

1200 New Jersey Avenue, SE Washington, DC 20590

Pipeline and Hazardous Materials Safety Administration

June 2, 2021

Mr. Rob Harman President High Roller E&C, LLC 1008 Southview Circle Center, Texas 75935

Dear Mr. Harman:

On January 7, 2021, in an email to the Pipeline and Hazardous Materials Safety Administration (PHMSA), you requested an interpretation of 49 CFR Part 193. Specifically, you requested an interpretation regarding the applicability of Part 193 to mobile liquefaction facilities.

In your interpretation request, you stated that High Roller E&C, LLC (HREPC) is designing a 15,000 gallon per day trailer mounted liquefaction plant that provides all the necessary means to clean and liquefy natural gas. You stated the liquefied natural gas (LNG) produced on this mobile trailer will fill LNG International Organization for Standardization (ISO) containers and/or LNG tankers and "will not be stored in permanent storage."

Your request presented the following questions<sup>1</sup>:

**Question 1**: Please verify that the design and operation of a mobile LNG liquefication plant connected to a 49 CFR Part 192 pipeline is governed by 49 CFR 193.2019.

**Question 2.A**: Please verify that the only exception to Question 1 would be in situations where the end user of the LNG (i.e., ultimate consumer) was also the producer of the LNG. For example, if a crude oil drilling company leased the mobile LNG plant, connected it to a Part 192 pipeline, and produced LNG for its sole use, it would not be subject to 49 CFR Part 193.

**Question 2.B**: Can the ultimate consumer truck the LNG from the production site, across public roadways, to a drilling site?

**Question 3.A**: Please verify that when the mobile LNG liquefication plant is NOT connected to a 49 CFR Part 192 pipeline, the design and operation is governed by NFPA 59A 2019.

**Question 3.B**: Please confirm that if the mobile LNG liquefaction plant will be in operation for less than 180 days, the design and operation are governed by Chapter 14 of NFPA 59A 2019.

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<sup>&</sup>lt;sup>1</sup> Modified slightly for readability.

The Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety provides written clarifications of the Regulations (49 CFR Parts 190-199) in the form of interpretation letters. These letters reflect the agency's current application of the regulations to the specific facts presented by the person requesting the clarification. Interpretations do not create legally-enforceable rights or obligations and are provided to help the public understand how to comply with the regulations.

**Question 3.C**: Please confirm that if the mobile LNG liquefaction plant will be in service for more than 180 days then the design is governed by Chapter 17 of NFPA 59A 2019, unless the authority having jurisdiction grants approval for an extension beyond 180 days.

On January 27, 2021, PHMSA sought clarification from HREPC regarding Question 2.B and posed the following three questions: 1) How does the ultimate consumer use the LNG at the drilling site?; 2) Where does the ultimate consumer obtain gas to produce the LNG?; and 3) Is the LNG that is trucked to a drilling site connected to a Part 192 pipeline?

Concerning PHMSA's first follow-up question, HREPC stated that the ultimate consumer will be vaporizing LNG and consuming gas at the drilling site. HREPC stated that the gas will be used in generator sets and/or natural gas engines. Regarding PHMSA's second follow-up question, HREPC explained that the ultimate consumer may obtain natural gas from a local gathering system collecting wellhead gas, directly from a wellhead, or from a Part 192 pipeline. HREPC also noted that the ultimate consumer may or may not own the property where the equipment is setup. With respect to PHMSA's third follow-up question, HREPC explained that it is not vaporizing LNG for reinjection into a pipeline. Lastly, HREPC noted that it is not just focused on drilling sites, stating "the ultimate consumer may be a mine, a small power generation facility, a factory, etc. The ultimate consumer will be buying gas from the supplier or the ultimate consumer may own the gas. They may own the liquefaction equipment outright or they may be leasing it."

On February 26, 2021, PHMSA asked two additional follow-up questions: 4) How long is the mobile LNG facility used at a time and what is the frequency of the use?; and 5) Is the mobile LNG facility removed entirely from the site after each use? HREPC responded that the mobile LNG facility may be used to produce LNG for a period of less than six months and produce 24/7 during that time, or they may be set up to produce LNG over a period of several years and production may be sporadic. With respect to PHMSA's second follow up question, HREPC indicated that the LNG facility "may be removed, disassembled/disconnected and stored onsite, or moved offsite."

With the facts above, PHMSA's responses are as follows:

**Question 1**: Please verify that the design and operation of a mobile LNG liquefication plant connected to a 49 CFR Part 192 pipeline is governed by 49 CFR 193.2019.

Response to Question 1: Section 193.2001 specifies that LNG facilities used in the transportation of gas by pipeline that is subject to the pipeline safety laws (49 U.S.C. 60101 et seq.) and 49 CFR Part 192 must comply with the safety standards prescribed in Part 193. Section 193.2019 prescribes regulations specifically for mobile and temporary LNG facilities. Section 193.2019 states, in relevant part, that "[m]obile and temporary LNG facilities for peak-shaving application, for service maintenance during gas pipeline systems repair/alteration, or for other short term applications need not meet the requirements of this part if the facilities are in compliance with applicable sections of NFPA-59A-2001 (incorporated by reference, see § 193.2013)." "[O]ther short term

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applications" is not defined in the Pipeline Safety Regulations (PSRs), rather the PSRs provides two mobile and temporary uses that serve as guidance for other uses: 1) peakshaving application and 2) service maintenance during pipeline systems repair/alternation.

Mobile and temporary peak-shaving applications are typically used to support utility power providers during peak demand for a few hours to a few days. Whereas, mobile and temporary LNG facilities used for service maintenance during pipeline system repair/alteration may be in use for a few weeks to a few months depending on the complexity of the repair. Therefore, if HREPC's mobile LNG facility will be used for similar purposes and will be removed, disassembled/disconnected and stored onsite, or moved offsite after use, then that facility would be governed by § 193.2019 because that proposed use is similar in mobility and duration to the examples provided in the regulation. However, if the LNG facility will be set up to produce LNG for permanent use, even if production is sporadic, that type of use and duration would not be governed by § 193.2019, because such a facility would be dissimilar to the examples provided in § 193.2019.

**Question 2.A**: Please verify that the only exception to Question 1 would be in situations where the end user of the LNG (i.e., ultimate consumer) was also the producer of the LNG. For example, if a crude oil drilling company leased the mobile LNG plant, connected it to a Part 192 pipeline, and produced LNG for its sole use, it would not be subject to 49 CFR Part 193.

**Response to Question 2.A**: Section 193.2001(a) states that "[Part 193] prescribes safety standards for LNG facilities used in the transportation of gas by pipeline that is subject to the pipeline safety laws (49 U.S.C. 60101 *et seq*) and Part 192 of this chapter." Section 193.2001(b)(1) provides an exception to 193.2001(a), stating that "LNG facilities used by ultimate consumers of LNG or natural gas" are not subject to Part 193.

The "ultimate consumer" provision provides a very limited exemption from 49 CFR Part 193. In a previous interpretation, PHMSA explained:

During the rulemaking that led to the adoption of § 193.2001(b)(1), OPS explained that the intent of that provision was to create an exception for "an LNG facility used by the ultimate consumer of the product". Likewise, in responding to a series of questions from a congressional committee, OPS stated that the exception in § 193.2001(b)(1), was designed for "small" facilities which are "generally located in industrial plants ... [to] serve as a supply of energy or feedstock for the plant." Unlike these examples, the Maine LMF facilities would be used to produce LNG for sale and distribution by truck, not solely for onsite consumption. Therefore, OPS concludes that your client's facilities would not qualify for the end-user exception in § 193.2001(b)(1).<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Maine Liquid Methane Fuels, LLC, *Request for Interpretation of 49 CFR 193.2001*, PHMSA interpretation # PI-10-0025, available at <a href="https://cms7.phmsa.dot.gov/regulations/title49/interp/PI-10-0025">https://cms7.phmsa.dot.gov/regulations/title49/interp/PI-10-0025</a>.

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Based on the limited facts provided in your question, if the ultimate consumer connected the HREPC mobile LNG facility to a Part 192 pipeline and proceeded to produce LNG for its sole use and consumption on-site, it would not be subject to 49 CFR Part 193.

**Question 2.B**: Can the ultimate consumer truck the LNG from the production site, across public roadways, to the drilling site?

**Response to Question 2.B**: As noted above, the ultimate consumer exception of § 193.2001(b)(1) is very narrow and was meant to encompass "small" facilities which are "generally located in industrial plants ... [to] serve as a supply of energy or feedstock for the plant." Importantly, PHMSA's previous interpretation provided to Maine Liquid Methane Fuels, LLC, highlights "on-site consumption" as a factor for consideration when determining if a use qualifies for the end-user exception in § 193.2001(b)(1).<sup>3</sup>

The example provided by HREPC indicates that the ultimate consumer would be trucking the LNG off-site and crossing public roads – roads that are not within the ultimate consumer's legal control. Trucking LNG across public roads for off-site consumption is similar to the type of activities PHMSA has already determined to be outside of the enduser exception<sup>4</sup>. Therefore, PHMSA concludes that the proposed use, as described by the limited facts provided, would not qualify HREPC for the end-user exception in § 193.2001(b)(1).

**Question 3.A**: Please verify that when the mobile LNG liquefaction plant is NOT connected to a 49 CFR Part 192 pipeline, the design and operation is governed by NFPA 59A 2019.

**Response to Question 3.A**: As noted above, § 193.2001(a) states that "[Part 193] prescribes safety standards for LNG facilities used in the transportation of gas by pipeline that is subject to the pipeline safety laws (49 U.S.C. 60101 *et seq.*) and Part 192 of this chapter." For mobile LNG liquefaction plants not covered by Part 193, PHMSA cannot comment on whether any other standards may be applicable to those facilities.

**Question 3.B**: If the mobile LNG liquefaction plant will be in operation for less than 180 days then the design and operation are governed by Chapter 14 of NFPA 59A 2019.

**Response to Question 3.B**: Please see PHMSA's response to Question 3.A. In addition, currently, Part 193 incorporates by reference the 2001 edition of NFPA 59A (see § 193.2013).

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 $<sup>^3</sup>$  Id

<sup>&</sup>lt;sup>4</sup> Maine Liquid Methane Fuels, LLC, *Request for Interpretation of 49 CFR 193.2001*, PHMSA interpretation # PI-10-0025, available at <a href="https://cms7.phmsa.dot.gov/regulations/title49/interp/PI-10-0025">https://cms7.phmsa.dot.gov/regulations/title49/interp/PI-10-0025</a>.

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**Question 3.C**: If the mobile LNG liquefaction plant will be in service for more than 180 days then the design is governed by Chapter 17 of NFPA 59A 2019 unless the authority having jurisdiction grants approval for an extension beyond 180 days.

**Response to Question 3.**C: Please see PHMSA's response to Question 3.A. Again, currently, Part 193 incorporates by reference the 2001 edition of NFPA 59A.

If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.

Sincerely,

John A. Gale Director, Office of Standards and Rulemaking From: Rob Harman <rob@hr-epc.com> Sent: Thursday, January 07, 2021 10:36 AM

To: White, Sentho (PHMSA) <sentho.white@dot.gov>

Cc: Ravi Vemulapalli <ravi@hr-epc.com>; Kieba, Max (PHMSA) <Max.Kieba@dot.gov>; Prothro II, James

(PHMSA) <james.prothro@dot.gov>; Asebe, Tewabe (PHMSA) <Tewabe.Asebe@dot.gov>

Subject: RE: Request for Interpretation - Mobile Liquefaction Facility

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I found a typo...our system is 15,000 gallon per day. (not 1500)

Ms. White:

High Roller E&C, LLC (HREPC) respectfully submits this Request for Interpretation from the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety to determine the applicability of 49CFR193 to mobile <u>liquefaction</u> facilities. HREPC is designing a 15,00 gallon per day <u>trailer mounted</u> liquefaction plant that provides all the necessary means to clean and <u>liquify</u> natural gas. The LNG produced on these mobile trailers will fill LNG ISO containers and /or LNG tankers. LNG will <u>not</u> be stored in permanent storage.

Q1: Please verify that if the mobile **LNG Liquification** plant is connected to a CFR192 pipeline then the design and operation is governed by **CFR193 section 2019.** 

Q2: Please verify that the only exception to Q1 above would be in situations where the end user of the LNG was also the producer (ultimate user). In other words a Crude Oil Drilling company leases the mobile LNG plant, connects it to a 192 pipeline, produces LNG for its sole use. In other words CFR193 is NOT applicable.

-Q2 part B: Can the Ultimate User truck the LNG from the production site, across public roadways, to the drilling site.

Q3: Please verify that when the mobile *LNG Liquification* plant is NOT connected to a CFR192 pipeline then the design and operation is governed by NFPA59A 2019.

Q3 Part B: If the mobile LNG Liquefaction plant will be in operation for less than 180 days then the design and operation are governed by Chapter 14 of NFPA 59A 2019.

Q3 Part C: If the mobile LNG Liquefaction plant will be in service for more than 180 days then the design is governed by Chapter 17 of NFPA 59A 2019 unless the AHJ grants approval for an extension beyond 180 days.

Respectfully, Robert Harman



## **Rob Harman**

President

1008 Southview Circle Center, TX 75935

Main: 833.473.7289 Direct: 936.332.5042 Mobile: 540.520.4018

rharman@hr-epc.com www.hr-epc.com