# ATTACHMENT B Fireworks Displays

# HOW TO USE THIS ATTACHMENT

This attachment 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.

In addition to the generic event information listed in the "Submittal Requirements" section in Guideline S-01, the information in the "Additional Submittal Requirements" section of this attachment must be provided with your permit application.

The "Technical Information" section outlines information and safety provisions that apply to fireworks displays in general. The specifications and code provisions for many of the items listed as submittal requirements can be found here, so review of the entire attachment is recommended as you prepare your special event application. 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.

# ADDITIONAL SUBMITTAL REQUIREMENTS

In addition to the standard special event information listed under the "Submittal Requirements" section in Guideline S-01, the information listed in this "Additional Submittal Requirements" section shall be provided as part of the application for all events that include fireworks.

Depending on the scope of the event or other considerations, the inspector reviewing the project may need more information in order to complete an evaluation of the event and provide conditions of approval to mitigate the potential hazards.

#### **Exterior Plans**

Include the following on the site plan:

- Location of the display set-up
- Location of the firing box, including distance from the display set-up area. All displays shall be electrically fired.
- Location of fire hydrants and fire lanes
- Fallout area based on 100-foot radius from the set-up area per inch of shell size based on the largest shell used. For example; a 2-inch shell requires a 200-foot radius fallout zone.
- Structures and overhead obstructions (trees, telephone/electrical lines) that may be located in or near the firing area.
- Parking lots, seating/viewing areas, walkways, and other areas accessible to the public during set-up and the display.
- Security fencing

#### **Other Information**

- Provide a current copy of insurance naming the OCFA, the city in which the event will take place, their officers, agents, employees and servants as additional insured.
  - Additional Insured Endorsements: OCFA must be named as an additional insured on the General Liability insurance policy and an Endorsement to that effect must accompany the Certificate of Insurance reflecting the minimum insurance requirements as stated above. The language on the Endorsement should read, "OCFA is an additional insured on the policy for any and all work performed, and the (Company Name) insurance is primary and noncontributing and OCFA's insurance is excess only."
- Provide a current copy of the California State Fire Marshal issued pyrotechnic operator's license for public display and current copy of the operator's California driver's license.
- List of all qualified assistants who will work the display. Assistants must be a minimum of 18 years old.
- Provide a list of fireworks to be discharged; indicate class, size, and amount of each (specify single or multiple break or salute).
- Provide a letter from the event sponsor or pyrotechnic company stating that any additional fees will be billed directly to the sponsor.
- Public displays fired on private property must have a letter from the current property owner approving of the event and holding OCFA and its employees harmless to damages or liability.

## Off-shore barge shows (additional requirements)

In addition to the items listed above, the plans shall include the following information:

- Distance between the barge and shore
- Location and distance between the set-up area and the firing box, emergency ladder, and safety barriers
- Firing shelter dimensions, construction type, distance to mortars, method of securing to barge, etc.
- A copy of the current U.S Coast Guard Certificate of Inspection from the Marine Inspector

Only personnel necessary for the safe operation of the fireworks display will be permitted on the barge during the firing of the fireworks. Spectators are not permitted on the barge at any time.

# **TECHNICAL INFORMATION**

# SCOPE

The information in this guideline is intended to provide general regulations and procedures for fireworks displays 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, and comply with segments of the Homeland Security Act of 2001.

## DEFINITIONS

The following definitions are provided to facilitate the consistent application of these guidelines:

*Offshore Barge:* A large, flat-bottomed vessel, usually intended to be pushed or towed, for transporting freight or passengers. An offshore barge will be considered an offshore vessel used in the open ocean waters. Vessels not used in the open ocean waters may be considered floats and/or platforms regulated by the general display requirements in this guideline.

# **GENERAL REQUIREMENTS**

Displays shall comply with the following requirements.

- Public display shall be electrically fired (CFC 5608.2).
- Provide a minimum of two, 2.5 gallon pressurized water extinguishers, currently serviced.
- Provide a water container for duds or misfired shell(s).
- Provide barricades/barriers to keep unauthorized personnel out of the site/fallout area.
- Mortars are to be in good condition. Base plugs in place, with no splits, bulges in the tubes or bent/frayed muzzles.
- Operators 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 until the all-clear order is given. (CCR 19).
- If mortar racks are used, they shall be stable and secure.
- Electrically fired shows require that all mortars that are buried in earth or placed in drums/troughs shall be nominally spaced 2 feet apart from the sides of the drum/trough.
- NO SMOKING in any area where fireworks are handled or stored.
- 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.
- Intoxicating liquids, narcotics and controlled substances are prohibited within the area of the firing site and shall not be used by any person handling fireworks or special effects at any time during transportation, set-up, firing or removal.

## **Event Procedure and Requirements**

The OCFA inspection will include, but is not limited to:

- 1. Verify licensing of operator and licensed assistants. Verity ID and age of all assistants.
- 2. Inspection/inventory of fireworks shells to be discharged.

- 3. Inspection of racks to determine proper spacing and bracing.
- 4. Inspection of mortars used to fire aerial shells.
- 5. Inspection of all required safety equipment, fire extinguishers, etc.

Public displays of fireworks from a barge do not require an on-site inspector during the event, however the barge will be inspected as noted above prior to leaving port.

#### Additionally,

- All electrically fired pyrotechnic circuits shall be tested with a test device in which the test current is not capable of firing the pyrotechnic device being tested. Firing site shall be cleared of all personnel while continuity testing is underway.
- 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 an OCFA inspector, as required by the inspector.
- During discharging of shells, operator observes activities to ensure wind and trajectory are adequate and makes adjustment if necessary.
- The licensed pyrotechnic operator shall be responsible to account for and retrieve all duds immediately following the display. Unfired shells shall be removed and returned directly to the supplier or stored in a manner approved on permit.
- The licensed pyrotechnic operator shall file a
  - Verbal report within 24 hours 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
  - Written report within 10 working days following any public display directly to the Office of the State Fire Marshal.

## INSURANCE REQUIREMENTS FOR FIREWORKS DISPLAYS ON OFF-SHORE BARGES

**Acceptability of Insurers:** All insurance policies must have a current A Class VII rated by A.M. Best Company. Worker's Compensation from the State Compensation Fund is acceptable to OCFA.

**General Insurance:** The following basic insurance provisions shall be in place with any vendor or contractor that OCFA contracts with to perform work or provide a service including license agreements for use of property and lease agreements.

- 1. General Liability (including pyrotechnics, operations, products and completed operations): \$1,000,000 combined single limit for bodily injury, personal injury and property damage/\$2,000,000 aggregate
- 2. Automobile: \$1,000,000 each accident; \$1,000,000 uninsured motorist
- 3. Professional Liability: \$1,000,000 each occurrence/\$2,000,000 aggregate
- 4. Worker's Compensation: (required by the State of California and necessary only if the other party to the contract has employees) \$1,000,000 each accident/\$1,000,000 each employee for disease

General liability policy limits shall be per occurrence for bodily injury, personal injury and property damage. If commercial general liability insurance or other form with a general

aggregate limit is used, either the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the required occurrence limit.

Additional Insured Endorsements: OCFA must be named as an additional insured on the General Liability insurance policy and an Endorsement to that effect must accompany the Certificate of Insurance reflecting the minimum insurance requirements as stated above. The language on the Endorsement should read, "OCFA is an additional insured on the policy for any and all work performed, and the (Company Name) insurance is primary and noncontributing and OCFA's insurance is excess only."