



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

JUL 31 2009

Mr. Jeff C. Wright  
Director  
Office of Energy Projects  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Dear Mr. Wright:

The Federal Energy Regulatory Commission (FERC) has asked whether the Siting Requirements in Subpart B, Part 193, Title 49, Code of Federal Regulations apply to a liquefied natural gas (LNG) transfer system with the following components: (1) an offshore marine berth with unloading piping located in Mount Hope Bay, Massachusetts, and (2) an interconnected pipe-in-pipe (PIP) transfer system that includes processing equipment and extends 4.25 miles from the berth, through the waters and into the lands beneath the Bay and Taunton River, to a storage tank located on the grounds of a waterfront LNG plant in Fall River, Massachusetts.

Having carefully considered your question, we find that the Mount Hope Bay LNG transfer system is a marine cargo transfer system, and that the application of our Siting Requirements is, therefore, authorized by law. We further find, however, that our approved models for calculating thermal-radiation and vapor-gas dispersion distances cannot be practicably applied to the second component of this system, the 4.25-mile PIP transfer system. Accordingly, the applicant must develop, and submit to our Administrator for approval, an alternative model for calculating those distances consistent with the specific requirements listed in Subpart B and the general principles stated in this opinion.

## I. Background

Two federal agencies other than FERC regulate waterfront LNG plants and offshore LNG facilities. The first is the Pipeline and Hazardous Materials Safety Administration (PHMSA), an organization within the U.S. Department of Transportation (DOT) that has jurisdiction over any gas pipeline facility used for transporting, storing, or converting LNG in interstate or foreign commerce.<sup>1</sup> The second is the U.S. Coast Guard (USCG), an agency formerly within DOT but

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<sup>1</sup> PHMSA's authority is derived from the Natural Gas Pipeline Safety Act (NGPSA) of 1968, Pub. L. No. 90-481, 82 Stat. 720 (Aug. 12, 1968), as amended, in relevant part, by the Pipeline Safety Act (PSA) of 1979, Pub. L. No. 96-129, 93 Stat. 989 (Nov. 30, 1979), and presently codified at 49 U.S.C. §§ 60101 *et seq.*

now within the U.S. Department of Homeland Security (DHS),<sup>2</sup> that has jurisdiction over any structure in navigable waters (or on immediately adjacent lands) used for the unloading, storage, and movement of hazardous substances, including LNG.<sup>3</sup>

Though our jurisdiction significantly overlaps, Congress has not clearly delineated the authority of PHMSA or USCG, except to note in our authorizing statute that an “[LNG] gas pipeline facility . . . does not include any part of a structure or equipment located in navigable waters[.]”<sup>4</sup> But that provision, enacted in response to a 1979 delegation by the DOT Secretary to USCG,<sup>5</sup> was not meant to limit our jurisdiction. Rather, it was intended to prohibit USCG from acquiring our preemptive rulemaking authority through a secretarial delegation and using that authority to issue regulations for structures in navigable waters (an action that, if undertaken, would be contrary to the State savings clause provision in the Ports and Waterways Safety Act).<sup>6</sup> Thus, aside from affirming that PHMSA lacks unfettered authority to regulate structures located in navigable waters, that provision does not otherwise proscribe our jurisdiction over LNG facilities.<sup>7</sup>

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<sup>2</sup> Homeland Security Act of 2002, Pub. L. No. 107-296, § 888 (Nov. 25, 2002) (codified at 6 U.S.C. § 468) (transferring USCG from DOT to DHS).

<sup>3</sup> USCG acts primarily under the Ports and Waterways Safety Act (PWSA) of 1972, Pub. L. No. 92-340, 86 Stat. 424 (Jul. 10, 1972), as amended by the Port Tanker Safety Act (PTSA) of 1978, Pub. L. No. 95-474, 92 Stat. 1471 (Oct. 17, 1978), and currently codified at 33 U.S.C. §§ 1221 *et seq.*

<sup>4</sup> Congress added this provision to PHMSA’s authorizing statute in the PSA, Pub. L. No. 96-129, § 151, 93 Stat. 989 (Nov. 30, 1979) (originally codified at 49 U.S.C. § 1671(12)). That provision is currently codified at 49 U.S.C. § 60101(14), as renumbered and amended by Pub. L. No. 103-272, § 60101, 108 Stat. 1307 (Jul. 5, 1994).

<sup>5</sup> See 49 C.F.R. § 1.46(y) (1979) (secretarial delegation of authority to USCG to exercise preemptive rulemaking authority under NGPSA in issuing regulations for waterfront LNG facilities).

<sup>6</sup> Compare 44 Fed. Reg. 5436, 5437 (Jan. 26, 1979) (“For the purpose of assuring continued uniform regulation of an entire waterfront LNG facility, the delegation of authority made by this amendment will permit the USCG to carry out its regulatory responsibilities . . . with same preemptive powers available to MTB[,PHMSA’s predecessor.]”); *ANR Pipeline Co. v. Iowa State Commerce Commission*, 828 F.2d 465, 470 (8th Cir. 1987) (“The NGPSA leaves nothing to the states in terms of substantive safety regulation of interstate pipelines, regardless of whether the local regulation is more restrictive, less restrictive, or identical to the federal standards.”); with 33 U.S.C. § 1225(b) (“Nothing contained in this section, with respect to structures, prohibits a State or political subdivision thereof from prescribing higher safety equipment requirements or safety standards than those which may be prescribed by regulations hereunder.”); see also S. REP. NO. 96-182 (May 15, 1979), reprinted in 1979 U.S.C.C.A.N. 1971, 1997 (“The purpose of this exclusion is to clarify and emphasize that, in its regulation of the safety of LNG and other hazardous materials facilities, the Coast Guard was, and is, intended to operate exclusively under the authority of the Ports and Waterways Safety Act, as amended (33 U.S.C. *et seq.*)”); CONG. REC., U.S. Senate, 96<sup>th</sup> Congress, 1<sup>st</sup> session, 32336 (Nov. 14, 1979) (“While S. 411 provides authority to the Secretary of Transportation, it is intended that the Secretary delegate that authority to the Materials Transportation Bureau. Last year when the Congress enacted the Port and Tanker Safety Act, which amends the Port and Waterways Safety Act, we intended that the law would be the exclusive and comprehensive authority for the Coast Guard to regulate the safety of hazardous materials facilities. This is still our intent; the Coast Guard is not intended to exercise authority under this act.”) (Statement of Senator Warren Magnuson).

<sup>7</sup> The Homeland Security Act of 2002, Pub. L. No. 107-296, § 888 (Nov. 25, 2002) (codified at 6 U.S.C. § 468), undermined the original purpose of the navigable waters exclusion by transferring USCG from DOT to DHS and thereby effectively precluding any future delegation of PHMSA’s preemptive rulemaking authority to USCG.

Nonetheless, PHMSA has traditionally not regulated LNG facilities in navigable waters as a matter of discretion,<sup>8</sup> except with respect to the application of the Siting Requirements in Subpart B, Part 193. Indeed, our regulations explicitly state that those requirements apply to the portion of a marine cargo transfer system that lies “between the marine vessel and the last manifold (or in the absence of a manifold the last valve) located immediately before a storage tank.”<sup>9</sup> That policy, in effect for nearly 30 years, has ensured that a set of uniform, preemptive siting requirements can be applied to an entire waterfront LNG plant, including any portion located in navigable waters, while allowing USCG to regulate nearly all other maritime matters, including the design, construction, operation, and maintenance of the marine cargo transfer system. Therefore, Part 193 does not generally regulate LNG facilities in navigable waters, except with respect to the siting of marine cargo transfer systems.

## II. Analysis

With that background in mind, we must first determine whether the Mount Hope Bay LNG transfer system<sup>10</sup> is a marine cargo transfer system. A marine cargo transfer system is defined in Subpart A as “a component, or system of components functioning as a unit, used exclusively for transferring hazardous fluids in bulk between a . . . marine vessel and a storage tank.”<sup>11</sup> The Mount Hope Bay LNG transfer system has two main components,<sup>12</sup> an offshore marine berth and an interconnected 4.25-mile PIP transfer system,<sup>13</sup> and those components function as a unit for the sole purpose of facilitating the bulk transfer of LNG from a marine vessel to a storage tank.<sup>14</sup> Thus, the Mount Hope Bay LNG transfer system is a marine cargo transfer system under Part 193.<sup>15</sup>

We must next determine whether the application of the Siting Requirements to this system is authorized by law. Our jurisdiction over LNG facilities extends without limitation to any gas pipeline facility that is used for transporting, storing, or converting LNG in interstate or foreign commerce, and our regulations state that the Siting Requirements apply to the part of a marine

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<sup>8</sup> 49 C.F.R. §§ 193.2001(b)(4); *see also* Notices, Department of Transportation, Memorandum of Understanding (MOU) Between the United States Coast Guard and the Materials Transportation Bureau for Regulation of Waterfront Liquefied Natural Gas Facilities, 43 Fed. Reg. 30381 (July 14, 1978); Department of Transportation, Coast Guard, Liquefied Natural Gas Waterfront Facilities; Proposed Rule, 51 Fed. Reg. 18276, 18277 (May 16, 1986) (discussing history of 1978 MOU and publishing terms of 1986 MOU).

<sup>9</sup> 49 C.F.R. § 193.2001(b)(3); *see* Research and Special Programs Administration, Liquefied Natural Gas Facilities; Reconsideration of Safety Standards for Siting, Design, and Construction, 45 Fed. Reg. 57402, 57418 (August 28, 1980).

<sup>10</sup> 49 C.F.R. § 193.2007 (defining transfer system).

<sup>11</sup> *Id.* (defining cargo transfer system).

<sup>12</sup> *Id.* (defining component).

<sup>13</sup> *Id.* (defining transfer piping).

<sup>14</sup> *Id.* (defining storage tank).

<sup>15</sup> We realize that the Mount Hope Bay LNG transfer system would be an LNG facility located in navigable waters under 49 U.S.C. § 60101(14) and 49 C.F.R. §§ 193.2001(b)(4), 193.2007(b)(4). However, the application of the siting requirements turns on whether something is a marine cargo transfer system, not whether it is an LNG facility located in navigable waters. Indeed, at least a portion of every marine cargo transfer system, if used to transfer LNG, will be an LNG facility located in navigable waters under our statute and regulations. As the Mount Hope Bay LNG transfer system is a marine cargo transfer system, we need not opine as to the distinction between an LNG facility located in navigable waters and a marine cargo transfer system to conclude that the siting requirements apply here.

cargo transfer system that lies between the vessel and the last manifold or valve before a storage tank. Having already determined that the Mount Hope Bay LNG transfer system is a marine cargo transfer system, we conclude that the application of our Siting Requirements to this system is authorized by law.

We recognize, however, that the practicability of applying those requirements to the Mount Hope Bay LNG transfer system is limited in at least one respect. Specifically, Subpart B states that certain models must be used to calculate the thermal-radiation and vapor-gas-dispersion distances for an LNG transfer system, but those models cannot be practicably applied to the 4.25-mile PIP transfer system.<sup>16</sup> Nevertheless, those regulations also authorize our Administrator to approve “alternate models” for calculating the thermal-radiation and vapor-gas-dispersion distances for LNG transfer systems, provided those alternative models “take into account the same physical factors” as the approved models and are “validated by experimental test data.”<sup>17</sup> Our opinion is that such an alternative model, if properly developed by the applicant and approved by our Administrator, could be practicably applied to the entire Mount Hope Bay LNG transfer system in a manner consistent with public safety and the requirements of Part 193.

### III. Conclusion

The Mount Hope Bay LNG transfer system is a marine cargo transfer system, and the application of the Siting Requirements is, therefore, authorized by law. However, using the standard models in Subpart B to calculate the thermal radiation and vapor-gas dispersion distances for the 4.25-mile system of PIP transfer piping is impracticable. Accordingly, the applicant must develop, and submit to the PHMSA Administrator for approval, an alternative model for calculating those distances consistent with the specific requirements in Subpart B and the general principles stated in this opinion.

I hope this information is helpful to you. If I can be of further assistance, please contact me at (202) 366-4595.

Sincerely,



Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

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<sup>16</sup> 49 C.F.R. §§ 193.2057(a), 193.2059(a).

<sup>17</sup> *Id.*; see 49 C.F.R. § 190.9 (filing petitions for approval); PHMSA Interpretation #PI-82-009 (May 28, 1982) (available at <http://www.phmsa.dot.gov/pipeline/regs/interps>).

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426  
May 29, 2009

OFFICE OF ENERGY PROJECTS

In Reply Refer To:  
OEP/DG2E/LNGE  
Docket No. CP04-36-005  
Weaver's Cove Energy, L.L.C.

Jeffrey D. Wiese  
Associate Administrator for Pipeline Safety  
U.S. Department of Transportation  
1200 New Jersey Ave., SE  
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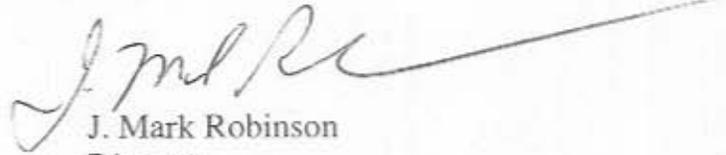
**RE: Applicability of Federal Siting Requirements**

Dear Mr. Weise:

On January 30, 2009, Weaver's Cove Energy, LLC filed an application with the Commission to construct and operate an offshore berth for receiving and unloading liquefied natural gas (LNG) tankers in Mount Hope Bay in Massachusetts waters. LNG offloaded at this location would be transferred to the LNG storage tank at the authorized terminal in Fall River, Massachusetts through pipe-in-pipe transfer lines. These transfer lines would be 4.25 miles in length and would be buried beneath the beds of Mount Hope Bay and the Taunton River.

Title 49, Code of Federal Regulations, §193.2001 states that the U.S. Department of Transportation regulations pertain to the siting of a marine cargo transfer system between the marine vessel and the last valve located immediately before the storage tank. However, §193.2001 also states that Part 193 does not apply to any LNG facility located in navigable waters. Consequently, we are seeking clarification that the siting provisions of Part 193 apply to the LNG transfer system proposed for burial beneath the waters of Mount Hope Bay and the Taunton River. We are also seeking guidance on the appropriate application of the regulations for calculating the associated exclusion zone distances and in applying the acceptable hazard limits specified by §193.2057 and §193.2059.

We believe that close coordination between our agencies is necessary to resolve this issue in a timely manner. In accordance with the February 2004 Interagency Agreement for the review of LNG import facilities, we are committed to working with the Department of Transportation in developing a suitable approach for the application of the Part 193 siting requirements.

A handwritten signature in black ink, appearing to read "J. Mark Robinson", with a long horizontal flourish extending to the right.

J. Mark Robinson  
Director  
Office of Energy Projects