Public Input No. 32-NFPA 1123-2023 [Global Input]

Globally add “and pyrotechnic articles” wherever the defined term “fireworks” is used as appropriate to the context of the sentence.

Statement of Problem and Substantiation for Public Input

Pyrotechnic articles is a separate, defined term. Fireworks displays can consists of fireworks (Display fireworks and/or consumer fireworks) as well as pyrotechnic articles.

The use of pyrotechnic articles is increasing and there are many fireworks displays that now only use pyrotechnic articles.

Submitter Information Verification

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Submittal Date: Thu Jun 01 15:02:26 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 35-NFPA 1123-2023 [Global Input]

Correct the term “discharge area” in 8.1.9.2, 8.2.10.3.3 and 8.3.1.1 t to the defined term “discharge site”.

Statement of Problem and Substantiation for Public Input

Consistency.

The defined term “discharge site” has been in NFPA from the first edition, however over the years of revisions, the undefined term “discharge area” has crept into the document.

Submitter Information Verification

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Street Address:
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Submittal Date: Thu Jun 01 15:14:18 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: FR-4-NFPA 1123-2023
Statement: The term discharge site is defined and the revision changes discharge area to discharge site where it is relevant.

Public Input No. 37-NFPA 1123-2023 [Global Input]

Renumber existing 4.2.2 as needed and add a new 4.2.2

4.2.2 Storage of Fireworks and Pyrotechnic Articles at the Display Site

The storage of fireworks and pyrotechnic articles at the display site shall conform to the following:

4.2.2 (1) * The fireworks and pyrotechnic articles shall remain in the enclosed shipping cartons in the enclos structure at the display site until ready for inspection, sorting, preparation or loading.

(a) Any enclosed structure used for display site storage shall be substantially similar to an enclosed truck or t

(b) Any enclosed structure that has utilities (electrical, gas, telephone, etc.) shall have the utilities turned off

4.2.2 A.4.2.2 (1) Keeping the fireworks and pyrotechnic articles in the enclosed shipping cartons in an enclo from the elements as well as any potential sources of while also protecting them external sources of ignition.

4.2.2 (2) * Display site storage shall be located at or adjacent to the display site.

A.4.2.2 (2) Display site storage is not always the best option within the actual display site. A location that is security and maintain the proper distances.

4.2.2 (3) * Display site storage shall be attended by authorized personnel or meet the requirements of NFPA pyrotechnic are present.

A.4.2.2 (3) Typically, fireworks and pyrotechnic articles are delivered to the display site the day of the firew take days to prepare and set up so other means of security are required.

4.2.2 (4) *Display site storage with display fireworks shall be located at least 300 feet (91.4 m) from any pul hazardous materials, preparation area(s) and discharge site(s).

A.4.2.2 (4) Establishing safe distances from display site storage is essential. Generally, 300 feet (91.4 m) is s however the operator and AHJ may determine greater distances are required.

4.2.2 (5) * Display site storage with pyrotechnic articles or consumer fireworks shall be located at least 100 above ground bulk storage of hazardous materials, preparation area(s) and discharge site(s).

A.4.2.2 (5) Establishing safe distances from display site storage is essential. Generally, 100 feet (30.5 m) is s consumer fireworks, however the operator and AHJ may determine greater distances are required.

4.2.2 (6) * Removing, counting, inspecting, sorting, organizing and returning of enclosed shipping cartons o cartons and removal or replacement of individual fireworks or pyrotechnic articles, and the enclosing of ship storage.

A.4.2.2 (6) Limiting the activities to those that reduce the exposure of the fireworks or pyrotechnic articles t

4.2.2 (7) Under no circumstances shall the installation or removal of electric matches or fuses, the assembly holders or mortars or holders, or any repairs of fireworks or pyrotechnic articles shall be conducted inside or

A.4.2.2 (7) Prohibiting activities that increase the exposure of the fireworks or pyrotechnic articles to unintei

4.2.2 (8) * Only the quantity of fireworks or pyrotechnic articles that can be prepared or loaded at one time s

A.4.2.2 (8) Realistically, the operator and each assistant can only load or prepare a single carton of fireworks or pyrotechnic articles in one place at one time along with limiting the number of personnel increasing safety

4.2.2 (9) * The door(s) of the enclosed truck, trailer or structure of display site storage shall not open in the d closed at all times unless the operator or assistants are actively working inside.

A.4.2.2 (9) Limiting the direction the doors open and keeping the doors closed to display site storage reduce or pyrotechnic articles inside.

4.2.2 (10) Only authorized personnel shall be permitted inside display site storage whenever fireworks or py

4.2.2 (11) The number of persons inside display site storage shall be limited to no more than those required t

A.4.2.2 (11) Limiting the number of persons reduces the risks of unintended ignition inside display site stora an event occurs.

4.2.2 (12) Display site storage shall be kept clean and orderly whenever fireworks or pyrotechnic articles are

4.2.2 (13) Flammable liquids and gases and power equipment shall not be kept in display site storage whene

4.2.2 (14) Fireworks and pyrotechnic articles shall be handled carefully whenever being loaded or unloaded holders or mortars, or set up.

4.2.2 (14) Fireworks and pyrotechnic articles and shipping cartons containing fireworks and pyrotechnic arti

4.2.2 (15) Smoking, vaping or any source of open flame shall be kept at least 50 feet (15.3 m) from display s

4.2.2 (16) Personnel shall not carry on their person lighters, matches, smoking materials and vaping devices

Statement of Problem and Substantiation for Public Input

The standards proposed are the basics for the storage of any fireworks or pyrotechnic articles, no matter the location.

The storage of fireworks or pyrotechnic articles at a display site presents unique challenges because the display site is typically temporary and close to an area with public access. The fireworks or pyrotechnic articles are also actively being worked during the preparation and loading for the display.

These standards are needed due to the number and severity of incidents at display sites, The incidents with fatalities and sever injuries were often due to the fact that the fireworks stored at a display site were not segregated and protected, so an unintended ignition of a fireworks device while being prepared or loaded resulted in a tragedy.

Submitter Information Verification

Submitter Full Name: Charles Weeth
Organization: Weeth & Associates, LLC
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Submittal Date: Thu Jun 01 15:29:24 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: If fireworks are in storage at a display site then they fall under the jurisdiction of ATF or they are in transit and fall under DOT and requirements for a storage area at a display site are not needed in this code.

Public Input No. 34-NFPA 1123-2023 [Section No. 1.1.1]

1.1.1

This code shall apply to the following:

(1) Construction, handling, and use of fireworks and equipment intended for outdoor fireworks display

(2) Operation of the display *(See 3.3.16, Fireworks Display.)*

1.1.1 This code shall apply to the following:

(1) Construction, handling, and use of fireworks, pyrotechnic articles and equipment intended for outdoor fireworks display

Add the definition for Pyrotechnic Article from NFPA 1124 3.3.48 to NFPA 1123 3.3#

3.3.48 Pyrotechnic Article.

A pyrotechnic device, other than a device classed as fireworks, for use in the entertainment industry.

Statement of Problem and Substantiation for Public Input

Consistency and clarification.

Pyrotechnic Articles can be used in a fireworks display as well as a proximate performance.

Submitter Information Verification

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Submittal Date: Thu Jun 01 15:11:19 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 3-NFPA 1123-2023 [Section No. 3.3.9.1]

3.3.9.1 Fireworks Device ~~(Display)~~ .

Any fireworks device designed for use in a fireworks display.

Statement of Problem and Substantiation for Public Input

The word display makes this definition confusing as a consumer firework may also be used in a fireworks display.

Submitter Information Verification

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Submittal Date: Fri Apr 28 10:56:21 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 6-NFPA 1123-2023 [New Section after 3.3.11]

TITLE OF NEW CONTENT

The site radius shall be an open area for all debris that reaches the ground, which includes streamers, and shell casings, which do not have suuficient altitude to burn out. All debris shall not fall in wetlands or waterways.

Additional Proposed Changes

File Name	Description	Approved
NFPA1123Letter.doc	NFPA Letter	

Statement of Problem and Substantiation for Public Input

Wetlands and waterways should not have wicks and fuses, which can be non-biodegradable, landing within. This has been happening every year at this particular site and has not, and cannot, be cleaned up due to inaccessibility. The site radius (fallout area) shall be accessible and viewable in real-time.

Submitter Information Verification

Submitter Full Name: Alexander Kendzierski
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Submittal Date: Thu May 04 19:24:07 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The requirements for wildlife noise exposure are outside the scope of this technical committee. Local site conditions vary widely and it is impossible to write requirements for every scenario and it is up to the AHJ and the local permitting process to enforce applicable requirements for the display. Additionally several of these requirements are already covered in the code (5.1.4 and 5.1.5). The request to triple the audience separation distances is not substantiated as achieving the submitter's goal without imposing an unsustainable burden on the operator.

Public Input No. 33-NFPA 1123-2023 [Section No. 3.3.24.2]

3.3.24.2* Electric Match.

An electric device that contains a small amount of pyrotechnic material that ignites when current flows through the device.

Revise the existing definition and appendix 3.3.24.2 * Electric Match to Electric Match (Regulated}. An electric device that contains a small amount of pyrotechnic material that ignites when current flows through the device and is classified as a hazardous material (Explosive) by the DOT and regulated by the ATF.

A.3.3.24.2 Electric Match (Regulated)

Add after the first sentence: Electric matches that are classified for transportation purposes as IGNITERS, UN0325 1.4G or IGNITERS UN0454 1.4S are regulated by the ATF.

Add a new 3.3.24.# Electric Match (Non- Regulated) An electric device that contains a small amount of pyrotechnic material that ignites when current flows through the device and is not classified as a hazardous material (Explosive) by the DOT or regulated by the ATF.

Revise 10.1.1 to:

The operator of a fireworks display that uses display fireworks, pyrotechnic articles that exceed the weight limits of consumer fireworks or regulated igniters shall be at least 21 years old and licensed or approved by the AHJ in accordance with any and all applicable federal, state, and local laws.

Add a new 10.1.# The operator of a fireworks display that uses pyrotechnic articles that do not exceed the weight limits of consumer fireworks, consumer fireworks or non- regulated igniters shall be at least 18 years old and approved by the AHJ.

Add a new A.10.1.# The use of pyrotechnic articles that do not exceed the weight limits of consumer fireworks, consumer fireworks or non- regulated igniters by an operator is exempt from the ATF regulations, thus the 21 years old requirement is not applicable.

Statement of Problem and Substantiation for Public Input

There are now two (2) types of electric matches (Igniters) available on the market today: Electric matches that are classified as hazardous materials (Explosive) for transportation purposes and regulated by the ATF, and electric matches that are not classified as hazardous materials (Explosive) for transportation purposes and not regulated by the ATF.

There are also pyrotechnic articles that are not regulated by the ATF because they comply with the weight limits for consumer fireworks. The use of consumer fireworks are also not regulated by the ATF.

Many fireworks displays, especially for small community events, weddings, graduations, homecomings and the like, now use consumer fireworks and/or pyrotechnic articles that comply with the weight limits for consumer fireworks. Many of these smaller displays are now electrically fired using non-regulated electric matches as the source of ignition. Thus, an ATF license or permit is not required for these fireworks displays. The Operator is not required to be 21 years old to use non-regulated fireworks or igniters or be an ATF Responsible Person or Employee Possessor.

Some local AHJs continue to require an ATF license or permit for fireworks displays that do not use any regulated fireworks or igniters. They also require the Operator to be an ATF Responsible Person or Employee Possessor.

An 18–20-year-old should have the opportunity to demonstrate their qualifications and proficiency to an AHJ for approval of a local permit to conduct a fireworks display that contains non-regulated pyrotechnic articles, consumer fireworks and non-regulated igniters fireworks. The standards in the code remain applicable no matter the age of the operator or the classifications of the fireworks devices and igniters.

This clarification will assist Operators and AHJs better understand this particular issue and assist with the correct interpretation of the Federal regulations on a local level.

Submitter Information Verification

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Submittal Date: Thu Jun 01 15:05:07 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: Regardless what the ignition method is it is required that the lead operator is 21 years old under display qualifications (10.1.1) and under most jurisdictional requirements. Maintaining 2 definitions also requires that the AHJ enforces both definitions. Additionally the proposed defined terms are not used in the document.

Public Input No. 17-NFPA 1123-2023 [New Section after 3.3.32]

3.2.x* Pyrotechnic Professional

A person who has demonstrated proficiency and knowledge of NFPA 1123 and NFPA 1126 through documented training and experience in the use of fireworks, pyrotechnic special effects material, or professional use only products.

A.3.2.x

Knowledge and training may be met through any of the following methods (or combination thereof):

(1) A valid proximate pyrotechnics or commercial display operator's license issued by the authority having jurisdiction.

(2) Completion of a recognized education or training curriculum acceptable to the authority having jurisdiction.

(3) Prior experience or demonstrated skill and testing acceptable to the authority having jurisdiction.

3.2.x* Professional Use Only Product

Fireworks and pyrotechnic special effects materials other than those explicitly marked, designed, designated, or approved as consumer fireworks or novelty devices and intended for use by a pyrotechnic professional.

A.3.2.x

Professional use products include, but are not limited to, display fireworks, theatrical fuses, igniters, or binary materials.

Statement of Problem and Substantiation for Public Input

These terms are used in other proposed new sections. There is a need to recognize these professional use products.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 18-NFPA 1123-2023 [Chapter 4 [Title Only]]	Uses defined term
Public Input No. 19-NFPA 1123-2023 [Section No. 4.1.3]	Uses defined term

Submitter Information Verification

Submitter Full Name: William Koffel
Organization: Koffel Associates, Inc.
Affiliation: American Pyrotechnics Association
Street Address:
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Submittal Date: Tue May 30 11:03:09 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 4-NFPA 1123-2023 [New Section after 3.3.32]

TITLE OF NEW CONTENT

Type your content here ...Private gathering.

Any gathering of people except for those at a residential use and where only Consumer Fireworks, as defined in this chapter, are used.

Statement of Problem and Substantiation for Public Input

There is no current definition of private gathering.

Submitter Information Verification

Submitter Full Name: Joshua Lazarus
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Submittal Date: Fri Apr 28 11:08:31 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: Private gathering does not appear in the document and cannot be defined.

Public Input No. 18-NFPA 1123-2023 [Chapter 4 [Title Only]]

Requirements for Display Fireworks~~- Aerial Shells and~~ , Professional Use Only Products and Equipment

Statement of Problem and Substantiation for Public Input

With the addition of the proposed new paragraph 4.1.4, the proposed title more accurately reflects the content of the Chapter.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 17-NFPA 1123-2023 [New Section after 3.3.32]	

Submitter Information Verification

Submitter Full Name: William Koffel
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Submittal Date: Tue May 30 11:08:36 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 19-NFPA 1123-2023 [Section No. 4.1.3]

4.1.3* Labeling of Display Fireworks Aerial Shells, Mines, Comets, Candles and Cakes .

4.1.3.1* Label Information.

Each shell shall bear a label containing the following information:

(1) A description of the size of the shell

(2) A description of the type of shell

(3) A warning statement as shown in Figure 4.1.3.1

(4) The name and location of business of the manufacturer, importer, or distributor

Figure 4.1.3.1 Warning Statement.

WARNING: DANGEROUS EXPLOSIVE
IF FOUND, DO NOT HANDLE —
CONTACT LOCAL FIRE OR
POLICE DEPARTMENT.

4.1.3.2 Conspicuousness.

4.1.3.2.1

The statement “Warning: Dangerous Explosive” shall be printed in capital letters having a printed image of at least ⅛ in. (3.2 mm) and be underlined.

4.1.3.2.2

The remaining printed matter shall not be required to be printed in capital letters but shall have a printed image at least ⅛ in. (3.2 mm) high.

4.1.3.2.3

The required statements shall be printed in a color contrasting sharply with the background and shall be printed within a borderline.

4.1.3.2.4

The label shall be at least 9 in.^{2} (5810 mm^2), unless the size of the shell is too small, in which case the label shall be permitted to be reduced to a size no smaller than necessary.

4.1.4 Labeling of Professional Use Only Products

4.1.4.1 Each device shall meet the label requirements of 4.1.3

4.1.4.2 The label for each device shall also include the statement "For Professional Use Only."

Statement of Problem and Substantiation for Public Input

Professional use only products shall contain the additional language regarding for professional use only, which is a newly defined term.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 17-NFPA 1123-2023 [New Section after 3.3.32]	

Submitter Information Verification

Submitter Full Name: William Koffel
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Submittal Date: Tue May 30 11:10:45 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is recognized as an issue by the technical committee and a Task Group has been created to revise the code. See NFPA PYR minutes for further information on this task group. Revising the code to add professional use only products could result in unintended consequences, such as products being misclassified or an inappropriate application of labeling requirements

Public Input No. 39-NFPA 1123-2023 [New Section after 4.2]

Display Site Storage

Renumber existing 4.2.2 as needed and add a new 4.2.2 Display Site Storage

4.2.2 Display Site Storage

The storage of fireworks and pyrotechnic articles at the display site shall conform to the following:

4.2.2 (1) * The fireworks and pyrotechnic articles shall remain in the enclosed shipping cartons in the enclos structure at the display site until ready for inspection, sorting, preparation or loading.

(a) Any enclosed structure used for display site storage shall be substantially similar to an enclosed truck or t

(b) Any enclosed structure that has utilities (electrical, gas, telephone, etc.) shall have the utilities turned off

4.2.2 A.4.2.2 (1) Keeping the fireworks and pyrotechnic articles in the enclosed shipping cartons in an enclos from the elements as well as any potential sources of while also protecting them external sources of ignition.

4.2.2 (2) * Display site storage shall be located at or adjacent to the display site.

A.4.2.2 (2) Display site storage is not always the best option within the actual display site. A location that is security and maintain the proper distances.

4.2.2 (3) * Display site storage shall be attended by authorized personnel or meet the requirements of NFPA pyrotechnic are present.

A.4.2.2 (3) Typically, fireworks and pyrotechnic articles are delivered to the display site the day of the firew take days to prepare and set up so other means of security are required.

4.2.2 (4) *Display site storage with display fireworks shall be located at least 300 feet (91.4 m) from any pub hazardous materials, preparation area(s) and discharge site(s).

A.4.2.2 (4) Establishing safe distances from display site storage is essential. Generally, 300 feet (91.4 m) is s however the operator and AHJ may determine greater distances are required.

4.2.2 (5) * Display site storage with pyrotechnic articles or consumer fireworks shall be located at least 100 f above ground bulk storage of hazardous materials, preparation area(s) and discharge site(s).

A.4.2.2 (5) Establishing safe distances from display site storage is essential. Generally, 100 feet (30.5 m) is s consumer fireworks, however the operator and AHJ may determine greater distances are required.

4.2.2 (6) * Removing, counting, inspecting, sorting, organizing and returning of enclosed shipping cartons of cartons and removal or replacement of individual fireworks or pyrotechnic articles, and the enclosing of ship storage.

A.4.2.2 (6) Limiting the activities to those that reduce the exposure of the fireworks or pyrotechnic articles to

4.2.2 (7) Under no circumstances shall the installation or removal of electric matches or fuses, the assembly holders or mortars or holders, or any repairs of fireworks or pyrotechnic articles shall be conducted inside or

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4.2.2 (8) * Only the quantity of fireworks or pyrotechnic articles that can be prepared or loaded at one time s

A.4.2.2 (8) Realistically, the operator and each assistant can only load or prepare a single carton of fireworks or pyrotechnic articles in one place at one time along with limiting the number of personnel increasing safety

4.2.2 (9) * The door(s) of the enclosed truck, trailer or structure of display site storage shall not open in the d closed at all times unless the operator or assistants are actively working inside.

A.4.2.2 (9) Limiting the direction the doors open and keeping the doors closed to display site storage reduces or pyrotechnic articles inside.

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4.2.2 (14) Fireworks and pyrotechnic articles and shipping cartons containing fireworks and pyrotechnic arti

4.2.2 (15) Smoking, vaping or any source of open flame shall be kept at least 50 feet (15.3 m) from display s

4.2.2 (16) Personnel shall not carry on their person lighters, matches, smoking materials and vaping devices

Statement of Problem and Substantiation for Public Input

The standards proposed are the basics for the storage of any fireworks or pyrotechnic articles, no matter the location.

The storage of fireworks or pyrotechnic articles at a display site presents unique challenges because the display site is typically temporary and close to an area with public access. The fireworks or pyrotechnic articles are also actively being worked during the preparation and loading for the display.

These standards are needed due to the number and severity of incidents at display sites, The incidents with fatalities and sever injuries were often due to the fact that the fireworks stored at a display site were not segregated and protected, so an unintended ignition of a fireworks device while being prepared or loaded resulted in a tragedy.

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Submittal Date: Thu Jun 01 15:49:37 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: If fireworks are in storage at a display site then they fall under the jurisdiction of ATF or they are in transit and fall under DOT and requirements for a storage area at a display site are not needed in this code.

Public Input No. 36-NFPA 1123-2023 [Section No. 4.2.1]

4.2.1* General.

Any storage, handling, assembly, testing, or transportation of fireworks materials and devices intended for outdoor display prior to their delivery to the display site shall be in accordance with the following:

(1) NFPA 1124

(2) 18 USC 40, “Importation, Manufacture, Distribution and Storage of Explosive Materials,” and 27 CFR 555, “Commerce in Explosives,” Bureau of Alcohol, Tobacco, Firearms and Explosives

(3) 49 CFR 171–177, U.S. Department of Transportation

Revise 4.2.1 * as follows:

4.2.1 * Prior to and After the Fireworks Display.

Any storage, handling, assembly, testing, or transportation of fireworks and pyrotechnic articles prior to their delivery to the display site and their return to the supplier after the fireworks display to shall be in accordance with the following:

A.4.2.1 After a fireworks display, all excess fireworks or pyrotechnic articles, devices that are damaged or failed to fire, or duds should be transported and stored according to NFPA 1124 and applicable Federal regulations.

Statement of Problem and Substantiation for Public Input

Clarity and accuracy.

Fireworks is the defined term and all that is needed. Obviously, the fireworks are intended for a fireworks display if they are being delivered to a display site. And fireworks can be transported back from the display site to the supplier.

A fireworks display can also utilize pyrotechnic articles, not just fireworks (Consumer Fireworks or Display Fireworks).

Fireworks and pyrotechnic articles are not only delivered to the display site, but they can also be returned to the supplier after the display.

Submitter Information Verification

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Submittal Date: Thu Jun 01 15:27:05 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: This topic is outside the scope of the technical committee as it pertains to activity that happen prior to activity prior to the display.

Public Input No. 40-NFPA 1123-2023 [Section No. 4.2.2]

4.2.2 Preparation of Fireworks.

4.2.2.1

Shells shall be kept in their shipping cartons until they are prepared, loaded, or set up for display.

4.2.2.2*

Preparation area(s) for display fireworks shall be secured from public access by at least 100 ft (30 m).

4.2.2.3

Preparation area(s) shall have only authorized personnel in them at any time display fireworks are being prepared.

4.2.2.4*

All fireworks shall be handled carefully while being unloaded from the delivery vehicle, prepared, loaded, or set up.

4.2.2.5*

The assembly, minor repair, and installation of fuses and electric match, and similar activities shall be permitted to be performed in a preparation area and shall not be considered manufacturing.

4.2.2.6

All electric matches that are attached to display fireworks shall have a shroud protecting the match head.

4.2.2.7

Cutting of fuse, including quick match, shall be prohibited when an electric match is known to be present in the fuse or quick match being cut.

Define a new 3.3.# * Preparation Area. The area(s) at or adjacent to a display site where fireworks are prepared after delivery and prior to a fireworks display, or after a fireworks display and before transporting back to the supplier.

A.3.3.# Preparation Area. These are typically open areas away from the public and the display site storage. Fireworks are inspected, sorted, organized, minor repairs conducted as needed, electric matches installed, fuses attached, and fireworks packed back into shipping cartons for transportation back to the supplier.

Revise the existing 4.2.2 as follows:

4.2.2 Preparation Areas and the Preparation of Fireworks and Pyrotechnic Articles

4.2.2.1 * Preparation area(s) for display fireworks shall be secured from public access, display site storage, other preparation areas, discharge sites and above ground bulk storage of hazardous materials by at least 300 ft (91.4 m).

A.4.2.2.1 Establishing safe distances from preparation areas is essential. Generally, 300 feet (91.4 m) is sufficient for many fireworks displays with display fireworks, however the operator and AHJ may determine greater distances are required.

4.2.2.2 * Preparation area(s) for pyrotechnic articles and consumer fireworks shall be secured from public access, display site storage, other preparation areas, discharge sites and above ground bulk storage of hazardous materials by at least 100 ft (30.5 m).

A.4.2.2.2 Establishing safe distances from preparation areas is essential. Generally, 100 feet (30.5 m) is sufficient for many fireworks displays with pyrotechnic articles and consumer fireworks, however the operator and AHJ may determine greater distances are required.

4.2.2.3 Only authorized personnel shall be permitted in a preparation area when any fireworks or pyrotechnic articles are present.

4.2.2.4 * The assembly or repair of fireworks and pyrotechnic articles shall only be performed in designated preparation area(s).

A.4.2.3.4 Assembly typically consists of attaching lances and fuses to frames for ground setpieces, attaching gerbs and fuses to wheels, etc.Repairs generally consist of taping tears, reconnecting fuses, etc.

4.2.2.5 * Only the quantity of fireworks or pyrotechnic articles that can be prepared at one time shall be in a preparation area.

A.4.2.5 Realistically, the operator and each assistant can only load or prepare a single carton of fireworks or pyrotechnic articles at a time. Limiting the quantity of fireworks or pyrotechnic articles in one place at one time along with limiting the number of personnel increasing safety and most importantly survivability

A.4.2.3.6 * The number of persons inside a preparation area(s) shall be limited to no more than those required to carry out the activities required.

A. 4.2.3.6 Limiting the number of persons reduces the risks of unintended ignition inside a preparation area as well increasing the ability of the occupants to escape if such an event occurs.

4.2.3.7 Preparation areas shall be kept clean and orderly whenever fireworks or pyrotechnic articles are present.

4.2.3.8 Flammable liquids and gases and power equipment shall not be kept in preparation areas whenever fireworks or pyrotechnic articles are present.

4.2.3.9 Smoking, vaping or any source of open flame shall be kept at least 50 feet (15.3 m) from a preparation area.

4.2.3.10 * Tables or benches used for preparing fireworks or pyrotechnic articles in a preparation area shall be made of wood or covered with wood, cardboard or Kraft paper.

A.4.2.3.10 Tables or benches made of plastic can pose a potential issue with the buildup and discharge of static electricity.

4.2.3.11 * Only non-ferrous tools shall be permitted to be used to prepare fireworks or pyrotechnic articles.

A.4.2.3.11 Tools made of ferrous metals can pose a potential issue from impact or friction.

Renumber existing 4.2.2.5, 4.2.2.6 and 4.2.2.7 as needed.

Statement of Problem and Substantiation for Public Input

The current document uses the term “preparation area, but this is not defined. Additional standards are needed as well as clarification of some existing standards to improve safety.

The standards proposed are the basics for the preparation of any fireworks or pyrotechnic articles, no matter the location.

The preparation of fireworks or pyrotechnic articles at a display site presents unique challenges because the display site is typically temporary and close to an area with public access. The fireworks or pyrotechnic articles for the display are being stored nearby and often unprotected, which presents additional risks.

These standards are needed due to the number and severity of incidents at display sites, The incidents with fatalities and severe injuries were often due to the fact that there was an unintended ignition while the fireworks were being prepared, , resulting in a tragedy.

Submitter Information Verification

Submitter Full Name: Charles Weeth
Organization: Weeth & Associates, LLC
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jun 01 15:54:49 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The preparation area is redundant as it is already addressed by NFPA 1123 in section 4.2.3.4 and section 8.1.2.4. By adding these requirements it would constrain the firework crew by creating a preparation area which would require approval by the AHJ and could impede their work in previous areas deemed safe by the code. If direct incident data could be tied to specific proposed revisions that would be helpful as well.

Public Input No. 21-NFPA 1123-2023 [New Section after 5.1.1.2]

TITLE OF NEW CONTENT

The selection of the display site shall be in agreement with both the Local Animal Control Officer and the State Fish and Wildlife Official.

Statement of Problem and Substantiation for Public Input

The decibel level is dangerously high for both pets and wildlife, including federally protected nesting osprey, due to the proximity of the site display. The Local Animal Control Officer has objected to this particular site for years. Massachusetts State Fish and Wildlife has also voiced concerns. The recommended increase in separation distance per shell casing size (refer to input for Sections 5.1.5.1 and 5 1.4.6) in conjunction with approval from both Local Animal Control and State Fish and Wildlife Officials, the Compliance Officer and the AHJ, will insure adequate safety for both pets and wildlife.

Submitter Information Verification

Submitter Full Name: Alexander Kendzierski
Organization: Microtech Associates
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 30 18:37:27 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The requirements for wildlife noise exposure are outside the scope of this technical committee. Local site conditions vary widely and it is impossible to write requirements for every scenario and it is up to the AHJ and the local permitting process to enforce applicable requirements for the display. Additionally several of these requirements are already covered in the code (5.1.4 and 5.1.5). The request to triple the audience separation distances is not substantiated as achieving the submitter's goal without imposing an unsustainable burden on the operator.

Public Input No. 42-NFPA 1123-2023 [Section No. 5.1.3.1]

5.1.3.1

For aerial shells, the minimum required radius of the display site shall be 70 ft/in. (22 m/25 mm) of the internal mortar diameter of the largest aerial shell to be fired, as shown in Table 5.1.3.1.

Table 5.1.3.1 Distances for Outdoor Aerial Shell Display Sites: Minimum Separation Distances from Mortars to Spectators for Land or Water Displays

Mortar Size[a]		Minimum Secured Diameter of Site[b]		Vertical Mortars[c]		Angled Mortars[d] ⅓ Offset		Mortars to Special Hazards[e]	
in.	mm	ft	m	ft	m	ft	m	ft	m
≤1	25	150	46	75	23	75	23	150	46
1.5	38	210	64	105	32	75	23	210	64
2	50	280	85	140	43	95	29	280	85
2.5	63	350	107	175	54	115	35	350	107
3	76	420	128	210	64	140	43	420	128
4	102	560	171	280	85	190	58	560	171
5	127	700	213	350	107	230	70	700	213
6	152	840	256	420	128	280	85	840	256
7	178	980	299	490	149	320	98	980	299
8	203	1120	341	560	171	370	113	1120	341
10	254	1400	427	700	213	460	140	1400	427
12	305	1680	512	840	256	560	171	1680	512

[a]See 4.1.1. Note that the discharge of fireworks using mortars >12 in. (>305 mm) in size requires the approval of the AHJ.

[b]See 5.1.3.

[c]See 5.2.1.4.

[d]See 5.2.1.4. Note that for mortars angled away from the main spectator area, the minimum secured diameter of the display site does not change. Only the location of the mortars within the secured area changes when the mortars are angled away from the main spectator area.

[e]See 5.1.4. Note that this is only the distance to the special hazards. The minimum secured diameter of the display site does not change.

The minimum secured diameter is recommended to increase to threefold per shell casing size.

Statement of Problem and Substantiation for Public Input

Please refer to Public Input No. 23 - NFPA 1123-2023 [Section No. 5.1.5.1] and the attached files.

Submitter Information Verification

Submitter Full Name: Alexander Kendzierski
Organization: Microtech Associates
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jun 01 19:17:16 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The requirements for wildlife noise exposure are outside the scope of this technical committee. Local site conditions vary widely and it is impossible to write requirements for every scenario and it is up to the AHJ and the local permitting process to enforce applicable requirements for the display. Additionally several of these requirements are already covered in the code (5.1.4 and 5.1.5). The request to triple the audience separation distances is not substantiated as achieving the submitter's goal without imposing an unsustainable burden on the operator.

Public Input No. 41-NFPA 1123-2023 [Section No. 5.1.3.7]

~~**5.1.3.7** * – Flammable Liquid Fireball Effects.~~

~~**5.1.3.7.1** –~~

~~For effects using black powder or a black powder equivalent as a propellant and using gasoline/alcohols/or other flammable liquids for fireball effects, whether discharged from mortars or from other devices, the separation distances provided in Table 5.1.3.7.1 shall apply.~~

~~Table 5.1.3.7.1 Distances for Flammable Effects: Minimum Separation Distances from Mortars to Spectators for Land or Water Displays~~

~~Device Capacity in Gallons Audience Separation Distance ≤5 75 5.01–25 150 25–50 200 50–100 250 100–200 300 200–400 350 >400 600~~

~~**5.1.3.7.2** –~~

~~When multiple devices are clustered together with distances of less than 10 ft between the individual effect devices to create a single fireball effect, the aggregate capacity of those devices shall be taken to determine the separation distance for the combined effects.~~

~~**5.1.3.7.3** –~~

~~When multiple devices are lined up for a wall of fire effect and where each device is separated by a minimum of 10 times the inside diameter of the individual device, the audience separation distance shall be determined by the individual capacity of each device.~~

~~**5.1.3.7.4** –~~

~~When prevailing winds are oriented toward the audience, a 50% increase in audience separation distance shall be required.~~

Statement of Problem and Substantiation for Public Input

First, Table 5.1.3.7.1 has no unit of measurement (feet, yards, meters) and thus is meaningless. This is a serious flaw and does not meet the requirements for inclusion in an NFPA/ANSI Code.

Second, no data has been provided that these distances, whatever the unit of measurement, are sufficient to provide for spectator, operator and assistant safety. There are no distances to overhead objects, fireworks or pyrotechnic articles, combustibles, above ground bulk storage of hazardous materials or combustibles.

Whatever the values are, they drop significantly per gallon as the quantity of flammable liquid fuel increases and then flatline at 400 gallons.

What little data is available, such as the Oregon Fire Code Technical Advisory No. 19-01 (Revised TA# 14-10, 11-12, 09-01) of February 7, 2019 (See https://www.oregon.gov/osp/Docs/TA19-01.pdf) indicates if the unit of measurement is in feet, these may not be sufficient.

However, based on experience, the distances in 19-01 are likely more than needed for safety for gasoline mines and especially methanol mines (ghost mines).

Third, different flammable liquid fuels behave and function in different ways. Methanol is not the same as gasoline, and neither methanol or gasoline are the same as kerosene or diesel fuel. These differences need to be detailed.

Fourth, Flammable Liquid Fireball Effects is not defined and no specification for the fuels, how they are stored, loaded or protected from the weather and ignition sources have been provided.

Fifth, there are no standards in NFPA 1123 that are applicable to Flammable Liquid Fireball Effects, including:

- quantities of fuel and propellant (gallons of gasoline total, gallons of gasoline per flame effect, quantity of black powder total, quantity of black powder in each lift charge, quantity of water, % of volume in the mortar, etc.)
- specification and configurations of mortars (sizes, types, placement methods, distances between mortars, distances to overhead objects, distances to fireworks, distances to structures, etc.)
- conditions (temperatures, dew point, wind speed, wind direction, elevation)
- method and timing of loading
- method of ignition
- method(s) of protection from falling embers and any other Flame Effects
- fire prevention measures
- fire protection measures
- personal protective equipment (PPE) for the support personnel
- other considerations or variables

Until and unless comprehensive and detailed definitions and standards in the proper form for an NFPA/ANSI Code are developed by the proponents for consideration, this standard should be deleted.

The proponents and other interested parties are encouraged to provide data and additional input in order to develop the detailed definitions and standards required to utilize fireball mines safely.

Submitter Information Verification

Submitter Full Name: Charles Weeth
Organization: Weeth & Associates, LLC
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jun 01 16:03:11 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: FR-1-NFPA 1123-2023
Statement: Metric equivalents have been added and overlapping values have been corrected. Additionally the unit for separation distance has been added.

Public Input No. 2-NFPA 1123-2023 [Section No. 5.1.3.7.1]

5.1.3.7.1

For effects using black powder or a black powder equivalent as a propellant and using gasoline/alcohols/or other flammable liquids for fireball effects, whether discharged from mortars or from other devices, the separation distances provided in Table 5.1.3.7.1 shall apply.

Table 5.1.3.7.1 Distances for Flammable Effects: Minimum Separation Distances from Mortars to Spectators for Land or Water Displays

Device Capacity in Gallons	Audience Separation Distance
≤5	75
5.01–25	150
25–50	200
50–100	250
100–200	300
200–400	350
>400	600

Additional Proposed Changes

File Name	Description	Approved
Table_V_Flammable_Liquid_Fireball_Effects_2_15_22.docx	This version of the table address the issue of what happens when an exact gallonage is used. It also adds the corresponding metric equivalents.	

Statement of Problem and Substantiation for Public Input

The current table does not properly address the separation distances between the gallon levels, for example what is my distance if I use 25 gallons of fuel? It also adds the corresponding metric equivalents.

Submitter Information Verification

Submitter Full Name: Joshua Lazarus
Organization: J Lazarus Consulting & Trainin
Street Address:
City:
State:
Zip:
Submittal Date: Fri Apr 28 10:49:55 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: FR-1-NFPA 1123-2023

Statement: Metric equivalents have been added and overlapping values have been corrected. Additionally the unit for separation distance has been added.

Public Input No. 22-NFPA 1123-2023 [Section No. 5.1.4.6]

5.1.4.6

Dwellings, buildings, and structures shall be permitted to be located within the display site with the approval of the AHJ and the owner of the dwelling, building, or structure, provided that the dwelling, building, or structure is unoccupied during the display, or if the structure provides protection for the occupants through noncombustible or fire-resistant construction.

Debris shall not be allowed to fall on private property, including both homes and land, without the consent.of the owner.

Statement of Problem and Substantiation for Public Input

Hot streamers have been frequently making direct ground contact in private woods and on rooftops (on two occasions), unbeknownst in real-time to authorities This is a direct result from shells not attaining sufficient altitude to burn out and insufficient separation distance. The color of the streamers upon surface contact directly indicates a high enough temperature with sufficient quantized energy to initiate combustion with the proper conditions. It is for this reason and the associated decibel level at this separation distance (currently specified per shell casing size) that it is strongly recommended to increase the setback (separation) distances per shell casing size to a threefold separation distance from that already specified. This would provide for the added safety needed for homes, woods, pets, livestock and wildlife.
Please refer to attached files in Section 5.1.5.1, Public Input No. 5. for additional information.

Submitter Information Verification

Submitter Full Name: Alexander Kendzierski
Organization: Microtech Associates
Street Address:
City:
State:
Zip:
Submittal Date: Wed May 31 18:31:57 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The requirements for wildlife noise exposure are outside the scope of this technical committee. Local site conditions vary widely and it is impossible to write requirements for every scenario and it is up to the AHJ and the local permitting process to enforce applicable requirements for the display. Additionally several of these requirements are already covered in the code (5.1.4 and 5.1.5). The request to triple the audience separation distances is not substantiated as achieving the submitter's goal without imposing an unsustainable burden on the operator.

Public Input No. 23-NFPA 1123-2023 [Section No. 5.1.5.1]

5.1.5.1*

The fallout area shall be an open area. The fallout area (which is the site radius per shell casing size) shall be an open area for all debris that reaches the ground, which includes shell casings and streamers that do not attain sufficient altitude to burn out.

Additional Proposed Changes

File Name	Description	Approved
NFPA1123Letter.doc	NFPA Letter for Code 1123	
NFPA_1123_Code_Amendments_2023.doc	NFPA Code 1123 Amendments	

Statement of Problem and Substantiation for Public Input

Please refer to the two attached files for detailed information.
There have been code misinterpretations in this regard. This would implicitly clarify this problem and provide for the necessary safety.

In regard to numerous incidents and code misinterpretations and input from scientists, engineers, neighbors and animal control officers, the following amendments are recommended for the safety, welfare and respect of people, pets, wildlife and private property in the selection of local fireworks display sites.
The site is recommended to be in compliance with both the Local Animal Control Officer and the State Fish and Wildlife Official in conjunction with the Compliance Officer and the AHJ, where all four parties must in mutual agreement as to the display site.
Implicitly state (in reference to sections 5.1.5.1, A5.1.5.1, 3.3.11 and A3.3.11) that the site radius shall be an open area for all debris that reaches the ground, which includes streamers, and shell casings, that do not have sufficient altitude to burn out.
The fallout area should be viewable and accessible in real-time. This is currently not the case at this location. Authorities cannot see and are unaware of the fallout, especially hot streamers, falling on private property, including both woods and homes. Setback distances are recommended to be increased to threefold from that stipulated per shell casing size. This would provide for the adequate and necessary additional safety.
Debris shall not be permitted to fall on private property, including land, without the consent of the owner. (In reference to section 5.1.4.6)
Debris shall not fall in wetlands or waterways.
Setback distances from dense woods, waterways and wildlife habitats are recommended to be increased to threefold that stipulated per shell casing size. (In reference to section 5.1.3.1) This would insure a safe sound intensity level for pets and wildlife, as determined by the inverse distance law.

Please pardon any redundancies and overlap in the public inputs.
Thank you much.

Submitter Information Verification

Submitter Full Name: Alexander Kendzierski
Organization: Microtech Associates
Street Address:
City:
State:

Zip:
Submittal Date: Wed May 31 18:44:19 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: The requirements for wildlife noise exposure are outside the scope of this technical committee. Local site conditions vary widely and it is impossible to write requirements for every scenario and it is up to the AHJ and the local permitting process to enforce applicable requirements for the display. Additionally several of these requirements are already covered in the code (5.1.4 and 5.1.5). The request to triple the audience separation distances is not substantiated as achieving the submitter's goal without imposing an unsustainable burden on the operator.

Public Input No. 26-NFPA 1123-2023 [Section No. 5.1.6]

5.1.6 General Fire Protection.

5.1.6.1 Portable Fire-Fighting Equipment.

5.1.6.1.1

Four or more fire extinguishers of the classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

5.1.6.1.2

The following portable fire extinguishers shall be provided and installed on extinguisher stands where fireworks displays are planned for public or private audiences :

1. Two pressurized water extinguishers each with a minimum rating of 2-A
2. Two extinguishers, each with a minimum rating of 3-A:40-B:C, or two extinguishers appropriate to the fireworks display being planned.

5.1.6.1.3

The extinguishers required by 5.1.6.1.2 shall be strategically located so that at least one of each type of extinguisher is on the opposing sides of where the fireworks display will take place.

5.1.6.1.4

Personnel who have a working knowledge of the use of the applicable fire extinguishers shall be present while the pyrotechnics are being handled, used, or removed.

5.1.6.2

Additional fire-extinguishing equipment shall be provided as required by the authority having jurisdiction.

5.1.7

Fire protection and other emergency response personnel and their vehicles shall remain at or beyond the perimeter of the display site during the actual firing of the display.

Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority. Original subsection 1.5.6 was renumbered accordingly with no modification made to original text.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 27-NFPA 1123-2023 [New Section after 6.8.2]	
Public Input No. 28-NFPA 1123-2023 [New Section after 7.7.2]	
Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1]	
Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]	

Submitter Information Verification

Submitter Full Name: Marvin Garriss

Organization: Synergy Consortium Group, LLC

Affiliation: Georgia Fire Prevention Association (IFMA-Chapter GA #35) and the Fire Equipment Manufacturers' Association (FEMA)

Street Address:

City:

State:

Zip:

Submittal Date: Thu Jun 01 13:28:17 EDT 2023

Committee: PYR-AAA

Committee Statement

Resolution: These requirements are redundant to those already found in section 8.1.1 and could require more or less fire protection. Each outdoor display site is different and requires different types of fire protection compared to indoor displays where stages are relatively the same.

Public Input No. 24-NFPA 1123-2023 [New Section after 6.3.2.3]

6.3.2.4* Temporary Structures and Barriers

Temporary structures and barriers other than the shelter required by Section 6.2.3 shall not be placed or constructed on or near a barge or floating platform used for the display of fireworks.

A.6.3.2.4

These requirements are not intended to restrict gunwales and other features of a barge or floating platform designed into the vessel as a primary containment, fall protection measure such as railings and walls for the transportation of bulk materials, strengthening reinforcement measures, or attachment and securement features.

Newly created regulations and permit conditions that attempt to secure fireworks debris at the firing site from falling into surrounding water have resulted in requirements for temporary structures and barriers that are placed or constructed on or near a barge or floating platform to contain that debris. Such temporary features on the restricted deck of a barge may greatly inhibit the safe and prompt egress from and access to the barge or floating platform. This may occur at any time that the crew is present on the barge, including set up and strike. This can delay or prevent the crew from escaping and emergency personnel from accessing the barge or floating platform in the event of an emergency.

The temporary nature of such features also implies that they are not tested, engineered or certified for use in such circumstances. They could be displaced and either interfere directly with the launching site, crew, or fall into the water and become a different hazard to personnel and navigation.

Access is also necessary for the crews of controlling vessels and other authorized vessels and personnel. Examples include tug crews to secure lines and other vessel operations as well as AHJ and USCG personnel inspecting the vessel for compliance with safety regulations and permitting conditions.

Temporary structures and barriers may interfere with overboard activities or procedures and the ability to monitor for, see, and quickly recover personnel who are overboard voluntarily or otherwise.

Temporary structures and barriers placed near a barge of floating platform additionally present a hazard to navigation, as vessels and personnel attempt to access or depart from the site. Such temporary structures and barriers may also require placement or control measures that would affect these safety concerns.

Statement of Problem and Substantiation for Public Input

Recent court cases involving citizen lawsuits against both the hosts of fireworks displays conducted over water and against agencies regulating water related activities have led to the regulation of water-based fireworks displays by agencies that are not familiar with fireworks or personnel safety. These attempts to regulate fireworks operations may be well-intentioned but are leading to requirements that do not appropriately address personnel safety and fireworks safety to the public and emergency personnel.

These agencies and organizations in their zeal to create responsive requirements are not always receptive to input from AHJs, fireworks companies, crews, barge and tug companies, or the hosts of the fireworks events. Current NFPA code may be difficult for a non-fireworks agency or group to place grasp and place in context where they have not actually participated in such activities.

These provisions and annex material are intended to inform and specify standards and limitations for the operation of water-based fireworks displays to protect the safety of AHJs, first responders, safety personnel, crews, and the public from uninformed, imposed requirements that are unsafe from the standpoint of fireworks operations. These standards may be referenced when creating and enforcing regulations and permit conditions and requirements that affect the safe practices familiar to the industry but unfamiliar to non-fireworks agencies and organizations.

Submitter Information Verification

Submitter Full Name: William Koffel
Organization: Koffel Associates, Inc.
Affiliation: American Pyrotechnics Association
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jun 01 07:30:22 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: FR-2-NFPA 1123-2023

Statement: These requirements are not intended to restrict gunwales and other features of a barge or floating platform designed into the vessel as a primary containment, fall protection measure such as railings and walls for the transportation of bulk materials, strengthening reinforcement measures, or attachment and securement features.

Temporary structures and barriers that are placed or constructed on or near a barge or floating platform to contain debris can greatly inhibit the safe and prompt egress from and access to the barge or floating platform. This can occur at any time that the crew is present on the barge, including set up and strike. This can delay or prevent the crew from escaping and emergency personnel from accessing the barge or floating platform in the event of an emergency.

Access is also necessary for the crews of controlling vessels and other authorized vessels and personnel. Examples include tug crews to secure lines and other vessel operations as well as AHJ and USCG personnel inspecting the vessel for compliance with safety regulations and permitting conditions.

Public Input No. 25-NFPA 1123-2023 [New Section after 6.4.8]

6.4.9*

Fireworks crew members on barges and floating platforms and other safety-related personnel or vessels shall not be assigned duties that distract from or interfere with the safe setup, firing, clearing, striking of the display and the continuous monitoring and vigilance to the potential hazards that may occur during a fireworks display.

A.6.4.9

The primary duties of the fireworks crew and crews on other safety-related vessels are safety. Duties that are not safety related, such as placing or operating cameras or recording systems distract from those primary duties and should not be permitted. This requirement is not intended to restrict common crew and vessel support functions.

6.4.10*

Non-essential floating platforms and devices, aircraft, and vessels, including both surface and underwater vessels, whether manned or unmanned, shall not be permitted above, in, or under the safety zone from one hour before the scheduled time of the display until one hour after the display.

A.6.4.10

Water based fireworks shows attract the interest of many people and organizations. In their enthusiasm to become a part of the activity, they may attempt to position or require the positioning of various devices, vehicles or vessels that may interfere with the safe operation of the displays. Examples include camera supports, collection devices, aircraft, drones, blimps, surface and subsurface vessels, and floating platforms.

Statement of Problem and Substantiation for Public Input

Recent court cases involving citizen lawsuits against both the hosts of fireworks displays conducted over water and against agencies regulating water related activities have led to the regulation of water-based fireworks displays by agencies that are not familiar with fireworks or personnel safety. These attempts to regulate fireworks operations may be well-intentioned but are leading to requirements that do not appropriately address personnel safety and fireworks safety to the public and emergency personnel.

These agencies and organizations in their zeal to create responsive requirements are not always receptive to input from AHJs, fireworks companies, crews, barge and tug companies, or the hosts of the fireworks events. Current NFPA code may be difficult for a non-fireworks agency or group to place grasp and place in context where they have not actually participated in such activities.

These provisions and annex material are intended to inform and specify standards and limitations for the operation of water-based fireworks displays to protect the safety of AHJs, first responders, safety personnel, crews, and the public from uninformed, imposed requirements that are unsafe from the standpoint of fireworks operations. These standards may be referenced when creating and enforcing regulations and permit conditions and requirements that affect the safe practices familiar to the industry but unfamiliar to non-fireworks agencies and organizations.

Submitter Information Verification

Submitter Full Name: William Koffel

Organization: Koffel Associates, Inc.
Affiliation: American Pyrotechnics Association
Street Address:
City:
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Zip:
Submittal Date: Thu Jun 01 07:35:15 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: FR-3-NFPA 1123-2023
Statement: The operator of the display is the only one who can assign other duties to the display crew.

Public Input No. 27-NFPA 1123-2023 [New Section after 6.8.2]

TITLE OF NEW CONTENT

6.9 Portable Fire-Fighting Equipment.

6.9.1

Four or more fire extinguishers of the classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

6.9.2

The following portable fire extinguishers shall be provided and installed on extinguisher stands where fireworks displays are planned for public or private audiences :

1. Two pressurized water extinguishers each with a minimum rating of 2-A
2. Two extinguishers, each with a minimum rating of 3-A:40-B:C, or two extinguishers appropriate to the fireworks display being planned.

6.9.3

The extinguishers required by 6.9.2 shall be strategically located so that at least one of each type of extinguisher is on the opposing sides of where the fireworks display will take place.

6.9.4

Personnel who have a working knowledge of the use of the applicable fire extinguishers shall be present while the pyrotechnics are being handled, used, or removed.

6.9.5

Additional fire-extinguishing equipment shall be provided as required by the authority having jurisdiction.

Type your content here ...

Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards specifically for floating vessels and floating platforms. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority.

Related Public Inputs for This Document

Related Input	Relationship

Public Input No. 26-NFPA 1123-2023 [Section No. 5.1.6] Public Input No. 28-NFPA 1123-2023 [New Section after 7.7.2] Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1] Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]	Similar requirements from a general to specific for floating vessels and floating platforms

Submitter Information Verification

Submitter Full Name:	Marvin Garriss
Organization:	Synergy Consortium Group, LLC
Affiliation:	Georgia Fire Prevention Association (IFMA-Chapter GA #35) and the Fire Equipment Manufacturers' Association (FEMA)
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Submittal Date:	Thu Jun 01 14:15:35 EDT 2023
Committee:	PYR-AAA

Committee Statement

Resolution: These requirements are redundant to those already found in section 8.1.1 and could require more or less fire protection. Each outdoor display site is different and requires different types of fire protection compared to indoor displays where stages are relatively the same.

Public Input No. 28-NFPA 1123-2023 [New Section after 7.7.2]

7.8 Portable Fire-Fighting Equipment.

7.8.1

Four or more fire extinguishers of the classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

7.8.2

The following portable fire extinguishers shall be provided and installed on extinguisher stands where fireworks displays are planned for public or private audiences :

1. Two pressurized water extinguishers each with a minimum rating of 2-A
2. Two extinguishers, each with a minimum rating of 3-A:40-B:C, or two extinguishers appropriate to the fireworks display being planned.

7.8.3

The extinguishers required by 7.8.2 shall be strategically located so that at least one of each type of extinguisher is on the opposing sides of where the fireworks display will take place.

7.8.4

Personnel who have a working knowledge of the use of the applicable fire extinguishers shall be present while the pyrotechnics are being handled, used, or removed.

7.8.5

Additional fire-extinguishing equipment shall be provided as required by the authority having jurisdiction.

Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards specifically as it relates to rooftops and other structures with limited egress locations. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 26-NFPA 1123-2023 [Section No. 5.1.6]	Similar requirements from a general to specific for rooftops, other structures, and other limited egress locations.
Public Input No. 27-NFPA 1123-2023 [New Section after	Similar requirements from floating vessels and floating platforms to specific for rooftops, other structures, and other

6.8.2]	limited egress locations.
Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1]	
Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]	

Submitter Information Verification

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Submittal Date:	Thu Jun 01 14:22:42 EDT 2023
Committee:	PYR-AAA

Committee Statement

Resolution: These requirements are redundant to those already found in section 8.1.1 and could require more or less fire protection. Each outdoor display site is different and requires different types of fire protection compared to indoor displays where stages are relatively the same.

Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1]

8.1.1*

The sponsor shall consult with the AHJ, the local responding fire department (if different from the AHJ), and the operator to determine the level of fire protection required in addition to that required by this section .

Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards providing for specific requirements for the operation of the fireworks display. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 26-NFPA 1123-2023 [Section No. 5.1.6]	Similar requirements from a general to specific for for the operation of the fireworks display.
Public Input No. 27-NFPA 1123-2023 [New Section after 6.8.2]	Similar requirements from floating vessels and floating platforms to specific for the operation of the fireworks display.
Public Input No. 28-NFPA 1123-2023 [New Section after 7.7.2]	Similar requirements from rooftops, other structures, and other limited egress locations to specific requirements for the operation of the fireworks display.
Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]	
Public Input No. 31-NFPA 1123-2023 [Section No. A.8.1.1]	

Submitter Information Verification

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Submittal Date: Thu Jun 01 14:30:24 EDT 2023
Committee: PYR-AAA

Committee Statement

Resolution: These requirements are redundant to those already found in section 8.1.1 and could require more or less fire protection. Each outdoor display site is different and requires different types of fire protection compared to indoor displays where stages are relatively the same.

Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]

8.1.10 General Fire Protection.

8.1.10.1 Portable Fire-Fighting Equipment.

8.1.10.1.1

Four or more fire extinguishers of the classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

8.1.10.1.2

The following portable fire extinguishers shall be provided and installed on extinguisher stands where fireworks displays are planned for public or private audiences :

1. Two pressurized water extinguishers each with a minimum rating of 2-A
2. Two extinguishers, each with a minimum rating of 3-A:40-B:C, or two extinguishers appropriate to the fireworks display being planned.

8.1.10.1.3

The extinguishers required by 8.1.10.1.2 shall be strategically located so that at least one of each type of extinguisher is on the opposing sides of where the fireworks display will take place.

8.1.10.1.4

Personnel who have a working knowledge of the use of the applicable fire extinguishers shall be present while the pyrotechnics are being handled, used, or removed.

8.1.10.2

Additional fire-extinguishing equipment shall be provided as required by the authority having jurisdiction.

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Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards providing for specific requirements for the operation of the fireworks display. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority.

Related Public Inputs for This Document

Related Input	Relationship

Public Input No. 26-NFPA 1123-2023 [Section No. 5.1.6]	Similar requirements from a general to specific for the operation of the fireworks display.
Public Input No. 27-NFPA 1123-2023 [New Section after 6.8.2]	Similar requirements from floating vessels and floating platforms to specific requirements for the operation of the fireworks display.
Public Input No. 28-NFPA 1123-2023 [New Section after 7.7.2]	Similar requirements from rooftops, other structures, and other limited egress locations to specific requirements for the operation of the fireworks display.
Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1]	Adds the specific requirements from the specified reference in 8.1.1 for the operation of the fireworks display.
Public Input No. 31-NFPA 1123-2023 [Section No. A.8.1.1]	

Submitter Information Verification

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Submittal Date:	Thu Jun 01 14:39:53 EDT 2023
Committee:	PYR-AAA

Committee Statement

Resolution: These requirements are redundant to those already found in section 8.1.1 and could require more or less fire protection. Each outdoor display site is different and requires different types of fire protection compared to indoor displays where stages are relatively the same.

Public Input No. 1-NFPA 1123-2022 [Section No. A.4.6.4]

~~A.4.6.4~~ —

~~The materials used in rack construction vary widely in the industry. There is no single material or construction method that is uniquely acceptable for fireworks display racks. This performance-based requirement addresses the concern about mortar rack construction and provides direction in order to ensure operator and audience safety during fireworks displays.~~

~~Many accidents characterized as rack-related accidents might actually be related to violations of current code such as mortar stabilization, shell type, or chain fusing. Mortar rack construction might be neither a cause of these accidents nor a means by which such accidents might be best prevented in the future.~~

~~Examples of the employed systems and methods related to the use of racks include the following:~~

(1) ~~How racks are secured and stabilized~~

(2) ~~Use of additional containment and/or framework construction~~

(3) ~~Types of shells utilized~~

(4) ~~Placement in the field~~

(5) ~~Use of natural barriers and/or berms~~

(6) ~~Use of other barriers (e.g., metal dumpsters)~~

(7) ~~Audience location~~

(8) ~~Use of other, smaller caliber shell mortar racks to surround and contain the larger 5 in. and 6 in. (127 mm to 152 mm) shell mortars~~

(9) ~~Chain fusing~~

(10) ~~Use of additional separation distances as prescribed by code related to the use of chain fusing~~

(11) ~~Consideration for mortar rack construction and the materials used for construction~~

Statement of Problem and Substantiation for Public Input

This appears to be a duplicated of A.4.5.7

Submitter Information Verification

Submitter Full Name: Chad Beebe
Organization: Ashe - Aha
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Submittal Date: Fri May 13 16:50:30 EDT 2022
Committee: PYR-AAA

Committee Statement

Resolution: FR-6-NFPA 1123-2023

Statement: The revision changes the annex to be more specific to chain fusing rather than mortar construction.

Public Input No. 31-NFPA 1123-2023 [Section No. A.8.1.1]

A.8.1.1

The AHJ should be consulted well enough in advance so that the required fire protection can be arranged. Fire ~~protection could include~~ protection includes portable fire extinguishers for the discharge area and could include standby fire apparatus for protection down range.

Statement of Problem and Substantiation for Public Input

As a former State Fire Marshal for Georgia, in reviewing the various NFPA Standards NFPA 160 Standard for the Use of Flame Effects Before an Audience, 2021 edition, NFPA 1123, Code for Fireworks Display, 2022 edition and NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2021 edition, it appears the NFPA 1123 Code has not addressed the need for general fire protection as well as the other two standards providing for specific requirements for the operation of the fireworks display. This proposal addresses the gaps in the current edition of the code. Portable fire extinguishers are the first line of defense. Although it is understood that attempting to extinguish pyrotechnic fires is not recommended. Portable fire extinguishers are assured to be readily available for fight potential secondary fires and will now be codified for the Authority Having Jurisdiction to be on each side of the pyrotechnics display to provide for a minimum level of safety while the pyrotechnics are being loaded, prepared for firing, or fired. The placing of this requirement makes the jurisdictional authority easier as a minimum level of portable fire-fighting equipment is required and no longer a potential argumentative judgement call by the authority. This modification to the ANNEX A now matches the required mandatory portable fire extinguishers specified elsewhere in Chapter 8 under the new proposed language of 8.1.10 under PI-30-NFPA 1123-2023.

Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 29-NFPA 1123-2023 [Section No. 8.1.1]	ANNEX A Language to 8.1.1 and related to the specific requirements for the operation of the fireworks display specified in 8.1.10
Public Input No. 30-NFPA 1123-2023 [New Section after 8.1.9.2]	Similar requirements from a general to specific requirements for the operation of the fireworks display.

Submitter Information Verification

Submitter Full Name:	Marvin Garriss
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Submittal Date:	Thu Jun 01 14:51:37 EDT 2023
Committee:	PYR-AAA

Committee Statement

Resolution: The changes to the annex make it seem like fire extinguishers are required which is not the intent of the committee.