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March 10, 2021

Jane Gilbert
Bureau of Air Quality
Maine Department of Environmental Protection
State House Station 17
Augusta, ME 04333

**Subject: Application for Minor Revision of Air License A-179-71-P-R/M
Sprague Operating Resources LLC
South Portland, ME Facility**

Dear Jane:

On behalf of Sprague Operating Resources LLC (Sprague), POWER Engineers is submitting this application to the Maine Department of Environmental Protection (MEDEP) for a Minor Revision of the air license (A-179-71-P-R/M) for Sprague's South Portland Terminal (facility). This Minor Revision is intended to incorporate into A-179-71-P-R/M certain requirements of the Consent Decree (Civil No. 1:20-cv-11026-LTS) between the United States Environmental Protection Agency (USEPA) and Sprague. There are no physical or process changes or emissions increases to the facility's operations as a result of this Minor Revision.

License Conditions Required by Consent Decree

Contained within Appendix G of the Consent Decree are the license conditions required to be incorporated into A-179-71-P-R/M. Specifically, Item 9 of Appendix G requires Sprague to submit a license amendment application that incorporates three specific requirements: operating no more than six (6) Heated Tanks (as defined in Consent Decree IV.8) containing asphalt; conversion of only one such Heated Tank to store #6 fuel oil if notification and emissions offset requirements in Item 2.a and 2.b of Appendix G are met; and restrictions on the facility-wide throughput of asphalt and #6 oil at the facility of 105,000,000 gallons and 10,000,000 gallons, respectively, on a rolling 12-month basis.

Sprague currently operates only five (5) Heated Tanks containing asphalt at the facility—Tanks 201, 202, 208, 209, and 215. Sprague formerly operated one (1) Heated Tank, Tank 7, containing #6 fuel oil. Tank 7 has been emptied of any remaining #6 fuel oil and cleaned. Sprague plans on keeping Tanks 201, 202, 208, 209, and 215 in operation containing asphalt, and proposes that Tank 7 be designated as one of the six (6) Heated Tanks that may contain asphalt in the future. Pursuant to Item 5 of Appendix G, prior to the storage of any asphalt in Tank 7, Sprague will install a Carbon System for Tank 7. Sprague is not currently planning on storing any #6 fuel oil at the facility.

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

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Sprague therefore proposes that the following revisions be made to the Specific Conditions of A-179-71-P-R/M.

- Sprague shall operate no more than six Heated Tanks at the facility, containing asphalt. Only one Heated Tank may be converted to contain #6 fuel oil, with a notification being provided to MEDEP at least 90 days in advance of such conversion. Heated Tanks are defined as:
 - o Bulk heated petroleum tanks used for the storage of #6 fuel oil or asphalt with a capacity greater than 210,000 gallons.
- Throughput of asphalt at the facility shall be limited to 105,000,000 gallons per year on a 12-month rolling total basis.
- Throughput of #6 fuel oil at (if one Heated Tank is converted to contain #6 fuel oil) the facility shall be limited to 10,000,000 gallons per year on a 12-month rolling total basis.

List of Equipment at the Terminal

In order to ensure consistency with information on-file with MEDEP, the following tables summarize all air emissions equipment at the facility.

FUEL BURNING EQUIPMENT

Equipment ID	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, & Sulfur Content	Date of Manufacture	Stack #
Heater #1	9.9	9,610 scf/hr	Natural Gas, negligible	2006	1
		70.7 gal/hr	Distillate Fuel, 0.0015%		
Heater #1	9.9	9,610 scf/hr	Natural Gas, negligible	2006	2
		70.7 gal/hr	Distillate Fuel, 0.0015%		
Heater #1	9.9	9,610 scf/hr	Natural Gas, negligible	2006	3A
		70.7 gal/hr	Distillate Fuel, 0.0015%		
Boiler #6	2.0	14.6	Distillate Fuel, 0.0015%	2018	5

BULK STORAGE EQUIPMENT

Tank Number	Safe Fill Capacity (gallons)	Product Currently Stored	Tank Type
3	3,250,296	Out of Service	Vertical Fixed Roof - Riveted
4	1,319,263	Kerosene	Internal Floating Roof - Riveted
5	1,337,448	Out of Service	Internal Floating Roof - Riveted
7	3,800,370	Out of Service	Vertical Fixed Roof - Welded Steel
13	3,226,398	#2 Fuel Oil	Vertical Fixed Roof - Riveted
14	4,391,394	Out of Service	Vertical Fixed Roof - Welded Steel
28	1,715,070	Aviation Gas	Internal Floating Roof - Welded Steel
31	126,000	Out of Service	Vertical Fixed Roof - Welded Steel
33	126,000	Out of Service	Vertical Fixed Roof - Welded Steel

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Tank Number	Safe Fill Capacity (gallons)	Product Currently Stored	Tank Type
40	1,281,000	Out of Service	Vertical Fixed Roof - Welded Steel
42	6,232,548	Out of Service	Vertical Fixed Roof - Welded Steel
101	1,236,438	Kerosene	Internal Floating Roof - Riveted
103	585,480	Out of Service	Vertical Fixed Roof - Welded Steel
104	1,572,270	#2 Fuel Oil	Internal Floating Roof - Welded Steel
105	3,757,488	#2 Fuel Oil	Vertical Fixed Roof - Welded Steel
111	2,097,732	#2 Fuel Oil	Internal Floating Roof - Riveted
112	2,458,218	Jet Fuel	Internal Floating Roof - Welded Steel
113	2,507,316	Jet Fuel	Internal Floating Roof - Welded Steel
114	2,508,492	Kerosene	Internal Floating Roof - Welded Steel
118	3,876,180	Out of Service	Vertical Fixed Roof - Welded Steel
201	590,604	Asphalt	Vertical Fixed Roof - Riveted - Insulated
202	592,242	Asphalt	Vertical Fixed Roof - Riveted - Insulated
203	58,800	Out of Service	Vertical Fixed Roof - Riveted
204	16,800	Out of Service	Vertical Fixed Roof - Riveted
205	16,800	Out of Service	Vertical Fixed Roof - Riveted
206	19,320	Out of Service	Vertical Fixed Roof - Riveted
207	1,502,256	Out of Service	Vertical Fixed Roof - Welded Steel
208	4,553,766	Asphalt	Vertical Fixed Roof - Welded Steel - Insulated
209	3,108,798	Asphalt	Vertical Fixed Roof - Welded Steel - Insulated
210	17,136	#2 Fuel Oil	Horizontal - Cradled
211	17,262	Kerosene	Horizontal - Cradled
212	96,600	Out of Service	Vertical Fixed Roof - Riveted
215	1,034,460	Asphalt	Vertical Fixed Roof - Welded Steel - Insulated
229	20,000	Out of Service	Vertical Fixed Roof - Welded Steel
AD4	454	Lubricity	Horizontal - Cradled
AD5	-	Out of Service	Horizontal - Cradled
AD6	454	Additive	Horizontal - Cradled
AD8	5,040	Additive	Horizontal - Cradled
AD9	2,793	Additive	Horizontal - Cradled
B1	28,770	Bio-Fuel	Vertical Fixed Roof - Welded Steel
B2	9,500	Bio-Fuel	Vertical Fixed Roof - Welded Steel
HO1	907	No. 2 Fuel Oil	Horizontal - Cradled
HO3	270	No. 2 Fuel Oil	Horizontal - Cradled
HO4	323	No. 2 Fuel Oil	Horizontal - Cradled
HO5	323	No. 2 Fuel Oil	Horizontal - Cradled
AD10	8,929	Lubricity	Horizontal - Cradled
RD2	462	Dye	Horizontal - Cradled
TO1	1,260	Thermal Oil Expansion	Horizontal - Cradled
TO2	270	Thermal Oil Overflow	Horizontal - Cradled
R1	294	No. 2 Fuel Oil	Horizontal - Cradled
RD1	336	Dye	Vertical Fixed Roof - Stainless Steel
WO1	462	Waste Oil	Horizontal - Cradled

Tank Number	Safe Fill Capacity (gallons)	Product Currently Stored	Tank Type
WO2	462	Waste Oil – Jet A	Horizontal - Cradled
WO3	462	Waste Oil – AvGas	Horizontal - Cradled
KO1	710,556	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO2	711,312	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO3	198,534	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO4	196,392	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO5	735,714	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO6	854,070	Kaolin Clay	Vertical Fixed Roof - Welded Steel
KO7	610,386	Kaolin Clay	Vertical Fixed Roof - Welded Steel
Boiler Chem 1	--	Out of Service	Vertical Fixed Roof - Plastic
Boiler Chem 2	--	Out of Service	Vertical Fixed Roof - Plastic
Boiler Chem 3	--	Out of Service	Vertical Fixed Roof - Plastic
CHEM 1	6,720	Peroxide	Vertical Fixed Roof - Welded Stainless Steel
CHEM 2	5,964	CMI 150	Vertical Fixed Roof - Fiberglass
CHEM 3	3,402	MET 550	Vertical Fixed Roof - Plastic
FOAM1	546	Fire Suppressant	Horizontal - Fixed-in-Place
FOAM2	273	Fire Suppressant	Horizontal - Fixed-in-Place
FOAM3	1,953	Fire Suppressant	Horizontal - Fixed-in-Place
YD-1	462	Off-road Diesel Fuel	Horizontal - Cradled (in containment)

PRODUCT LOADING EQUIPMENT

Product Type	Type of Loading	Maximum Loading Rate	Vapor Recovery Unit
Liquid Asphalt	Top	318 gal/min	N/A
#2 Fuel Oil	Top, bottom	600 gal/min	VRU #1
Diesel Fuel/Kerosene	Top, bottom	500 gal/min	VRU #1
Jet Fuel	Top, bottom	500 gal/min	VRU #1
Aviation Gas	Bottom	600 gal/min	VRU #2

Tank Emissions Testing

Based on discussions with MEDEP, Sprague anticipates that emissions testing of the Heated Tanks will be required to quantify the emissions during breathing (i.e. periods when tanks are not actively being filled or emptied) and working (i.e. periods when at least one tank is being filled) conditions. Upon conclusion of the emissions testing, Sprague will develop site-specific emission factors to be used when estimating emissions from the Heated Tanks. Until the testing is completed, Sprague proposes to estimate emissions using emission factors developed from the emissions testing program conducted at Sprague’s Searsport, ME facility in 2012 and 2013, and pro-rate the tank breathing emission factors based on the liquid surface areas of the tanks that were tested and those whose emissions are being estimated. The following table summarizes the

tank breathing VOC emission factors being proposed for the South Portland facility’s Heated Tanks containing asphalt until site-specific testing is completed.

Searsport Tank 2 Diameter:	120 ft
Searsport Tank 2 Liquid Surface Area:	11,309.7 sq. ft
Searsport Tank 2 Breathing Emission Factor:	4.2 tons/year
S. Portland Tanks 201, 202 Diameter:	60 ft
S. Portland Tanks 201, 202 Liquid Surface Area:	2,827.4 sq. ft
Ratio of Tank 2 to Tanks 201, 202 Liquid Surface Area:	0.25
Pro-rated Tanks 201, 202 Breathing Emission Factor:	1.1 tons/year
S. Portland Tank 208 Diameter:	128 ft
S. Portland Tank 208 Liquid Surface Area:	12,868.0 sq. ft
Ratio of Tank 2 to Tank 208 Liquid Surface Area:	1.14
Pro-rated Tank 208 Breathing Emission Factor:	4.8 tons/year
S. Portland Tank 209 Diameter:	116 ft
S. Portland Tank 209 Liquid Surface Area:	10,568.3 sq. ft
Ratio of Tank 2 to Tank 209 Liquid Surface Area:	0.93
Pro-rated Tank 209 Breathing Emission Factor:	3.9 tons/year
S. Portland Tank 215 Diameter:	72 ft
S. Portland Tank 215 Liquid Surface Area:	4,071.5 sq. ft
Ratio of Tank 2 to Tank 215 Liquid Surface Area:	0.36
Pro-rated Tank 215 Breathing Emission Factor:	1.5 tons/year

Carbon Systems

Sprague is also required by the Consent Decree (Appendix G, Item 5) to install Carbon Systems (consisting of vents, demisters, and carbon beds) for all Heated Tanks at the facility. The current designs are for two separate Carbon Systems to be installed– one Carbon System will serve Tanks 201, 202, and 215, while another Carbon System will serve Tanks 208 and 209. Each Carbon System will have its own exhaust point that will serve as the only exhaust point for the group of tanks it serves. The table below summarizes the exhaust characteristics of each Carbon System.

CARBON SYSTEM EXHAUST CHARACTERISTICS

Tanks Served	Height Above Ground (ft)	Stack Diameter (in)	Volumetric Flow Rate (acfm)	Exhaust Temperature (°F)
201, 202, 215	10	8	Varies- 1,500 max	Ambient
208, 209	10	8	Varies- 1,500 max	Ambient

The Design Plan for the Carbon Systems required in Appendix G, Item 4, is being submitted by Sprague in a separate submittal.

Sprague Operating Resources LLC
March 10, 2021

Signatory Requirement

Required by the Chapter 115 Minor Revision process is a signatory requirement. The completed signatory requirement, signed by a responsible official, is attached to this application.

Conclusion

The proposed revisions to A-179-71-P-R/M qualify as a Minor Revision under Chapter 115 of MEDEP rules, as they represent administrative changes, involve a change in monitoring and reporting requirements, and do not increase the licensed emissions from the facility. Incorporation of these revisions do not require any physical changes to the facility.

If you have any questions, please feel free to reach out to me at (207) 869-1418 or via email (tom.rolfson@powereng.com).

Sincerely,



Tom Rolfson, P.E.
Environmental Engineer

Enclosure(s):

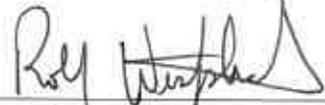
c: Chief, Environmental Enforcement Section, Environment and Natural Resources Division, U.S. Department of Justice
EES Case Management Unit, Environment and Natural Resources Division, U.S. Department of Justice
Thomas T. Olivier, USEPA Region 1
Christine Sansevero, USEPA Region 1
Jason Littlefield, Sprague
Jay Leduc, Sprague
Rolf Westphal, Sprague
Lynn Muzzey, Maine DEP

**Chapter 115 Air Emission License Application
State of Maine DEP - Bureau of Air Quality**

Section K: SIGNATORY REQUIREMENT

Each application submitted to the Department must include the following certification signed by a Responsible Official*:

"I certify under penalty of law that, based on information and belief formed after reasonable inquiry, I believe the information included in the attached document is true, complete, and accurate."

 _____ Responsible Official Signature	 3.5.2021 _____ Date
Rolf Westphal	Terminal Manager
_____ Responsible Official (Printed or Typed)	_____ Title

* A Responsible Official is defined by MEDEP Rule, Chapter 100 as:

- A. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (1) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (2) The delegation of authority to such representatives is approved in advance by the permitting authority;
- B. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- C. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).