POWER ENGINEERS, INC.

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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-97-71-J-R/A Sprague Operating Resources LLC Searsport, 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-97-71-J-R/A) for Sprague's Searsport Terminal (facility). This Minor Revision is intended to incorporate into A-97-71-J-R/A 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 F of the Consent Decree are the license conditions required to be incorporated into A-97-71-J-R/A. Specifically, Item 4 of Appendix F requires Sprague to submit a license amendment application that incorporates two specific requirements: operating no more than three (3) Heated Tanks (as defined in Consent Decree IV.8) containing asphalt or #6 fuel oil, of which no more than two (2) Heated Tanks shall contain #6 fuel oil; and restrictions on the facility-wide throughput of asphalt and #6 oil at the facility of 90,000,000 gallons and 40,000,000 gallons, respectively, on a rolling 12-month basis.

Sprague currently operates only two (2) Heated Tanks at the facility–Tank 1 which contains asphalt, and Tank 2 which contains #6 fuel oil. Sprague formerly operated another Heated Tank, Tank 3, containing #6 fuel oil. Tank 3 has since been emptied of any remaining #6 fuel oil and now contains #2 fuel oil. Sprague has no plans to use Tank 3 as a Heated Tank again. Thus, Tank 1 and Tank 2 will be the only Heated Tanks as part of this application.

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Sprague therefore proposes that the following revisions be made to the Specific Conditions of A-97-71-J-R/A.

- Sprague shall operate no more than two Heated Tanks at the facility, containing either #6 fuel oil or asphalt. Heated Tanks are defined as:
  - Bulk heated petroleum tank 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 90,000,000 gallons per year on a 12-month rolling total basis.
- Throughput of #6 fuel oil at the facility shall be limited to 40,000,000 gallons per year on a 12-month rolling total bases.

## 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

	Max. Capacity	Maximum	Fuel Type, & Sulfur	Date of	
Equipment ID	(MMBtu/hr)	Firing Rate	Content	Manufacture	Stack #
Doilor #1	<b>DE 1</b>	24,608 scf/hr	Natural Gas, negligible	_ 1000	1
Bollet #1	20.1	179.3 gal/hr	Distillate Fuel, 0.0015%	- 1989	I
Doilor #2	<b>DE 1</b>	24,608 scf/hr	Natural Gas, negligible	_ 1000	1
Bullet #2	20.1	179.3 gal/hr	Distillate Fuel, 0.0015%	- 1989	I
Generator #1	1.25 (125 kWe)	8.9 gal/hr	Distillate Fuel, 0.0015%	1991	2
Generator TEMP	4.89 (500 kWe)	35.7 gal/hr	Distillate Fuel, 0.0015%	2015	

# BULK STORAGE EQUIPMENT

Tank	Safe Fill Capacity	Product Currently	
Number	(gallons)	Stored	Tank Type
1	3,927,756	#6 Fuel Oil	Heated Fixed Roof Tank – Insulated
2	3,949,890	Liquid Asphalt	Heated Fixed Roof Tank – Insulated
3	6,023,598	#2 Fuel Oil	Fixed Roof Tank – Insulated
11	27,848	Kerosene	Fixed Roof Tank
12	27,848	Kerosene	Fixed Roof Tank
101	579,894	Distillate Product	Internal Floating Roof Tank
102	2,792,076	Distillate Product	Internal Floating Roof Tank
103	4,362,624	Distillate Product	Internal Floating Roof Tank
104	4,362,624	Distillate Product	Internal Floating Roof Tank
105	5,007,576	Distillate Product	Fixed Roof Tank
107	2,014,866	Distillate Product	Internal Floating Roof Tank
108	4,362,624	Distillate Product	Internal Floating Roof Tank
109	4,362,624	Distillate Product	Internal Floating Roof Tank

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Product Type	Type of Loading	Maximum Loading Rate
#6 Fuel Oil	Тор	400 gal/min
Liquid Asphalt	Тор	475 gal/min
#2 Fuel Oil/Kerosene	Top, bottom	500 gal/min

### PRODUCT LOADING EQUIPMENT

# **Tank Emissions Testing**

An emissions testing program was conducted at the facility during 2012 and 2013 in response to a USEPA testing order for information under Section 114 of the Clean Air Act and in accordance with testing approaches subsequently prescribed by USEPA Region 1 staff. The intent of the emissions testing program was to quantify the emissions from the storage and operation of Heated Tanks, and was conducted on Tank 3 in June/July 2012 (during which time Tank 3 contained #6 fuel oil) and on Tank 2 in May/June 2013 (during which time Tank 1 contained asphalt). Although Tank 3 is no longer used as a Heated Tank, Sprague is proposing to use the results of the site-specific 2012/2013 emissions testing program to quantify breathing and working emissions from the two Heated Tanks (Tank 1 and Tank 2), as well as from the #6 fuel oil and asphalt loading racks (which were also included in the 2012/2013 emissions testing program) rather than conducting subsequent emissions testing of the equipment at the facility.

Because the diameter (and therefore surface area) of Tank 3 is significantly greater than that of Tank 1 and in order to estimate beathing emissions from Tank 1, Sprague is proposing to pro-rate the tank breathing emission factor from the testing on Tank 3 based on the liquid surface areas of the respective tanks. The table below outlines the calculations used to support this proposal, which results in a tank beathing VOC emission factor for Tank 1 of 6.8 tons per year.

Tank 1 Diameter:	120 ft
Tank 3 Diameter:	150 ft
Tank 1 Liquid Surface Area:	11,309.7 sq. ft
Tank 3 Liquid Surface Area:	17,671.5 sq. ft
Ratio of Tank 1 Surface Area to Tank 3 Surface Area:	0.64
Tank 3 Breathing Emission Factor:	10.6 tons/year
Pro-rated Tank 1 Breathing Emission Factor:	6.8 tons/year

### **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-97-71-J-R/A 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.

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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,

The Ref

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

William M. L: Hiefrield3-5-2021William M. L: HiefrieldTerminal ManagerResponsible 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).