Billing Code: 4910-60-P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Part 173

[Docket No. PHMSA-2013-0205; Notice No. 13-14]

Clarification on Fireworks Policy Regarding Approvals or Certifications for Firework Series

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

ACTION: Clarification.

SUMMARY: This notice clarifies PHMSA's policy regarding applications for firework device series. PHMSA has required separate applications for each individual firework device. Often one firework device has identical hazardous properties to another firework device that is intended to produce a similar result in a firework display. These similar firework devices are considered part of a series of firework devices. In this document, we are clarifying our policy to accept certain fireworks series applications.

DATES: [insert date of publication in the Federal Register].

FOR FURTHER INFORMATION CONTACT: Mr. Ryan Paquet, Director, Approvals and Permits Division, Office of Hazardous Materials Safety, (202) 366-4512, PHMSA, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

I. Introduction

In this notice, PHMSA's Office of Hazardous Materials Safety (OHMS) is issuing its policy regarding firework device series applications, which details the categories of fireworks for

which PHMSA firework series applications may be permitted, and the criteria necessary to be considered a firework series. PHMSA believes that by issuing fireworks approvals or certifications to firework device series, the application backlog will be reduced, the current level of safety will be sustained, and firework series will reach the market faster.

II. Background

The transportation of fireworks in Division 1.3 or 1.4 requires a classification approval issued by PHMSA, commonly referred to as an EX number, or in the case of Division 1.4G consumer fireworks, a classification certification may be issued by a fireworks certification agency (FCA).[1] The EX or FC number is a unique identifier that indicates the device has been classed and authorized for transportation in the U.S., and is specific to a particular device as specified in 49 CFR 173.64 or 173.65, and the American Pyrotechnic Association (APA) Standard 87-1, Version 2001 (IBR, see 49 CFR 171.7).

Often manufacturers create one firework that has comparable hazardous properties and chemical compositions to another firework that is intended to produce a similar result in a firework display. These similar fireworks are considered part of a firework series. For example, five display shells are all eight inches in diameter and all contain the same pyrotechnic powder weight, but each display shell produces a different pattern. The hazardous properties of these fireworks are identical, but currently each firework must have a separate application. This

[1] Manufacturers of Division 1.4G consumer fireworks have the option of applying to a DOT-approved fireworks certification agency (FCA) instead of applying to PHMSA. The fireworks still must conform to the requirements in the APA Standard 87-1, and pass a thermal stability test. Instead of applying to PHMSA, the manufacturer may apply in writing to an FCA with the information required in APA Standard 87-1. After reviewing the application, the FCA will notify the manufacturer, in writing, if the fireworks have been classed, certified, and assigned an FC number, or if the application is denied (see 49 CFR 173.65).

current policy creates added paperwork for both the manufacturers and PHMSA, results in delays in processing applications, and consequently, creates delays in shipping the fireworks.

Following a review of the current policy, PHMSA is revising its policy with respect to firework series approval or certification applications. Specifically, PHMSA will accept firework series applications that comply with the basic requirements of the APA Standard 87-1, and the conditions specified in this policy.

III. Category of Devices Allowed in Series Applications

The categories of firework series applications will be limited to the following devices:

Cone Fountain	Roman Candle
Cylindrical Fountain	Sky Rocket/Bottle Rocket
Illuminating Torch	Toy Smoke Device
Mine and Shell	Wire Sparkler/Dipped Sparkler
Missile with Fin-type Rocket	Display Aerial Shell (Fireworks, UN0335, 1.3G)

IV. General Requirements

PHMSA will accept firework series applications that comply with the basic requirements of the APA Standard 87-1, Version 2001 (IBR, see 49 CFR 171.7) and for all series applications the following apply:

1) Series applications for PHMSA approval or FCA certification will be limited to one category of device and one hazard classification, e.g., Cone Fountain, Division 1.4G;
2) There are two types of series applications: "Effect Series" and "Dimensional Series." The combination of an "Effect Series" and a "Dimensional Series" is prohibited; and

3) The thermal stability test must be performed on all combinations of the components (chemical mixtures) used together in the device, or on each "Finished Product" covered under the application.

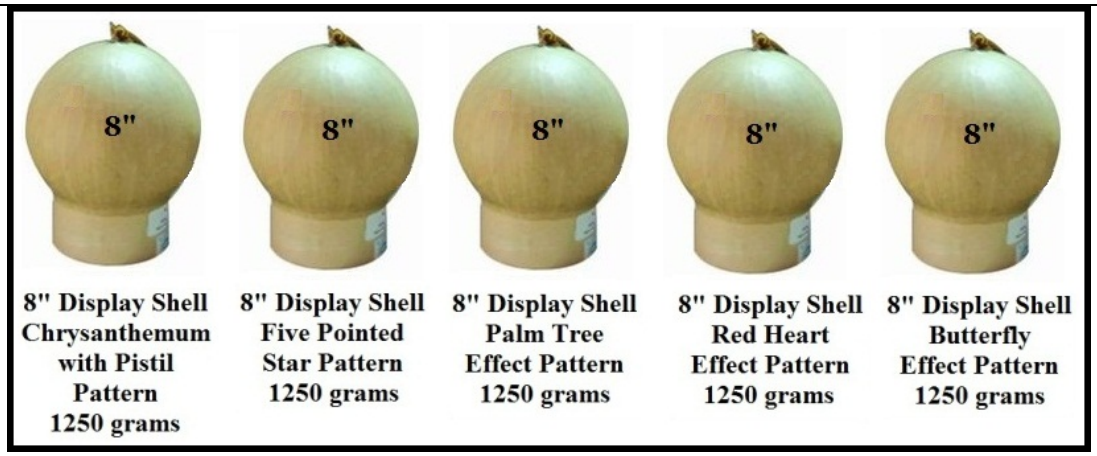

Figure 1 Effect" 8-inch Display Shell Series

V. Effect Series

For all effect series applications the following apply:

1) Devices must be the same size and have the same maximum pyrotechnic powder weight (Figure 1 – "Effect" 8-inch Display Shell Series).

2) Display shell diameter, tube diameter, the number of tubes in a device, and tube separation distances cannot change.

3) A series may cover an assortment of different combinations of effects and patterns. A pattern is the design created by the effects. (Examples: Figures 2 through 6).

				
Figure 2 Chrysanthemum Pistil Pattern	**Figure 3** Smiley Face Pattern	**Figure 4** Palm Tree Pattern	**Figure 5** Heart Pattern	**Figure 6** Butterfly Pattern

4) If devices contain single or multiple reports/salutes, the size, weight and number of reports/salutes must remain constant.

5) The application must provide the following:

    i) A detailed table for each device that indicates the breakdown of all pyrotechnic composition names and weights;

    ii) A list of all effect combinations used in the application; and

    iii) Diagrams of each device that identifies all components and dimensions.

VI. Dimensional Series

For all dimensional series applications the following apply:

1) Devices may increase in dimensional size and in total pyrotechnic composition weight. Change to the device size is limited to one of the following:

    i) Increasing the shell diameter (Example: Figure 7);

    ii) Increasing the tube diameter; or

    iii) Increasing the number of tubes in the device.

2) Effect(s) must remain constant throughout the series.

3) Tube separation distance must not change.

4) If devices in the series contain single or multiple reports/salutes, all of the devices must include reports/salutes. However, the size, weight, and number of reports/salutes may vary.

5) The application must provide the following:

   i) A detailed table of the different sizes that indicates the breakdown of all pyrotechnic composition names and weights; and

   ii) A diagram of the largest device in the series that details all components and dimensions.

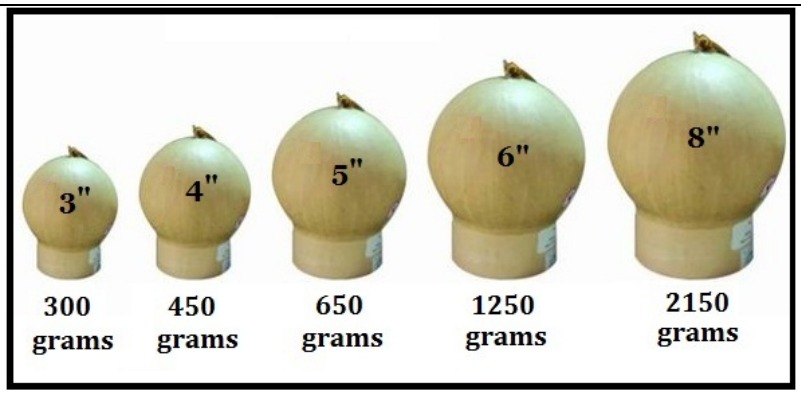

Figure 7 "Dimensional" Display Shell Series 3", 4", 5", 6", 8"

Issued in Washington, DC, under authority delegated in 49 CFR 1.97.

Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration

[FR Doc. 2013-24082 Filed 10/01/2013 at 8:45 am; Publication Date: 10/02/2013]