Minnesota Department of Public Safety State Fire Marshal Division

Public Display Fireworks Operator Guidelines



June 2011

Contents

| INTRODUCTION | 4 |
|--|----|
| PART A: PERMITS | 4 |
| Exception | 4 |
| Exception | 5 |
| PERMIT PROCEDURE | 5 |
| Application Timeframe | 5 |
| Restrictions on Sponsors | |
| Application Form | |
| Permit and Inspection Fees | 6 |
| City Clerk/County Auditor Responsibilities | 7 |
| Fire Chief/County Sheriff Responsibilities | |
| PART B: GENERAL SAFETY REQUIREMENTS FOR FIREWORKS DISPLAYS | 8 |
| Exception | 8 |
| Operator Responsibilities | 8 |
| On-site Fireworks Storage | 9 |
| Sponsor Responsibilities | 9 |
| OUTDOOR DISPLAYS | 10 |
| Location of Mortars | |
| Location of Ground Pieces | 10 |
| Discharge / Display Site | 11 |
| Designated Landing/Fallout Area | |
| Smoking and Open Flames | |
| Illumination | |
| Supervision of Fireworks | |
| Ready Boxes | |
| HDPE Mortars | |
| Display Discontinued | |
| Range Inspection | |
| INDOOR / PROXIMATE AUDIENCE DISPLAYS | |
| Demonstration and Approval | |
| Fire Watch | |
| Separation Distances | |
| Display Discontinued | |
| | |
| Smoke Control | |
| Attending of Materials | |
| Precautions Precautions | |
| Notice to Patrons | |
| PART C: REPORTING REQUIREMENTS | |
| Report to State Fire Marshal | |
| Early Reporting | |
| Documenting Assistants | |
| Failure with Report | |
| PART D: PYROTECHNIC OPERATOR CERTIFICATION REQUIREMENTS | |
| CERTIFICATION | |
| Age | |
| | |

| Application Form | 15 |
|--|----------------|
| Reciprocity | 15 |
| Evidence of Experience | |
| References | 16 |
| Fee | 16 |
| Notification | 16 |
| Classification | 16 |
| Length of Certification | 16 |
| CERTIFICATION RENEWAL | 16 |
| Application Form | 16 |
| Evidence of Experience | 16 |
| Fee | 17 |
| Notification | 17 |
| Refusal to Renew Certification | 17 |
| Classification | 17 |
| Restrictions | 17 |
| Length of Certification | 17 |
| SUSPENSION OR REVOCATION | 17 |
| Operator Restrictions | 18 |
| Surrender of Certificate | 18 |
| Length of Suspension | 18 |
| Length of Revocation | 18 |
| PART E: FEDERAL REQUIRMENTS | 18 |
| Definition of Display Fireworks | 18 |
| Minnesota Statutes 624.20-624.25 Relating to Fireworks | 19 |
| 624.20 Fireworks | 19 |
| 624.21 Sale, possession, and use of fireworks prohibited | 19 |
| 624.22 Fireworks displays; permit; operator certification | |
| 624.221 Exemptions for license or permit holder | 22 |
| 624.23 Construction of sections 624.20 to 624.25 | 23 |
| 624.24 Officers may seize illegal fireworks. | 23 |
| 624.25 Violation. | 23 |
| ATTACHMENTS | 24 |
| Sample Application / Permit Display of Fireworks / Pyrotechnic Special Effects | 24 |
| Minnesota State Fire Marshal Application for Permit Display of Indoor Fireworks / Pyrote | echnic Special |
| Effects | 24 |
| Fireworks Operator Certification Application | |
| Minnesota Department of Revenue License Applicant Information Form | |
| Fireworks Operator Display Report | 24 |
| American Pyrotechnics Association Proximate Pyrotechnics Checklist | |

MINNESOTA STATE FIRE MARSHAL PUBLIC DISPLAY FIREWORKS OPERATOR GUIDELINES Revised 06/11

INTRODUCTION

Minnesota state law requires that public fireworks displays be conducted only when supervised by a pyrotechnic operator (supervising operator) certified by the Minnesota State Fire Marshal. The purpose of these guidelines is to familiarize municipal and county officials, organizations wishing to sponsor a fireworks display, and pyrotechnic operators with state permit and operator certification requirements. The guidelines also describe the responsibilities of the sponsoring organization and the supervising operator, and outlines the minimum fire and life safety requirements applicable to fireworks displays.

The information contained in this guideline is based on the provisions of Minn. Stat. § 624.20 - 624.25, the 2007 Minnesota State Fire Code, and National Fire Protection Association Standards 1123 (2006 edition) and 1126 (2006 edition).

A copy of Minnesota Statutes § 624.20 - 624.25 is included as part of these guidelines. The 2007 Minnesota State Fire Code is available from the Minnesota State Bookstore at (651) 297-3000. National Fire Protection Association (NFPA) standards are available from the NFPA at 1-800-344-3555.

Persons with questions relating to fireworks permit or certification requirements should contact the Minnesota State Fire Marshal Division by phone at 651-201-7200, or by mail at:

Minnesota State Fire Marshal Division Fireworks Operator Certification Program 444 Cedar Street, Suite 145 St. Paul, MN 55101-5145

Questions may also be submitted by email to firecode@state.mn.us. Fireworks information is posted on the State Fire Marshal Division Web site at www.fire.state.mn.us.

PART A: PERMITS

Fireworks displays may be sponsored by a city, fair association, amusement park or other public or private organization only after obtaining a permit prior to conducting a display. Permits are issued to the display sponsor.

State law prohibits private individuals, including a certified fireworks operator acting as an individual, from sponsoring fireworks displays however, a fireworks display company may sponsor displays for private parties.

All fireworks displays must be conducted under the direct supervision of a public display fireworks operator certified by the Minnesota State Fire Marshal. Fire departments are **not** exempt from this requirement.

Exception

Cities and counties are allowed, but not required, to exempt displays involving the use of smoke pots, flash pots and theatrical flash powder for ceremonial, theatrical and musical productions from the requirement for a permit. However, such displays are required to be

conducted in a safe manner in accordance with all applicable codes and standards. Contact local authorities to determine if this exemption applies.

Outdoor Displays Within a Municipality

When a fireworks display is to be conducted within the corporate limits of a municipality, a permit must be secured from the city clerk of that municipality. Before issuing the permit the city clerk must refer an application for a permit to the chief of the fire department for review and approval. The permit may not be issued unless the fire chief approves the application.

Outdoor Displays Outside a Municipality

When a fireworks display is to be conducted outside the corporate limits of a municipality a permit must be secured from the county auditor who is responsible for performing the duties assigned to the city clerk. In such cases the duties normally performed by the chief of the fire department are to be performed by the county sheriff. The county sheriff is encourage, but not required by law, to coordinate the sheriff's investigation with the chief of the fire department serving the portion of the county in which the display will be conducted. The permit may not be issued unless the sheriff approves the application.

Indoor Displays

When an indoor fireworks display is to be conducted at any location, a permit must be secured from the Minnesota State Fire Marshal. The State Fire Marshal will conduct an investigation to determine whether a permit should be issued.

Exception

The State Fire Marshal has delegated the authority to issue indoor fireworks display permits to certain local fire chiefs. A list of cities which have received this delegation is maintain in the office of the State Fire Marshal and is posted on the State Fire Marshal Web site at www.fire.state.mn.us. When an indoor fireworks display is to be conducted in a city which has received this delegation the permit must be obtained from the chief of the fire department in that city, or the chief's designee, not the State Fire Marshal.

PERMIT PROCEDURE

Application Timeframe

Unless specifically exempted by the city or county (see exemption to permit requirement on page 2), a permit for an outdoor display must be secured from the city clerk (county auditor), or the State Fire Marshal for indoor displays, prior to conducting a fireworks display. The sponsor of the proposed display must submit a written permit application at least 15 days in advance of the date of the display.

Restrictions on Sponsors

Fireworks displays may be sponsored by a city, fair association, amusement park or other public or private organization. Examples of a public organization include a county, township or other public entity. Examples of private organizations include churches, fraternal / veteran's organizations, businesses, companies, lake associations and private colleges.

State law prohibits private individuals, including a certified public display fireworks operator acting as an individual, from sponsoring fireworks displays. A fireworks display company may sponsor displays for private parties.

Application Form

The sponsor must, at a minimum, provide the following information to the city clerk (county auditor) in writing when applying for a permit to conduct a fireworks display:

- 1. The name of the organization sponsoring the fireworks display, including the name, address and phone number of the authorized agent of that organization. Permits are not transferable.
- 2. The name of the certified public display fireworks operator, and the operator's certificate number issued by the Minnesota State Fire Marshal, responsible for supervising the display.
- 3. The date, time of day and exact location of the proposed display.
- 4. **Outdoor Displays:** A diagram of the grounds where the display will be conducted. At the minimum, the diagram must show the point at which the fireworks are to be discharged; the location of all buildings, highways, streets, communication lines and other possible overhead obstructions; and the lines behind which the audience will be restrained.
 - **Indoor / Proximate Audience Displays:** A diagram of the facility where the display will be conducted. At the minimum, the diagram must show the point at which the fireworks will be discharged and the fallout radius for each pyrotechnic device used during the display.
- 5. The approximate number and types of fireworks and / or pyrotechnic special effect devices to be discharged.
 - <u>Changes in the Display</u>: For indoor and proximate audience displays, any changes adding fireworks or pyrotechnic special effects different from those described in the initial application must be approved in advance by the authority issuing the permit. Unless otherwise acceptable to the authority issuing the permit, all requests for changes must be submitted at least 24 hours prior to the display.
- 6. The name(s) and birth date(s) of all assistants who will assist with the display. Assistants must be at least 18 years of age. The names of all assistants must be recorded on the Fireworks Operator Display Report which must be filed with the Minnesota State Fire Marshal Division following the display.
- 7. Proof of bond or certificate of insurance in an amount deemed appropriate by the city or county for the payment of damages that could be caused, either to persons or property, as a result of the display and arising from acts of the sponsor, the pyrotechnic operator, their agents, employees or subcontractors. It is recommended that the city or county be named as a co-insured on any certificate of insurance.
- 8. A site safety plan which, at the minimum, must include procedures and actions to be taken in the event a shell fails to ignite in, or discharge from a mortar, fails to function over the fallout area, or otherwise malfunctions.

Permit and Inspection Fees

<u>Outdoor Displays</u>: The permit cannot be granted until the sponsor pays the permit fee, if any, established by the city or county.

<u>Indoor Displays</u>: The fee for an indoor display permit obtained from the Minnesota State Fire Marshal is \$150.00. Payment must accompany the application for a permit, be in the form of a money order, cashier's check, or certified check made payable to the Minnesota State Fire Marshal. In addition, the sponsoring organization will be invoiced for the actual costs, including personnel and travel costs, incurred by the State Fire Marshal in order to conduct the required inspection.

City Clerk/County Auditor Responsibilities

Upon receipt of an application for permit, the city clerk (county auditor) must promptly refer the application to the chief of the local fire department (county sheriff) for review. If, after conducting an appropriate investigation, the fire chief (sheriff) authorizes the display and the required permit fee is paid (where applicable), the city clerk (county auditor) must issue a permit.

Fire Chief/County Sheriff Responsibilities

Upon being notified by the city clerk (county auditor) of an application for permit, the fire chief (sheriff) must conduct an investigation to determine the following:

- 1. That the operator of the display is competent and certified by the Minnesota State Fire Marshal. Operator certification may be verified by contacting the State Fire Marshal Division, or checking the Division's Web site at www.fire.state.mn.us.
 - Certification by the State Fire Marshal may be considered evidence of competency. Certified operators are issued a card upon completion of the requirements for certification. The card must be kept in the operator's possession and presented to the authority having jurisdiction upon request.
- 2. Using National Fire Protection Association Standard 1123 Code for Fireworks Display (2006 edition) or 1126 Standard for the Use of Pyrotechnics Before a Proximate Audience (2006 edition), as guidance, that the displays is of such character and is to be so located, discharged or fired that it will not be hazardous to property or endanger any person. In addition to reviewing the diagram of the display area submitted with the permit application, the fire chief (sheriff) should:
 - a. Inspect the areas selected for the discharge site, spectator viewing area, parking areas and designated landing (fallout) area.
 - b. For indoor and proximate audience displays, request a walk-through and representative demonstration of the fireworks and / or pyrotechnic special effects as a condition of approval for the issuance of a permit.
 - c. Obtain a written plan outlining the manner and location of storage of fireworks both prior to delivery to the display site and at the display site, the type of fire protection (e.g. portable fire extinguishers, standby fire department apparatus and / or personnel) that will be provided at the discharge site, the means of direct communication with local public safety organizations in the event of an emergency, and the provisions that will be made for crowd control.
 - d. Obtain a copy of the site safety plan submitted with the permit application that establishes procedures and actions to be taken in the event that a shell fails to ignite in, or discharge from, a mortar, fails to function over the fallout area, or otherwise malfunctions.

When indoor displays require smoke detectors to be by-passed and / or air-handling systems to be disengaged, the authority issuing the permit shall ensure the local fire chief has been notified and

arrangements have been made to have a representative of the fire department present for all displays and demonstrations. The fire department representative shall have a means of direct communication with the department's emergency dispatch center. The sponsoring organization, at the discretion of the chief of the fire department, is responsible for the actual costs of providing an on-site fire department representative during the display.

Once the authority having jurisdiction (fire chief, sheriff, State Fire Marshal) has determined that requirements of Minnesota Statute § 624.20 - 624.25, the 2007 Minnesota State Fire Code, and NFPA standard 1123 (2006 edition) and / or 1126 (2006 edition) have been met, the proposed display will be supervised by an public display fireworks operator certified by the State Fire Marshal, and the display will not be hazardous to property or endanger persons, the fire chief (sheriff) shall promptly notify the city clerk (county auditor). When so notified, the city clerk, county auditor, or the State Fire Marshal (indoor displays only) must issue a permit for the conduct of the display.

PART B: GENERAL SAFETY REQUIREMENTS FOR FIREWORKS DISPLAYS

Supervision

A fireworks display may only be conducted when supervised by a pyrotechnic operator certified by the Minnesota State Fire Marshal.

Exception

Cities and counties are allowed, but not required, to exempt displays involving the use of smoke pots, flash pots and theatrical flash powder for ceremonial, theatrical and musical productions from this requirement. Such displays are, however, required to be conducted in a safe manner in accordance with all applicable codes and standards. Contact local authorities to determine if this exemption is applicable.

Operator Responsibilities

The certified fireworks operator is responsible for all aspects of the display related to fireworks and other pyrotechnics. While the operator may actively participate in the firing of the display, safety must be the operator's primary concern. The operator must ensure that:

- 1. No fire or life safety hazard is allowed to exist or occur during the storage, transportation, handling, preparation or use of fireworks.
- 2. All displays are conducted in accordance with applicable laws, codes, regulations, standards and guidelines relating to fireworks.
- 3. A sufficient number of qualified assistants are on hand for the safe conduct of the display, that all assistants are fully trained in the proper performance of their assigned tasks and are knowledgeable of safety hazards and procedures and the use of portable fire extinguishers.
 - Any person acting as an assistant at a fireworks display must be a minimum of 18 years of age. The certified operator is responsible for verifying the age of all assistants and providing for their constant supervision.
- 4. Proper protective gear (i.e., head protection, eye protection, hearing protection, foot protection, and protective clothing) is worn by all personnel involved in the display. Suitable protective clothing includes long-sleeved shirts and long pants made of 100 percent cotton, leather, Nomex, or other

equivalent fabric.

- 5. A sufficient number of fire extinguishers of a suitable type are present while fireworks and other pyrotechnic materials are being loaded, prepared for firing or fired.
- 6. Contacting the local fire chief to determine the level of fire protection required for the display.

In addition to portable fire extinguishers, fire protection may include standby fire apparatus and personnel at or beyond the perimeter of the display site, and / or down range as deemed necessary by the fire chief. When required by the fire chief the cost of standby apparatus and / or personnel must be borne by the sponsoring organization. Fire apparatus and personnel remain subject to the chief's orders at all times when so employed.

7. Crowd control monitors are provided around the discharge site to prevent spectators, or any other unauthorized persons, from entering the site. When agreed to by the sponsor, the sponsor assumes responsibility for providing all or a portion of the required monitors.

Provisions for crowd control are subject to approval by the fire chief (sheriff). Monitors should wear distinctive identification (e.g. badges, colored vests, etc.). Where practical, fencing, ropes or other barriers should be used to assist in crowd control.

This is not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1123 (2006 edition) or 1126 (2006 edition).

On-site Fireworks Storage

Requirements for the on-site storage of fireworks are contained in Chapter 33 of the 2007 Minnesota State Fire Code. Additional requirements are contained in National Fire Protection Association Standards 1123 and 1126, 2006 editions.

In brief, as soon as fireworks are delivered to the display site, they must be supervised, kept dry at all times and inspected for damage. Display fireworks temporarily stored at the site during the fireworks display shall be stored in ready boxes located upwind and at least 25 feet from the mortar placement and separated according to size and their designation as salutes. (An exception applies for electrically fired displays, or displays where all shells are loaded into mortars prior to the show.) Preparation areas for display fireworks shall be secured from public areas by at least 100 feet.

Sponsor Responsibilities

The sponsor of the fireworks display is responsible for the following:

- 1. Obtaining the required state, city or county permit for the display.
- 2. Ensuring that the local fire chief has been contacted regarding requirements for standby fire apparatus and/or personnel.
- 3. Providing crowd control monitors around the discharge site to prevent spectators or any other unauthorized persons from entering the site (requires prior agreement of both the sponsor and supervising pyrotechnic operator). Provisions for crowd control are subject to approval by the fire chief (sheriff). Monitors should wear some distinctive identification (e.g. badges, colored vests, etc.). Where practical, fencing ropes or other types of barriers should be used to assist in crowd control.

- 4. Contact and obtain permits from any other authority having jurisdiction to include but not limited to: FAA, US Coast Guard, USDoT
- 5. Contact and obtain permission from any private or public owners of buildings or property that are within the secured fireworks display site.

This is not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1123 (2006 edition) or 1126 (2006 edition).

OUTDOOR DISPLAYS

The display, storage, use and handling of fireworks and pyrotechnic special effects materials must be in accordance with Article 33 of the 2007 Minnesota State Fire Code and National Fire Protection Association Standard No. 1123, 2006 edition. Where there is a conflict between the provisions of the 2007 Minnesota State Fire Code and National Fire Protection Association Standard 1123, the provisions of the Minnesota State Fire Code take precedence.

While it is not the intent of this guideline to duplicate or replace the requirements of the applicable codes and standards, following are some of the general safety factors the fire chief (sheriff) must consider when making a determination as to whether a fireworks display should be authorized. This not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1123 (2006 edition).

Location of Mortars

Mortars must be separated from spectator viewing areas, spectator vehicles and approved buildings in accordance with the requirements of NFPA 1123, 2006 edition. For mortars 2 inches in diameter or larger, the secured site radius is 70 feet per inch of internal mortar diameter for a secured site diameter of 140 feet per inch of internal mortar diameter. For example, a 2 inch mortar requires a secured site diameter of 280 feet while a 4 inch mortar requires a secured site diameter of 560 feet. Mortars 1 inch in diameter or less require a secured site diameter of at least 150 feet, 1.5 inch mortars require a secured site diameter of at least 210 feet and 2.5 inch mortars require a secured site diameter of at least 550 feet. (NFPA 1123, Table 5.1.3.1)

Unless approved by the fire chief (sheriff), the separation distances from health care facilities (e.g. hospitals, nursing homes) and detention and correctional facilities (e.g. jails, prisons) must be double the distances specified in NFPA 1123, 5.1.3. (NFPA 1123, 5.1.4.1 and NFPA 1123, 5.1.4.2)

Separation distances must be doubled from bulk storage areas of materials that have flammability (e.g. gasoline), explosive (e.g. fertilizer) or toxic hazard (e.g. chlorine) must be twice what is otherwise required. When unusual or safety-threatening conditions are present, the fire chief (sheriff) may require that these distances be increased. (NFPA 1123, 5.1.1.2)

Location of Ground Pieces

Ground pieces having movable parts (e.g. revolving wheels, Roman candle batteries, and items employing large salutes) must be located at least 125 ft. from spectators and vehicles. (NFPA 1123, 5.1.3.5.2) Ground pieces having no movable parts (e.g. fixed ground pieces) are allowed not less than 75 ft. from spectators and vehicles. (NFPA 1123, 5.1.3.5.1)

Discharge / Display Site

The area selected for the discharge of aerial shells must be located so that the trajectory of the shells will not come within 25 ft. of any overhead object. (NFPA 1123, 5.1.4.7)

Spectators or spectator parking shall not be located within the display site. (NFPA 1123, 5.1.3.1) Only the operator, necessary assistants, and inspectors appointed by the fire chief / sheriff are allowed in the display site while the display is in progress.

Dwellings, buildings, and structures shall be permitted within the display site with the approval of the fire chief / sheriff and the owner of the dwelling, building, or structure, provided that the dwelling, building, or structure is unoccupied during the display, or the structure provides protection for the occupants though noncombustible or fire-resistant construction. (NFPA 1123, 5.1.4.6)

Designated Landing/Fallout Area

The area over which aerial shells are fired and into which debris and malfunctioning aerial shells can fall (i.e. the designated landing area or fallout area) must be a large, clear, open area approved by the local fire chief / sheriff. Spectators, unauthorized vehicles, watercraft, and readily combustible materials must not be allowed in this area during the display. (NFPA 1123, 5.1.5.2)

Smoking and Open Flames

Smoking materials, matches, lighters or open flame devices are prohibited within 50 ft. of any area where fireworks or other pyrotechnic materials are present. (NFPA 1123, 8.1.6.1). NO SMOKING OR OPEN FLAME signs must be conspicuously posted in the area.

Illumination

Operators and assistants must use only flashlights, chemical chemiluminescent lights or electric lighting for artificial illumination. (NFPA 1123, 8.1.5)

Supervision of Fireworks

Fireworks shall be protected from direct access by the public, must not be left unattended, unsecured, or allowed to become wet at the display site. (NFPA 1123, 7.5.7.1 and NFPA 7.5.7.2, and MSFC Chapter 33, Section(s) 3308.5.1 and 3308.5.2)

Ready Boxes

Ready boxes (i.e. a portable, weather resistant storage containers for aerial shells at the site of a fireworks display) must be located at least 25 ft. in an upwind direction from mortars. (NFPA 1123, 4.2.4.3)

HDPE Mortars

High density polyethylene (HDPE) mortars may be reloaded during the same display. (Provided as a clarification due to the prohibition of such reloading which was contained in an earlier state fire code.)

Display Discontinued

If the local fire chief or pyrotechnic operator determines that there is a lack of crowd control or that the crowd is in danger, the display must be immediately discontinued. If at any time high winds or wet weather create a danger, the display must be postponed until weather conditions are acceptable to the fire chief and the certified pyrotechnic operator. (NFPA 1123, 8.1.4, NFPA 8.1.4.1, NFPA 8.1.4.2)

Range Inspection

The entire firing range must be inspected immediately following a display, and prior to allowing public

access, for the purpose of locating unexploded aerial shells or live components. (NFPA 1123, 8.2.12) If the firing range cannot be thoroughly inspected due to darkness, or other safety reasons, the site must be secured and immediately inspected the following morning. (MSFC, Chapter 33, Section 3308.9)

This is not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1123 (2006 edition)

INDOOR / PROXIMATE AUDIENCE DISPLAYS

Note: MN Statute § 624.22 Subd.2(b)(d) defines fireworks displays as either "outdoor" or "indoor" while the MN State Fire Marshal Fireworks Operator Certificate certifies the fireworks operator as either "outdoor" or "proximate audience". NFPA 1126 (2006 Edition) is the code for proximate audience displays and is the primary code when dealing with indoor fireworks displays. However, proximate audience displays may also occur outdoors, such as with concerts and theatrical performances. If the fireworks operator chooses to use NFPA 1126 (2006 Edition) separation distances in an outdoor setting, they must be certified for proximate audience. If the fireworks operator is certified for outdoor displays only, they must follow the separation distances outlined in NFPA 1123 (2006 Edition) for ground display pieces.

All indoor displays of pyrotechnic special effects, and outdoor displays where the audience is closer to pyrotechnic devices than permitted by NFPA 1123 are considered proximate audience displays. The display, storage, use and handling of fireworks and pyrotechnic special effects materials for proximate audience displays must be in accordance with Article 33 of the 2007 Minnesota State Fire Code and National Fire Protection standard 1126 (2006 edition). Where there is a conflict between the provisions of the Minnesota State Fire Code and National Fire Protection Association Standard 1126, the provisions of the Minnesota State Fire Code take precedence.

While it is not the intent of this guideline to duplicate or replace the requirements of the applicable codes and standards, following are some of the general safety factors the fire chief (sheriff) must consider when making a determination as to whether a fireworks display should be authorized. This not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1126 (2006 edition).

Demonstration and Approval

A walk-through and representative demonstration of the pyrotechnics shall be approved by the fire chief (sheriff) before a permit is approved. (NFPA 1126, 6.4.1.1)

Fire Watch

Where an indoor display requires the interruption of fire detection and life safety systems, prior approval must be obtained from the fire chief (sheriff) and the building owner or owner's agent, and arrangements made to have a representative of the fire department (i.e. fire watch) present for all displays, rehearsals and demonstrations. (NFPA 1126, 8.1.6.1, NFPA 6.4.3.1)

All fire detection and life safety systems, and other building systems that have been disarmed or disengaged, must be reinstated to normal operating condition as soon as the likelihood of false alarms from the use of pyrotechnics has passed. (NFPA 1126, 8.7.6, NFPA 1126, 6.4.3.2) The fire watch must be maintained until the restoration of normal functioning has been verified.

Separation Distances

Each pyrotechnic device fired during a performance must be separated from the audience by at least 15 ft., but not less than two (2) times the fallout radius of the device, unless otherwise approved by the fire chief (sheriff). (NFPA 1126, 8.4.1) For example, if a pyrotechnic device has a fallout radius of 10 ft., a minimum distance of 20 feet must separate the device from the audience.

Concussion mortars must be separated from the audience by a minimum of 25 ft. (NFPA 1126, 8.4.2)

There shall be no glowing or flaming particles within 10 feet of the audience (NFPA 1126, 8..3)

Display Discontinued

The display must be immediately stopped if the local fire chief (sheriff) or pyrotechnic operator determines there is a danger to spectators or property. (NFPA 1126, 8.3.8)

Types of Devices Allowed

All pyrotechnic devices and binary systems used indoors must be specifically manufactured and labeled for indoor use. (NFPA 1126, 7.2.1, NFPA 1126, 7.4.2)

Smoke Control

When pyrotechnic special effects material is fired within a building, the quantity of smoke developed must not obscure the visibility of exit signs or paths of egress travel. (NFPA 1126. 8.6.6)

Smoking/Open Flame

Smoking shall not be permitted within 25 ft. of the area where pyrotechnics are being handled or stored, except for smoking done as part of the performance as approved by the fire chief (sheriff) and the pyrotechnic operator. (NFPA 1126, 8.5.5.1. NFPA 1126, 8.5.5.3)

Pyrotechnic materials shall not be stored within 50 ft. of any unprotected source of heat or open flame. (NFPA 1126, 5.3)

Attending of Materials

No pyrotechnic materials or devices shall be left unsupervised unless they are in an approved secured location. (NFPA 1126, 5.2.3)

Precautions

Precautions must be taken so that no part, projectile or debris from pyrotechnic materials or devices damages overhead properties, overhead equipment, automatic sprinkler or detection systems, or the ceiling and walls of the performance site. (NFPA 8.6.2)

Notice to Patrons

The operator of a facility where an indoor fireworks display occurs must provide no0tice in a prominent place as approved by the authority issuing the display permit informing patrons attending a performance when indoor fireworks will be part of the performance. (MS 624.22, Subdivision 1 (d))

This is not intended to be an all inclusive list. Additional requirements may be contained in National Fire Protection Association Standard 1126 (2006 edition).

PART C: REPORTING REQUIREMENTS

Report to State Fire Marshal

The supervising operator is also responsible for submitting written reports for each display to the State Fire Marshal, on the form provided by the State Fire Marshal, for each fireworks display. When multiple displays occur at the same location and on the same day, a separate report must be submitted for each display. Reports must be submitted within 30 days following any fireworks display conducted by the operator. (See Early Reporting Requirement below.) When multiple displays are conducted during any given month, the reports may be submitted together in one monthly mailing.

Early Reporting

The operator must submit a written report to the State Fire Marshal on the form provided within 10 days following a fireworks display conducted by the operator if any of the following occurred:

- a. injury to any person resulting from the display of fireworks;
- b. fire or damage to property resulting from the display of fireworks; or
- c. unsafe or defective pyrotechnic product was used or observed.

Documenting Assistants

All assistants used at a fireworks display must be at least 18 years old. The name and date of birth of each assistant must be recorded on the Fireworks Operator Display Report filed by the supervising operator.

Failure with Report

In accordance with Minnesota Statutes § 624.22, Subd. 8, the State Fire Marshal may suspend, revoke or refuse to renew the certification of an operator who fails to file the required report.

PART D: PYROTECHNIC OPERATOR CERTIFICATION REQUIREMENTS

In order to supervise a fireworks display, an operator must be certified by the Minnesota State Fire Marshal. Part D of this guideline outlines the requirements for certification, renewal of certification, and suspension or revocation of certification.

CERTIFICATION

An applicant for certification as a fireworks operator must meet the following requirements before the applicant may be certified by the State Fire Marshal:

Age

The applicant must be at least 21 years old. Proof of age shall be established by providing a copy of the applicant's driver's license or other government issued identification which includes the date of birth.

Examination

The applicant must have completed a written examination administered by the State Fire Marshal and achieved a passing score of at least 70 percent. There is no fee for taking the examination.

- 1. The examination is designed to demonstrate the applicant's knowledge of Minnesota Statute, the Minnesota State Fire Code, and National Fire Protection Association standards relating to safe practices for the storage, use, handling, discharge and display of fireworks and pyrotechnic special effects materials.
- 2. The State Fire Marshal may waive the NFPA standard 1123 portion of the written exam when the

applicant provides written proof of certification by the Pyrotechnics Guild International (PGI), Inc., or the American Pyrotechnics Association (APA) dated January 1, 2006 or later. The portions of the examination related to Minnesota Statute § 624.20 - 624.25, and the Minnesota State Fire Code will not be waived under any circumstances.

- 3. The examination is administered at the office of Minnesota State Fire Marshal. Examinations are scheduled, at regular intervals during normal business hours. Contact the office to obtain the examination schedule or check the division web site at www.fire.state.mn.us.
- 4. The examination is arranged in three parts: general knowledge, outdoor displays and proximate audience displays. In order to be certified, all applicants must successfully pass the general portion of the examination as well as the portions of the examination applicable to outdoor and / or proximate audience displays, depending on the level of certification the applicant is seeking.
- 5. Persons failing to achieve a passing score of at least 70 percent are eligible to retake the examination after 30 days.
- 6. The examination includes information from these guidelines, Minn. Stat. § 624.20 624.25, relevant sections of the 2007 Minnesota State Fire Code, and National Fire Protection Association Standards 1123 (2006 edition) and 1126 (2006 edition).
- 7. Examinations successfully completed prior to meeting the experience requirement for certification will be valid for a period of one year from the date of the examination. Applicants for certification will be required to re-test if the required experience is not obtained during that time

Application Form

After successfully passing the examination, or providing written documentation of equivalent PGI or APA certification deemed acceptable by the State Fire Marshal, the applicant must apply for certification in writing to the State Fire Marshal by completing and signing an application form provided by the State Fire Marshal.

Reciprocity

The State Fire Marshal does not have reciprocity with any other state's certification process.

Evidence of Experience

The applicant must submit evidence of experience, which must include active participation as an operator or assistant in the safe performance of at least five (5) safely conducted fireworks displays. At least one (1) of these displays must have occurred in the current year or the year immediately preceding the date of application.

Applicants for outdoor certification must provide outdoor display experience. Applicants for indoor / proximate audience certification must present evidence of indoor / proximate audience display experience. Applicants for both certifications must provide experience for each certification.

Applicants presenting experience obtained as an assistant in the state of Minnesota must be listed on the Fireworks Operator Display Report filed for that display by the certified operator. Applicants presenting experience obtained in another state are responsible for providing acceptable documentation that verifies that experience. Acceptable documentation includes:

- a copy of a display permit from an issuing authority which lists the applicant as an operator or assistant, or
- a letter from an employing fireworks display company, signed by the chief officer of the company, verifying the dates and locations of displays for which the applicant served as an operator or assistant

References

The applicant must submit references from at least three (3) certified fireworks display operators who can verify the experience reported or any training received by the applicant. All references must include the name, address, phone number, and the name of the agency or organization represented by the person submitting the reference.

Fee

The applicant must pay a certification fee of \$100 to the State Fire Marshal.

Notification

The State Fire Marshal is required to review the application and send the applicant written confirmation or denial of certification within 30 days of receipt of the application.

Classification

Once all the certification requirements have been met, the State Fire Marshal will certify and classify the operator for supervising outdoor displays, indoor / proximate audience displays or both types of displays, based on the operator's documented experience and the results of the examination.

Length of Certification

Certification is valid for a period of four (4) years from the date of issue, unless otherwise suspended or revoked by the State Fire Marshal for cause.

CERTIFICATION RENEWAL

An applicant for renewal of certification as a public display fireworks operator must meet the following requirements before the certification may be renewed by the State Fire Marshal:

Application Form

The applicant must apply for renewal of certification in writing to the State Fire Marshal by completing and signing an application form provided by the State Fire Marshal.

Evidence of Experience

The applicant must submit evidence of experience that must include, as a minimum, the dates, locations and authorities issuing the permits for at least three (3) safely conducted fireworks displays participated in or supervised by the applicant in the four (4) years immediately preceding the date of application.

Applicants for outdoor certification must provide outdoor display experience. Applicants for indoor / proximate audience certification must present evidence of indoor / proximate audience display experience. Applicants for both certifications must provide experience for each certification.

Applicants presenting experience obtained in another state are responsible for providing acceptable

documentation that verifies that experience. Acceptable documentation includes:

• a copy of a display permit from an issuing authority which lists the applicant as an operator or

- assistant, or
- a letter from an employing fireworks display company, signed by the chief officer of the company, verifying the dates and locations of displays for which the applicant served as an operator or assistant

Applicants lacking the required experience, or whose certification has been expired for more than 12 months from the date of expiration, must follow the procedures outlined in the "CERTIFICATION" section of this guideline, including re-examination.

Fee

The applicant must pay a certification renewal fee of \$100 to the State Fire Marshal.

Notification

The State Fire Marshal is required to review the application and send the applicant written confirmation or denial of certification renewal within 30 days of receipt of the application.

Refusal to Renew Certification

The State Fire Marshal may refuse to renew an operator's certification if the operator has committed any of the offenses outlined in the "SUSPENSION OR REVOCATION" section of this guideline.

Classification

Once all the certification renewal requirements have been met, the State Fire Marshal will recertify and classify the operator for supervising outdoor displays, indoor / proximate audience displays or both types of displays, based on the operator's original certification and evidence of experience.

Restrictions

Certification will only be renewed for the classification for which the applicant was originally certified (i.e. outdoor displays, indoor / proximate audience displays or both) for which applicable evidence of experience has been provided. Applicants wishing to be certified under another classification must follow the procedures outlined in the "CERTIFICATION" section of this guideline.

Length of Certification

Certification is again valid for a period of four (4) years from the date of issue, unless otherwise suspended or revoked by the State Fire Marshal for cause.

SUSPENSION OR REVOCATION

The State Fire Marshal may suspend, revoke or refuse to renew certification of an operator if the operator has:

- 1. submitted a fraudulent application;
- 2. caused or permitted a fire or safety hazard to exist or occur during the storage, transportation, handling, preparation or use of fireworks;
- 3. conducted a display of fireworks without receipt of a permit required by the state or a political subdivision;
- 4. conducted a display of fireworks with assistants who were not at least 18 years old, properly

instructed and continually supervised; or

5. otherwise failed to comply with any federal or state law or regulation, or these guidelines, relating to fireworks. A conviction of a felony, gross misdemeanor, or misdemeanor involving fireworks or explosives may be considered as evidence of failure to comply with federal or state law.

Operator Restrictions

An operator's certification is not valid after it has been suspended or revoked. An operator, therefore, is not authorized to supervise a fireworks display during a suspension or revocation.

Surrender of Certificate

When certification has been suspended or revoked, the operator must immediately surrender the certificate to the State Fire Marshal.

Length of Suspension

Suspensions will be for a period of a minimum of 30 calendar days each. After the suspension period ends, the State Fire Marshal will return the operator's certificate.

Length of Revocation

Each revocation is for a minimum of one year, unless otherwise determined by the State Fire Marshal based on the circumstances causing the revocation. Once an operator's certification has been revoked, the certification may only be reinstated after the operator has followed the procedures outlined in the "CERTIFICATION" section of this guideline.

PART E: FEDERAL REQUIRMENTS

Display fireworks are explosive materials subject to regulation under the Federal explosives law and regulation. You must obtain a license or permit from the Bureau of Alcohol, Tobacco, Firearms & Explosives (ATF) in order to manufacture, use or possess display fireworks (27 CFR Part 555 Subpart D). In addition, you must comply with all storage requirements outlined in Subpart K of 27 CFR Part 555.

Definition of Display Fireworks

Large fireworks designed primarily to produce visible or audible effects by combustion, deflagration, or detonation. This term includes, but is not limited to, salutes containing more than 2 grains (130 mg) of explosive materials, aerial shells containing more than 40 grams of pyrotechnic compositions, and other display pieces which exceed the limits of explosive materials for classification as "consumer fireworks."

Display fireworks are classified as fireworks UN0333, UN0334 or UN0335 by the U.S. Department of Transportation at 49 CFR 172.101. This term also includes fused set pieces containing components, which together exceed 50 mg of salute powder.

More information on this subject can be found at www.atf.gov. To apply, contact the ATF St. Paul II Industry Operations office at 651-726-0220.

MINNESOTA STATUTES 624.20-624.25 RELATING TO FIREWORKS

624.20 Fireworks.

Subdivision 1. (a) As used in sections 624.20 to 624.25, the term "fireworks" means any substance or combination of substances or article prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration, or detonation, and includes blank cartridges, toy cannons, and toy canes in which explosives are used, the type of balloons which require fire underneath to propel them, firecrackers, torpedoes, skyrockets, Roman candles, daygo bombs, sparklers other than those specified in paragraph (c), or other fireworks of like construction, and any fireworks containing any explosive or inflammable compound, or any tablets or other device containing any explosive substance and commonly used as fireworks.

- (b) The term "fireworks" shall not include toy pistols, toy guns, in which paper caps containing 25/100 grains or less of explosive compound are used and toy pistol caps which contain less than 20/100 grains of explosive mixture.
- (c) The term also does not include wire or wood sparklers of not more than 100 grams of mixture per item, other sparkling items which are nonexplosive and nonaerial and contain 75 grams or less of chemical mixture per tube or a total of 500 grams or less for multiple tubes, snakes and glow worms, smoke devices, or trick noisemakers which include paper streamers, party poppers, string poppers, snappers, and drop pops, each consisting of not more than twenty-five hundredths grains of explosive mixture. The use of items listed in this paragraph is not permitted on public property. This paragraph does not authorize the purchase of items listed in it by persons younger than 18 years of age. The age of a purchaser of items listed in this paragraph must be verified by photographic identification.
- (d) A local unit of government may impose an annual license fee for the retail sale of items authorized under paragraph (c). The annual license fee of each retail seller that is in the business of selling only the items authorized under paragraph (c) may not exceed \$350, and the annual license of each other retail seller may not exceed \$100. A local unit of government may not:
- (1) impose any fee or charge, other than the fee authorized by this paragraph, on the retail sale of items authorized under paragraph (c);
- (2) prohibit or restrict the display of items for permanent or temporary retail sale authorized under paragraph
- (c) that comply with National Fire Protection Association Standard 1124 (2003 edition); or
- (3) impose on a retail seller any financial guarantee requirements, including bonding or insurance provisions, containing restrictions or conditions not imposed on the same basis on all other business licensees.
- Subd. 2. As used in sections 624.20 to 624.25, the term "explosive fireworks" means any fireworks that contain pyrotechnic or flash powder, gunpowder, black powder, or any other explosive compound constructed to produce detonation or deflagration.

HIST: 1941 c 125 s 1; 1988 c 584 s 2; 2002 c 350 s 1; 2003 c 128 art 15 s 6

624.21 Sale, possession, and use of fireworks prohibited.

Except as otherwise provided in sections 624.20 to 624.25, it shall be unlawful for any person to offer for sale, expose for sale, sell at retail or wholesale, possess, advertise, use, or explode any fireworks. This section shall not be construed to prohibit the possession, use, or explosion of fireworks by an engineer

licensed pursuant to sections 326.02 and 326.03 or a person under the engineer's direct supervision when undertaking acoustical testing; or sales at wholesale to those persons holding valid permits for a fireworks display from a governmental subdivision of the state; or sales outside the state or sales to licensed professional engineers for acoustical testing purposes only.

HIST: 1941 c 125 s 2; 1963 c 818 s 1; 1982 c 440 s 1; 1988 c 584 s 3; 1994 c 636 art 5 s 17

624.22 Fireworks displays; permit; operator certification.

Subdivision 1. **General requirements; permit; investigation; fee.** (a) Sections 624.20 to 624.25 do not prohibit the supervised display of fireworks by a statutory or home rule charter city, fair association, amusement park, or other organization, except that:

- (1) a fireworks display may be conducted only when supervised by an operator certified by the state fire marshal; and
- (2) a fireworks display must either be given by a municipality or fair association within its own limits, or by any other organization, whether public or private, only after a permit for the display has first been secured.
- (b) An application for a permit for an outdoor fireworks display must be made in writing to the municipal clerk at least 15 days in advance of the date of the display and must list the name of an operator who is certified by the state fire marshal and will supervise the display. The application must be promptly referred to the chief of the fire department, who shall make an investigation to determine whether the operator of the display is competent and is certified by the state fire marshal, and whether the display is of such a character and is to be so located, discharged, or fired that it will not be hazardous to property or endanger any person. The fire chief shall report the results of this investigation to the clerk. If the fire chief reports that the operator is certified, that in the chief's opinion the operator is competent, and that the fireworks display as planned will conform to the safety guidelines of the state fire marshal provided for in paragraph (f), the clerk shall issue a permit for the display when the applicant pays a permit fee.
- (c) When the supervised outdoor fireworks display for which a permit is sought is to be held outside the limits of an incorporated municipality, the application must be made to the county auditor, and the auditor shall perform duties imposed by sections 624.20 to 624.25 upon the clerk of the municipality. When an application is made to the auditor, the county sheriff shall perform the duties imposed on the fire chief of the municipality by sections 624.20 to 624.25.
- (d) An application for an indoor fireworks display permit must be made in writing to the state fire marshal by the operator of the facility in which the display is to occur at least 15 days in advance of the date of any performance, show, or event which will include the discharge of fireworks inside a building or structure. The application must list the name of an operator who is certified by the state fire marshal and will supervise the display. The state fire marshal shall make an investigation to determine whether the operator of the display is competent and is properly certified and whether the display is of such a character and is to be so located, discharged, or fired that it will not be hazardous to property or endanger any person. If the state fire marshal determines that the operator is certified and competent, that the indoor fireworks display as planned will conform to the safety guidelines provided for in paragraph (f), and that adequate notice will be given to inform patrons of the indoor fireworks display, the state fire marshal shall issue a permit for the display when the applicant pays an indoor fireworks fee of \$150 and reimburses the fire marshal for costs of inspection. Receipts from the indoor fireworks fee and inspection reimbursements must be deposited in the general fund as a nondedicated receipt. The state fire marshal may issue a single permit for multiple indoor fireworks displays when all of the displays are to take place at the same venue as part of a series of performances by the same performer or group of performers. A copy of the application must be promptly

conveyed to the chief of the local fire department, who shall make appropriate preparations to ensure public safety in the vicinity of the display. The operator of a facility where an indoor fireworks display occurs must provide notice in a prominent place as approved by the state fire marshal to inform patrons attending a performance when indoor fireworks will be part of that performance. The state fire marshal may grant a local fire chief the authority to issue permits for indoor fireworks displays. Before issuing a permit, a local fire chief must make the determinations required in this paragraph.

- (e) After a permit has been granted under either paragraph (b) or (d), sales, possession, use and distribution of fireworks for a display are lawful for that purpose only. A permit is not transferable.
- (f) The state fire marshal shall adopt and disseminate to political subdivisions rules establishing guidelines on fireworks display safety that are consistent with sections 624.20 to 624.25 and the most recent editions of the Minnesota Uniform Fire Code and the National Fire Protection Association Standards, to insure that fireworks displays are given safely. In the guidelines, the state fire marshal shall allow political subdivisions to exempt the use of relatively safe fireworks for theatrical special effects, ceremonial occasions, and other limited purposes, as determined by the state fire marshal.
- Subd. 2. **Operator certification requirements.** (a) An applicant to be a supervising operator of a fireworks display shall meet the requirements of this subdivision before the applicant is certified by the state fire marshal.
- (b) An applicant must be at least 21 years old.
- (c) An applicant must have completed a written examination, administered or approved by the state fire marshal, and achieved a passing score of at least 70 percent. The state fire marshal must be satisfied that achieving a passing score on the examination satisfactorily demonstrates the applicant's knowledge of statutes, codes, and nationally recognized standards concerning safe practices for the discharge and display of fireworks.
- (d) An applicant shall apply in writing to the state fire marshal by completing and signing an application form provided by the state fire marshal.
- (e) An applicant shall submit evidence of experience, which must include active participation as an assistant or operator in the performance of at least five fireworks displays, at least one of which must have occurred in the current or preceding year.
- Subd. 3. **Certification application; fee.** An applicant shall submit a completed initial application form including references and evidence of experience and successful completion of the written examination. Applicants shall pay a certification fee of \$100 to the State Fire Marshal Division of the Department of Public Safety. The state fire marshal shall review the application and send to the applicant written confirmation or denial of certification within 30 days of receipt of the application. Certification is valid for a period of four years from the date of issuance.
- Subd. 4. **Classification.** When an applicant has met the requirements of subdivisions 2 and 3, the state fire marshal shall certify and classify the operator for supervising proximate audience displays, including indoor fireworks displays, for supervising traditional outdoor fireworks displays, or for supervising both types of displays, based on the operator's documented experience.
- Subd. 5. **Responsibilities of operator.** The operator is responsible for ensuring the fireworks display is organized and operated in accordance with the state fire marshal's guidelines described in subdivision 1.

- Subd. 6. **Reports.** (a) The certified operator shall submit a written report to the state fire marshal within ten days following a fireworks display conducted by the operator if any of the following occurred:
- (1) an injury to any person resulting from the display of fireworks;
- (2) a fire or damage to property resulting from the display of fireworks; or
- (3) an unsafe or defective pyrotechnic product or equipment was used or observed.
- (b) The certified operator shall submit a written report to the state fire marshal within 30 days following any other fireworks displays supervised by the operator.
- (c) The state fire marshal may require other information from operators relating to fireworks displays.
- Subd. 7. **Operator certification renewal.** An applicant shall submit a completed renewal application form prepared and provided by the state fire marshal, which must include at least the dates, locations, and authorities issuing the permits for at least three fireworks displays participated in or supervised by the applicant and conducted during the past four years. An applicant shall pay a certification renewal fee of \$100 to the State Fire Marshal Division of the Department of Public Safety. The state fire marshal shall review the application and send to the applicant written confirmation or denial of certification renewal within 30 days of receipt of the application. Certification is valid for a period of four years from the date of issuance.
- Subd. 8. **Suspension, revocation, or refusal to renew certification.** The state fire marshal may suspend, revoke, or refuse to renew certification of an operator if the operator has:
- (1) submitted a fraudulent application;
- (2) caused or permitted a fire or safety hazard to exist or occur during the storage, transportation, handling, preparation, or use of fireworks;
- (3) conducted a display of fireworks without receipt of a permit required by the state or a political subdivision;
- (4) conducted a display of fireworks with assistants who were not at least 18 years of age, properly instructed, and continually supervised; or
- (5) otherwise failed to comply with any federal or state law or regulation, or the guidelines, relating to fireworks.
- Subd. 9. **Database.** The commissioner of public safety shall maintain a database of the information required under this section for purposes of (1) law enforcement, (2) investigative inquiries made under subdivision 1, and (3) the accumulation and statistical analysis of information relative to fireworks displays.

HIST: 1941 c 125 s 3; 1973 c 123 art 5 s 7; 1985 c 248 s 70; 1986 c 444; 1995 c 226 art 4 s 23; 1997 c 187 art 1 s 23; 1Sp2003 c 2 art 4 s 28

624.221 Exemptions for license or permit holder.

Sections 624.20, 624.21, and 624.23 to 624.25 do not apply to:

- (a) the holders of a federal explosives license or permit issued pursuant to United States Code, title 18, chapter 40, or their agents when the holder or agent is acting in compliance with the conditions of licensure; or
- (b) the holders of permits issued pursuant to section 624.22 or their agents, from the date of issuance until 20 days after the date of exhibition authorized by the permit, when the holder or agent is acting in compliance with the conditions of the permit and section 624.22.

HIST: 1988 c 584 s 4

624.23 Construction of sections 624.20 to 624.25.

Nothing in sections 624.20 to 624.25 shall be construed to prohibit any resident wholesaler, dealer, or jobber, from possessing or selling at wholesale fireworks which are not prohibited; or the possession or sale of any kind of fireworks for shipment directly out of the state; or the possession or use of fireworks by airplanes and railroads, or other transportation agencies for signal purposes or illumination; or the possession, sale, or use of blank cartridges for a show or theater, or for signal or ceremonial purposes in athletics or sports, or for use by military organizations or for use as a bird or animal repelling device.

HIST: 1941 c 125 s 4; 1971 c 710 s 1; 1988 c 584 s 5

624.24 Officers may seize illegal fireworks.

The state fire marshal, or any sheriff, police officer, constable, or local fire marshal, shall seize, take, remove, or cause to be removed, at the expense of the owner, all stocks of fireworks or combustibles offered or exposed for sale, stored, or held in violation of sections 624.20 to 624.25.

HIST: 1941 c 125 s 5

624.25 Violation.

Any person violating the provisions of sections 624.20 to 624.24 may be sentenced as follows:

- (1) if the violation involves explosive fireworks in an amount of 35 pounds gross container weight or more, to imprisonment for not more than one year, or to payment of a fine of not more than \$3,000, or both;
- (2) if the violation involves explosive fireworks in an amount of less than 35 pounds gross container weight, to imprisonment for not more than 90 days, or to payment of a fine of not more than \$700, or both; and
- (3) if the violation involves any amount of fireworks other than explosive fireworks, to imprisonment for not more than 90 days, or to payment of a fine of not more than \$700, or both.

HIST: 1941 c 125 s 6; 1988 c 584 s 6

ATTACHMENTS

The following forms are included as attachments to these Guidelines:

Sample Application / Permit Display of Fireworks / Pyrotechnic Special Effects

Minnesota State Fire Marshal Application for Permit Display of Indoor Fireworks / Pyrotechnic Special Effects

Fireworks Operator Certification Application

Minnesota Department of Revenue License Applicant Information Form

Fireworks Operator Display Report

American Pyrotechnics Association Proximate Pyrotechnics Checklist

(FOR USE BY LOCAL JURISDICTIONS)

SAMPLE APPLICATION / PERMIT OUTDOOR PUBLIC FIREWORKS DISPLAY

Applicant instructions:

| 2. This application must be completed and | d returned at least 15 days prior to | not valid for an indoor fireworks display. o date of display. to |
|---|---|--|
| Name of Applicant (Sponsoring Organization): | | |
| Address of Applicant: | | |
| Name of Applicant's Authorized Agent: | | |
| Address of Agent: | | |
| Telephone Number of Agent: | Date of Display: | Time of Display: |
| Location of Display: | | |
| Manner and place of storage of fireworks prior to | o display: | |
| Type and number of fireworks to be discharged: | | |
| MINNESOTA STATE LAW REQUIRES SUPERVISION OF A PYROTECHNI Name of Supervising Operator: | C OPERATOR CERTIFIED I | BY THE STATE FIRE MARSHAL. |
| Required attachments. The following attachm | ents must be included with this a | pplication: |
| 2. A diagram of the ground at which the d included) must show the point at which | sted Amount: \$1.5 million minim isplay will be held. This diagrar the fireworks are to be discharge tets, communication lines and other exercises. | num) n (drawn to scale or with dimensions ed; the location of ground pieces; the ner possible overhead obstructions; and the |
| The discharge of the listed fireworks on the date the following conditions, if any: | and at the location shown on thi | |
| I understand and agree to comply with all provis Code, National Fire Protection Association Stand the issuing authority, and will ensure that the fire or constitute a nuisance. | dard 1123 (2006 edition), applica | able federal law(s) and the requirements of |
| Signature of Applicant (or Agent): | | Date: |
| Signature of Fire Chief/County Sheriff: | | Date: |
| Signature of Issuing Authority: | | Date: |



Minnesota Department of Public Safety State Fire Marshal Division Application for Permit

Display of Indoor Fireworks / Pyrotechnic Special Effects



Revised 6/11

Instructions: Complete this application, attach the non-refundable permit fee, proof of bond or insurance in the specified amount, a copy of the plan for the use of pyrotechnics (see page 2 for the required contents of the plan), and submit to the address below at <u>least 15 days</u> prior to the date of the display. If approved, permits will be issued to the Sponsoring Organization named on the application.

Minnesota Department of Public Safety State Fire Marshal Division 444 Cedar Street, Suite 145 St. Paul, MN 55101-5145

Hours: 8:00 am to 4:30 PM, Monday - Friday

| Name of Sponsoring Organization: | |
|---|---|
| Address of Sponsoring Organization: | |
| Name of Authorized Agent – Sponsoring Organization: | |
| Address of Agent: | |
| Phone Number of Agent: (W) | (H) |
| Location of Display: | |
| Date of Display: | Time of Display: |
| Manner and Place of Storage of Fireworks / Pyrotechnic S | Special Effects Prior to Display: |
| | |
| | |
| Type and Number of Fireworks / Pyrotechnic Special Effe | cts to be Discharged: |
| | |
| | |
| | displays to be conducted under the direct supervision of a by the Minnesota State Fire Marshal. |
| Name of Supervising Operator: | MN Certificate Number: |
| Safety) Note: Inspection Fee - The sponsoring organ personnel and travel costs, of conducting the inspection of bond or insurance in the amount of \$1.5 million | · |
| nics special effects display for which this application has b | rstand and agree to ensure that the indoor fireworks / pyrotech- been filed will be conducted in full compliance with Minnesota ational Fire Protection Association Standard 1126 (2006 Edition). |
| Signature of Authorized Agent: | Date: |

Pyrotechnics Plan - Required Contents

National Fire Protection Association Standard 1126 - Use of Pyrotechnics Before A Proximate Audience (2006 Edition) Section 6.2, requires that the applicant for a permit submit a written plan for the use of pyrotechnics. Applications for Section 6.3.2 lists the contents of the plan, which are as follows:

- 1. The name of the person, group, or organization sponsoring the production.
- 2. The date and time of day of the production.
- The exact location of the production.
- 4. The name of the person actually in charge of firing the pyrotechnics (i.e. the pyrotechnics operator).
- 5. The number, names and ages of all assistants who are to be present.
- 6. The qualifications of the pyrotechnic operator.
- 7. The pyrotechnics experience of the operator.
- 8. Confirmation of an applicable state and federal licenses held by the operator or assistants.
- 9. Evidence of the permittee's insurance carrier or financial responsibility.
- 10. The number and types of pyrotechnic devices and materials to be used, the operator's experience with those devices and effects, and a definition of the general responsibilities of assistants.
- 11. A diagram of the facilities were the production is to be held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the fallout radius for each pyrotechnic device used in the performance, and the lines behind which the audience shall be restrained.
- 12. The point of on-site assembly of pyrotechnic devices.
- 13. The manner and place of storage of the pyrotechnic materials and devices.
- 14. A material safety data sheet (MSDS) for the pyrotechnic material(s) to be used.
- 15. Certifications that the set, scenery, and rigging materials are inherently flame-retardant or have been treated to achieve flame retardancy. (NFPA 1126: 6.3.2)

Any addition of pyrotechnics to a performance or any significant change in the presentation of pyrotechnics shall require approval by the authority having jurisdiction. *Exception: For the purpose of this standard [NFPA 1126], reducing the number or size of pyrotechnics to be used in a performance shall not be considered a significant change in the presentation.* (NFPA 1126: 6.2.3)

After a permit has been granted, the permittee shall keep the plan available at the site [of the performance] for safety inspectors or other authorized agents of the authority having jurisdiction. (NFPA 1126: 6.2.2)



DEPARTMENT OF PUBLIC SAFETY MINNESOTA STATE FIRE MARSHAL DIVISION

FIREWORKS OPERATOR CERTIFICATION APPLICATION

| | orint or Type) | | | | |
|-------------|---|---------------------|---|---|---|
| Addres | SS: | | | | City: |
| State: | Zip: | | Telephone: (H | 1 | (W) |
| Fax Nu | ımber: | | E-ma | il Address: | |
| Driver' | s License Number: | | | State: | Date of Birth: |
| Certifi | cation Applied For: | Outdoor Dis | splayPro | oximate Display | Outdoor and Proximate Display |
| (| Outdoor and Proxim | | Ves No No Sec. A Sec. B Sec. C Evidence of I lisplaysone of vertical parts Sec. C Sec. C Sec. C Sec. C Sec. C Sec. C Sec. C | Rec'd By Check No. Test Date Experience which must be within t | |
| | Display | ocation | Sponsor | Permit Issued by | Type of Display (Outdoor or Proximate) |
| 2 3 4 | | | | | |
| 1 | Name | Address | | Telephone No. | Name of Agency/Organization |
| 3I verif | y that the above info in a revocation of m | rmation is true and | | ware that any false sta | tement constitutes fraud and may |
| | Sionature | | | | |

Return this form and make checks payable to:

Minnesota State Fire Marshal Division Attn: Fireworks Operator Certification Program 444 Cedar Street, Suite 145 St. Paul, MN 55101-5145

All data required on a fire works operator certificate application is required by law or administrative rule. The information is used to identify your fireworks operator certificate record and determine your eligibility for a fireworks operator certificate. Failure to provide required information may result in denial of the certificate. All information on the application is public and copies of the application or its information may be issued to anyone.

State of Minnesota License Applicant Information

Under Minnesota law (M.S. 270.72), the agency issuing you this license is required to provide to the Minnesota Commissioner of Revenue your Minnesota business tax identification number and the Social Security number of each license applicant.

Under the Minnesota Government Data Practices Act and the Federal Privacy Act of 1974, we must advise you that:

- This information may be used to deny the issuance, renewal or transfer of your license if you owe the Minnesota Department of Revenue delinquent taxes, penalities, or interest;
- The licensing agency will supply it only to the Minnesota Department of Revenue. However, under the Federal Exchange of Information Act, the Department of Revenue is allowed to supply this information to the Internal Revenue Service:
- Failing to supply this information may jeopardize or delay the issuance of your license or processing your renewal application.

Please fill in the following information and return this form along with your application to the agency issuing the license. **DO NOT RETURN THIS FORM TO THE DEPARTMENT OF REVENUE.**

| Please print or type | | | |
|---|--|------------------------|--|
| Name of license being applied for ar | nd license number (if renewal): License Num | iber#: | |
| | | | |
| | | | |
| Licensing Authority (name of city, coun | ty or state agency issuing license): | | |
| | -,, | | |
| | | | |
| License Renewal Date: | | | |
| Electise Renewal Bate. | | | |
| | | | |
| PERSONAL INFORMATION | | | |
| Applicant's last name | Applicant's first name and middle initial | Social Security Number | |
| | rr | | |
| | | | |
| Applicant's address | City | State Zip Code | |
| | | | |
| BUSINESS INFORMATION: | | | |
| Business name | | | |
| Business name | | | |
| | | | |
| Business address | City | State Zip Code | |
| Minnesota tax identification number | Endoral tay idam | tification number | |
| | cation is not required, please explain on the re | | |
| | A /A A | | |
| Applicant Signature: | | | |
| | | | |
| | | | |
| Signature | Title | Date | |



DEPARTMENT OF PUBLIC SAFETY MINNESOTA STATE FIRE MARSHAL DIVISION

FIREWORKS OPERATOR DISPLAY REPORT



MSS 624.22, Subd. 6 requires fireworks display operators to report all displays to the State Fire Marshal within 30 days of the display. If an injury, fire over \$100, or damage over \$100 to property occurs, or unsafe or defective pyrotechnic products or equipment was used, complete Part B and return to the State Fire Marshal Division within 10 days of the display.

| PART A – DISPLAY | INFORMATION | |
|-----------------------------|--|---|
| Name of Operator | | Certificate Number |
| Type of Display: | () Outdoor () Outdoor Proximate Audience (|) Outdoor Both () Indoor Proximate Audience |
| Display Date: | Display Time: From | To |
| Sponsor (Private individ | duals may not sponsor a display) | |
| Name of Property or Ad | Outdoor and Outdoor Proximate Audience Iddress where Display Occurred | |
| City / Township | County | |
| | Barrier I (as la la se Brasilia de As | Page Blades |
| Name of Facility where | Required for Indoor Proximate Aud Display Occurred | |
| | | County |
| Assistants: Name | Date of Birth | MN Fireworks Operator Cert. # (If Applicable) |
| | | |
| | | |
| | | |
| Attach separate sheet for | or more assistants, if necessary. | |
| | Defective Products/Injury/ | /Damage |
| Was there an injury as a re | re device product used or observed during the display esult of the above display? ge or a fire resulting from the display? | ? () Yes () No If yes, answer Part B, Section I. () Yes () No If yes, answer Part B, Section II. () Yes () No If yes, answer Part B, Section III. |
| If you a | answer yes to any of these questions | complete and return page 2. |
| | nformation, and that attached information on pag t constitutes fraud and may result in a revocation | ge 2 if necessary, is true and accurate. I am aware n of my certificate. |
| Signature: | | Date: |
| Return this form to: | Minnesota State Fire Marshal Division Attn: Fireworks Operator Certification Progr 444 Cedar Street, Suite 145 | ram |

All data required on a fireworks operator certificate application is required by law or administrative rule. The information is used to identify your fireworks operator certificate record and determine your eligibility for a fireworks operator certificate. Failure to provide required information may result in denial of the certificate. All information on the Fireworks Operator Display Report is public and copies of the application or its information may be issued to anyone.

Revised 06/11 Page 1

St. Paul, MN 55101-5145

PART B - INJURY/DAMAGE/DEFECTIVE PRODUCT INFORMATION

Section I – Defective Product

List all fireworks that were duds, malfunctioned, or defective. For each firework listed, the report shall include: Type of firework (Type 1 - Mines, Type 2 - Aerial Shells, Type 3 - Roman Candles, Type 4 - Set Pieces), size of firework if applicable (i.e., 6 inch shell.), and manufacturer's name. (Use a separate sheet for additional defective products)

| Firework Type (Type 1, 2, Etc.) | Firework Size | Manufacturer |
|---------------------------------|---------------|--------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Section II – Injuries | | |

Describe any injuries caused by fireworks. Each injury shall be listed separately, and shall include the type of firework that injured the person, cause of the injury, type of injury, and the name, address, age and telephone number of the injured person. (Use a separate sheet for additional injuries)

| Firework Type: | Cause of Inju | ıry: | | Type of Injury: | | | |
|----------------|---------------|----------|------|-----------------|--------|------|------------|
| Injured Name: | | Address: | City | | State: | Age: | Telephone: |
| Firework Type: | Cause of Inju | ıry: | | Type of Injury: | | | |
| Injured Name: | | Address: | City | : | State: | Age: | Telephone: |

Section III - Property Damage

Describe any fires or property damage (over \$100) caused by fireworks authorized by the permit. Each fire/damage shall be listed separately and shall include the type of firework that started the fire/damage, cause of the fire/damage, brief description of property damaged and dollar loss of the damage that occurred. (Use a separate sheet for additional fires/damages)

| Firework Type | Cause of Fire/Damage | Property Description | Dollar Loss |
|---------------|----------------------|----------------------|-------------|
| | | | |
| | | | |
| | | | |

All data required on a fireworks operator certificate application is required by law or administrative rule. The information is used to identify your fireworks operator certificate record and determine your eligibility for a fireworks operator certificate. Failure to provide required information may result in denial of the certificate. All information on the Fireworks Operator Display Report is public and copies of the application or its information may be issued to anyone.

Revised 06/11 Page 2



Proximate Pyrotechnics Checklists

Disclaimer

The following Checklists contain safety information associated with the presentation of an indoor or "proximate" pyrotechnics event and are intended to provide an overview regarding the proper procedures to be followed. These Checklists are offered by the American Pyrotechnics Association (APA) to assist in safely producing events incorporating indoor pyrotechnics.

The Checklists are not intended to be all encompassing, exhaustive treatments of every aspect of a proximate pyrotechnics production. The Checklists also do not apply to certain types of productions, for example, motion picture and television productions, and other events where the audience is not proximate to the pyrotechnics. The checklists may need to be augmented by the team members to include special circumstances and shifting responsibilities for certain aspects of an event.

The APA, its officers and directors, and its members make no warranties, express or implied regarding the information provided in the attached Checklists. Indeed, APA, its officers and directors and its members expressly disclaim any liability whatsoever for the use of these Checklists. In no event shall they be liable for any damage, injuries, costs or expenses relating to the use the Checklists. Users of proximate pyrotechnics are encouraged to seek legal counsel and other appropriate professional assistance prior to utilizing proximate pyrotechnics in any particular jurisdiction.

April, 2004



PROXIMATE PYROTECHNICS CHECKLISTS

- I. Pre-Production Checklist (Pyrotechnician)
 - 1. Prepare and file permit application for pyrotechnics (NFPA 1126: 4.2, 4.3)
 - 2. Determine what regulatory standard is used for the jurisdiction
 - 3. Prepare pyrotechnic material description (NFPA 1126: 4.3.2 (j))
 - 4. Review production schedule
 - 5. Installation plot plan and specifications (NFPA 1126: 4.3.2 (k))
 - 6. Determine insurance levels, have insurance certificate prepared with appropriate additional insureds and filed (NFPA 1126: 4.3.2 (i))
 - 7. Determine any pyrotechnic licenses required and other qualifications of Personnel (NFPA 1126: 4.3.2 (h))
 - 8. Plan pyrotechnic transportation, handling and storage (NFPA 1126: 3.1, 3.2)
 - 9. Determine and plan for security requirements (NFPA 1126: 6.1.3, 6.1.4, 6.5.6)
 - 10. Determine venue management contact information (NFPA 1126: 4.3.2, 6.1.3)
- II. Site Inspection Checklist (Pyrotechnician & Venue Management)
 - 1. Confirm venue management consent to pyrotechnics
 - 2. Confirm venue management or production permit for event
 - 3. Verify plot plan measurements and accuracy (NFPA 1126: 4.3.2 (j) and (k))
 - 4. Verify AHJ approval of venue compliance with life safety standards
 - 5. Determine fire protection systems, controls and equipment
 - 6. Determine HVAC systems and controls
 - 7. Determine show management production plan
 - 8. Determine venue management safety plans, crowd control, security and emergency plans and procedures
 - 9. Determine personal safety requirements for pyrotechnicians (e.g., fall protection plans and equipment)
 - 10. Verify AHJ approval of flame retardant materials in public areas and pyrotechnic installation sites
 - 11. Determine approved & secure storage and work areas for pyrotechnics (NFPA 1126: 3.1.1, 4.3.2 (I) and (m), 6.1.3, 6.1.4)
 - 12. Determine hazmat shipping depot (venue) if required
- III. Production Meeting Checklist (Production Management)
 - 1. Confirm installation plan and schedule (NFPA 1126: 4.2, 4.3)
 - 2. Schedule live pyrotechnic demonstration (NFPA 1126: 4.4.1, 4.4.2)
 - 3. Schedule rehearsal and performance
 - 4. Determine need for HVAC/fire protection system control adjustments and personnel responsibilities (NFPA 1126: 4.4.3, 6.1.6, 6.6.6, 6.7.6, 6.7.7)
 - 5. Assign responsibility for hazard communication with participants and staff (NFPA 1126: 6.6.1)
 - 6. Review emergency action plan and assign responsibilities

- 7. Coordinate pyrotechnic control points, communications and line of sight (NFPA 1126: 6.3.5, 6.3.6, 6.6.5)
- 8. Review crew lists and assignments
- 9. Review safety plans and procedures and personal protective equipment (NFPA 1126: 6.5.7)

IV. Walkthrough Inspection Checklist (AHJ)

- 1. Pyrotechnic walkthrough and demonstration
 - A. Confirm venue management consent to pyrotechnics
 - B. Verify pyrotechnic plot with actual site dimensions/adjustments
- 2. Type of devices verify indoor/proximate use & performance specifications (NFPA 1126: 5.1, 5.2, 5.3, 5.4)
- 3. Verify quantities, locations, and cueing of devices to be used
- 4. Verify secure areas and methods for restricting unauthorized persons from entering.
- 5. Verify that all devices are securely fixed with proper audience separation
 - A. Minimum 15ft or 2X fallout radius (NFPA 1126: 6.4.1)
 - B. Concussion mortars min 25ft in secured area (NFPA 1126: 6.4.2)
 - C. Trajectory of comets/mines not over audience (NFPA 1126: 6.2.11)
 - D. Waterfall effect area to be free of flammable materials (NFPA 1126: 6.2.12)
 - E. Wire rocket effects to be properly secured and terminated (NFPA 1126: 6.2.9)
 - F. Airbursts over audience to be minimum height of 3 times the diameter of effect, and no sparks within 15 ft of floor (NFPA 1126: 6.2.14(1) & (2))
- 6. Check fire fighting equipment
 - A. Minimum of 2 approved water fire extinguishers (NFPA 1126: 6.1.1.1)
 - B. Other firefighting equipment as needed/required (NFPA 1126: 6.1.1 & 6.1.1.2)
 - C. Existing on-site fire fighting equipment/systems
- 7. Pyrotechnic firing systems
 - A. Verify operational/safety features and functions of systems (NFPA 1126: 6.3.2 & 6.3.3)
 - B. Verify operator & spotters have clear view of effects and communication with operator (NFPA 1126: 6.3.5)
- 8. Determine plan for HVAC /detectors adjustments & notification of demonstration
- 9. Determine need for demonstration of representative effects
- 10. Check plans for approved and secure on-site storage and preparation areas (NFPA 1126: 4.3.2 (I), 6.1.3 & 6.1.4)
 - A. Separation from heat/flame sparks (NFPA 1126: 3.3)
 - B. No smoking within 25ft (signage) (NFPA 1126: 6.5.5)
 - C. Materials stored/handled neatly and orderly (NFPA 1126: 6.5.1)
- 11. Check plan for personal protective equipment for preparation and loading of pyrotechnics (NFPA 1126: 6.5.7)

V. Rehearsal & Show Checklist (Pyrotechnician)

- 1. Hold safety meeting with all participants
- 2. Hold rehearsal, if required (all requirements of following section apply)
- 3. Performance

- A. Determine how final alert will be given to all performers, crew and support personnel and who will give the alert
- B. Conduct final inspection immediately preceding performance
 - a) Confirm pyrotechnic wiring connections and firing system
 - b) Confirm device placement, mounting, orientation and readiness
 - c) Confirm firefighting equipment in position
 - d) Confirm spotters in place with communication
- C. Execute or fire show
 - a) Confirm and maintain audience separation, performers positioned correctly, support personnel readiness
 - b) Confirm and maintain unobstructed view of effects by operator and/or spotter
 - c) Observe effect performance for safe operation
- VI. Post-Show Checklist (Pyrotechnician)
 - 1. Inspect all pyrotechnic devices to confirm firing (NFPA 1126: 6.7.1)
 - 2. Confirm the integrity of fallout zones and adjacent areas
 - 3. Return unfired devices to approved storage or repackage for transportation (NFPA 1126: 6.7.2)
 - 4. Confirm reactivation of any disarmed fire detection/HVAC systems to normal operating mode (NFPA 1126: 6.7.6)
 - 5. File post-show report, if required

Source: Proximate Pyrotechnics Committee, American Pyrotechnics Association

Reference: National Fire Protection Association, NFPA 1126 Standard for the Use of Pyrotechnics Before a Proximate Audience, 2001 Edition.

Question & comments may be directed to:

American Pyrotechnics Association P.O. Box 30438 Bethesda, MD 20824 (301) 907-8181