October 15, 2019

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 2050

Re: [Docket No. PHMSA-2017-0120 (HM-219C) RIN 2137-AF33 Hazardous Materials: Adoption of Miscellaneous Petitions To Reduce Regulatory Burdens

Dear Mr. Schoonover:

On behalf of the American Pyrotechnics Association (APA), we respectfully submit the following comments on the above-referenced Notice of Proposed Rulemaking (NPRM).[1]

Interest of APA

APA is the principal safety and trade association for the fireworks industry. Founded in 1948, our mission is to encourage safety in the design and use of all types of fireworks, to provide industry information and support to its members, and to promote responsible regulation of the fireworks industry.[2]

A Petition for Rulemaking submitted to PHMSA by APA is addressed in this proposed rule: P-1711, requesting that PHMSA incorporate by reference a new version of APA Standard 87-1, *Standard for the Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics ("APA Standard 87-1")* that is currently incorporated by reference in the PHMSA's Hazardous Materials Regulations (HMR) under 49 CFR § 171.7(f)(1). Accordingly, the APA has a strong interest in this rulemaking activity.

Comments

<u>APA Supports PHMSA's Proposal to Incorporate by Reference (IBR) APA Standard 87-1A, APA 87-1B, and APA 87-1C</u>

[1] 84 Fed. Reg. 41556 (Aug. 14, 2019).
[2] APA represents regulated and licensed manufacturers, importers, distributors, wholesalers, retailers, suppliers and professional public display fireworks companies. Along with their subsidiaries, APA's over 250 member companies are responsible for 90 percent of the fireworks manufactured, imported, distributed and professionally displayed in the United States.

Since the APA Standard 87-1 was first incorporated by reference into the HMR, tens of thousands of EX Approvals have been issued to members of the industry. Based upon a review of the PHMSA database, since 2009 greater than 50,000 EX Approvals have been issued under 87-1:

- >34,000 1.4G Consumer Fireworks Approvals have been issued under APA 87-1
- >15,000 1.3G Display Fireworks Approvals have been issued under APA 87-1
- >1,400 1.4G Articles Pyrotechnic Approvals have been issued under APA 87-1

Over the past three decades, APA Standard 87-1 has provided a significant cost savings and business benefit to the fireworks industry, which is largely comprised of small, family owned businesses. Based upon the 50,400 Approvals issued directly under the Standard since 2009 (earlier data in the database is not searchable to the public); industry has experienced a direct cost savings of $428,400,000 ($428M). This figure represents the amount saved, had each Approval required the formal UN Series 6 tests under 49 CFR § 173.56 at an average laboratory test fee of $8,500.

The APA and its members are grateful to PHMSA for its recognition of the voluntary APA Standard 87-1 as an option for manufacturers to obtain an EX Approval for the classification of fireworks and pyrotechnic articles. However, the Current edition (2001) is extremely outdated and does not address the technological advances of the fireworks industry during the last 15 plus years.

APA's petition, P-1711, requested PHMSA to IBR the updated version of APA's Standard 87-1, which has undergone an eight year review of the Current Standard, involving extensive consultation and involvement with the pyrotechnics industry (both domestically and internationally) and with PHMSA. The new Standard has been divided into three (3) separate and distinct parts to provide clarity to the fireworks industry while maintaining the composition limits developed by PHMSA for classification that are needed to ensure the safe transportation of fireworks:

a. APA Standard 87-1A (2018): Standard for the Construction, Classification, Approval and Transportation of Consumer Fireworks.
b. APA Standard 87-1B (2018): Standard for the Construction, Classification, Approval and Transportation of Display Fireworks.
c. APA Standard 87-1C (2018): Standard for the Construction, Classification, Approval and Transportation of Entertainment Industry and Technical (EI&T) Pyrotechnics.

The new Standard will allow for numerous consumer and display fireworks as well as pyrotechnic articles to be issued EX Approvals under the Standard avoiding the costly expense associated with obtaining classification through the DOT Approved explosives testing labs. For consumer fireworks, new devices have been developed and incorporated into the APA 87-1A Standard including combination items, multiple tubes and combinations of effects that were previously limited to single tubes. APA 87-1B will now provide for "chained aerial shells" and "families or series aerial shells" to be Approved under the Standard; and APA 87-1C, has significantly broadened the variety of professional articles pyrotechnic that may be Approved under the Standard addressing the needs of the fastest growing segment of the industry, Entertainment and Technical Pyrotechnics.

We agree with PHMSA's decision to propose "IBR by its review of the explicit requirements for consumer fireworks in APA 87-1A, display fireworks in APA 87-1B, and professional fireworks (classed as articles pyrotechnic) in APA 87-1C. These standards add numerous new devices, expand the permitted chemical list, and focus solely on the hazard classification for transportation."

APA Standard 87-1 is referenced in a number of fireworks and pyrotechnics standards published by the National Fireworks Protection Agency (NFPA): NFPA 1123 Code for Fireworks Display, NFPA Code for the Manufacturer, Transportation and Storage of Fireworks and Pyrotechnic Articles, NFPA 1126 Standard for the Use of Pyrotechnics Before a Proximate Audience. Additionally, many State laws adopt and / or reference APA standard 87-1 with regard to the description of permissible consumer fireworks. The IBR of the revised 87-1 Standard(s) will greatly enhance these other codes and standards that rely upon APA Standard 87-1 as a reference.

Contrary to comments submitted by the National Fireworks Association (NFA) in their October 8, 2019, request to extend the comment period by 90 days on this NPRM, the proposed revisions to APA 87-1, and specifically, APA 87-1A, had no impact on the Notice of Proposed Rulemaking recently considered by the U.S. Consumer Product Safety Commission (CPSC). While that rulemaking proposal was not approved, the CPSC NPRM was predicated on the current (2001) APA Standard 87-1, and the proposed revisions would have had no impact on that rulemaking. Nor does the proposed revision of APA 87-1 create any regulatory inconsistencies that would prevent its IBR.

We would like to emphasize the fact that the proposed revision of APA 87-1 is no more restrictive than (2001) APA 87-1. In fact, as evidenced by the significant revisions to the Standard, numerous new devices will now be authorized for Approval without requiring the expensive DOT explosives laboratory testing for classification in order to apply for Approval as a new explosive under 49 CFR § 173.56. Many members of the NFA are also members of the APA and reap the benefits of the voluntary self-certification Approvals process afforded to them under 87-1. Thus, the proposed new 87-1 Standard(s) under consideration for IBR will reduce the regulatory burden on industry, including manufacturers and small business importers who often help their foreign manufacturers obtain EX Approvals.

APA Standard 87-1 has been the primary vehicle for fireworks manufacturers to obtain their Approvals free of charge. Manufacturers who develop devices outside the scope of 87-1 are still afforded the opportunity to obtain their explosives classifications and Approvals through the route provided under §173.56. APA's ultimate goal is to reduce the number of manufacturers who have to go through that expensive, and often more time consuming, route to obtain an Approval for transportation and we believe the revised standard will help achieve that goal by reducing testing and save the industry hundreds of thousands of dollars while still achieving PHMSA's goal of ensuring the safe transportation of fireworks.

<u>Editorial Revisions to new APA 87-1 Standards</u>

In our most recent final review of the three revised APA Standards, anticipating PHMSA's IBR, we noted three necessary substantive revisions to APA 87-1C outlined below, in addition to a few minor editorial corrections that we would like to bring to PHMSA's attention. Additionally we are offering PHMSA our recommendations regarding "date specific" requirements proposed in the revised Standards which have already expired since our Petition was filed in March 2018:

1. **APA Standard 87-1A**:
    a. Pg. 9 – Effect: add a period and space between Table and Lift Charge.
    b. Pg. 9 – Finished Consumer Fireworks, item 7: Any device manufactured, prior to *October 1, 2018* should be modified to either October 1, 2021 or one year after effective date of the Standard being IBR.

c. Pg. 61 Appendix I. Item 1. Editorial comment: Permitted and Restricted Chemical Table for Consumer Fireworks and Novelties is controlled by PHMSA (see the PHMSA website for the most current table)
d. Pg. 68 Appendix II. 1 Introduction. Editorial comment. There are three options a manufacturer may use to obtain authorization to transport consumer fireworks as Fireworks, UN0336, 1.4G.
e. Pg. 82 "Reloadable Shells" editorial text change to reflect a change in the AFSL Standard referenced in APA Standard: strike second bullet point (individual shells that are of cylindrical or other non-spherical shape must not exceed 101.6mm (4 inches) in total length. Also, bullet 3: re-write as: This requirement is for AFSL tested devices only. They are not requirements covered under 16 CFR, 49 CFR or in APA 87-1.

2. **APA Standard 87-1B**:
   a. Pg. 8 – Finished Display Firework, item 6: Any device manufactured, prior to *October 1, 2018*, should be modified to either October 1, 2021 or one year after effective date of the Standard being IBR.
   b. Pg. 41 Appendix I. Item 1. Editorial comment: Permitted and Restricted Chemical Table for Display Fireworks and Quickmatch is controlled by PHMSA (see the PHMSA website for the most current table).

3. **APA Standard 87-1C**:
   a. Pg. 8 – Finished EI&T Pyrotechnic Device, item 6: Any device manufactured, prior to *October 1, 2018*, should be modified to either October 1, 2021, or one year after the effective date of the Standard being IBR.
   b. Pg. 28 – Substantive revision: 3.2.1.18 – Multi-shot Device (Cake): we wish to modify Line 21 to state NO; Line 22 to state NA; Line 23 to state No; and Line 27 to state NA. It is our desire, for transportation safety reasons, as well as professional use of these devices, to not allow multi-shot device (Cakes) with reports to be approved under 87-1C. The APA never intended for the single shot tube restrictions for reports to apply to a multi-shot device.
   c. Pg. 29 – Substantive revision: 3.2.1.19 – Multi-shot Device (Combination): we wish to modify Line 21 to state No; Line 22 to state NA; Line 23 to state No; and Line 27 to state NA. Professionals using UN0431 do not necessarily use "combination devices" and we wish to modify this section for consistency.
   d. Pg. 32- Substantive revision: 3.2.1.22 – Shot Tube Preloaded (devices): we wish to clarify the requirements for Multi-shot and Series – Line items 81 and 82: Devices permitted in a multi-shot (cake) and multi-shot (combination) that Yes, there are requirements but with restrictions on reports. This revision was an oversight of APA's Standards Committee and we are concerned that multiple shot 6g report cakes are more hazardous for transport and storage, and should be immediately corrected in the revised Standard before adoption.
   e. Pg. 40 Appendix I. Item 1. Editorial comment: Permitted and Restricted Chemical Table for EI&T Pyrotechnics is controlled by PHMSA (see the PHMSA website for the most current table).

f. Pg. 50 Sample EX Application. Editorial comment: Item 6 Category of Device – 3.2.1.11 Flash Tube is out of place, a hard break needs to be inserted so this device is directly under 3.2.1.10 Flash Tray.

Conclusion

The APA strongly supports PHMSA's proposal to IBR APA Standard 87-1A, APA 87-1B and APA 87-1C and for this opportunity to provide additional necessary substantive and editorial comments to the Standard prior to its final adoption. Please see the attached recommended revisions outlined above to our three standards.

We appreciate the opportunity to comment on this proposed rulemaking and look forward to PHMSA issuing a swift Final Rule as the revisions to APA Standard 87-1 are long overdue and important to the livelihood of the entire fireworks industry. IBR of APA Standards 87-1A, 87-1B, 87-1C meets the spirits of this miscellaneous rulemaking to reduce regulatory burdens, especially on small businesses, while maintaining PHMSA's objective to ensure safety focused on the hazard class for transportation.

Please let me know if we can provide any additional information.

Respectfully submitted,

Julie L. Heckman
Executive Director