



DEPARTMENT ORDER

**Sprague Operating Resources LLC  
Cumberland County  
South Portland, Maine  
A-179-71-P-R/M (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal with Minor Revision**

**FINDINGS OF FACT**

After review of the air emission license renewal and amendment applications, 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**

Sprague Operating Resource LLC (Sprague) has applied to renew their Air Emission License for the operation of emission sources associated with their bulk petroleum storage and distribution facility.

Sprague has requested a minor revision to their license in order to address physical changes to the asphalt pipeline.

The equipment addressed in this license is located at 59 Main St, South Portland, Maine.

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**Fuel Burning Equipment**

<b>Equipment</b>	<b>Max. Capacity (MMBtu/hr)</b>	<b>Maximum Firing Rate</b>	<b>Fuel Type, % sulfur</b>	<b>Date of Manuf.</b>	<b>Stack #</b>
Heater #1	9.9	9,610 scf/hr	Natural Gas, negligible	2006	1
		70.7 gal/hr	Distillate Fuel, 0.5%		
Heater #2	9.9	9,610 scf/hr	Natural Gas, negligible	2006	2
		70.7 gal/hr	Distillate Fuel, 0.5%		
Heater #3	9.9	9,610 scf/hr	Natural Gas, negligible	2006	3A
		70.7 gal/hr	Distillate Fuel, 0.5%		
Boiler #5	2.0	14.3 gal/hr	Distillate Fuel, 0.5%	2001	5

**Bulk Storage Equipment**

<b>Tank Number</b>	<b>Safe Fill Capacity (bbls)</b>	<b>Product Currently Stored<sup>a</sup></b>	<b>Tank Type</b>
3	77,388	<i>See Note c</i>	Vertical, Fixed Roof
4	31,441	Distillate	Internal Floating Roof
5	31,844	<i>See Note c</i>	Internal Floating Roof
7	90,485	#6 Fuel Oil	Vertical, Fixed Roof
13	76,819	Distillate	Vertical, Fixed Roof
14	104,557	Distillate	Vertical, Fixed Roof
28	40,835	Aviation gasoline	Internal Floating Roof
31	~3,000	<i>See Note c</i>	Vertical, Fixed Roof
33	~3,000	<i>See Note c</i>	Vertical, Fixed Roof
40	~30,500	<i>See Note c</i>	Vertical, Fixed Roof
42	148,394	<i>See Note c</i>	Vertical, Fixed Roof
101	29,439	Distillate	Internal Floating Roof
103	13,940	<i>See Note c</i>	Vertical, Fixed Roof
104	37,435	Distillate	Internal Floating Roof
105	89,464	Distillate	Vertical, Fixed Roof
111	49,946	Distillate	Internal Floating Roof
112	58,529	Distillate	Internal Floating Roof
113	59,698	Distillate	Internal Floating Roof
114	59,726	Distillate	Internal Floating Roof
118	92,290	<i>See Note c</i>	Vertical, Fixed Roof
201	14,062	Asphalt	Vertical, Fixed Roof
202	14,101	Asphalt	Vertical, Fixed Roof
203	~14,100	<i>See Note c</i>	Vertical, Fixed Roof
204	~400	<i>See Note c</i>	Vertical, Fixed Roof
205	~400	<i>See Note c</i>	Vertical, Fixed Roof
206	~4,600	<i>See Note c</i>	Vertical, Fixed Roof
207	35,768	<i>See Note c</i>	Vertical, Fixed Roof
208	108,423	Asphalt	Vertical, Fixed Roof
209	74,019	Asphalt	Vertical, Fixed Roof
210	408	Distillate	Horizontal
211	411	Distillate	Horizontal
212	~2,300	<i>See Note c</i>	Vertical, Fixed Roof
215	24,630	Asphalt	Vertical Fixed Roof
229	445	Emulsion/HFMS-1	Vertical Fixed Roof
AD4 <sup>b</sup>	10.8	Lubricity	Horizontal
AD5 <sup>b</sup>	~12	<i>See Note c</i>	Horizontal
AD6 <sup>b</sup>	10.8	Additive	Horizontal
AD8 <sup>b</sup>	120	Additive	Horizontal

Tank Number	Safe Fill Capacity (bbls)	Product Currently Stored <sup>a</sup>	Tank Type
AD9 <sup>b</sup>	66.5	Additive	Horizontal
B1 <sup>b</sup>	685	Biodiesel	Vertical, Fixed Roof
B2 <sup>b</sup>	226	Biodiesel	Vertical, Fixed Roof
HO1 <sup>b</sup>	24	Distillate	Horizontal
HO3 <sup>b</sup>	6.4	Distillate	Horizontal
HO4 <sup>b</sup>	6.4	Distillate	Horizontal
HO5 <sup>b</sup>	9.4	Distillate	Horizontal
HO7 <sup>b</sup>	~238	<i>See Note c</i>	Horizontal
TO1 <sup>b</sup>	30	Thermal Oil Expansion	Horizontal
TO2 <sup>b</sup>	0.1	Thermal Oil Overflow	Horizontal
R1 <sup>b</sup>	7	Distillate	Horizontal
RD1 <sup>b</sup>	8	Red Dye	Vertical, Fixed Roof
RD2 <sup>b</sup>	8	Red Dye	Vertical, Fixed Roof
WO1 <sup>b</sup>	11	Waste Oil	Horizontal
WO2 <sup>b</sup>	11	Waste Oil	Horizontal
KO1 <sup>b</sup>	16,918	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO2 <sup>b</sup>	16,936	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO3 <sup>b</sup>	4,727	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO4 <sup>b</sup>	4,676	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO5 <sup>b</sup>	17,517	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO6 <sup>b</sup>	20,335	Kaolin (Clay Slurry)	Vertical Fixed Roof
KO7 <sup>b</sup>	14,533	Kaolin (Clay Slurry)	Vertical Fixed Roof
Boiler Chem 1 <sup>b</sup>	2.4	Polytreat TL	Vertical, Fixed Roof
Boiler Chem 2 <sup>b</sup>	2.4	Volamine	Vertical, Fixed Roof
Boiler Chem 3 <sup>b</sup>	2.4	Oxotrol DS	Vertical, Fixed Roof
CHEM 1 <sup>b</sup>	160	Peroxide	Vertical, Fixed Roof
CHEM 2 <sup>b</sup>	142	Bronopol	Vertical, Fixed Roof
CHEM 3 <sup>b</sup>	90	Gluteraldehyde	Vertical, Fixed Roof
FOAM1 <sup>b</sup>	13	Fire Suppressant	Horizontal
FOAM2 <sup>b</sup>	6.5	Fire Suppressant	Horizontal
FOAM3 <sup>b</sup>	46.5	Fire Suppressant	Horizontal
YD-1 <sup>b</sup>	11	Distillate	Horizontal

<sup>a</sup> Sprague may change the product stored in each tank provided all of the required controls are in-place and recordkeeping done for the type of product being stored.

<sup>b</sup> These tanks are considered insignificant activities and noted for completeness only.

<sup>c</sup> These tanks are not currently in use but are being maintained for potential future use.

### Control Equipment

Equipment	Control Rate
(2) McGill Carbon Adsorption Units	10 mg/liter (each)

Sprague may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, Sprague has portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

#### 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.

Gasoline. For the purposes of this license, gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines. This definition includes aviation gasoline.

Portable Engine. For the purposes of this license, *portable engine* means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

D. Revision Description

Sprague requested a minor revision to their air emission license to address a physical change to the asphalt pipeline at the terminal. Specifically, 350 feet of 8-inch diameter pipeline and 150 feet of 12-inch diameter pipeline have been replaced with 300 feet of new 12-inch diameter pipeline.

With this change, the entire length of asphalt pipeline between the dock and tank farm is now 12 inches in diameter. While this may have the potential to increase asphalt throughput, and therefore emissions, the facility-wide annual limit on VOC emissions will remain in place and will continue to limit Sprague to minor source levels. In addition, a change in actual asphalt throughput is not expected, and any increase in actual emissions is projected to be below four tons per year of VOC which qualifies this change as a minor revision per 06-096 C.M.R. ch. 115.

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

This license is considered to be a renewal of currently licensed emission units combined with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

With the annual fuel limits on the heaters and Boiler #5 as well as the volatile organic compound (VOC) and hazardous air pollutant (HAP) limits associated with the tanks the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; and
- As an area source of HAP, because the licensed emissions are below the major source thresholds for HAP.

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 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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, and #3

Heaters #1, #2, and #3 heat a thermal oil which is used to heat the asphalt stored at the facility to keep it in a liquid form. Each heater is rated at 9.9 MMBtu/hr and fires natural gas and distillate fuel.

1. BPT Findings

The BPT emission limits for the heaters were based on the following:

Natural Gas

- PM/PM<sub>10</sub> - 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO<sub>2</sub> - 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- NO<sub>x</sub> - 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- CO - 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- VOC - 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT

Distillate Fuel

- PM/PM<sub>10</sub> - 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO<sub>2</sub> - based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO<sub>x</sub> - 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10
- CO - 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10
- VOC - 0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the heaters are the following:

Unit	Pollutant	lb/MMBtu
Heaters #1, #2, #3 (each) <i>natural gas</i>	PM	0.05
Heaters #1, #2, #3 (each) <i>distillate fuel</i>	PM	0.08

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) <i>natural gas</i>	0.50	0.50	0.01	0.96	0.81	0.05
Heaters #1, #2, #3 (each) <i>distillate fuel</i>	0.79	0.79	4.99	1.41	0.35	0.02

Visible emissions from each heater when firing natural gas shall not exceed 10% opacity on a six-minute block average basis.

Visible emissions from each heater when firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis.

Compliance with the visible emission limits shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department.

Total natural gas fuel use for Heaters #1, #2, and #3 combined shall not exceed 84 MMscf/year on a calendar year total basis.

Total distillate fuel oil use for Heaters #1, #2, and #3 and Boiler #5 combined shall not exceed 600,000 gal/year on a calendar year total basis.

2. Periodic Monitoring

Periodic monitoring for the heaters shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the distillate fuel.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

The heaters do not heat water. They do not meet the definition of a “steam generating unit” and therefore are not subject to New Source Performance Standards (NSPS) *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP):  
40 C.F.R. Part 63, Subpart JJJJJ

The heaters do not heat water. They do not meet the definition of a “boiler” and therefore are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ.

C. Boiler # 5

Boiler #5 is rated at 2.0 MMBtu/hr and fires distillate fuel. It was installed in 2001 and exhausts through its own stack.

1. BPT Findings

The BPT emission limits for Boiler #5 were based on the following:

Distillate Fuel

- PM/PM<sub>10</sub> – 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO<sub>2</sub> – based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO<sub>x</sub> – 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10
- CO – 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10
- VOC – 0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10
- Visible Emissions – 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Boiler #5 are the following:

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)
Boiler #5	0.16	0.16	1.01	0.29	0.07	0.01

Visible emissions from Boiler #5 shall not exceed 20% opacity on a six-minute block average basis. Compliance shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department.

Total distillate fuel oil use for Heaters #1, #2, and #3 and Boiler #5 combined shall not exceed 600,000 gal/year on a calendar year total basis.



2. Periodic Monitoring

Periodic monitoring for Boiler #5 shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the distillate fuel.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to its size, Boiler #5 is not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

Boiler #5 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. It is considered an existing oil boiler rated less than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 C.F.R. § 63.11225(a)(2)] Sprague submitted their Initial Notification to EPA on September 6, 2011.

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

- (ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Oil fired boilers with a heat input capacity of $\leq 5$ MMBtu/hr	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

- (iii) The boiler tune-up program, conducted to demonstrate continuous compliance, 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 for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
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 for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

- (iv) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before and after** the boiler tune-up; and

2. A description of any corrective actions taken as part of the tune-up of the boiler.

After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

(3) Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
  1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  2. "No secondary materials that are solid waste were combusted in any affected unit."
  3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (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) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups through their electronic reporting system.  
[40 C.F.R. § 63.11225(a)(4)(vi)]

**D. Distillate Fuel Sulfur Limit**

Heaters #1, #2, and #3 and Boiler #5 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), 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 (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Heaters #1, #2, and #3 and Boiler #5 shall not exceed 0.0015% by weight (15 ppm).

**E. Loading Racks**

Sprague operates two loading racks. Loading Rack 1 is equipped with three top-loading positions and one bottom-loading position. Loading Rack 2 is equipped with six bays, each equipped for either top- or bottom-loading.

Emissions from each loading rack are controlled by a McGill adsorption unit. Each McGill adsorption unit consists of two carbon adsorbers. During operation, the hydrocarbon laden air flows through one adsorber where the hydrocarbons adsorb onto the surface of the carbon. The cleaned air flows out of the adsorber and is exhausted to atmosphere.

While one adsorber is on-line, the other is off-line being vacuum regenerated. A vacuum pump desorbs the hydrocarbons from the carbon. The now concentrated hydrocarbon vapors are pumped to an absorption tower where they are condensed and absorbed by a counter flow gasoline feed which is fed back to the gasoline storage tank (Tank 28). Any hydrocarbons that are not absorbed in the absorber tower are routed back to the on-line carbon adsorber. The two carbon adsorbers alternate between adsorption and regeneration at 15-minute intervals.

Gasoline is only dispensed through Loading Rack 1 which is controlled by a McGill adsorption unit (Vapor Recovery Unit 1).

Loading Rack 2 processes only distillate products. However, since Sprague is required to control vapors from the loading of any truck whose most recent previous load was gasoline (known as switch-loading), Sprague utilizes another McGill adsorption unit (Vapor Recovery Unit 2) for this purpose. Sprague shall demonstrate compliance by operating Vapor Recovery Unit 2 at all times on Loading Rack 2 in lieu of collecting records to demonstrate the unit is used during switch-loading.

1. Best Practical Treatment (BPT)

BPT for the loading racks includes use of a vapor recovery unit when loading gasoline products or when loading a truck whose most recent previous load was gasoline and an emission limit for each vapor recovery unit of 10 milligrams of total organic compounds (TOC) per liter of product transferred. Compliance shall be demonstrated by annual emissions testing of each vapor recovery unit by June 15<sup>th</sup> of every third calendar year.

2. New Source Performance Standards (NSPS)

Loading Rack 1 is subject to *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX. This regulation applies to gasoline loading racks which were constructed or modified after December 17, 1980. Although Loading Rack 1 was originally installed in the 1950s, the terminal was upgraded in 2000 in order to restart the dispensing of aviation gasoline. It has been conservatively assumed that this terminal upgrade involved modifications to Loading Rack 1 sufficient to make it subject to Subpart XX.

a. Emission Standards

1. Loading Rack 1 shall be equipped with a vapor collection system designed to collect the total organic compound vapors displaced from the tank trucks during product loading. [40 C.F.R. § 60.502(a)]
2. Emissions to the atmosphere from Vapor Recovery Unit 1 are not to exceed 35 milligrams of TOC per liter of gasoline loaded. [40 C.F.R. § 60.502(b)] This limit is streamlined to the more stringent BPT limit of 10 milligrams of TOC per liter of product transferred.
3. Vapor Recovery Unit 1 shall be designed to prevent any TOC vapors collected at one loading rack from passing to another loading rack. [40 C.F.R. § 60.502(d)]
4. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the procedures outlined in 40 C.F.R. § 60.502(e).
5. Sprague shall act to assure that loading of gasoline tank trucks at the facility are made only into tank trucks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 C.F.R. § 60.502(f)]
6. Sprague shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [40 C.F.R. § 60.502(g)]
7. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. [40 C.F.R. § 60.502(h)]

8. No pressure-vacuum vent in the vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).  
[40 C.F.R. § 60.502(i)]
9. Each calendar month, the vapor collection system, Vapor Recovery Unit 1, and Loading Rack 1 shall be inspected during the loading of gasoline tank trucks for liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within fifteen (15) calendar days after it is detected.  
[40 C.F.R. § 60.502(j)]

b. Recordkeeping

Sprague shall keep the following records as specified in 40 C.F.R. § 60.505:

1. Records of tank truck vapor tightness documentation required by 40 C.F.R. § 60.502(e)(1) in accordance with 40 C.F.R. §§ 60.505(a), (b), (d), and (e). The records required by 40 C.F.R. Part 63, Subpart BBBB are determined to be at least as stringent as these NSPS requirements.
2. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) in accordance with 40 C.F.R. §§ 60.505(c) and (e).

F. Gasoline Storage – Tank 28

Sprague currently operates one tank (Tank 28) for storage of gasoline products. Tank 28 has a useable capacity of 40,835 barrels (1.715 MMgallons) and was constructed in 1970. It is equipped with an internal floating roof (IFR) with a mechanical shoe seal and an auxiliary wiper.

1. Best Practical Treatment

BPT for Tank 28 includes the operation and maintenance of an IFR with mechanical shoe seal and auxiliary wiper as well as monthly visual inspections around the perimeter of the tank and the IFR. Sprague shall keep an inspection log documenting any detected leaks, holes, tears or other openings and the corrective action taken.

2. Emission Limits

The only pollutants emitted from the use and operation of Tank 28 are VOC and HAP. Emissions from Tank 28 are included in the facility-wide process VOC and HAP emission limits.

3. New Source Performance Standards (NSPS)

Tank 28 was installed in 1970. However, as part of a terminal upgrade in 2000, an entirely new roof was installed on Tank 28. This work was determined to be a reconstruction, and Tank 28 is therefore subject to *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, 40 C.F.R. Part 60, Subpart Kb.*

a. Tank Standards

- (1) Sprague shall equip and operate Tank 28 with a fixed roof in combination with an internal floating roof employing a mechanical shoe seal. The internal floating roof shall rest or be floating on the liquid surface (but not necessarily in complete contact with it) at all times, except during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. § 60.112b(a)]
- (2) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. [40 C.F.R. § 60.112b(a)(1)(iii)]
- (3) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e. no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 C.F.R. § 60.112b(a)(1)(iv)]
- (4) 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 C.F.R. § 60.112b(a)(1)(v)]
- (5) 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 C.F.R. § 60.112b(a)(1)(vi)]
- (6) 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% of the opening. [40 C.F.R. § 60.112b(a)(1)(vii)]
- (7) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 C.F.R. § 60.112b(a)(1)(viii)]
- (8) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 C.F.R. § 60.112b(a)(1)(ix)]

b. Inspections

- (1) Sprague shall visually inspect the internal floating roof and the primary seal through manholes and roof hatches on the fixed roof at least once every 12 months. If the internal floating roof is not resting on the surface of the liquid 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. If a failure that is detected during the inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions Sprague will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

[40 C.F.R. § 60.113b(a)(2)]

- (2) Sprague shall visually inspect each internal floating roof, primary seal, secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time Tank 28 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% 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. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years. [40 C.F.R. § 60.113b(a)(4)]

c. Notifications

Sprague shall notify the Department in writing at least 30 days prior to refilling Tank 28 after it has been emptied and degassed and an inspection performed to afford the Department the opportunity to have an observer present. If the inspection of Tank 28 was not planned and Sprague could not have known about it 30 days in advance, Sprague shall notify the Department at least 7 days prior to refilling Tank 28. Notification shall be made by telephone to the Department's regional inspector immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification may be made in writing provided it is received by the Department at least 7 days prior to refilling.

[40 C.F.R. § 60.113b(a)(5)]

d. Recordkeeping and Reporting

- (1) Sprague shall keep a record of each inspection performed as required by 40 C.F.R. §§ 60.113b(a)(2) and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

[40 C.F.R. § 60.115b(a)(2)]

- (2) If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection, Sprague shall submit a report to the Department within 30 days of the inspection. The report shall identify the



storage vessel, the nature of the defects, and the data the storage vessel was emptied or the nature of and date the repair was made.

[40 C.F.R. § 60.115b(a)(3)]

- (3) Sprague shall keep readily accessible records showing the dimension of Tank 28 and an analysis showing its capacity. [40 C.F.R. § 60.116b(b)]
- (4) Sprague shall maintain for Tank 28 a record of the product stored, the period of storage, and the maximum true vapor pressure of the product during the storage period. [40 C.F.R. § 60.116b(c)]

#### 4. State Regulations

Tank 28 is subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. Many of the requirements of this chapter are similar to, or less stringent than, the requirements of 40 C.F.R. Part 60, Subpart Kb. Following are requirements of 06-096 C.M.R. ch. 111 that are not otherwise already addressed.

- a. Routine visual inspections of the IFR on Tank 28 shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 2(A)(4)]
- b. Tank 28 shall not be emptied and degassed for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. This provision notwithstanding, 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 shall notify the Department within 24 hours if the tank must be emptied and degassed between June 1 and August 31. [06-096 C.M.R. ch. 111, §§ 2(C) and (D)]
- c. Sprague shall keep records for Tank 28 of the monthly throughput quantities and types of volatile petroleum liquids and period of storage as well as records of the average monthly storage temperatures and true vapor pressures. [06-096 C.M.R. ch. 111, §§ 5(A)(2) and (3)]

#### G. 40 C.F.R. Part 63, Subpart BBBBBB

Sprague is subject to the *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. The facility is considered an existing bulk gasoline terminal which is not subject to 40 C.F.R. Part 63, Subparts R or CC.

Subpart BBBBBB contains requirements applicable to both Loading Rack 1 and Tank 28. Tanks storing gasoline are subject to Subpart BBBBBB, and tanks storing ethanol (not blended with gasoline) are not. Below is a summary of the currently applicable requirements. Any streamlining of individual requirements will be addressed in the Loading Racks or Gasoline Storage – Tank 28 sections below as appropriate. The rule may contain additional requirements and/or clarifications not specified in this document.

1. General Requirements

Sprague must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.11085(a)]

2. Tank 28

As described above, Tank 28 is an IFR gasoline storage tank greater than 151 m<sup>3</sup> subject to 40 C.F.R. Part 60, Subpart Kb. Per 40 C.F.R. Part 63, Subpart BBBB, § 63.11087, gasoline storage tanks that are subject to, and comply with, Subpart Kb are deemed to be in compliance with Subpart BBBB.

3. Emission Limits and Management Practices for the Loading Rack

Loading Rack 1 is a bulk gasoline terminal loading rack with an actual average gasoline throughput of less than 250,000 gallons per day subject to the following requirements:

- a. Sprague shall use submerged filling with a submerged fill pipe that is not more than 6 inches from the bottom of the cargo tank; and
- b. Sprague shall keep records to document daily average gasoline throughput and make them available within 24 hours of request.  
[40 C.F.R. Part 63, Subpart BBBB, Table 2]

4. Equipment Leak Inspections

*Equipment in gasoline service* means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems used in a system that transfers gasoline or gasoline vapors. This definition also includes the entire vapor processing system, except the exhaust port or stack.

- a. Sprague shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(a)]
- b. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 C.F.R. § 63.11089(b)]
- c. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the

repair is not feasible within fifteen (15) days. In such cases, Sprague shall provide in the semiannual report the reason(s) why the repair was not feasible within 15 calendar days and the date each repair was completed.

[40 C.F.R. § 63.11089(c) and (d)]

**5. Recordkeeping for Loading Rack**

- a. Sprague shall keep records of the test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b) and (c).
- b. Sprague shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service.  
[40 C.F.R. § 63.11094(d)]
- c. For each leak detected through inspection of equipment in gasoline service, Sprague shall record in the log book the following information:
  1. The equipment type and identification number.
  2. The nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell).
  3. The date the leak was detected and the date of each attempt to repair the leak.
  4. Repair methods applied in each attempt to repair the leak.
  5. “Repair delayed” and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery of the leak.
  6. The expected date of successful repair of the leak if the leak is not repaired within fifteen (15) days.
  7. The date of successful repair of the leak.  
[40 C.F.R. § 63.11094(e)]
- d. Sprague shall keep records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment (i.e. the IFR controls on Tank 28). [40 C.F.R. § 63.11094(g)(1)]
- e. Sprague shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.  
[40 C.F.R. § 63.11094(g)(2)]

**6. Notifications and Reports**

- a. Sprague has previously submitted an Initial Notification and a Notification of Compliance Status as required by 40 C.F.R. § 63.11093.
- b. Sprague shall submit to the Department and EPA a semiannual excess emissions report which contains the following information. If no excess emission events occurred during the previous 6-month period, no report is required.
  1. The number of equipment leaks not repaired within fifteen (15) calendar days after detection.
  2. For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15)

days after detection include the date on which the leak was detected, the date of each attempt to repair the leak the reasons for the delay of repair, and the date of successful repair.

[40 C.F.R. § 63.11095(c)]

- c. Sprague shall submit a semiannual report to the Department and EPA including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused, or may have caused, any applicable emission limitation to be exceeded. The report must also include a description of actions taken by Sprague to minimize emissions including actions taken to correct a malfunction. [40 C.F.R. § 63.11095(d)]

#### H. Distillate, Asphalt, and Residual Storage Tanks

Sprague currently operates several fixed roof or internal floating roof tanks for storage of distillate fuel as well as several heated fixed roof tanks used to store asphalt or residual fuel oil (i.e. #6 fuel oil). Heat for the asphalt and residual tanks is provided by Heaters #1, #2, and #3.

##### 1. Emission Limits

The only pollutants emitted from the use and operation of the Distillate, Asphalt, and Residual Storage Tanks are VOC and HAP. Emissions from the Distillate, Asphalt, and Residual Storage Tanks (both working and standing losses) are included in the facility-wide VOC and HAP emission limits.

##### 2. New Source Performance Standards (NSPS)

Distillate, asphalt, and residual fuel oil have true vapor pressures less than 1.0 kPa. Therefore, regardless of age, none of the Distillate, Asphalt, and Residual Storage Tanks are subject to *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*, 40 C.F.R. Part 60, Subpart Kb. [40 C.F.R. § 60.110b(b)]

##### 3. Best Practical Treatment

Prior to issuance of the facility's air emission license A-179-71-N-R/M (March 29, 2011), the Department evaluated the control of emissions from Sprague's tanks as compared to emissions controls commonly used in sources of similar age and design for compliance with BPT, in accordance with 38 M.R.S. § 590(3) and 06-096 C.M.R. ch. 115 (3)(D)(2).

Literature and air emission licenses for other, similar sources support the BPT determination that materials exhibiting true vapor pressure below 70 mm Hg (9.3 kPa) at storage conditions are most appropriate for storage in fixed-roof tanks, while more

volatile materials require a floating roof tank or equivalent to minimize VOC and HAP emissions.

Asphalt (CAS #8052-42-4) is obtained as the non-volatile residue from distillation of crude oil or by separation as the raffinate (the material left over after a component or components have been removed) from a residual oil in a deasphalting or decarbonization process. Asphaltic materials are complex hydrocarbon mixtures characterized by large molecular size (molecular weights ranging from 500 to 2000 and carbon numbers predominantly greater than C25), high boiling temperature ranges (752-1021 °F), high viscosity (a measure of a fluid's resistance to flow), low solubility, and low vapor pressure. Asphalt, a viscoelastic material, has the properties of either an elastic solid or a viscous liquid, depending on the temperature. For temporary storage purposes in Maine's climate, asphalt storage is maintained at temperatures above ambient temperatures to facilitate ease of movement and transportation. According to information provided by the source, at an asphalt storage temperature of approximately 300 °F, the vapor pressure of this product is 0.52 mm Hg.

Residual Fuel Oil (CAS #68476-33-5) has a vapor pressure of less than 5.2 mm Hg, as specified on its safety data sheet (SDS). No. 6 fuel oil (CAS #68553-00-4), which is part of the residual fuel oil category, has a vapor pressure of 0.2 mm Hg at 70 °F, as specified in its SDS. Distillate Fuel Oil (CAS #68476-30-2) has a vapor pressure of 1.0 mmHg. For comparison purposes, at 70 °F, the vapor pressure of water is 17.5 mm Hg, and the vapor pressure of gasoline is approximately 310 mm Hg.

The Department finds no evidence contradicting its original conclusion and hereby confirms the use of fixed roof tanks and annual throughput tracking as BPT for the Distillate, Asphalt, and Residual Storage Tanks.

BPT for the Distillate, Asphalt, and Residual Storage Tanks shall include monthly visual inspections of all Distillate, Asphalt, and Residual Storage Tanks including around the perimeter of the tank and the tank roof. Sprague shall keep an inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken.

#### I. Annual VOC/HAP Emission Limits

Sprague shall be limited to annual facility-wide emissions of 49.9 tpy of VOC, 9.9 for any single HAP, and 24.9 tpy for all HAP combined. Compliance with these limits shall be demonstrated through the recordkeeping outlined below with calculations of emissions performed at least once annually. Additional calculation of emissions to demonstrate compliance with these limits shall be performed upon request by the Department.

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 of each tank;
6. Tank emissions calculated using EPA TANKS program or an alternative approved by the Department. This statement notwithstanding, to comply with the reporting requirements of *Emission Statements*, 06-096 C.M.R. ch. 137, breathing and working losses from asphalt and residual storage shall be quantified using AP-42 equations and factors, as applicable, and site-specific data including product storage temperatures and associated vapor pressures, when available.;
7. Tank truck emissions assuming 1.3% of the displaced vapors are emitted during loading (based on assumed capture efficiency of 98.7% as given in 40 C.F.R. Part 63, Subpart R);
8. Calculations of emissions from the vapor recovery units based on 10 mg per liter of product transferred or the emission rate demonstrated at the most recent performance test for the vapor destruction unit;
9. HAP speciation data as given by the American Petroleum Institute (API) or other speciation data as obtained by a supplier;
10. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage;
11. Calculations showing annual emissions of VOC and HAP from equipment seals, and transfer piping and fittings determined in accordance with American Petroleum Institute, Manual of Petroleum Measurement Standard, Chapter 19 (method of calculating VOC emission from tanks); and
12. Calculations of VOC/HAP from the licensed combustion units.

J. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

K. Annual Emissions

1. Total Annual Emissions

Sprague shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on the following:

- Firing 600,000 gal/year of distillate fuel in the heaters and Boiler #5;
- Firing 84 MMscf/year of natural gas in the heaters; and
- Facility-wide limits on VOC and HAP emissions.

**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
Heaters (Nat Gas)	2.2	2.2	–	4.2	3.5	–
Heaters & Boiler #5 (distillate fuel)	3.4	3.4	21.2	6.0	1.5	–
Facility-wide Limit	–	–	–	–	–	49.9
<b>Total TPY</b>	<b>5.6</b>	<b>5.6</b>	<b>21.2</b>	<b>10.2</b>	<b>5.0</b>	<b>49.9</b>

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through ‘Tailoring’ revisions made to EPA’s *Approval and Promulgation of Implementation Plans*, 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility’s fuel use limits;
- worst case emission factors from the following sources: U.S. EPA’s AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

### III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

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

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

### 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, and
- 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-P-R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.  
[06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 C.F.R. 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 C.M.R. ch. 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 C.M.R. ch. 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 emissions 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 C.M.R. ch. 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 C.M.R. ch. 115]

#### **SPECIFIC CONDITIONS**

(16) **Heaters #1, #2, #3 and Boiler #5**

A. Fuel

1. Total natural gas fuel use for Heaters #1, #2, and #3 combined shall not exceed 84 MMscf/year on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
2. Total distillate fuel oil use for Heaters #1, #2, and #3 and Boiler #5 combined shall not exceed 600,000 gal/year on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
3. Prior to July 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
4. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
5. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel combusted (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Heaters #1, #2, #3 (natural gas)	PM	0.05	06-096 C.M.R. ch. 115, BPT
Heaters #1, #2, #3 (distillate fuel)	PM	0.08	06-096 C.M.R. ch. 115, BPT

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 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)
Heater #1 (natural gas)	0.50	0.50	0.01	0.96	0.81	0.05
Heater #1 (distillate fuel)	0.79	0.79	4.99	1.41	0.35	0.02
Heater #2 (natural gas)	0.50	0.50	0.01	0.96	0.81	0.05
Heater #2 (distillate fuel)	0.79	0.79	4.99	1.41	0.35	0.02
Heater #3 (natural gas)	0.50	0.50	0.01	0.96	0.81	0.05
Heater #3 (distillate fuel)	0.79	0.79	4.99	1.41	0.35	0.02
Boiler #5	0.16	0.16	1.01	0.29	0.07	0.01

D. Visible emissions from Boiler #5 and each heater when firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis.  
 [06-096 C.M.R. ch. 115, BPT]

E. Visible emissions from each heater when firing natural gas shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

F. Sprague shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boiler #5 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Oil fired boilers with a heat input capacity of $\leq 5$ MMBtu/hr	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. The boiler tune-up program, conducted to demonstrate continuous compliance, 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 for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(1)]
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
- (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 for oil fired boilers less than or equal to 5 MMBtu/hour. [40 C.F.R. § 63.11223(b)(3)]
- (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
- (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
- (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

- c. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

## 2. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
  - b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
  - c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
  - d. The following certifications, as applicable:
    - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
    - (2) "No secondary materials that are solid waste were combusted in any affected unit."
    - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
- a. Copies of notifications and reports with supporting compliance documentation;
  - b. 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;

- c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review.

**(17) Loading Racks**

- A. The bulk terminal shall be equipped and maintained with a carbon adsorption unit that captures displaced VOC vapors whenever gasoline is being transferred to a tank truck. [06-096 C.M.R. ch. 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 C.M.R. ch. 112 and ch. 120]
- C. Gasoline loading shall be allowed only into tank trucks and trailers that have been properly certified pursuant to 40 C.F.R. Part 60, Appendix A, Method 27 and maintained and labeled as vapor-tight in accordance with 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112 and ch. 120]
- D. Any tank truck carrying gasoline, or which has carried gasoline as the most recent previous load, shall utilize the vapor collection system and associated vapor recovery unit during the entire loading process. [06-096 C.M.R. ch. 115, BPT]
- E. Sprague shall prevent 100% of the lower explosive limit (LEL) from being 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. [06-096 C.M.R. ch. 120]
- F. Sprague shall conduct a compliance test of Vapor Recovery Units 1 and 2 prior to June 15, 2018 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 C.M.R. ch. 115, BPT]
- G. Emissions from the Loading Racks and associated vapor recovery units shall be included in calculations used to demonstrate compliance with the facility-wide VOC and HAP emission limits. [06-096 C.M.R. ch. 115, BPT]

H. Sprague shall comply with all applicable requirements of 40 C.F.R. Part 60, Subpart XX including, but not limited to, the following:

1. Emission Standards

- a. Loading Rack 1 shall be equipped with a vapor collection system designed to collect the total organic compound vapors displaced from the tank trucks during product loading. [40 C.F.R. § 60.502(a)]
- b. Emissions to the atmosphere from Vapor Recovery Unit 1 are not to exceed 10 milligrams of TOC per liter of gasoline loaded. [40 C.F.R. § 60.502(b) and 06-096 C.M.R. ch. 115, BPT]
- c. Vapor Recovery Unit 1 shall be designed to prevent any TOC vapors collected at one loading rack from passing to another loading rack. [40 C.F.R. § 60.502(d)]
- d. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the procedures outlined in 40 C.F.R. § 60.502(e).
- e. Sprague shall act to assure that loading of gasoline tank trucks at the facility are made only into tank trucks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 C.F.R. § 60.502(f)]
- f. Sprague shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [40 C.F.R. § 60.502(g)]
- g. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. [40 C.F.R. § 60.502(h)]
- h. No pressure-vacuum vent in the vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water). [40 C.F.R. § 60.502(i)]
- i. Each calendar month, the vapor collection system, Vapor Recovery Unit 1, and Loading Rack 1 shall be inspected during the loading of gasoline tank trucks for liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within fifteen (15) calendar days after it is detected. [40 C.F.R. § 60.502(j)]



2. Recordkeeping

Sprague shall keep the following records as specified in 40 C.F.R. § 60.505:

- a. Records of tank truck vapor tightness documentation required by 40 C.F.R. § 60.502(e)(1) in accordance with 40 C.F.R. §§ 60.505(a), (b), (d), and (e). The records required by 40 C.F.R. Part 63, Subpart BBBB are determined to be at least as stringent as these NSPS requirements.
- b. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) in accordance with 40 C.F.R. §§ 60.505(c) and (e).

(18) **Gasoline Storage – Tank 28**

A. Sprague shall comply with all applicable requirements of 40 C.F.R. Part 60, Subpart Kb for Tank 28 including, but not limited to, the following:

1. Tank Standards

- a. Sprague shall equip and operate Tank 28 with a fixed roof in combination with an internal floating roof employing a mechanical shoe seal. The internal floating roof shall rest or be floating on the liquid surface (but not necessarily in complete contact with it) at all times, except during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. § 60.112b(a) and 06-096 C.M.R. ch. 111]
- b. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. [40 C.F.R. § 60.112b(a)(1)(iii)]
- c. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e. no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 C.F.R. § 60.112b(a)(1)(iv) and 06-096 C.M.R. ch. 111]
- d. 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 C.F.R. § 60.112b(a)(1)(v) and 06-096 C.M.R. ch. 111]
- e. 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 C.F.R. § 60.112b(a)(1)(vi) and 06-096 C.M.R. ch. 111]
- f. 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% of the opening. [40 C.F.R. § 60.112b(a)(1)(vii)]

- g. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 C.F.R. § 60.112b(a)(1)(viii)]
- h. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 C.F.R. § 60.112b(a)(1)(ix)]

## 2. Inspections

- a. Sprague shall visually inspect the internal floating roof and the primary seal through manholes and roof hatches on the fixed roof at least once every 12 months. If the internal floating roof is not resting on the surface of the liquid 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. If a failure that is detected during the inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions Sprague will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.  
[40 C.F.R. § 60.113b(a)(2)]
- b. Sprague shall visually inspect each internal floating roof, primary seal, secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time Tank 28 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% 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. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years. [40 C.F.R. § 60.113b(a)(4) and 06-096 C.M.R. ch. 111]

## 3. Notifications

Sprague shall notify the Department in writing at least 30 days prior to refilling Tank 28 after it has been emptied and degassed and an inspection performed to afford the Department the opportunity to have an observer present. If the inspection of Tank 28 was not planned and Sprague could not have known about it 30 days in advance, Sprague shall notify the Department at least 7 days prior to refilling Tank 28. Notification shall be made by telephone to the Department's regional inspector immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification may be made in writing provided it is received by the Department at least 7 days prior to refilling.

[40 C.F.R. § 60.113b(a)(5)]

4. Recordkeeping and Reporting

- a. Sprague shall keep a record of each inspection performed as required by 40 C.F.R. §§ 60.113b(a)(2) and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).  
[40 C.F.R. § 60.115b(a)(2) and 06-096 C.M.R. ch. 111]
  - b. If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection, Sprague shall submit a report to the Department within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defects, and the data the storage vessel was emptied or the nature of and date the repair was made.  
[40 C.F.R. § 60.115b(a)(3)]
  - c. Sprague shall keep readily accessible records showing the dimension of Tank 28 and an analysis showing its capacity. [40 C.F.R. § 60.116b(b)]
  - d. Sprague shall maintain for Tank 28 a record of the product stored, the period of storage, and the maximum true vapor pressure of the product during the storage period. [40 C.F.R. § 60.116b(c)]
- B. Routine visual inspections of the IFR on Tank 28 shall be conducted around the perimeter of the tank and through roof hatches once every month. Compliance shall be demonstrated by maintaining an inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken.  
[06-096 C.M.R. ch. 111, § 2(A)(4) and 06-096 C.M.R. ch. 115, BPT]
- C. Tank 28 shall not be emptied and degassed for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. This provision notwithstanding, 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 shall notify the Department within 24 hours if the tank must be emptied and degassed between June 1 and August 31. [06-096 C.M.R. ch. 111, §§ 2(C) and (D)]
- D. Sprague shall keep records for Tank 28 of the monthly throughput quantities and types of volatile petroleum liquids and period of storage as well as records of the average monthly storage temperatures and true vapor pressures. [06-096 C.M.R. ch. 111, §§ 5(A)(2) and (3)]
- E. Emissions from Tank 28 shall be included in calculations used to demonstrate compliance with the facility-wide VOC and HAP emission limits.  
[06-096 C.M.R. ch. 115, BPT]

**(19) 40 C.F.R. Part 63, Subpart BBBB**

Sprague shall comply with all applicable requirements of 40 C.F.R. Part 63, Subpart BBBB including, but not limited to, the following:

- A. Sprague must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.11085(a)]
- B. Tank 28 shall comply with the requirements of 40 C.F.R. Part 63, Subpart BBBB by complying with 40 C.F.R. Part 60, Subpart Kb. [40 C.F.R. § 63.11087(f)]
- C. Emission Limits and Management Practices for the Loading Rack
  1. Sprague shall use submerged filling with a submerged fill pipe that is not more than 6 inches from the bottom of the cargo tank; and
  2. Sprague shall keep records to document daily average gasoline throughput and make them available within 24 hours of request. [40 C.F.R. Part 63, Subpart BBBB, Table 2]
- D. Equipment Leak Inspections
  1. Sprague shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(a)]
  2. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 C.F.R. § 63.11089(b)]
  3. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within fifteen (15) days. In such cases, Sprague shall provide in the semiannual report the reason(s) why the repair was not feasible within 15 calendar days and the date each repair was completed. [40 C.F.R. § 63.11089(c) and (d)]

**E. Recordkeeping for Loading Rack**

1. Sprague shall keep records of the test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b) and (c).
2. Sprague shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service.  
[40 C.F.R. § 63.11094(d)]
3. For each leak detected through inspection of equipment in gasoline service, Sprague shall record in the log book the following information:
  - a. The equipment type and identification number.
  - b. The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell).
  - c. The date the leak was detected and the date of each attempt to repair the leak.
  - d. Repair methods applied in each attempt to repair the leak.
  - e. "Repair delayed" and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery of the leak.
  - f. The expected date of successful repair of the leak if the leak is not repaired within fifteen (15) days.
  - g. The date of successful repair of the leak.  
[40 C.F.R. § 63.11094(e)]
4. Sprague shall keep records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment (i.e. the IFR controls on Tank 28). [40 C.F.R. § 63.11094(g)(1)]
5. Sprague shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.  
[40 C.F.R. § 63.11094(g)(2)]

**F. Notifications and Reports**

1. Sprague has previously submitted an Initial Notification and a Notification of Compliance Status as required by 40 C.F.R. § 63.11093.
2. Sprague shall submit to the Department and EPA a semiannual excess emissions report which contains the following information. If no excess emission events occurred during the previous 6-month period, no report is required.
  - a. The number of equipment leaks not repaired within fifteen (15) calendar days after detection.
  - b. For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection include the date on which the leak was detected, the date of each attempt to repair the leak the reasons for the delay of repair, and the date of successful repair.  
[40 C.F.R. § 63.11095(c)]

3. Sprague shall submit a semiannual report to the Department and EPA including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused, or may have caused, any applicable emission limitation to be exceeded. The report must also include a description of actions taken by Sprague to minimize emissions including actions taken to correct a malfunction. [40 C.F.R. § 63.11095(d)]

**(20) Distillate, Asphalt, and Residual Tanks**

- A. Emissions from the Distillate, Asphalt, and Residual Storage Tanks shall be included in calculations used to demonstrate compliance with the facility-wide VOC and HAP emission limits. [06-096 C.M.R. ch. 115, BPT]
- B. Sprague shall conduct routine inspections of the Distillate, Asphalt, and Residual Storage Tanks at a minimum of once every month around the perimeter of the tank and roof. Compliance shall be demonstrated by maintaining an inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [06-096 C.M.R. ch. 115, BPT]

**(21) Annual VOC/HAP Emission Limits**

- A. Total facility-wide annual emissions of VOC shall not exceed 49.9 tpy on a 12-month rolling total basis. Compliance with this limit shall be demonstrated through the recordkeeping outlined below with calculations of emissions performed at least once annually. Additional calculation of emissions to demonstrate compliance with this limit shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BPT]
- B. Facility-wide annual emissions of HAP shall not exceed 9.9 tpy on a 12-month rolling total basis for any single HAP and 24.9 tpy on a 12-month rolling total basis for all HAP combined. Compliance with these limits shall be demonstrated through the recordkeeping outlined below with calculations of emissions performed at least once annually. Additional calculation of emissions to demonstrate compliance with these limits shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BPT]
- C. Compliance with the annual facility-wide VOC and HAP emission limits shall be demonstrated by the following recordkeeping:
  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 of each tank;

6. Tank emissions calculated using EPA TANKS program or an alternative approved by the Department. This statement notwithstanding, to comply with the reporting requirements of *Emission Statements*, 06-096 C.M.R. ch. 137, breathing and working losses from asphalt and residual storage shall be quantified using AP-42 equations and factors, as applicable, and site-specific data including product storage temperatures and associated vapor pressures, when available.;
7. Tank truck emissions assuming 1.3% of the displaced vapors are emitted during loading (based on assumed capture efficiency of 98.7% as given in 40 C.F.R. Part 63, Subpart R);
8. Calculations of emissions from the vapor recovery units based on 10 mg per liter of product transferred or the emission rate demonstrated at the most recent performance test for the vapor destruction unit;
9. HAP speciation data as given by the American Petroleum Institute (API) or other speciation data as obtained by a supplier;
10. Monthly throughput specifying quantity and types of volatile petroleum liquids in each tank and the period of storage;
11. Calculations showing annual emissions of VOC and HAP from equipment seals, and transfer piping and fittings determined in accordance with American Petroleum Institute, Manual of Petroleum Measurement Standard, Chapter 19 (method of calculating VOC emission from tanks); and
12. Calculations of VOC/HAP from the licensed combustion units.  
[06-096 C.M.R. ch. 115, BPT]

(22) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

(23) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

Sprague Operating Resources LLC  
Cumberland County  
South Portland, Maine  
A-179-71-P-R/M (SM)

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**Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal with Minor Revision**

- (24) 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. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 2 DAY OF March, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Core for  
PAUL MERCER, COMMISSIONER

**The term of this license shall be ten (10) years from the signature date above.**

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/19/16

Date of application acceptance: 1/21/16

Date filed with the Board of Environmental Protection:

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

