in each tank,

6. Tank emissions calculated using EPA TANKS program or an alternative approved by the Department,
  7. Tank truck emissions assuming 1.3% of the vapors are displaced during loading (based on assumed capture efficiency of 98.7% as given in 40 CFR Part 63, Subpart R), and
  8. HAP speciation data as given by the American Petroleum Institute (API) or other speciation data as obtained by a supplier.
- B. Sprague shall calculate and record the annual total facility VOC and HAP emissions (tons) from the loading racks, storage tanks, and fugitive sources (i.e. pumps, valves, flanges). [06-096 CMR 115, BPT]
- C. Sprague shall maintain records of all monthly inspections and leak inspections of all equipment utilizing sight, smell and sound. [06-096 CMR 115, BPT]
- D. If, during an inspection, a problem is detected, a report shall be submitted to the Department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defect, and the date the storage vessel was emptied or the nature of and date the repair was made. [40 CFR Part 60.115b(a)(3) and 40 CFR Part 60.115b(a)(4)]
- E. Sprague shall maintain records consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)] :
1. Copies of compliance reports
  2. 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.
  3. Documentation of fuel type(s) used monthly by each boiler
  4. The occurrence and duration of each malfunction of the boiler
  5. Actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation.

(22) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), 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.

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- (23) Sprague shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 29th DAY OF March, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Darryl N. Brown*  
DARRYL N. BROWN, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/28/2010

Date of application acceptance: 11/19/2010

Date filed with the Board of Environmental Protection:

This Order prepared by Amanda L. Gray, Bureau of Air Quality.



