

IME

institute of makers of explosives

The safety and security institute of the commercial explosives industry since 1913

April 26, 2023

Mr. William Schoonover
Associate Administrator, Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
East Building, 2nd Floor
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: HM-219D; Hazardous Materials: Adoption of Miscellaneous Petitions and Updating Regulatory Requirements. Docket No. PHMSA-2020-0102. 88 Fed. Reg. 13624.

Dear Mr. Schoonover:

The Institute of Makers of Explosives (“IME”) respectfully submits the following comments on the above-captioned Notice of Proposed Rulemaking (“NPRM”).¹

Interest of IME

IME is a nonprofit association founded in 1913 to provide accurate information and comprehensive recommendations concerning the safety and security of commercial explosive materials. Our mission is to promote safety and the protection of employees, users, the public and the environment; and to encourage the adoption of uniform rules and regulations in the manufacture, transportation, storage, handling, use and disposal of explosive materials used in blasting and other essential operations. In furtherance of this mission IME publishes a series of Safety Library Publications (“SLPs”) describing industry best practices developed by subject matter experts with extensive experience in the commercial explosives industry. Two of these SLPs are covered by this NPRM.

Among other things, the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) is proposing to incorporate by reference (“IBR”) into the Hazardous Materials Regulations (“HMR”), two updated publications developed by IME; SLP-23 and SLP-22, respectively. This action is in response to IME Petitions for Rulemaking; (i) P-1731 (SLP-23, *Recommendations for the Transportation of Explosives, Division 1.5; Ammonium Nitrate Emulsions, Division 5.1, and Combustible Liquids in Bulk Packaging*), and (ii) P-1736 (SLP-22, *Recommendations for the Safe Transportation of Detonators in a Vehicle with Certain Other Explosive Materials*). Accordingly, IME has a direct interest in this rulemaking.

General Comments

These comments respond to PHMSA’s proposal to IBR updated editions of SLP-23 and SLP-22. We will address each SLP in turn, below. As the agency notes in the proposed rule, most of the changes to SLP-23, with certain exceptions, are non-substantive and editorial in nature.² The changes to SLP-22 are more significant. That said, since the revision of SLP-23 was completed and IME’s Petition, P-1731, was filed,

¹ 88 Fed. Reg. 13624 (Mar. 3, 2023).

² Id. at 13633.

a number of additional clarifying edits to SLP-23 have been suggested to IME by stakeholders. We believe these changes to be non-substantive and will fully describe them in these comments.

Comments on SLP-23

1. IME Supports PHMSA's Proposal to Incorporate SLP-23 (2021) into the HMRs.

The NPRM describes three substantive changes to SLP-23 recommended by IME; (i) deletion of the vented pipe test (VPT) in Appendix A of the document, (ii) allowing operators to continually monitor driver qualifications and training instead of conducting an annual audit, and (iii) adoption into the HMR of Special Permit 8723 ("SP-8723") which currently authorizes UN0332, UN3375, and UN3139 to be transported in IM 101 and 102 portable tanks.³ In connection with item "(iii)," we note that SP-8723 was modified in November 2022 to include T11 UN portable tanks.

PHMSA states in the NPRM that it agrees with IME's suggested changes in items (ii) and (iii) above,⁴ and IME supports PHMSA's proposal to accept these improvements to the SLP. We assume that the incorporation of item (iii) will include the modification to allow the use of T11 UN portable tanks.

PHMSA does not agree, however, with IME's proposal to eliminate the use of the VPT for Division 1.5 explosives and Division 5.1 ammonium nitrate emulsions. While IME continues to believe that the VPT is inappropriate for testing Division 1.5 and 5.1 materials for the reasons stated in our petition and described in the NPRM,⁵ we understand PHMSA's reticence to remove the testing requirement from the HMRs at this time. Industry will continue its ongoing effort to gather data on the VPT and its efficacy for use with Division 1.5 and 5.1 materials, and will pursue this issue with the UN Sub-Committee of Experts on the Transport of Dangerous Goods. IME appreciates PHMSA's willingness to reconsider this decision pending future developments at the UN Sub-Committee.

2. Section II of SLP-23 Should be Expanded to Include the Same Security Provisions Included in Section I.G.1 (Security).

The title of Section I of SLP-23 ("*Standards for Transporting a Single Bulk Hazardous Material for Blasting by Cargo Tank Motor Vehicles*") and the title of subsection G ("*Security and Safety of the Bulk Hazardous Materials Transported under the Provisions of IME SLP-23*"), make the applicability of subsection I.G.1 somewhat ambiguous. Specifically, the language could be interpreted to limit the applicability of the security provisions to cargo tank motor vehicles ("CTMV") carrying only a single bulk hazardous material. IME's intent, however, is to apply the security precautions to all CTMVs, regardless of whether they are carrying a single hazmat or multiple hazmats.

Accordingly, we recommend that Section II of SLP-23 be amended to include a new subsection "H" as follows:

H. Security

- a. All hatches, fill openings, and manways shall be locked with one padlock meeting forced entry ratings of grade 5 (ASTM F883-09). All hinges and hasps shall be installed so that they cannot be removed when the openings are locked.
- b. All auger outlet openings shall be covered and secured with tool removable devices or locks.

³ Id. at 13632. The description and proper shipping names of these materials are: UN0032, Explosive, Blasting, type E; UN3375, Ammonium nitrate emulsion, and UN3139, Oxidizing liquid n.o.s. (PG II).

⁴ Id.

⁵ Id.

- c. All product hose openings shall be closed and secured with tool removable devices or locks.
- d. All surge hoppers shall be covered and secured with tool removable devices or locks.
- e. All augers containing Division 1.5 or 5.1 bulk hazardous materials shall be cleaned, leaving residue only, unless the augers are an integral part of the packaging.
- f. All hoses containing Division 1.5 or 5.1 bulk hazardous materials shall be blown clean, leaving residue only.
- g. No spillage of bulk hazardous materials shall be evident anywhere on the vehicle.
- h. The vehicle steering wheel shall be locked when unattended.
- i. When unattended the vehicle cab shall be locked.

The language above is identical to that in subsection I.G.1. IME considers this to be a non-substantive change.

3. *SLP-23 Should be Expanded to Allow the Use of Intermediate Bulk Containers (“IBCs”).*

IME appreciates PHMSA’s proposal to adopt the provisions of SP-8723 to authorize the transport of the hazardous materials covered by that SP in IM 101 and 102 portable tanks.⁶ As we noted in our petition, the exclusion of these containers in the 2011 edition of SLP-23 was inadvertent since these tanks had long been in use. A second oversight was corrected in 2022 when the SP was modified to include T11 UN portable tanks.

Similarly, the use of intermediate bulk containers (“IBCs”) is not expressly authorized under SLP-23, despite their historical use.⁷ Specifically, the final rule incorporating the 2011 version of SLP-23 into the HMRs⁸ also incorporated several SPs authorizing the transport of certain explosives in bulk. One of the SPs incorporated in that action was SP-11579 which, *inter alia*, authorized the transport of blasting materials/ammonium nitrate emulsions in certain IBCs.⁹

The current version of SLP-23 specifically authorizes the transport of the above materials in bulk packaging authorized under 49 CFR 173.240 (UN0331 and NA0331), and 49 CFR 173.242 (UN0332 and UN3375). However, both regulatory provisions limit transport in IBCs to materials for which, “the IBC type is authorized according to the IBC packaging code specified for the specific hazardous material in Column (7) of the §172.101 [Hazardous Materials] Table [“HMT”] . . .” There are no IBC packaging codes for NA0331, UN0331, and UN0332 in Column (7) of the HMT and, accordingly, such transport is currently prohibited.¹⁰

It was not IME’s intent to exclude this form of transport when the incorporation of SLP-23 was originally requested. Nor do we believe it was PHMSA’s intent, since SP-11579 was expressly incorporated into the HMR as part of that incorporation action.¹¹

IME member companies would like to resume transporting the materials in the IBCs previously authorized by SP-11579 (or any other appropriate IBC as determined by PHMSA).¹² As recognized in the former SP, this form of shipment does not pose a safety concern. This authorization can be accomplished in one of two ways; (i) amend section I.A.2 of SLP-23 to specifically provide that the IBC Code requirements in 49 CFR 173.240

⁶ Id. at 13633.

⁷ This issue was described in IME’s Addendum to Petition for Rulemaking P-1731, filed on May 16, 2019.

⁸ 80 Fed. Reg. 79424 (Dec. 21, 2015).

⁹ Explosive, blasting Type E, 1.5D, UN0332; Explosive, blasting Type B, 1.5D, UN0331; Ammonium nitrate-fuel oil mixture 1.5D, NA 0331; and Ammonium nitrate emulsion, intermediate for blasting explosives, 5.1, UN3375.

¹⁰ The entry for UN3375 does include IBC code “IB2.”

¹¹ Letter from Dr. Magdy El-Sibaie to Active Grantees of SP-11579 et. al., June 24, 2016.

¹² IBCs authorized by SP-11579 included, UN31A, UN31B, and UN31H.

and 173.242 are inapplicable, or (ii) amend the HMT to include an IBC Code for the materials. For the sake of simplicity, IME would prefer the second option.

Given the historical use of IBCs for the transport of these materials, and the fact that the original IBR of SLP-23 included the provisions in SP-11579, we consider this change to be non-substantive.

4. *The Title of Section I of IME SLP-23 Should be Changed to Clarify that the Section Applies to the Transport of Bulk Hazardous Materials by CTMV, Vessel, and Rail/Rail Car.*

The current title of Section I of SLP-23 is “*Standards For Transporting A Single Bulk Hazardous Material for Blasting by Cargo Tank Motor Vehicles.*” (Emphasis added). A strict reading of the title implies that Section I is limited to bulk transport by CTMV. Subsection B, however, specifically states that, “[h]ighway, vessel, and rail are authorized modes for the transportation of the bulk hazardous materials listed in Section I.A.1 in bulk packagings.”

In addition, Section I.2.a and I.2.b authorize the use of bulk packaging specified in 49 CFR 173.240 and 173.242, respectively. Section 173.240 includes rail cars, motor vehicles, portable tanks, IBCs,¹³ large packagings, and flexible bulk containers. Section 173.242 includes rail cars, cargo tanks, portable tanks, and IBCs.¹⁴

In order to eliminate any confusion caused by this contradictory language, we recommend that the title of Section I be modified as follows, “*Standards for Transporting a Single Bulk Hazardous Material for Blasting.*” A corresponding correction should also be made to Special Provision 148, subsection “(a)” and 49 CFR 173.66, which specifically reference the title of Section I of SLP-23.

IME considers this clarification to be non-substantive.

Comments on SLP-22

PHMSA proposes to IBR the updated version of IME SLP-22.¹⁵ IME agrees with and appreciates the agency’s stated conclusion that the changes proposed by IME “will either maintain or enhance the safety of transporting detonators by highway with other explosive materials.”¹⁶

As noted in our petition, IME’s SLPs are continually updated to reflect the most recent technological advances and best practices in our industry. The revision process also includes technical corrections, practical improvements, and the elimination of any practices that are outdated or redundant. We believe that the proposed revision to SLP-22 is an improvement to the document that clarifies the applicability of several requirements, and proposes commonsense changes to other provisions. All recommended revisions preserve and/or enhance the high level of safety expected and promoted by both our industry and PHMSA.

¹³ Section I.2.a applies to NA0331, and UN0331. IBCs are allowed provided there is an IBC packing code specified in Column (7) of the HMT. See IME Comment “3” supra.

¹⁴ Section I.2.b applies to UN0332 and UN3375. Again, IBCs are authorized provided there is an IBC packing code specified in Column (7) of the HMT.

¹⁵ IME SLP-22 (2019).

¹⁶ 88 Fed. Reg. at 13635.

Conclusion

IME appreciates PHMSA's consideration of our comments on this proposed rule. IME is available to discuss these comments and to answer any questions that may arise.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Susan JP Flanagan".

Susan JP Flanagan
Senior Public Policy Counsel
Institute of Makers of Explosives
202.674.7123
sjflanagan@ime.org