



NORTHSTAR FIRE DEPARTMENT



Fireworks Public Display– Guidelines & Specifications

Fire Prevention Guideline P-09

PURPOSE

This guideline contains information related to fireworks displays when proposed as part of a special event or similar use. For purposes of this guideline, the use of any pyrotechnic device, including spark machines, is considered a fireworks display; consumer California State Fire Marshal labeled “safe and sane” fireworks, are excluded.

As you organize and set up your event, go over the information in this attachment with the crew, operational personnel, and other responsible parties to facilitate a successful fire safety inspection and a safe and code-compliant event.

SCOPE

This guideline is intended to provide general procedures for public displays (fireworks) using pyrotechnic devices and to meet the minimum requirements of California Code of Regulations (CCR) Title 19, California Fire Code (CFC) Chapter 56, National Fire Protection Association (NFPA) Section 1123, Northstar Community Services District (NCS D) Ordinance 39-22 and comply with segments of the Homeland Security Act of 2001.

SUBMITTAL REQUIREMENTS

1. PERMIT REQUIRED

- 1.1 All public displays (fireworks) shall only be performed under the authority of a written Operational Permit from the Northstar Fire Department. Northstar Fire Department will not issue an Operational Permit unless Placer County has given their approval as well. The Operational Permit shall be issued for a specific act, location and period of time. All permits can be revoked due to climatic and ground fuel conditions or state/local bans. All permits may be revoked at any time if the terms of the permit are violated. All permits are non-transferrable. A request for an operational permit must be made in writing (providing supportive documentation) to the Northstar Fire Department.

2. SUBMITTAL REQUIREMENTS

Permit Application - All of the following documents must be submitted to the Northstar Fire Department for review and approval for the issuance of an Operational Permit:

- 2.1 A completed Special Event application.

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- 2.2 A Supplemental Application for Fireworks Display form.
- 2.3 A current copy of the following: Worker’s Compensation, auto/liability/property damage insurance naming the Northstar Community Services District, the city in which the event will take place, their offices, agents, employees and servants as additional insured. (CCR19)
- 2.4 A current copy of the California State Fire Marshal issued pyrotechnic operator’s license and current copy of the operator’s California driver’s license.
- 2.5 A copy of a current California State Fire Marshal’s license for public display.
- 2.6 A list of quailed assistants who will work the display.
- 2.7 Copies of all signed and completed Placer County paperwork showing approval by the County.

Plans:

- 2.8 A fully dimensioned plot plan that shows location of the display setup and location (with distance) of the firing box from the display. Include any access roads with width shown, hydrants, ingress and egress. Show structures that may be located in or near the firing area. Include the fallout are based upon 100 feet per inch of shell size.
- 2.9 List of fireworks to be discharged, by class, size and amount of each (specify single or multiple break or salute).
- 2.10 Letter from sponsor or pyrotechnic company stating that any additional fees will be billed directly by the sponsor.
- 2.11 Public displays fired on private property must have a letter from the current property owner approving of the event and holding Northstar Community Services District and its employees harmless to damages or liability.

3. PUBLIC DISPLAY REQUIREMENTS

- 3.1 Public display shall be electrically fired (CFC 5608.2).
- 3.2 Provide a minimum of two, 2.5-gallon pressurized water extinguishers, currently serviced.
- 3.3 Provide a water container for duds or misfired shell(s).

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- 3.4 Provide for barricades/barriers to keep unauthorized personnel out of the site/fallout area.
- 3.5 Mortars are to be in good condition. Base plugs in place, with no splits, bulges in the tubes or bent/frayed muzzles.
- 3.6 Operator and assistants located within the fallout area are required to have all the proper safety gear/protective clothing on during the firing of the display and immediately after the display (CCR 19).
- 3.7 A test fire utilizing the largest shell (non-salute type) permitted in the display shall be conducted (1) hour prior to the display and shall be witnessed by a Northstar Fire Department inspector, as required by the inspector.
- 3.8 If mortar racks are used, they shall be stable and secure.
- 3.9 Electrically fire shows require that all mortars buried in earth or placed in drums/troughs shall be nominally spaced 2 feet apart from the sides of the drum/trough.
- 3.10 NO SMOKING in firing or display areas.
- 3.11 Electrically fired shows require that all technicians shall be positioned a minimum of 100 feet from any mortar and positioned so as to be protected from the direct line of fire.
- 3.12 A continuity test shall be conducted and witnessed by the Northstar Fire Department inspector prior to any firing.

4. EVENT REQUIREMENTS

- 4.1 Contact the Northstar Fire Department at 530-562-1212 to schedule an inspection. Please see the attached inspection document that will be used by NFD while performing the inspection. The inspection will include, but is not limited to:
 - Verifying licensing of operator and licensed assistants. Verify ID and age of all assistants.
 - Inspection/inventory of fireworks shells to be discharged.
 - Inspection of racks to determine proper spacing and bracing.
 - Inspection of mortars used to fire aerial shells.
 - Inspection of all required safety equipment, fire extinguishers, etc.



INSPECTION CHECK LIST FOR OUTDOOR FIREWORKS DISPLAY

PAPERWORK

- Show Permit from Engineering Division.
- Approved Site Plan.

PERSONNEL

- Verify and record pyrotechnic operator identification.
- Verify pyrotechnic operator possesses valid driver license of proper type.
- Verify and record pyrotechnic information on the identity and ages of all assistants, helpers, etc.

SECURITY

- Verify site security of storage area, discharge area, display area and fallout area as indicated on approved plan.
- Verify arrangement for traffic and crowd control before, during and after display.

TRANSPORTATION AND STORAGE ARRANGEMENTS

- Transportation shipping documents match products in vehicle.
- Vehicle placards are provided as required.
- Fireworks storage is in an approved manner and location
- Storage container(s) is locked and secured.

FIRE PROTECTION AND SAFETY EQUIPMENT

- Fire extinguishers available and accessible
- Shovel and container available for retrieving duds
- Appropriate protective gear (i.e. hard hat, long sleeved shirt, etc.) available for persons manually discharging fireworks.

MORTAR INSPECTION

- Compare list of mortar racks, etc. with actual equipment.
- Mortars are approved for use with type of shells to be fired.
- Mortars are inspected prior to use for defects, debris, etc.
- Base plugs are securely attached to bottom of mortars.
- Mortars are proper length for size of shells to be fired.

RACK INSPECTION

- Racks have no more than 10 tubes per unit.
- Base and ends of racks are nominal 2" thick lumber.

- Racks have blocks (nominally 2"x4") separating individual mortars.
- Racks for mortars 3" or larger have side braces of 1"x6" nominal lumber or ½"x4" plywood.
- All racks with more than 5 tubes have diagonal side braces.
- Racks are secured to prevent falling over.

TROUGH INSPECTION

- No trough is more than 8 feet in length.
- Bottom surface of trough is provided with ¾" plywood if not sufficiently stable to support firing of the mortar.
- Troughs are constructed of minimum ¾" plywood and secured with 3/8" through-bolts, rods or angle iron "U" brackets at each end and center.
- Sand or soft dirt, free of rocks or debris, is on-hand to fill trough.
- Minimum separation distance between mortar is provided.
- Trough is of adequate height to securely bury mortar 2/3 of their minimum legal length.

DRUM INSPECTION

- Drums are in good condition.
- Sand or soft dirt, free of rocks or debris, is on-hand to fill drum.
- Drums are of adequate size to provide minimum separation distances between mortars.
- Drums are of adequate height to securely bury mortars 2/3 of their minimum legal length.

TRENCHES, ETC. TO BURY MORTARS IN GROUND

- Planking below mortars is provided for unstable or unlevel surfaces.
- Trenches are of sufficient depth to securely bury mortars 2/3 of their minimum legal length.
- Minimum separation distance between mortars is provided.
- Sand or soft dirt, free of rocks or debris, is on-hand to fill trench.

AERIAL SHELL INSPECTION

- Number of shells matches quantity listed on permit.
- Shells properly lab for use in California.
- operator examines shells for damage.
- operator sizes shell for proper fir in mortars.

GROUND DEVICE INSPECTION

- Ground devices match items listed on permit.
- Location and spacing of devices is per approved permit.
- Equipment available to secure & brace ground devices.

DISCHARGE FALLOUT AREA INSPECTION

- Location is as per approved permit.
- Minimum required fallout area is provided.
- Arrangements provided to secure fallout area when shell loading begins.

ELECTRICALLY FIRED DISPLAY INSPECTION

- Power source is restricted to batteries or individually isolated generators.

- [] Firing system is protected against accidental firing.
- [] Method for circuit testing is available.
- [] Firing panel is located within continuously unobstructed full view of operator.

MANUALLY FIRED DISPLAY INSPECTION

- [] Safety caps protecting fuses remain in place until immediately before firing.

RELOADED MORTARS DISPLAY INSPECTION

- [] No HDPE Mortars will be reload.
- [] Ready box(es) are located more than 25 feet upwind of the closest mortar.
- [] Ready box(es) are divided into separate compartments for each shell size.
- [] Ready box(es) are covered with a flame-resistive canvas cover.

OPERATION OF DISPLAY

- [] Discharge, display, and fallout areas are cleared of all unauthorized personnel prior to loading shells.
- [] No one under the age of 18 is in discharge, display, and fallout areas once loading of shells begins.
- [] Mortars are aimed over fallout area and away from separators.
- [] On electrically fired shows, discharge area is cleared of all persons prior to electrical circuit testing.
- [] All devices are ONLY fired upon or signal of the licensed operator.
- [] During discharging of shells, operator observes activities to ensure wind and trajectory are adequate and makes adjustment if necessary.
- [] If a misfire occurs, mortar shall be identified, marked and left undisturbed.

POST DISPLAY ACTIVITIES

- [] NO ONE permitted to enter display, discharge or fall out areas until pyrotechnic operator has determined the area to be safe and secure.
- [] Entire firing area is inspected by pyrotechnic operator and crew to locate any unexploded shells. Shells located are properly disposed of.
- [] Unfired shells removed and returned directly to supplier or stored in manner approved on permit.

NOTIFICATION

- [] PYROTECHNIC OPERATOR provides verbal reports to State Fire Marshal for any incident involving injury or death to public or crew, or for any fire requiring emergency action or response resulting from the firing of the show.
- [] AUTHORITY HAVING JURISDICTION files charges of violations that would be cause for revocation or denial of a license to the State Fire Marshal within three years of the alleged act or omission.
- [] AUTHORITY HAVING JURISDICTION reports fireworks seized pursuant to Section 12722 of the Health & Safety Code to the State Fire Marshal within 3 days.