



185 International Drive
Portsmouth, New Hampshire 03801
(800) 225.1560

June 17, 2021

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

**Subject: Draft Air License Amendment A-179-71-R-M
Sprague Operating Resources LLC
South Portland, ME Facility**

Dear Lynn:

On behalf of Sprague Operating Resources LLC (Sprague), I am submitting these comments on the draft air emission license amendment (A-179-71-R-M) that the Maine Department of Environmental Protection Bureau of Air Quality (DEP) has issued.

1. Section I.D.1.b: suggest including a note similar to that in I.D.1.a, stating that as of issuance of this license, Sprague does not store #6 fuel oil in any heated tanks. Since the note in I.D.1.a only accounts for five of the possible six heated tanks allowed to be licensed, it should be made clear that the sixth such tank is currently not in service.
2. Section II.C.1: revise wording to indicate that only active licensed heated tanks be routed to a Carbon System. Sprague would route such tanks (i.e. Tank 7, which is currently empty and not heated) to a Carbon System prior to activation (i.e. filling with product and heating).
3. Section II.C.1 and Specific Condition 21.F.1.a: Sprague proposes that initial testing of the heated bulk storage tanks be performed no later than 180 days after the associated Carbon System(s) installation. There are several logistical issues that necessitate this change:
 - The U.S. Environmental Protection Agency (EPA) approved Sprague's Carbon System Design Plan on April 27, 2021, and based on that approval date, the date which the Carbon System must be installed is October 27, 2021. Upon EPA's approval of the Carbon System Design Plan, Sprague ordered the equipment, which will take a considerable amount of time to fabricate and deliver. While Sprague is confident in meeting the October 27, 2021 deadline for installing the Carbon Systems, Sprague expects there to be little time between the installation and the deadline. In order to allow for an appropriate "shakedown" period for the Carbon Systems, Sprague requests that the deadline to perform initial testing be delayed.
 - Typically, the asphalt season ends in November/December, as asphalt customers are not able to continue paving projects due to weather conditions. Asphalt



season resumes in the spring, generally sometime in/near April. When not in season, the asphalt tanks are no longer heated to the degree that they are from April through October, such that emissions are not unnecessarily generated by heating the tanks. Conducting emission testing outside of the asphalt season would either result in unrepresentative test results due to the lower tank temperatures, or excess emissions resulting from heating the tanks when they would otherwise not be.

- Allowing for 180 days from the commencement of Carbon System operation to conduct testing will provide the necessary time for both a shakedown period of the Carbon System and for the tanks to be unheated during the asphalt off-season.
4. Section II.C.1 and Specific Condition 21.F.1.a: Sprague requests that the requirement to conduct working loss emission testing be removed from the license. Sprague instead proposes that, similar to truck loading, emissions from vessel loading operations be calculated using emission factors developed from the emissions testing program at Sprague's Seaport Terminal from 2013. These emission factors are representative of operations in South Portland. Similar to conducting emission testing on the asphalt tanks, there are a variety of reasons that testing for working losses from asphalt storage tanks is challenging, and should not be required when a representative emission factor is available:
 - The seasonality of asphalt storage means that it is likely that an asphalt delivery would not occur before the tanks are no longer heated for the season.
 - Asphalt deliveries can be sporadic and infrequent. For example, during 2020, Sprague only received four vessels containing asphalt, one vessel each in March, May, June, and August. During the March vessel transfer, the storage tank receiving the asphalt was maintained at a "winter fill" temperature, which is far less than storage temperatures during asphalt season. Thus, any off-season vessel transfer activities would be inappropriate to conduct testing during.
 - Additionally, Sprague is not the owner of the asphalt products and has little control over when asphalt vessels are scheduled. Attempting to select a testing date well enough in advance to ensure that the testing contractor and DEP can be present will be difficult.
 5. Section II.C.1, II.E.1, and Specific Condition 21.H.1: Sprague requests that the requirement to monitor and record liquid temperature of each in-service heated bulk storage tanks be revised to daily rather than continuously (with hourly averaging). The tank temperature fluctuations on an hourly basis are expected to be small, and do not add value from an emissions estimation perspective.
 6. Section II.C.1 and Specific Condition 21.F.1.c: Sprague requests that emissions testing only be conducted upstream from the Carbon System. The Carbon Systems are being installed as odor control devices pursuant to the EPA Consent Decree, thus the results from the downstream testing will not be used for any purpose and any such testing would be unnecessary.
 7. Section II.D.2 and Specific Condition 21.G.2: Sprague will be required to keep records of the hours that the heated bulk storage tanks are spent being filled in order to calculate the emissions from the tanks during filling operations. It is suggested that this



requirement be modified in order to allow for a "mass per volume filled" emission factor (i.e. pounds per thousand gallons) instead of a "mass per duration" emission factor (i.e. pounds per hour). Vessel discharge rates can vary depending on a variety of conditions, and the use of a "mass per duration" emission factor that was developed during an emission testing program may be inappropriate for use during tank filling operations that are with different tank filling rates (either increased or decreased). Typically, tank truck loading emissions are based on a "mass per volume filled" as the primary emissions mechanism for tank truck filling is the displacement of a volume of vapors that are equivalent to the volume of liquid product entering the tank truck. The emissions mechanism for a large storage tank is the same- because the tank is being filled, the tank is not experiencing a "breathing" effect, but rather is constantly expelling vapors displaced by the liquid entering the tank for the duration of the filling operations.

Suggested replacement language for II.D.2 is as follows: "Hours the heated bulk storage tanks spent being filled (i.e., experiencing working losses) and the volume of product entering the tank." This language would still require the hours of tank filling to be recorded, but would allow for an alternate method for calculating emissions.

If you have any questions, please feel free to reach out to either Tom Rolfson at (207) 869-1418 or via email (tom.rolfson@powereng.com) or me at (603) 430-7205 or via email (jlittlefield@spragueenergy.com).

Best Regards,

Jason Littlefield

Jason Littlefield
Director of Environment
Sprague Operating Resources LLC

Enclosure(s):

cc: Tom Rolfson, Power Engineers
Paul Scoff, Sprague
Jay Leduc, Sprague
Rolf Westphal, Sprague
Jane Gilbert, Maine DEP