



DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 107, 171, and 173

[Docket No. PHMSA-2020-0103 (HM-257A)]

RIN 2137-AF50

Hazardous Materials: Streamlining Requirements for the Approval of Certain Energetic Materials

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: PHMSA is amending the Hazardous Materials Regulations (HMR) by streamlining the classification and approval process for transporting certain low-hazard fireworks, revising the criteria for small arms cartridges to include tracer ammunition as eligible for self-classification, designating the PHMSA portal as the sole method to submit applications for all explosives approvals, and authorizing voluntary termination of an explosive approval by the approval holder.

DATES: *Effective Date:* This final rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference of certain material listed in this rule was approved by the Director of the Federal Register as of December 28, 2020.

Voluntary Compliance Date: **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Delayed Compliance Date: **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

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I. Executive Summary

PHMSA is adopting, with some modification based on comments received, the amendments proposed in the HM-257A notice of proposed rulemaking (NPRM), titled

*Hazardous Materials: Streamlining Requirements for the Approval of Certain Energetic Materials.*¹ This final rule:

- Streamlines the classification and approval process for transporting certain low-hazard fireworks by allowing self-certification using an online application in the PHMSA portal;
- Ensures exception from regulation of low hazard fireworks commonly known as novelty devices by adopting guidance criteria into the HMR;
- Revises the classification criteria for small arms cartridges to include tracer ammunition as eligible for self-classification as a Division 1.4S material;
- Designates the PHMSA portal as the sole method to submit applications for all explosives approvals; and
- Authorizes an approval holder to terminate an explosive approval voluntarily.

PHMSA expects the final rule will generate aggregate cost savings by reducing unnecessary burdens on the classification process for the transportation of explosives—such as low hazard fireworks—and providing additional flexibility for stakeholders while maintaining current levels of safety.² The amendments in the final rule will also reduce unnecessary regulatory burdens constraining innovation and commerce consistent with Executive Order (E.O.) 14192 (*Unleashing Prosperity Through Deregulation*).

PHMSA expects the final rule will result in net cost savings of \$2.2 million (2024 dollars) over a 10-year analysis period, or approximately \$200,000 annually. PHMSA also estimates that 846 labor hours will be saved annually from time that would have been spent processing fireworks approvals, resulting in an annual budget savings of \$85,341 to the government—significantly increasing government efficiency and making government resources available for other higher priority tasks. The final rule will

¹ 88 FR 83514 (Nov. 30, 2023).

² 49 CFR parts 171-180.

streamline the approval process, improve regulatory clarity, and facilitate international trade without adversely affecting safety. PHMSA has developed a detailed economic analysis in the final regulatory impact analysis (RIA), a copy of which has been placed in the docket.

II. Incorporation by Reference Discussion Under 1 CFR Part 51

PHMSA incorporates by reference into the HMR all or parts of numerous standards and specifications developed and published by standard development organizations (SDOs). In general, SDOs update and revise their published standards every two to five years to reflect modern technology and best technical practices.

The National Technology Transfer and Advancement Act of 1995 (NTTAA; 15 U.S.C. § 3701 *et seq.*) directs Federal agencies to use standards developed by voluntary consensus standards bodies in lieu of government-written standards whenever possible. Voluntary consensus standards bodies develop, establish, or coordinate technical standards using agreed-upon procedures. The Office of Management and Budget (OMB) issued Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, to implement section 12(d) of the NTTAA relative to the utilization of consensus technical standards by Federal agencies. This circular provides guidance for Federal agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the NTTAA.

PHMSA is responsible for determining which standards currently referenced in the HMR should be updated, revised, or removed, and which standards should be added to the HMR, under the NTTAA and Circular A-119. Revisions to materials incorporated by reference in the HMR are handled via the rulemaking process, which allows for the public and regulated entities to provide input. During the rulemaking process, PHMSA must also obtain approval from the Office of the Federal Register to incorporate by

reference any new materials. The Office of the Federal Register issued a rulemaking that revised 1 CFR 51.5 to require that an agency detail in the preamble of a final rule the ways the materials it proposes to incorporate by reference are reasonably available to interested parties, or how the agency worked to make those materials reasonably available to interested parties.³

The following American Pyrotechnics Association (APA) standards appear in the regulatory text of this final rule and have already been incorporated by reference into the HMR in 49 CFR 171.7 and approved for the locations in which they appear: (1) APA 87-1A: *Standard for the Construction, Classification, Approval and Transportation of Consumer Fireworks* (2018); (2) APA 87-1B: *Standard for the Construction, Classification, Approval, and Transportation of Display Fireworks* (2018); and (3) APA 87-1C: *Standard for the Construction, Classification, Approval, and Transportation of Entertainment Industry and Technical Pyrotechnics* (2018). No changes to these standards are established in this final rule.

III. Background

A. Low Hazard Fireworks

The final rule amends the classification and approval process for certain low hazard fireworks determined to be Division 1.4G explosives under the HMR. Section 173.50(b)(4) defines Division 1.4 explosives to consist of explosives that present a minor explosion hazard. Table 1 to § 173.52 assigns a “G” to Division 1.4 explosives that are pyrotechnic substances or articles containing a pyrotechnic substance, or articles containing both an explosive substance and an illuminating, incendiary, tear-producing or smoke-producing substance. Many fireworks are assigned to compatibility group “G.” These low hazard fireworks include ground and novelty device fireworks under the 2018

³ 79 FR 66278 (Nov. 7, 2014).

APA Standard 87-1A. However, novelty fireworks that comply with the requirements of the 2018 APA Standard 87-1A are regulated as hazardous materials effectively only when transported by air, and then as Division 4.1 flammable solids instead of as Class 1 explosives.

Low hazard fireworks are explosive articles that are not designed to leave ground level, contain no aerial components, and contain less than 100 grams of chemical composition per tube. These explosive articles are known to present a minimum safety risk in transportation. Manufacturing is restricted to using only chemicals from the “Permitted and Restricted Chemical Table for Consumer Fireworks and Novelties” found in 2018 APA Standard 87-1A and reports (*i.e.*, the “pop” or “bang” heard from a firework) being limited to no more than 50 milligrams of report composition.

Classifying low hazard fireworks as Division 1.4G fireworks is consistent with the United Nations (UN) default fireworks table (“the UN table”) and 30 years of classification experience under the APA standards. The UN table for explosives, specifically within Class 1, categorizes explosives into six divisions based on their potential effects. The six divisions range from those with a mass explosion hazard (1.1) to those with a minor explosion hazard (1.4) and include categories for projection hazards and fire hazards with varying degrees of severity. The UN table is used primarily when specific test data or competent authority classifications are unavailable, particularly for imported fireworks. For clarity, PHMSA is adding a separate term and description for “low hazard fireworks” to § 173.59 (description of terms for explosives). The addition of this description maintains current levels of safety by ensuring proper understanding of the meaning of low hazard fireworks in the HMR for purposes of the provisions adopted in this rulemaking.

1. Ground Devices

The final rule streamlines the approval or certification process to allow self-certification. Ground device fireworks are designed to produce their effects at or near ground level. The following 17 individual ground devices are considered low hazard fireworks that may be approved or certified for transportation using the new system, provided they meet HMR and APA requirements for construction, formulation, and packaging: Chaser, Crackling Ball, Crackling Strip, Crackling Tube, Firecracker, Flasher/Strobe, Flitter Sparkler, Fountain Cone, Fountain Cylindrical, Fountain Nitrocellulose, Ground Spinner, Illuminating Torch, Smoke, Snake, Specialty Device, Wheel, and Sparklers (to include the Wire Sparkler or Dipped Stick varieties).

Ground devices meeting 2018 APA Standard 87-1A are described and classified as “UN0336, Fireworks, Division 1.4G.” Currently, ground device classifications are either approved by PHMSA personnel or certified by a Fireworks Certification Agency (FCA) upon completion of a multi-step review of each application. The final rule allows manufacturers to self-certify using an online application in the PHMSA portal that employs an automated system for review and issuance of a certification. This automated system may be used for the ground devices identified in this final rule in lieu of the current process, which will avoid time-consuming reviews by PHMSA or FCA personnel and reduce costs to manufacturers who opt to use an FCA to certify these firework types.

Manufacturers of fireworks that meet the criteria for the construction, formulation, and packaging of these ground devices—specifically discussed in Section V of the 2018 APA Standard 87-1A—certify compliance with specified conditions and limitations and receive a certificate with a unique identifier number (*i.e.*, a FW number) for each firework type. The online application in the PHMSA portal provides immediate comparison of the technical information provided by the applicant against the criteria established for ground device fireworks. PHMSA will maintain oversight of the self-certification information submitted to the PHMSA portal for these low hazard firework

types through a quality assurance and quality control (QA/QC) review program.

Accordingly, PHMSA finds the current safety level will be maintained when using this process for self-certification of eligible ground device fireworks.

PHMSA is not authorizing cake and combination ground devices to be eligible for self-certification at this time. Manufacturers can use the PHMSA portal to submit an application for these ground devices following the standard approval application process to obtain an EX number or, alternatively, use an FCA to obtain an FC number for transportation.

2. *Novelty Devices*

The final rule adopts conditions and criteria for exceptions from regulation for novelty devices (“novelties”) consistent with past guidance and the 2018 APA Standard 87-1A. Shippers and carriers of novelties that meet the construction, formulation, and packaging criteria for these devices are not subject to regulation under the HMR beyond the conditions adopted for novelties. Though excepted from regulation in most circumstances, novelty devices meeting the conditions and criteria prescribed in the final rule are still subject to PHMSA oversight.

PHMSA guidance currently allows for five novelties—when shipped domestically by ground, rail, or vessel—to be transported without being regulated as explosives when manufactured in accordance with the applicable provisions in the 2001 edition of APA Standard 87-1. The 2018 APA Standard 87-1A includes two additional novelties that may be excluded from HMR requirements—for a total of seven novelties—provided they meet the conditional requirements for construction, formulation, packaging, and transportation mode. The seven novelties are Booby Trap/Pull Apart, Novelty Flitter Sparkler, Party Popper, Novelty Snake, Snapper, Novelty Wire Sparkler or Novelty Dipped Stick, and Novelty Smoke Device. However, when prepared for transportation by

air, these novelties must be described and classified as “UN3178, Flammable solid, inorganic, n.o.s. (novelties), 4.1” and shipped as flammable solids under the HMR.

When transported domestically by ground, rail, or vessel, a PHMSA approval or FCA certification is not required for novelties manufactured in accordance with the PHMSA guidance document and the applicable provisions in 2018 APA Standard 87-1A. PHMSA is not aware of any systemic safety issues or safety concerns involving shipments of novelties meeting these conditions. This final rule adopts the relief provided in the PHMSA guidance by regulation to provide manufacturers of novelties with greater clarity and certainty without reducing levels while maintaining safety.⁴

B. Tracer Ammunition

The final rule clarifies that certain tracer ammunition is a small arms cartridge eligible for self-classification as a Division 1.4S material and excepted from the explosive application approval process, provided the applicable criteria in 49 CFR 173.56(h) are met. However, the text of an exception for small arms cartridges in a subsequent provision, § 173.56(h)(3), has created uncertainty as to whether an inert projectile with a tracer can be included under that regulation. Tracer ammunition uses a small amount of pyrotechnic charge at the base or as coating of the projectile to make the trajectory of the projectile visible to the naked eye. Affected entities have expressed concern about whether tracer ammunition is considered inert under § 173.56(h)(3) and qualifies for the exception in that regulation. PHMSA considers the small amount of pyrotechnic charge as a negligible quantity of explosive material compared to the quantity of propelling charge contained within the cartridge itself, and this small amount of pyrotechnic charge at the base of or coated on the projectile does not increase the

⁴ PHMSA anticipates that publishing this final rule will necessitate withdrawing certain guidance documents. *See, e.g.*, Pipeline and Hazardous Materials Safety Admin., *Guidance and Criteria For Fireworks Novelty Devices* (Mar. 19, 2015), available at <https://www.phmsa.dot.gov/hazmat/energetic-materials-approvals/guidance-and-criteria-fireworks-novelty-devices>.

hazard posed by the packaged cartridges in a bonfire test nor make unintentional initiation any more likely.

C. Process for Submitting Approval Applications

The final rule amends § 107.705(a)(1) to allow the PHMSA portal to be used for submitting all approval applications and to require the use of the PHMSA portal for explosives approval applications, including to self-certify the manufacture of ground device fireworks. Persons will no longer be able to submit explosives approval applications by mail, e-mail, or fax and must use the PHMSA portal after the final rule becomes effective. PHMSA believes that moving to an electronic-only service will increase efficiency in processing the large volume of explosives approval applications that are submitted on an annual basis. The PHMSA portal provides the public online access to PHMSA services, creating a single source for Hazardous Materials and Pipeline Safety applications and data. Persons need only to register to create an account to access and use the portal. Further discussion is provided in “Section V.”

D. Voluntary Termination of Existing Approvals

The final rule modifies the process for the modification, suspension, and termination of approvals in § 107.713. As currently prescribed in § 107.713(c), before an approval is modified, suspended, or terminated, PHMSA must provide approval holders an opportunity to show cause why the proposed action should not be taken. The final rule amends § 107.713 to add a new provision allowing approval holders to request termination of approvals. The final rule also revises the current requirements to clarify that when an approval holder voluntarily seeks to terminate an approval, PHMSA is not required to issue a show cause letter.

IV. Public Comments

PHMSA issued an NPRM under Docket No. PHMSA 2020-0103 (HM-257A).⁵

The comment period for the NPRM closed February 28, 2024. PHMSA received seven sets of comments from the following:

American Fireworks Standards Laboratory (AFSL)	PHMSA-2020-0103-0006
American Promotional Events, Inc. (“TNT Fireworks”)	PHMSA-2020-0103-0009
American Pyrotechnics Association (APA)	PHMSA-2020-0103-0007
Anonymous	PHMSA-2020-0103-0005
P.R. China	PHMSA-2020-0103-0004
Sporting Arms and Ammunition Manufacturers’ Institute (SAAMI)	PHMSA-2020-0103-0003
United Pyrotechnics (UP)	PHMSA-2020-0103-0008

All comments are generally supportive of PHMSA’s efforts under this rulemaking—especially self-certification of “low hazard fireworks” and streamlining of the approval process overall. The comments submitted to this docket may be accessed via the docket file numbers listed in the above table at <https://www.regulations.gov>. PHMSA developed this final rule in consideration of the comments received to the public docket.

Within the seven sets of positive comments, PHMSA did receive several outside the scope of this rulemaking. Specifically, PHMSA received comments from SAAMI recommending the following revisions to the HMR to improve efficiency:

- Establish a de minimis threshold for minute amounts of explosives in either very small per-unit quantities or percentages in dilutions.
- Review testing requirements for high hazard explosives in Division 1.1 by relying only on sensitivity and thermal stability testing to ensure that an explosive is safe to transport.
- Specify a high, medium, and low hazard explosives groups scheme.
- Use a management approach to Division 1.4S explosives.

⁵ 88 FR 83514 (Nov. 30, 2023).

- Standardize the approach to Class 9 energetics, consistent with proposals and the United Nations.
- Consider more fully relying on the recommendations from PHMSA-approved explosive laboratories.

PHMSA appreciates SAAMI's feedback on areas for increasing efficiency in the safe transportation of explosives. Though relevant to the discussion of the approach to classifying and transporting explosives, PHMSA did not propose these changes in the NPRM and is therefore declining to pursue them at this time. However, PHMSA invites SAAMI and its member companies to submit petitions for rulemaking that include economic and safety information in support of such changes. PHMSA also will consider these suggestions as part of its efforts to improve government efficiency.

PHMSA also received comment from the AFSL—an independent, not-for-profit standards development and testing organization serving the consumer fireworks industry. AFSL sets design, construction, and product performance standards for all current categories of consumer fireworks and novelties. AFSL recommended that PHMSA audit all products requiring EX or FC numbers to ensure manufacture of the product is consistent with the information provided to PHMSA. AFSL believes that consumer fireworks devices which differ materially from information submitted and approved in the application process are being imported into the U.S. and creating a risk to the American public. PHMSA acknowledges the AFSL's concerns about product quality and agency oversight. Though beyond the scope of this rulemaking, PHMSA will take AFSL's recommendation into consideration for development of a plan and allocation of enforcement resources to inspect consumer fireworks products.

V. Discussion of Amendments and Applicable Comments

The final rule amends certain regulations in the HMR for explosives approvals to streamline procedural requirements for fireworks manufacturers and shippers. PHMSA

will continue to use the current approval process for Division 1.4G consumer fireworks in accordance with § 173.56(b), (f), or (i), and § 173.65. However, the final rule allows manufacturers to self-certify the classification of certain ground device fireworks using the PHMSA portal and creates a conditional exception from further regulation under the HMR for novelties. Furthermore, the final rule revises the self-classification of inert projectile cartridges in § 173.56(h) to include explicitly tracer ammunition; amends § 107.705 to mandate the use of the PHMSA portal for explosives approval applications; and amends § 107.713 to clarify that an approval holder may voluntarily terminate an approval and to clarify that a show cause letter from PHMSA is unnecessary in these circumstances. Note that the ability to terminate an approval voluntarily is not limited to holders of explosives approvals and applies to all approval holders.

In the final RIA, PHMSA determined that the aggregate benefits of the amendments in the final rule justify their aggregate costs. The amendments are expected to reduce the paperwork burden on the regulated community and PHMSA personnel by eliminating paper-based explosives approval applications. The overall net benefits include a cost savings of 846 labor hours annually. See the RIA for additional information. These cost savings will not have a material effect on the safety impact of PHMSA's explosives approval program. Based on an assessment of the comments received in response to the NPRM, PHMSA amends the HMR as detailed in this section.

A. Establishing Exceptions for Ground and Novelty Device Fireworks

The final rule revises § 173.64—Exceptions for Division 1.3 and 1.4 Fireworks—to codify exceptions for ground devices and novelties. Specifically, for these low hazard fireworks, the final rule allows an exception from the standard explosive device approval process for the classification into Division 1.4G. This exception is implemented by establishing an automated system within the PHMSA portal that allows for self-certification. This automated system, which may be used for the ground devices

identified in this rulemaking, reviews the information provided by the applicant, which is the same as currently required under the HMR, and issues a certificate with a unique identifier (*i.e.*, an FW number). PHMSA personnel will no longer need to conduct a time-consuming review of each application under the automated system. This includes firsthand review of the diagram of the firework device and its chemical formulation sheets since compliance is certified by the applicant. Adopting the automated system is consistent with the directive in E.O. 12866 to implement alternatives to direct regulation and will not have any adverse impacts on public health and safety or the environment.⁶

Currently, the HMR requires explosives—such as fireworks—to be examined, classed, and approved by PHMSA. Certain fireworks may also be certified for transportation by a DOT-approved FCA instead. Streamlining the process to authorize transportation of low-hazard fireworks through self-certification will introduce efficiencies and maintain transportation safety under the HMR.

Though the NPRM proposed to include novelties in the self-certification process, PHMSA is not adopting that proposal in the final rule. Novelties historically have not been subject to a PHMSA “approval process,” and PHMSA has no information indicating that this practice presents a safety risk. In addition, commenters raised concerns in response to the NPRM that self-certification would impose a new regulatory burden on manufacturers of novelties. For these reasons, PHMSA is codifying the conditions and criteria found in the PHMSA guidance and 2018 APA Standard 87-1A to provide an exception from further regulation for seven novelties. Manufacturers need only comply with conditions and criteria in § 173.59 to claim the exception, as opposed to also certifying compliance using the PHMSA portal. Finally, a new definition for “low hazard firework” is added to § 173.59 consistent with the other changes adopted in the final rule.

⁶ 58 FR 51735 (Oct. 4, 1993).

PHMSA received a comment from SAAMI stating that the phrase “low explosive hazard,” as proposed in the new definition of “low hazard fireworks” in § 173.59, has distinct meaning and should not be generally conflated with “low hazard fireworks.” SAAMI understands that “low hazard fireworks” include medium explosive hazards, which PHMSA also classifies as Division 1.4 explosive hazards, and suggests that PHMSA use the term “Division 1.4” instead of “low explosive hazard” in the definition of “low hazard fireworks.” Division 1.4 includes both Division 1.4G and 1.4S, which SAAMI views as both medium and low explosive hazards encompassed by the term “low hazard fireworks.” PHMSA agrees that using the phrase “low explosive hazard” in the definition of “low hazard fireworks” may be confusing. Accordingly, the final rule refers generally to a Division 1.4 material in the new definition.

SAAMI also states that the fireworks industry uses the phrase “low hazard fireworks” for products classified as Division 1.4G, which SAAMI views as a medium explosive hazard, while some of these fireworks likely do have a Division 1.4S low explosive hazard. SAAMI states that the assignment of “low hazard fireworks” (as a Division 1.4G) may be a conservative approach in some cases, and that PHMSA may want to clarify that performance testing to obtain a Division 1.4S classification remains an alternative option. SAAMI specifically suggests that PHMSA should point out the availability of the option to continue using procedures provided in § 173.56 to obtain a Division 1.4S classification in the newly revised § 173.64(b). PHMSA agrees. The final rule revises § 173.64(b) to include additional language that low hazard consumer fireworks may still be classified as specified in § 173.56. This revision adds value by clarifying flexibilities offered in the HMR for manufacturers of fireworks devices while maintaining safe transportation of explosives material.

1. Ground Devices

Ground device fireworks certified using the PHMSA portal as conforming to the construction, formulation, and packaging requirements in § 173.64 are authorized for transport as “UN0336, Fireworks, 1.4G.” Seventeen ground devices are eligible for this new certification process: Chaser, Crackling Ball, Crackling Strip, Crackling Tube, Firecracker, Flasher/Strobe, Flitter Sparkler, Fountain Cone, Fountain Cylindrical, Fountain Nitrocellulose, Ground Spinner, Illuminating Torch, Smoke, Snake, Specialty Device, Wheel, and Sparklers (Wire Sparkler or Dipped Stick). Cake and combination devices are excluded from eligibility for certification using this automated system.

The final rule specifies the criteria for manufacturing (construction and formulation) and packaging of these ground devices. They are subject to both general and specific requirements as presented below in the table of Criteria for Ground Devices.

General requirements for ground devices are as follows:

- Devices must use chemicals in conformance with the “Permitted and Restricted Chemicals for Consumer Fireworks and Novelties” table in APA Standard 87-1A, incorporated by reference in § 173.64. Note that all chemical specifications in the table are maximum limits.
- All reports are limited to 50 mg (0.050 g) of composition per report.
- All devices are initiated by a safety fuse with the exception of firecrackers, flitter sparklers, nitrocellulose fountains, snakes, wire sparklers, or dipped sticks.
- All devices must be finished (*i.e.*, cannot be a component intended to be used in another device).
- All devices must successfully pass a thermal stability test as specified in § 173.64(a)(2).
- Each device must be marked with the alphanumeric PHMSA-assigned identifier number (“FW number”) consisting of the letters FW, followed by the year and month issued, and a sequential number based on order of issuance that year (*e.g.*,

FWYYYYMMSSSS). If the device is too small, the package that contains the device must display the certification number.

The specific requirements for each of the 17 eligible ground device types are as follows:

Criteria for Ground Devices			
Device	Definition	Specification⁷	Special Conditions
Chaser	Consists of a paper or cardboard tube, which vents out the fuse end of the tube.	20 total grams of chemical composition, with multiple reports permitted.	None
Crackling Ball	Consists of a spherical ball that contains small granules of chemical composition that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Crackling Strip	Consists of small granules of chemical composition adhered to and encased in a paper or cardboard wrapping that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Crackling Tube	Consists of a tube that contains small granules of chemical composition that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Firecracker	Consists of a small paper-wrapped or cardboard tube that produces a single report.	50 milligrams of chemical composition per firecracker.	Multiple firecrackers can be fused together to form a string. There is no limit on number of firecrackers in a string.
Flasher / Strobe	Consists of a paper-wrapped or cardboard tube that produces a crackling/flashing/strobe light effect.	Five total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 60 grams of composition.

⁷ This column describes the chemical composition weight limits per tube and whether reports are permitted.

Criteria for Ground Devices			
Device	Definition	Specification⁷	Special Conditions
Flitter Sparkler	Consists of a paper or cardboard tube attached to a stick or wire. Upon ignition, the device produces a shower of sparks, a colored flame and/or a crackling effect.	25 total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to four grams with no more than 15 percent of the formulations being chlorates.	None
Fountain (Cone)	Consists of a conical paper or cardboard container that upon ignition produces a shower consisting of any combination of colored sparks, color flame, crackle, smoke, whistle and/or micro star effects.	50 total grams of chemical composition, with no reports permitted.	None
Fountain (Cylindrical)	Consists of a paper or cardboard tube that upon ignition produces a shower consisting of any combination of colored sparks, color flame, crackle, smoke, and whistle or micro star effects.	100 total grams of chemical composition, with no reports permitted.	None
Fountain (Nitrocellulose)	Consists of a paper or cardboard cone or tube device that produces a shower of small sparks, color, and flame as its primary effect using nitrocellulose as the major chemical component.	15 total grams of chemical composition, with no reports permitted.	None
Ground Spinner	Consists of a paper or cardboard tube that upon ignition emits a shower of colored sparks that vents out of an orifice, causing the device to spin rapidly on the ground.	20 total grams of chemical composition, with reports permitted.	Multiple ground spinners can be fused together to form a string. Strings are limited to 20 grams of total composition.
Illuminating Torch	Consists of a paper or cardboard tube that upon ignition, emits a colored flame with or without crackles or sparks.	100 total grams of chemical composition, with no reports permitted.	None

Criteria for Ground Devices			
Device	Definition	Specification⁷	Special Conditions
Smoke	Consists of a paper or cardboard tube that upon ignition, emits smoke as the primary effect.	100 total grams of chemical composition. All mixtures containing a chlorate must contain an equal amount or greater amount of a carbonate or bicarbonate.	Multiple smoke devices can be fused together to form a string. Strings are limited to 100 grams of total composition.
Snake	Consists of pressed pellet of pyrotechnic composition that upon ignition, produces a snake-like ash that expands in length as the composition is consumed.	20 total grams of chemical composition, with no reports. Only formulations of nitrated asphalt, asphaltum, bitumen, pitch, and/or tar with an oxidizer (with or without a binder) are permitted.	None
Specialty Device	Consists of a paper or cardboard tube(s), <i>e.g.</i> , in the shape of an animal or a small vehicle, that produces multiple effects.	20 total grams of chemical composition, with reports permitted.	No tube can contain more than 2 grams of composition; tubes cannot contain aerial components or internal shells.
Wheel	Consists of a paper or cardboard tube placed on the ground or attached to a post, by means of a nail, spike, or string. Upon ignition, the wheel rotates producing a shower of sparks, color, crackling, flame, or whistle effects.	200 total grams of chemical composition, with no reports. No tube can contain more than 60 total grams of composition, which includes a 20 gram propellant limit per tube. Tubes cannot contain aerial components. Handles are not permitted.	None

Criteria for Ground Devices			
Device	Definition	Specification⁷	Special Conditions
Wire Sparkler or Dipped Stick	Consists of a metal wire or wood dowel coated with a chemical composition. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	100 total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to four grams with no more than 15 percent of the formulations being chlorates.	Inner packaging cannot exceed 120 grams of composition.

To receive an FW number, a manufacturer must follow a multi-step process. First, the applicant must register with PHMSA to create an account (if not already an account holder within the PHMSA portal) and provide the following contact information: Company name, contact person, title, address, phone, and e-mail address; manufacturing location; and U.S. agent (if applicable), address, phone, and e-mail address. A unique profile is created for each applicant based on their e-mail address, which allows for repeated access. If already registered as an account holder with the PHMSA portal, persons must ensure all necessary information is provided to allow for self-certification.

Then, the applicant must select the option for self-certification of a firework and provide specific information about a device and certify that the construction, chemical composition, and packaging are in accordance with the HMR. This step requires the applicant to respond to the following questions:

- What is the name and/or product code of the device? (Must be unique.)
- What is the category of the ground device? (There will be a drop-down menu with the 17 authorized ground devices.)
- What is the maximum weight in grams of chemical composition in the device?
- Does the device contain a report? (List how many reports.)
- What is the maximum weight in milligrams of any single report in the device?

- What is the total report weight in milligrams in the device?
- Did the device pass a thermal stability test?
- Does the device comply with the Permitted and Restricted Chemicals Table found in the APA Standard 87-1A, Appendix 1, currently incorporated by reference in § 173.64?
- Does the device use a safety fuse for ignition?
- Does the device meet one of the descriptions listed in § 173.64?
- Do you certify the device will be manufactured and transported in accordance with all the statements you attested to above?

A certificate will be issued for each device following the successful completion of the process. The certificate contains the unique alphanumeric identifier number described above.

The People's Republic of China (PRC) submitted comments requesting that PHMSA expand the self-certification process for low hazard fireworks to all consumer fireworks classified as Division 1.4G. PHMSA appreciates PRC's perspective on this issue but is not prepared at this time to expand the self-certification process to all consumer fireworks classified as Division 1.4G.

2. *Novelties*

Novelties conforming to the construction, formulation, and packaging requirements in § 173.64 are authorized for transport without further regulation except for air transport. Though considered Division 1.4 fireworks under PHMSA's regulatory scheme, consistent with the guidance previously discussed in this Section V.A, novelties that meet the requirements of § 173.64 are not regulated by PHMSA, except that they must be classed, described, and packaged as "UN3178, Flammable solid, inorganic, n.o.s. (novelties), 4.1, PG II," when transported by air. Seven novelties are eligible for this exception: Booby Trap/Pull Apart, Novelty Flitter Sparkler, Party Popper, Novelty

Snake, Snapper, Novelty Wire Sparkler or Novelty Dipped Stick, and Novelty Smoke Device.

Novelties must comply with both the general and specific requirements as presented below in the table of Criteria for Novelties. The general requirements for novelties are as follows:

- Devices that do not list specific chemical restrictions must use chemicals in conformance with the permitted and restricted chemical table in the APA Standard 87-1A, Appendix 1, incorporated by reference in § 173.64. Note that all chemical specifications in the table are maximum limits.
- No reports are permitted in novelties.
- Smoke devices must be initiated by a fuse.
- Devices must be finished and packaged in the inner packagings.
- All novelties must successfully pass a thermal stability test specified in § 173.64(a)(2).

The specific requirements for each of the seven novelties are as follows:

Criteria for Novelties			
Novelty	Definition	Specifications	Special Conditions
Booby Trap/Pull Apart	Device that is actuated by means of friction. Pulling a string or strings apart activates the device, producing a noise effect.	0.016 total grams of chemical composition, which is limited to barium, potassium, and/or sodium chlorate with red phosphorus.	Inner packages must not contain more than 12 devices.
Novelty Flitter Sparkler	Consists of a paper or cardboard tube attached to a stick or wire. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	Five total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to four grams with no more than 15 percent of the formulation being chlorates.	Inner packages must not contain more than eight devices, and an ignition fuse is permitted.

Criteria for Novelties			
Novelty	Definition	Specifications	Special Conditions
Party Poppers	Device that is actuated by means of friction. Pulling a string or trigger activates the device, producing a noise effect and releasing paper streamers or confetti. Common examples resemble champagne bottles and toy pistols.	0.016 total grams of chemical composition, which is limited to barium, potassium, and/or sodium chlorate with red phosphorus.	Inner packages must not contain more than 72 devices.
Novelty Snakes and Glow-Worms	Consists of pressed pellet of pyrotechnic composition that upon ignition, produce a snake-like ash that expands in length as the composition is consumed.	Two total grams of chemical composition. Only formulations of nitrated asphalt, asphaltum, bitumen, pitch, and/or tar with an oxidizer (with or without a binder) are permitted.	Inner packaging must not contain more than 25 devices.
Snappers	Consists of small, paper-wrapped items. When dropped, the device activates, producing a noise effect.	0.001 total grams of silver fulminate coated on small bits of sand or gravel.	Inner packages must not contain more than 50 devices with sawdust or other impact absorbing materials.
Novelty Wire Sparkler or Novelty Dipped Stick	Consists of a metal wire or wood dowel coated with a chemical composition. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	25 total grams of chemical composition, with no reports permitted. Formulations containing perchlorates are limited to five grams. Formulations containing chlorates are limited to four grams with no more than 15 percent of the formulations being chlorates.	Inner packages must not contain more than eight devices.
Novelty Smoke Device	Consists of an item that upon ignition, emits smoke as the only effect.	Five total grams of chemical composition, with no reports permitted. All mixtures containing a chlorate must contain an equal amount or greater amount of a carbonate or bicarbonate (<i>e.g.</i> , calcium carbonate, sodium bicarbonate).	Inner packages must not contain more than 72 devices.

Novelties must be in inner packagings that are further packed in strong outer packagings. The packages must conform to the general packaging requirements of § 173.24. The maximum gross weight of a completed package may not exceed 30 kilograms (66 pounds). In addition, each outer package must be plainly marked with “NOVELTIES, IN CONFORMANCE WITH § 173.64, NOT REGULATED, EXCEPT WHEN TRANSPORTED BY AIR.” If an overpack is used and the marking on packages contained therein is not visible, the overpack must also be marked with this marking. As stated earlier, when novelties are transported by air, they must be classed and described as “UN3178, Flammable solid, inorganic, n.o.s. (novelties), 4.1, PG II,” and packaged for air transport accordingly.

APA submitted comments requesting that PHMSA expand the exceptions for the seven eligible novelty devices to include fuseless smoke devices, fireworks fuses, and pull string smoke devices that do not require a fuse.⁸ PHMSA believes more information is needed to support expanding the group of novelties that are eligible for the exception beyond those proposed in the NPRM. PHMSA suggests APA provide that supporting information in a petition for a rulemaking.

3. *Fireworks Identification Scheme*

As a baseline, fireworks must be approved and assigned an explosives approval number by PHMSA (*i.e.*, an EX number) based on actual testing and classification prior to transportation to, from, and within the United States based on the requirements for a new explosive under § 173.56. However, § 173.64 permits Division 1.3G and 1.4G fireworks to be approved without prior examination based on certain conditions, including compliance with the provisions of the 2018 APA Standards 87-1A, 1B, and 1C, which are incorporated by reference in § 171.7. Further, § 173.65 permits—in lieu of an

⁸ APA is a safety and trade association of the fireworks industry representing manufacturers, importers, distributors, retailers, suppliers, and professional display companies. The APA supports and promotes safety standards for all aspects of fireworks.

approval—Division 1.4G consumer fireworks (as defined in § 173.59) to be certified by a DOT-approved FCA. After the FCA reviews the consumer fireworks application and certifies it meets the requirements, the FCA assigns an FC number.

The final rule streamlines the process for approval or certification of ground device fireworks by allowing self-certification using the PHMSA portal. Manufacturers will certify compliance with specified conditions and limitations online and receive a certificate with a unique identifier number (*i.e.*, an FW number) for each firework type. The FW number will identify the ground device that has been certified through the newly established automated system as specified § 173.64. An example of an FW number would be “FW2023100001” consisting of the letters FW, followed by the year and month issued, and a sequential number based on order of issuance that year.

PHMSA requested comment on the supply chain implications, the economic impact, and safety concerns associated with the proposed FW numbering system, as well as comment on how to implement the changes if they are adopted. PHMSA received comment from APA stating that novelties have not been required to have an EX approval number since 2009. APA did not understand why PHMSA would propose to now require manufacturers of novelties to apply (*i.e.*, self-certify) for an “FW” number. APA further mentioned that requiring an “FW” number contradicts the 2018 APA Standard 87-1A, which states that “[a]n EX-approval or FC certification letter is not required to ship the novelty devices, specifically those listed in the APA Standard 87-1A, into or within the United States.” APA stated that requiring an “FW” number will be a burdensome task for manufacturers—requiring manufacturers to certify novelties, and develop diagrams and technical files, along with the tedious process of entering data in the PHMSA portal.

PHMSA appreciates APA’s concerns and is not adopting the proposal to include novelties in the automated self-certification process. Given the historical transport of these low hazard fireworks since issuance of the guidance without any known or

anecdotal incidents in transportation, PHMSA believes adopting requirements for manufacturers to certify compliance and supply information to PHMSA in the portal imposes an undue burden without a corresponding safety benefit. Yet, PHMSA can still provide certainty for the exception. Therefore, the final rule only adopts the conditions and criteria for relief from transportation regulations for novelties into the HMR.

PHMSA notes that novelties will still be regulated for transportation by air.

PHMSA also received comment from APA stating that requiring a diagram for the self-certification of both ground devices and novelties be uploaded with the application is a redundant action. APA stated that these types of low hazard fireworks are well-known and well described in the 2018 APA 87-1A; therefore, the diagrams are not necessary. Though PHMSA generally agrees with APA's statement, a diagram of the device aids in determining compliance by providing useful information on the category of the device and quantity of pyrotechnic in the device. PHMSA's experience has generally shown that some applicants have submitted diagrams for categories of devices that are outside the scope of the approval. In lieu of the proposal to include diagram(s) for ground devices with the information submitted to self-certify the fireworks device, the final rule requires applicants to maintain a record demonstrating compliance, which may include information such as a drawing of the device. The record must be accessible at or through the principal place of business for five years after the device is manufactured and must be made available, upon request.

APA also stated its understanding is that PHMSA currently has a quality assurance (QA) process for reviewing applications certified by FCAs. APA urges PHMSA to have a "similar and consistent process" for the low hazard fireworks subject to the automated system. Without such a process, APA does not support the proposal for self-certification of select ground devices. PHMSA provides assurances to APA and the public that we have a quality assurance and quality control (QA/QC) process to monitor

low hazard fireworks self-certifications modeled after QA/QC process we have for the FCA program.

PHMSA also received comment in the form of several questions from American Promotional Events, Inc., and its subsidiaries (collectively known as TNT Fireworks)—an importer, distributor, and transporter of consumer fireworks and novelties in the U.S. TNT Fireworks requested clarification of the self-certification process for low hazard fireworks. PHMSA has paraphrased TNT Fireworks’ questions and provided responses as follows:

- *Can a U.S. designated agent certify an application for an FW Number on behalf of a non-U.S. manufacturer?*
 - A U.S. designated agent may submit the application on behalf of a non-U.S. manufacturer, but the application must be certified by the non-U.S. manufacturer. See *Federal Register* Notice 10-9⁹—Clarification of the Fireworks Approvals Policy. As noted at 76 FR 38056, “[w]hile firework classification approvals will only be issued to fireworks manufacturers, PHMSA will accept fireworks approval applications from the manufacturer’s U.S. designated agent on behalf of the manufacturer, as well as the manufacturer itself” and further at 76 FR 38057, “[i]t is the responsibility of the manufacturer to sign the application and certify that the device conforms.” Similarly, for self-certification of low hazard fireworks, U.S. agents may submit the application information on behalf of a non-U.S. manufacturer, but the manufacturer is required to certify. The automated system allows for a U.S. agent to submit an application and for the manufacturer to follow up on that same application to certify the firework.

⁹ 76 FR 38053 (Jun. 29, 2011).

- *What is the expected turnaround time for the issuance of an FW number upon the submission of an application? Would the FW number be issued automatically upon self-certification of a firework?*
 - As previously stated in the final rule, the self-certification process is an automated system. Manufacturers of information submitted for ground devices that meet the required criteria for the construction, formulation, and packaging immediately receive a certificate with the unique FW identifier number for each firework device. The expectation is that this process can take as little as five minutes from start to finish, especially where manufacturers already have an account with the PHMSA portal.
- *Will there be an alternative method to apply other than electronically through the PHMSA portal?*
 - The PHMSA portal will be the only method of application submittal with respect to explosives approvals applications. See the Section V.C. *Amending the Approvals Process* discussion of changes.
- *Can a U.S. agent of a non-U.S. manufacturer terminate an active EX approval and if so, are there safeguards to ensure that an EX approval is not inadvertently terminated?*
 - A U.S. agent may not terminate an EX approval. The request must be submitted separately by the manufacturer through the PHMSA portal for review and handling by PHMSA.

B. Authorizing the Self-Classification of Ammunition with Tracer Projectiles

Provided certain conditions are met, 49 CFR 173.56(h) authorizes self-classification of certain types of small arms cartridges into Division 1.4S. In particular, § 173.56(h)(3) authorizes ammunition with inert projectile or blank ammunition. Tracer projectiles use a small amount of pyrotechnic composition to provide visible light upon

exit from a firearm barrel. Tracer projectiles cannot be considered as an “inert” projectile due to the presence of the pyrotechnic composition.

However, the quantity of pyrotechnic composition on tracer projectiles is negligible compared to the quantities of pyrotechnic material contained within the cartridge itself. The presence of such small quantities of pyrotechnics neither increases the hazard as indicated when subject to a bonfire test, nor does its presence make unintentional initiation any more likely. The difference in hazard between inert projectile cartridges and the same cartridges with a small amount of pyrotechnic composition for tracer projectiles is negligible. Furthermore, there are no additional concerns related to tracer projectiles that justify exclusion from the self-classification provision of § 173.56(h)(3).

PHMSA received comment from SAAMI suggesting that the term “tracer projectiles” be used in place of the proposed parenthetical “(including tracer ammunition)” to clarify that the exception only authorizes self-classification when the tracer is on the projectile, which is a narrower scope of what might be included in the more general term “tracer ammunition.” Furthermore, SAAMI suggested a conforming revision to the packaging exceptions for limited quantities of small arms cartridges classed as Division 1.4S explosive materials in § 173.63(b) to also include a reference to tracer projectiles self-classed as Division 1.4S in accordance with § 173.56(h)(3). SAAMI believed the logic of the proposed addition of self-classification for tracer ammunition in the latter naturally coincides with the former limited quantity exceptions. SAAMI also made mention of use of the term “projectile” in the singular in § 173.56(h)(3) and in the plural in § 173.63(b); and suggested using the plural in both regulations. Here, PHMSA notes that, in accordance with 49 CFR 171.9–Rules of construction, unless context requires otherwise, words imparting the singular include

plural and vice versa. Regarding use of projectile or projectiles, context does not require otherwise.

PHMSA otherwise agrees with the suggestions offered by SAAMI. The conditions for self-classification in § 173.56(h)(3) are the same as the conditions for eligibility for packaging exceptions in § 173.63(b)(1)(ii)(B). Though not proposed, PHMSA views making the same change to § 173.63(b) to include tracer projectile(s) as ammunition eligible for exception from full regulation as a limited quantity material as a logical outgrowth of the proposal to allow tracer projectiles to be self-classified as Division 1.4S material. PHMSA also agrees with the subtlety of the scope change to refer to “tracer projectiles” instead of full cartridges. Therefore, PHMSA adopts the following changes:

- Revise § 173.56(h)(3) to include tracer projectiles; and
- Revise § 173.63(b)(1)(ii)(B) to include tracer projectiles. Note that PHMSA is also making an editorial change to § 173.63(b)(1)(ii). The list of materials that may be shipped as limited quantities includes an “and” conjunction following paragraph (b)(1)(ii)(E), but the “and” should instead follow paragraph (b)(1)(ii)(F) to complete the list with paragraph (b)(1)(ii)(G).

These revisions provide clarity that ammunition with tracer projectiles is eligible for self-classification as Division 1.4S and associated packaging exceptions. The changes maintain the current level of safety for transportation of small arms cartridges.

C. Process for Submitting Approval Applications

PHMSA currently provides several options for submitting applications for approvals, including by mail, e-mail, and fax and through the PHMSA portal, though this latter method is not codified as an option. The final rule amends 49 CFR 107.705 to include the PHMSA portal as a submittal option for all approvals. The final rule also establishes the PHMSA portal as the only method for submittal and acceptance of

explosives approval applications (including ground device self-certifications).

Transitioning to an all-electronic system will improve efficiency. Delays occur when PHMSA personnel must transcribe application information into the portal database due to incomplete data, inability to read handwritten materials, and so forth. Where missing data or uncertainties are discovered, PHMSA personnel must follow up with the applicant or otherwise reject an application, which causes further delays. Electronic submissions improve efficiency for the applicant on the front end (data entry) and for PHMSA on the back end (review and issuance of approval). The PHMSA portal provides online access to PHMSA services, creating a single source for all hazardous materials explosives applications and data. Persons need only to register to create an account, if not having done so already, to access the PHMSA portal. Moreover, an average of three million metric tons of explosives are consumed annually in the U.S., of which a significant portion goes to mining. Explosives are essential for energy production and the manufacture of metal and mineral products. Improved efficiency in processing means shorter turnaround times for approvals of explosives which supports the unleashing of American energy.¹⁰

PHMSA received comments from APA, AFSL, SAAMI, TNT Fireworks and UP, a U.S. designated agent for service for multiple international fireworks manufacturers. These commenters all requested that PHMSA maintain alternatives to the PHMSA portal for submission of explosives approval applications to provide applicants with additional flexibility. PHMSA acknowledges the commenters concerns but is committed to this electronic resource for explosives approval applications. PHMSA views any potential benefits from maintaining alternative submission methods as outweighed by the efficiency provided by a single process. Though PHMSA acknowledges there may be

¹⁰ 90 FR 8353 (Jan. 29, 2025).

unforeseen service interruptions with the PHMSA portal that may negatively impact the ability to submit applications, our expectation is that any service interruption will be short-lived. The use of the PHMSA portal as the only method of submittal for all explosives approvals will reduce the paperwork burden on applicants and PHMSA personnel. The overall net benefits include an estimated cost savings of 846 labor hours annually. See the RIA for a full discussion.

PHMSA notes that SAAMI inquired as to why the processing of approvals electronically is limited to include only energetic approvals at this time. PHMSA streamlined the fireworks approval process in this rulemaking and viewed it as an opportunity to further modernize our systems. PHMSA considered including other approvals. However, because this rulemaking is focused on energetic materials, PHMSA determined that additional public notice and comment should be provided before expanding the electronic process to other approvals. PHMSA anticipates addressing electronic-only approval submissions for other approval types in a separate, future rulemaking.

SAAMI commented that the use of an online portal will cause information security issues because § 173.56(b) will require the electronic submittal of information that may be potentially proprietary and security-sensitive. SAAMI stated that the PHMSA portal may suffer from cybersecurity vulnerabilities, and that its use may cause a stakeholder to be out of compliance with security regulations. Contractors serving the Federal Government and its agencies are required to protect certain categories of unclassified information provided by or for the U.S. Government, including the systems on which the data is stored. One of those categories, Controlled Unclassified Information (CUI), replaces legacy labels For Official Use Only (FOUO), Sensitive but Unclassified (SBU), and Law Enforcement Sensitive (LES). CUI is government-created or owned UNCLASSIFIED information that allows for, or requires, safeguarding and

dissemination controls in accordance with laws, regulations, or government-wide policies. It is sensitive information that does not meet the criteria for classification but must still be protected.

Furthermore, SAAMI stated that its members' most sensitive applications are classified as secret and above. As such they go through the Department of War (*i.e.* Department of Defense) examiners and process, as opposed to PHMSA. SAAMI stated that they occasionally have some applications that go through PHMSA that are sensitive but being "commercial" in nature they have a designation that is less than secret. SAAMI further stated that in the rare instances when they must submit a "sensitive" application, they use hand delivery or a commercial courier service. SAAMI is concerned that PHMSA seems to be prohibiting these delivery methods, and requests that PHMSA maintain the options for mail or hand delivery, which requires a solution beyond the current PHMSA portal or e-mail processes.

PHMSA acknowledges SAAMI's concerns and reiterates that the PHMSA portal system complies with relevant Federal information security laws, including the Computer Security Act of 1987 (40 U.S.C. § 1441 *et seq.*), the Clinger-Cohen Act of 1996 (40 U.S.C. § 11101 *et seq.*), and the Federal Information Security Management Act (FISMA) of 2002 (44 U.S.C. § 3541 *et seq.*). In addition, it meets Federal Government IT security requirements outlined in OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources, and adheres to National Institute of Standards and Technology (NIST) Guidelines. Furthermore, for safeguarding data within the PHMSA portal, the following measures are implemented:

- Data encryption is applied both in transit and at rest.
- Secure Socket Layer (SSL) connection is employed for portal connectivity, with regularly updated certificates.

- Weak ciphers are disabled to enhance security.
- Continuous application of patches and updates is carried out to mitigate vulnerabilities and ensure system integrity.

Overall, these measures help to ensure the confidentiality, integrity, and availability of data within the PHMSA portal, safeguarding it against unauthorized access, tampering, or interception. PHMSA will maintain as proposed the PHMSA portal as the only method of explosives approvals submissions. Nonetheless, PHMSA reminds submitters that its systems are not cleared to process controlled or classified information, and that submitters should contact PHMSA in advance if it determines that any information it intends to submit has been labeled as CUI or Classified by another government agency.

D. Voluntary Termination of Approvals

Finally, the final rule revises the approvals process to allow approval holders to request termination of approvals. The final rule also clarifies that when an approval holder voluntarily requests termination, PHMSA is not required to issue a letter providing them an opportunity to show cause why the approval should not be terminated. PHMSA received comment from APA and an individual asking for clarification on how existing products, including products placed in transportation before their approval is terminated, would be treated. For example, one of these commenters asked if an approval holder requests termination of its EX approval, but boxes of that product are in the transportation chain, would those boxes now contain unapproved explosives.

PHMSA clarifies that any product placed into transportation in commerce while the approval was valid will continue to be valid until it reaches its destination. This also applies to product shipped for disposal purposes.

VI. Section-by-Section Review

The following is a section-by-section review of the final rule amendments.

A. Part 107

Section 107.705

The requirements for submitting registrations, reports, and applications for approval are prescribed under 49 CFR 107.705. PHMSA revises paragraph (a)(1) to clearly specify that the PHMSA portal may be used to file all types of approval applications with PHMSA. Further, with respect to explosives approvals applications, PHMSA specifies the PHMSA portal as the required method for submittal of applications and removes options to submit those explosives applications via mail, e-mail, or fax for all explosives approvals.

Section 107.713

Section 107.713 prescribes procedures for the issuance, modification, and termination of approvals required by the HMR. PHMSA revises the introductory text to paragraph (c) to refer to new paragraph (e); and adds a new paragraph (e) to allow approval holders (of any type) to request termination of an approval voluntarily. PHMSA will then issue a termination letter, rather than a show cause letter. Hazardous materials offered into transportation or being transported in accordance with a valid approval prior to the approval's termination may continue to be transported to its destination without concern of being an unapproved shipment. However, where hazardous materials may need to be transported for disposal purposes after the termination of the approval, a temporary approval or special permit will need to be obtained should the hazardous material not otherwise be allowed for transport.

B. Part 171

Section 171.8

Section 171.8 provides definitions and abbreviations applicable to the HMR. PHMSA adds the new term "FW number" and defines it as a unique identifier number assigned by the Associate Administrator to a low hazard Division 1.4G consumer

firework device that has been certified in accordance with the provisions of §173.64.

Note that PHMSA has revised the proposed version of the definition of “FW number” to refer to the Associate Administrator instead of “PHMSA” and to define it as a unique identified number. PHMSA received no comment on the proposed definition and adopts as revised in this final rule.

C. Part 173

Section 173.56

Section 173.56 prescribes the procedures for classification and approval of new explosives. Small arms cartridges meeting the criteria in paragraph (h) may be self-classified as Division 1.4S by the manufacturer. PHMSA modifies § 173.56(h)(3) to provide clarity that tracer ammunition (*i.e.*, ammunition with tracer projectiles) is eligible for self-classification as a Division 1.4S material, provided the other criteria in paragraph (h) are met. This revision maintains the current level of safety for transportation of small arms cartridges while providing greater understanding to shippers of what types of small arms cartridges may be self-classified in accordance with paragraph (h).

Section 173.59

Section 173.59 provides informational descriptions of terms for explosives. PHMSA adds a separate term and description for “low hazard fireworks.” The addition of this description maintains the current level of safety with the HMR by ensuring proper understanding of the meaning of low hazard fireworks for purposes of the provisions adopted in this rulemaking.

Section 173.63

Section 173.63 provides exceptions from the general packaging requirements for certain explosives, including small arms cartridges that may be shipped as limited quantity material under specified conditions in paragraph (b). PHMSA revises paragraph (b) to include tracer ammunition (*i.e.*, ammunition with tracer projectiles)

consistent with the revision made to § 173.56(h) to allow classification of this material as Division 1.4S without obtaining an EX approval based on eligibility criteria. Paragraph (b) provides this same eligibility criteria to allow transport as a limited quantity material and, therefore, ammunition with tracer projectiles classed as Division 1.4S may also be transported as limited quantity material subject to specified conditions.

Section 173.64

Section 173.64 prescribes classification and approval exceptions from the standard explosives approval process for Division 1.3 and 1.4 fireworks. PHMSA revises § 173.64 to include further exceptions for low hazard (consumer) fireworks that qualify for self-certification by the manufacturer. Specifically, new paragraph (b) outlines construction and formulation criteria for self-certification of certain ground devices as Division 1.4 fireworks. Seventeen ground devices are eligible for self-certification and classification as Division 1.4G fireworks. In addition, new paragraph (b) outlines criteria for exception from regulation for certain novelties. Finally, paragraph (b) includes provisions for maintaining supporting documentation demonstrating compliance for the manufacture of ground devices. The supporting information includes the assigned FW number and may contain other pertinent information such as the category of device, drawing(s), chemical composition list, gram quantities, and, if applicable, the U.S. agent of service information. Except for transportation by air, seven novelties are eligible for exception from the HMR. PHMSA also makes editorial changes to paragraph (a) consistent with revision to paragraph (b), such as adding a title to paragraph (a) and clarifying further the reference to § 173.65 for certification of Division 1.4G consumer fireworks by an FCA. These revisions maintain the current level of safety for the transportation of fireworks by ensuring proper understanding of which ground devices and novelties may qualify for self-certification, exception EX approval requirements, and exception from requirements of the HMR.

VII. Regulatory Analyses and Notices

A. Legal Authority

This final rule is published under the authority of the Secretary of Transportation set forth in the Federal Hazardous Materials Transportation Laws (49 U.S.C. § 5101 *et seq.*) and delegated to the PHMSA Administrator pursuant to 49 CFR 1.97.

B. Executive Orders 12866; DOT Regulatory Policies and Procedures

Executive Order (E.O.) 12866 (*Regulatory Planning and Review*), as well as the Department's rulemaking procedures in 49 CFR part 5 and DOT Order 2100.6B (*Policies and Procedures for Rulemaking*),¹¹ require agencies to regulate in the "most cost-effective manner," to make a "reasoned determination that the benefits of the intended regulation justify its costs," and to develop regulations that "impose the least burden on society."¹² The Department, in 49 CFR part 5 and DOT Order 2100.6B, specifies that regulations should generally "not be issued unless their benefits are expected to exceed their costs." In arriving at those conclusions, E.O. 12866 requires that agencies should consider "both quantifiable measures . . . and qualitative measures of costs and benefits that are difficult to quantify" and "maximize net benefits . . . unless a statute requires another regulatory approach." Executive Order 12866 also requires that "agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating." The Department's regulatory procedures further direct that PHMSA and other DOT Operating Administrations must generally choose the "least costly regulatory alternative that achieves the relevant objectives" unless required by law or compelling safety need.

¹¹ See Department of Transportation, *Administrative Rulemaking, Guidance, and Enforcement Procedures*, 91 FR 22431 (Apr. 27, 2026).

¹² 58 FR 51735 (Oct. 4, 1993).

E.O. 12866 and the Department’s procedures also require that PHMSA submit “significant regulatory actions” to the Office of Information and Regulatory Affairs (OIRA) within the Executive Office of the President’s Office of Management and Budget (OMB) for review. This final rule is not a significant regulatory action pursuant to E.O. 12866 and has not designated this rule as a “major rule” as defined by the Congressional Review Act (5 U.S.C. § 801 *et seq.*). PHMSA has complied with the requirements in E.O. 12866 and the Department’s regulatory procedures in 49 CFR part 5 and DOT Order 2100.6B and determined this final rule will result in cost savings by introducing efficiencies into the explosives approval process and providing clarity on applicability of the hazardous materials regulations and programs.

C. Executive Orders 14192 and 14219

PHMSA has determined this final rule is an E.O. 14192 (*Unleashing Prosperity Through Deregulation*) deregulatory action.¹³ PHMSA has developed a detailed economic analysis in the RIA, a copy of which has been placed in the docket, and determined that the total costs of the rule on the regulated community will be less than zero. This final rule does not implicate any of the factors identified in section 2(a) of E.O. 14219 indicative of a regulation that is “unlawful . . . [or] that undermine[s] the national interest.”¹⁴

D. Energy-Related Executive Orders 13211, 14154, and 14156

PHMSA has analyzed this final rule in accordance with the principles and criteria contained in E.O. 14156 (*Declaring a National Energy Emergency*) and E.O. 14154 (*Unleashing American Energy*).¹⁵ The president has declared a national emergency to address America’s inadequate energy development production, transportation, refining,

¹³ 90 FR 9065 (Feb. 6, 2025).

¹⁴ 90 FR 10583 (Feb. 19, 2025).

¹⁵ 90 FR 8433 (Jan. 29, 2025); 90 FR 8353 (Jan. 29, 2025).

and generation capacity and asserted a Federal policy to unleash American energy by ensuring access to abundant supplies of reliable, affordable energy from inter alia, the removal of “undue burden[s]” on the identification, development, or use of domestic energy resources. PHMSA finds this final rule is consistent with each of E.O. 14156 and E.O. 14154.

In addition, this final rule is not a “significant energy action” under E.O. 13211 (*Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*),¹⁶ which requires Federal agencies to prepare a Statement of Energy Effects for any “significant energy action.” Because this final rule is not a significant action under E.O. 12866, it will not have a significant adverse effect on supply, distribution, or energy use; accordingly, OIRA has not designated this final rule as a significant energy action.

E. Executive Order 13132; Federalism

PHMSA analyzed this final rule in accordance with the principles and criteria contained in E.O. 13132 (*Federalism*) and the Presidential Memorandum (*Preemption*) published in the *Federal Register* on May 22, 2009.¹⁷ E.O. 13132 requires agencies to assure meaningful and timely input by State and local officials in the development of regulatory policies that may have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” The Federal Hazardous Materials Transportation laws contain an express preemption provision at 49 U.S.C. § 5125(b) that preempts State, local, and Tribal requirements on certain covered subjects, unless the non-Federal requirements are “substantively the same” as the Federal requirements, including the following:

- (1) The designation, description, and classification of hazardous material;

¹⁶ 66 FR 28355 (May 22, 2001).

¹⁷ 64 FR 43255 (Aug. 10, 1999); 74 FR 24693 (May 22, 2009).

(2) The packing, repacking, handling, labeling, marking, and placarding of hazardous material;

(3) The preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents;

(4) The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; and

(5) The design, manufacture, fabrication, inspection, marking, maintenance, recondition, repair, or testing of a packaging or container represented, marked, certified, or sold as qualified for use in transporting hazardous material in commerce.

Though this final rule may operate to preempt some State requirements, it will not impose any regulation that has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. The preemptive effect of the regulatory amendments in this final rule is limited to the minimum level necessary to achieve the objectives of the Federal Hazardous Materials Transportation Laws. Therefore, the consultation and funding requirements of E.O. 13132 do not apply.

F. Executive Order 13175

PHMSA analyzed this rulemaking in accordance with the principles and criteria contained in E.O. 13175 (*Consultation and Coordination with Indian Tribal Governments*) and DOT Order 5301.1A (*Department of Transportation Tribal Consultation Policy and Procedures*).¹⁸ E.O. 13175 requires agencies to assure meaningful and timely input from Tribal government representatives in developing rules that significantly or uniquely affect Tribal communities by imposing “substantial direct

¹⁸ 65 FR 67249 (Nov. 9, 2000).

compliance costs” or “substantial direct effects” on such communities, or the relationship and distribution of power between the Federal Government and Tribes.

PHMSA assessed the impact of the rulemaking and determined it would not significantly or uniquely affect Tribal communities or Indian Tribal governments. The rulemaking’s regulatory amendments have a broad, national scope. Therefore, this final rule will not significantly or uniquely affect Tribal communities, much less impose substantial compliance costs on Tribal governments, or mandate Tribal action. For these reasons, the funding and consultation requirements of Executive Order 13175 and DOT Order 5301.1A do not apply.

G. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. § 601 *et seq.*) requires Federal agencies to consider conducting a Final Regulatory Flexibility Analysis (FRFA) for a final rule that has been subject to notice-and-comment rulemaking under the APA unless the agency head certifies that the final rule will not have a significant economic impact on a substantial number of small entities. E.O. 13272 (*Proper Consideration of Small Entities in Agency Rulemaking*) obliges agencies to establish procedures and policies to promote compliance with the Regulatory Flexibility Act.¹⁹ DOT posts its implementing guidance on a dedicated webpage.²⁰

This final rule has been developed in accordance with E.O. 13272 and DOT’s procedures and policies to promote compliance with the Regulatory Flexibility Act. As explained above, this final rule will provide an annual net cost savings of approximately \$0.22 million because it facilitates the transportation of hazardous materials by streamlining the regulatory requirements for energetics manufacturers and shippers while

¹⁹ 67 FR 53461 (Aug. 16, 2002).

²⁰ DOT, *Rulemaking Requirements Related to Small Entities* (last accessed Sept. 3, 2024), available at <https://www.transportation.gov/regulations/rulemaking-requirements-concerning-small-entities>.

maintaining the current level of safety for transportation of these items. Specifically, it amends the classification and approval process of certain low hazard Class 1 explosive materials (*i.e.*, fireworks) and clarifies classification eligibility for ammunition with tracer projectiles. Finally, this rulemaking will require the use of the PHMSA portal, an online application, as the sole method to submit explosives approval applications, thereby reducing, for example, the fireworks application approval processing time from 28 days to several hours, and will allow voluntary termination of approvals.

Therefore, PHMSA certifies the final rule does not have a significant economic impact on a substantial number of small entities.

H. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. § 3501 *et seq.*) and its implementing regulations at 5 CFR 1320.8(d) require that PHMSA provide interested members of the public and affected agencies an opportunity to comment on information and recordkeeping requests.

PHMSA has analyzed this final rule in accordance with the Paperwork Reduction Act. PHMSA currently accounts for information collection and recordkeeping burdens under OMB Control Number 2137-0057 *Approvals for Hazardous Materials*. In this final rule, PHMSA revises 49 CFR 173.64 applicable to low hazard fireworks that may impact the burden accounted for in OMB Control Number 2137-0057. The addition in § 173.64 requires ground device firework manufacturers to provide information in association with pursuing self-certification as low hazard fireworks for purposes of transportation.

PHMSA determines the impact of these amendments to be negligible as the information is the same information currently required by the HMR under EX approval requirements but now are required as part of the automated self-certification process.

I. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (UMRA; 2 U.S.C. § 1501 *et seq.*) requires agencies to assess the effects of Federal regulatory actions on State, local, and Tribal governments, and the private sector. For any final rule that includes a Federal mandate that may result in the expenditure by State, local, or Tribal governments, or by the private sector, of \$100 million or more in 1996 dollars in any given year, the agency must prepare, amongst other things, a written statement that qualitatively and quantitatively assesses the costs and benefits of the Federal mandate.

As explained in the RIA, available for review in the docket, this final rule does not impose unfunded mandates under UMRA because it does not result in costs of \$100 million or more (in 1996 dollars) per year for either State, local, or Tribal governments, or to the private sector.

J. National Environmental Policy Act

PHMSA has analyzed this rule pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. § 4321 *et seq.*) and has determined it is excluded categorically under 23 CFR 771.117(c)(20), which applies to the promulgation of rules, regulations, and directives. Under Section 9 of DOT Order 5610.1D, PHMSA may apply a categorical exclusion (CE) established in another Operating Administration's procedures. PHMSA followed the requirements outlined in DOT Order 5610.1D to apply the Federal Highway Administration's CE to this deregulatory action. PHMSA does not anticipate any adverse environmental impacts from this rule, and PHMSA has determined no unusual circumstances are present under 23 CFR 771.117(b). PHMSA's Categorical Exclusion Determination memo for this action is available on PHMSA's website.²¹

²¹ DOT, PHMSA, *Implementing Procedures* (Aug. 28, 2025), available at <https://www.phmsa.dot.gov/planning-and-analytics/environmental-analysis-and-compliance/implementing-procedures>.

K. Privacy Act Statement

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at <https://www.dot.gov/privacy>. DOT's complete Privacy Act Statement is in the *Federal Register* on April 11, 2000, and is available for review on DOT's website at <https://www.dot.gov/privacy>.

L. Executive Order 13609 and International Trade Analysis

E.O. 13609 (*Promoting International Regulatory Cooperation*) requires that Federal agencies consider whether the impacts associated with significant variations between domestic and international regulatory approaches are unnecessary or may impair the ability of American business to export and compete internationally.²² In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

Similarly, the Trade Agreements Act of 1979 (Pub. L. No. 96-39), as amended by the Uruguay Round Agreements Act (Pub. L. No. 103-465), prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. For purposes of these requirements, Federal agencies may participate in the establishment of international standards, if the standards have a legitimate domestic objective, such as providing for

²² 77 FR 26413 (May 4, 2012).

safety, and do not operate to exclude imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

PHMSA engages with international standards setting bodies to protect the safety of the American public. PHMSA has assessed the effects of the final rule and has determined that its regulatory amendments will not cause unnecessary obstacles to foreign trade.

M. Severability

PHMSA finds that the various provisions of this final rule are severable and able to function independently if severed from each other. Thus, in the event a court were to invalidate one or more of this final rule's unique provisions, the remaining provisions should stand and continue in effect.

N. Cybersecurity and Executive Order 14082

E.O. 14082 (*Improving the Nation's Cybersecurity*) directed the Federal Government to improve its efforts to identify, deter, and respond to "persistent and increasingly sophisticated malicious cyber campaigns."²³ PHMSA has considered the effects of this final rule and has determined that its regulatory amendments materially would not affect the cybersecurity risk profile for affected entities.

List of Subjects

49 CFR Part 107

Administrative practice and procedure, Hazardous materials transportation, Packaging and containers, Penalties, Reporting and recordkeeping requirements.

49 CFR Part 171

²³ 86 FR 26633 (May 17, 2021).

Exports, Hazardous materials transportation, Hazardous waste, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

49 CFR Part 173

Hazardous materials transportation, Incorporation by reference, Packaging and containers, Radioactive materials, Reporting and recordkeeping requirements.

In consideration of the foregoing, PHMSA amends 49 CFR chapter I as follows:

PART 107—HAZARDOUS MATERIALS PROGRAM PROCEDURES

1. The authority citation for part 107 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 Section 4; Pub. L. 104–121 Sections 212–213; Pub. L. 104–134 Section 31001; Pub. L. 114–74 Section 701 (28 U.S.C. 2461 note); 49 CFR 1.81 and 1.97; 33 U.S.C. 1321.

2. In § 107.705, revise paragraph (a)(1) to read as follows:

§ 107.705 Registrations, reports, and applications for approval.

(a) * * *

(1) File using the following methods:

(i) *Submission methods.* Notwithstanding paragraph (a)(1)(ii) of this section, the registration, report, or application may be filed with the Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590-0001. Applications may be filed using the PHMSA portal at <https://portal.phmsa.dot.gov/> or, alternatively, may be filed with any attached supporting documentation in an appropriate format by fax at 202-366-3753 or 202-366-3308, or by e-mail at approvals@dot.gov.

(ii) *Explosive approval applications*. Filing of explosives approval and fireworks approval applications, as well as certifications of low hazard fireworks, must be submitted using the PHMSA portal <https://portal.phmsa.dot.gov/>.

* * * * *

3. In § 107.713, revise paragraph (c) introductory text and add paragraph (e) to read as follows:

§ 107.713 Approval modification, suspension or termination.

* * * * *

(c) Except as provided in paragraphs (d) and (e) of this section, before an approval is modified, suspended, or terminated, the Associate Administrator notifies the holder in writing of the proposed action and the reasons for it, and provides an opportunity to show cause why the proposed action should not be taken.

* * * * *

(e) The Associate Administrator may terminate an approval at the request of the approval holder based on the holder's determination that it is no longer needed. The approval holder must submit the request in writing to the Associate Administrator using the PHMSA portal at <https://portal.phmsa.dot.gov/>. The Associate Administrator will notify the approval holder of termination.

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

4. The authority citation for part 171 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; Pub. L. 101–410 section 4; Pub. L. 104–134, section 31001; Pub. L. 114–74 section 701 (28 U.S.C. 2461 note); 49 CFR 1.81 and 1.97.

5. In § 171.8, add a definition for “FW number” in alphabetical order to read as follows:

§ 171.8 Definitions and abbreviations.

* * * * *

FW number means a unique identifier number assigned by the Associate Administrator to a Division 1.4G consumer firework device certified in accordance with § 173.64(b) of this subchapter.

* * * * *

PART 173--SHIPPERS--GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

6. The authority citation for part 173 continues to read as follows:

Authority: 49 U.S.C. 5101–5128, 44701; 49 CFR 1.81, 1.96 and 1.97.

7. In § 173.56, revise paragraph (h)(3) to read as follows:

§ 173.56 New explosives—definition and procedures for classification and approval.

* * * * *

(h) * * *

(3) Ammunition with inert or tracer projectile, or blank ammunition; and

* * * * *

8. In § 173.59, add a description for “Low hazard fireworks” in alphabetical order to read as follows:

§ 173.59 Description of terms for explosives.

* * * * *

Low hazard fireworks. Pyrotechnic articles of certain chemical composition, design, and packaging that are not designed to leave ground level, contain no aerial components, present a Division 1.4G hazard during transportation, and comply with any limits and requirements found therein, as listed in § 173.64. Low hazard fireworks include ground and novelty devices.

* * * * *

9. In § 173.63, revise paragraph (b)(1)(ii) to read as follows:

§ 173.63 Packaging exceptions.

* * * * *

(b) * * *

(1) * * *

(ii) Cartridges, small arms, Cartridges, power device (*used to project fastening devices*), Cartridges for tools, blank, and Cases, cartridge empty with primer that may be shipped as a limited quantity are as follows:

(A) Ammunition for rifle, pistol or shotgun;

(B) Ammunition with inert or tracer projectiles, or blank ammunition;

(C) Ammunition having no tear gas, incendiary, or detonating explosive projectiles;

(D) Ammunition not exceeding 12.7 mm (50 caliber or 0.5 inch) for rifle or pistol, cartridges or 8 gauge for shotshells;

(E) Cartridges for tools, blank;

(F) Cases, cartridge, empty with primer; and

(G) Cartridges, power device (*used to project fastening devices*).

* * * * *

10. Revise § 173.64 to read as follows:

§ 173.64 Exceptions for Division 1.3 and 1.4 fireworks.

(a) *Classification and approval.* Notwithstanding the requirements of § 173.56(b), Division 1.3 and 1.4 fireworks (see § 173.65 for provisions applicable to Fireworks Certification Agencies) may be classed and approved by the Associate Administrator without prior examination and offered for transportation if the following conditions are met:

(1) Fireworks must be manufactured in accordance with the applicable requirements in APA 87-1A (IBR, see § 171.7 of this subchapter), APA 87-1B (IBR, see § 171.7 of this subchapter), and APA 87-1C (IBR, see § 171.7 of this subchapter).

(2) The fireworks must pass a thermal stability test conducted by a third-party laboratory or the manufacturer. The test must be performed by maintaining the device, or a representative prototype of a large device such as a display shell, at a temperature of 75°C (167°F) for 48 consecutive hours. When fireworks contain more than one component, those components that could be in physical contact with each other in the finished firework must be placed in contact with each other during the thermal stability test.

(3) The manufacturer applies in writing to the Associate Administrator following the applicable requirements in APA 87-1A (IBR, see § 171.7 of this subchapter), APA 87-1B (IBR, see § 171.7 of this subchapter), and APA 87-1C (IBR, see § 171.7 of this subchapter), and is notified in writing by the Associate Administrator that the fireworks have been classed, approved, and assigned an EX number. Each application must be complete and include all relevant background data and copies of all applicable drawings, test results, and any other pertinent information on each device for which approval is being requested. The manufacturer must sign the application and certify that the device for which approval is requested conforms to the appropriate APA standard; that the descriptions and technical information contained in the application are complete and accurate; and, with respect to APA 87-1A, that no duplicate application has been submitted to a Fireworks Certification Agency. If the application is denied, the manufacturer will be notified in writing of the reasons for the denial. The Associate Administrator may require that the fireworks be examined by an agency listed in § 173.56(b)(1).

(b) *Additional exceptions for low hazard Division 1.4 consumer fireworks.* Low hazard fireworks are pyrotechnic articles of certain chemical composition, design, and packaging such that they present a Division 1.4 explosive hazard during transportation. Low hazard ground device fireworks listed in table 1 to paragraph (b)(2)(v) of this section and meeting the specified conditions and limitations are eligible for self-classification, certification, and transport as UN0336, Fireworks, Division 1.4G. These low hazard fireworks may in some cases be alternatively classified as Division 1.4S when following the new explosives procedures in § 173.56. Low hazard fireworks are not required to go through the explosives approval requirements of § 173.56 or the DOT-approved Fireworks Certification Agency requirements of § 173.65; however, low hazard ground device fireworks must be certified by the manufacturer with the Associate Administrator and obtain an FW number. Furthermore, low hazard novelty fireworks listed in table 2 to paragraph (b)(3)(iv) of this section meeting the specified conditions and limitations are excepted from the requirements of this subchapter as a Class 1 explosive material.

(1) *General requirements.* No person may manufacture and offer for transport a low hazard firework not compliant with requirements of this paragraph (b). No person may accept for transport a low hazard firework not certified or excepted from this subchapter as specified in this paragraph (b). If the person certifying compliance with the Associate Administrator is not a resident of the United States, the person must designate an agent for service in accordance with § 105.40 of this chapter. In addition, low hazard fireworks:

(i) Must successfully pass a thermal stability test as specified in paragraph (a)(2) of this section; and

(ii) May not be transported as a component part for another firework or explosive.

(2) *Requirements specific to ground firework devices.* (i) Ground devices must use chemicals in conformance with the Permitted and Restricted Chemical Table for Consumer Fireworks and Novelties list in APA 87-1A, Appendix 1.

(ii) When permitted, all reports are limited to 50 mg of composition per report.

(iii) Ground devices must be initiated by a fuse. However, a fuse is not required for the following types: flitter sparklers, wire or dipped sparklers, fountain (nitrocellulose), and snakes (glow worms).

(iv) Ground devices must be marked with an FW number issued by the Associate Administrator. If the firework is too small for the marking, the outer package of the fireworks must be marked with the FW number.

(v) Authorized ground devices, and their descriptions, specifications, and special conditions for transport are set forth as follows:

Table 1 to Paragraph (b)(2)(v)—Authorized Ground Devices and Specifications

Type	Description	Specification	Special Conditions
Chaser	Consists of a paper or cardboard tube, which vents out its fuse hole.	20 grams total of chemical composition, with multiple reports permitted (each report limited to 50 milligrams).	None.
Crackling Ball	Consists of a spherical ball that contains small granules of chemical composition that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Crackling Strip	Consists of small granules of chemical composition adhered to and encased in a paper or cardboard wrapping that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Crackling Tube	Consists of a tube that contains small granules of chemical composition that upon ignition produce sparks and/or a crackling effect.	20 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 72 grams of composition.
Firecracker	Consists of a small paper-wrapped or cardboard tube that produces a single report.	50 milligrams of chemical composition per firecracker.	Multiple firecrackers can be fused together to form a string. There is no limit on number of firecrackers in a string.

Type	Description	Specification	Special Conditions
Flasher / Strobe	Consists of a small paper-wrapped or cardboard tube that produces a crackling/flashing/strobe light effect.	5 total grams of chemical composition, with no reports permitted.	Inner packaging cannot exceed 60 grams of composition.
Flitter Sparkler	Consists of a paper or cardboard tube attached to a stick or wire. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	25 total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to 4 grams with no more than 15 percent of the formulation being chlorates.	None.
Fountain (Cone)	Consists of a paper or cardboard tube that upon ignition produces a shower consisting of any combination of colored sparks, color flame, crackle, smoke, whistle, or micro star effects.	50 total grams of chemical composition, with no reports permitted.	None.
Fountain (Cylindrical)	Consists of a paper or cardboard tube that upon ignition produces a shower consisting of any combination of colored sparks, color flame, crackle, smoke, whistle, or micro star effects.	100 total grams of chemical composition, with no reports permitted.	None.
Fountain (Nitrocellulose)	Consists of a cone or tube device that produces a shower of small sparks, color, and flame as its primary effect using nitrocellulose as the major chemical component.	15 total grams of chemical composition, with no reports permitted.	None.
Ground Spinner	Consists of a paper or cardboard tube that upon ignition emits a shower of sparks that vent out of an orifice causing the device to spin rapidly on the ground.	20 total grams of chemical composition, with reports permitted (each report limited to 50 milligrams).	Multiple ground spinners can be fused together to form a string. Strings are limited to 20 grams of total composition.
Illuminating Torch	Consists of a paper or cardboard tube that upon ignition, emits a colored flame with or without crackles or sparks.	100 total grams of chemical composition, with no reports permitted.	None.
Smoke	Consists of a paper or cardboard tube that upon ignition emits smoke as the primary effect.	100 total grams of chemical composition. All mixtures containing a chlorate must contain an equal amount or greater amount of a carbonate or bicarbonate (e.g., calcium carbonate, sodium bicarbonate).	Multiple smoke devices can be fused together to form a string. Strings are limited to 100 grams of total composition.
Snake	Consists of pressed pellet of pyrotechnic composition that upon ignition produce a snake-like ash that expands in length as the composition is consumed.	20 total grams of chemical composition, with no reports. Only formulations of nitrated asphalt, asphaltum, bitumen, pitch, and/or tar with an oxidizer (with or without a binder) are permitted.	None.
Specialty Device	Consists of a paper or cardboard tube(s), e.g., in the shape of an animal or a small vehicle, that produces multiple effects.	20 total grams of chemical composition, with reports permitted (each report limited to 50 milligrams). No tube can contain more than 2 grams of composition; tubes cannot contain aerial components or internal shells	None.

Type	Description	Specification	Special Conditions
Wheel	Consists of a paper or cardboard tube(s) placed on the ground or attached to a post, by means of a nail, spike or string. Upon ignition the wheel rotates, producing a shower of sparks, color, crackling, flame, or whistle effects.	200 total grams of chemical composition, with no reports. No tube can contain more than 60 total grams of composition, which includes a 20 gram propellant limit per tube. Tubes cannot contain aerial components. Handles are not permitted.	None.
Wire Sparkler or Dipped Stick	Consists of a metal wire or wood dowel coated with a chemical composition. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	100 total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to 4 grams with no more than 15 percent of the formulations being chlorates.	Composition weight per inner packaging cannot exceed 120 grams.

(3) *Requirements specific to novelty firework devices.* Except for transportation by air, novelty fireworks conforming to the requirements of this paragraph (b)(3) are not subject to the requirements of this subchapter. For air transportation, novelty devices must be transported as required by this subchapter for “UN3178, Flammable solid, inorganic, n.o.s. (Novelties), 4.1, PG II.”

(i) Novelty devices must use chemicals in conformance with the Permitted and Restricted Chemical Table for Consumer Fireworks and Novelties in APA 87-1A, Appendix 1 (IBR, see § 171.7 of this subchapter).

(ii) Inner packagings of novelty devices must be packaged in strong outer packagings. The packages must conform to the requirements of § 173.24. The maximum gross weight of a completed package may not exceed 30 kg (66 pounds).

(iii) Each outer package, and overpack if used, containing novelty devices must be plainly marked “NOVELTIES, IN CONFORMANCE WITH § 173.64, NOT REGULATED, EXCEPT WHEN TRANSPORTED BY AIR”.

(iv) Authorized novelty devices, and their descriptions, specifications, and special conditions for transport are set forth as follows:

Table 2 to Paragraph (b)(3)(iv)—Authorized Novelty Devices and Specifications

Type	Description	Specifications	Special Conditions
Booby Trap/Pull Apart	Is a device that is actuated by means of friction. Pulling a string or strings apart activate the device producing a noise effect.	0.016 total grams of chemical composition, which is limited to barium, potassium, and/or sodium chlorate with red phosphorus.	Inner packages must not contain more than 12 devices.
Novelty Flitter Sparkler	Consists of a paper or cardboard tube attached to a stick or wire. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	5 total grams of chemical composition, with no reports permitted. Formulations containing chlorates are limited to 4 grams with no more than 15 percent of the formulation being chlorates.	
Party Poppers	Is a device that is actuated by means of friction. Pulling a string or trigger activates the device producing a noise effect and releasing paper streamers or confetti. Common examples resemble champagne bottles and toy pistols.	0.016 total grams of chemical composition, which is limited to barium, potassium, and/or sodium chlorate with red phosphorus.	Inner packages must not contain more than 72 devices.
Novelty Snakes and Glow-Worms	Consists of pressed pellet of pyrotechnic composition that upon ignition, produce a snake-like ash that expands in length as the composition is consumed.	2 total grams of chemical composition. Only formulations of nitrated asphalt, asphaltum, bitumen, pitch, and/or tar with an oxidizer (with or without a binder) are permitted.	Inner packaging must not contain more than 25 devices.
Snappers	Consists of small, paper-wrapped items. When dropped, the device activates, producing a noise effect.	0.001 total grams of silver fulminate coated on small bits of sand or gravel.	Inner packages must not contain more than 50 devices with sawdust or other impact absorbing materials
Novelty Wire Sparkler or Novelty Dipped Stick	Consists of a metal wire or wood dowel coated with a chemical composition. Upon ignition, the device produces a shower of sparks, a colored flame, and/or a crackling effect.	25 total grams of chemical composition, with no reports permitted. Formulations containing perchlorates are limited to 5 grams. Formulations containing chlorates are limited to 4 grams with no more than 15 percent of the formulations being chlorates.	Inner packages must not contain more than 8 devices.
Novelty Smoke Device	Consists of a paper or cardboard tube that upon ignition, emits smoke as the only effect.	5 total grams of chemical composition, with no reports permitted. All mixtures containing a chlorate must contain an equal amount or greater amount of a carbonate or bicarbonate (e.g., calcium carbonate, sodium bicarbonate).	Inner packages must not contain more than 72 devices.

(4) *Recordkeeping requirements.* The manufacturer of low hazard ground devices must maintain a record demonstrating compliance with this section. Each record must clearly provide the FW number assigned to the device certified. The record may contain information such as: category of device, drawing(s), chemical composition list, gram

quantities, and, if applicable, U.S. agent of service information. The record must be accessible at or through the principal place of business for five years after the device is manufactured and must be made available, upon request, to an authorized official of a Federal, State, or local government agency at a reasonable time and location, not to exceed five (5) business days.

Issued in Washington, D.C. on May 28, 2026 under authority delegated in 49 CFR 1.97.

Paul J. Roberti,
Administrator,
Pipeline and Hazardous Materials Safety Administration.

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