



CLARK COUNTY FIRE DEPARTMENT
Fire Prevention Bureau
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105.8.f.5

TITLE: OUTDOOR FIREWORKS DISPLAY

SCOPE: The temporary storage, use and handling of fireworks and equipment intended for an outdoor fireworks display shall comply with NFPA 1123 and Article 78 of the 2005 Clark County Fire Code. This guideline will not apply to the use of pyrotechnic effects and equipment used with a proximate audience with distances less than those required by NFPA 1123.

PURPOSE: To provide standardized Clark County Fire Department permit requirements relating to the use of fireworks and equipment for an outdoor fire works.

SPECIFICATIONS AND REQUIREMENTS

The permit application will have three (3) sets of plans, drawn to a **measurable scale** submitted for review and approval no less than 10 business days prior to the event. If plans are submitted with less than 10 business days prior to the event, additional fees will be assessed. The minimum application fee is \$75.00 and is a variable fee based on the complexity of the submittal. The minimum late submittal fee and expedite fee are \$85.00 each and also a variable fee based on the complexity of the submittal. Please see the **Clark County Fire Department Permit and Service Fee Schedule for exact details.**

The following information must be provided with all submittals:

1. **Licensing:** A legible copy of a valid Nevada State Fire Marshal's license for Outdoor Pyrotechnic Aerial.
2. **Insurance:** A legible copy of a valid bond or Certificate of Insurance. The minimum coverage for property damage and bodily injury arising from the fireworks display is a minimum of \$1,000,000.00 and additional insured will be the Clark County Fire Department.
3. **Production Schedule:** A detailed description to include, but not limited to, the following:
 - A. Contact person for the property and their telephone and fax number.

- B. Contact information for the technician, such as telephone numbers and fax numbers, as well as, a valid Nevada State Fire Marshal license for the technician.
 - C. Time and dates the fireworks are to be unloaded and stored on site.
 - D. Time and date of initial set-up.
 - E. Time and date of the scheduled site inspection.
 - F. Time and date of the demonstration.
 - G. Time and date of the outdoor fireworks show including the rain date, if applicable.
 - H. Schedule of firing, shot sheet, including the cue, but not limited to, the shot time, device address, modules location, quantity, product number, related family, minimum distance, height of device, construction and location of every device used in the outdoor firework display.
 - I. Material Safety Data Sheets (MSDS) for all devices being used in the outdoor fireworks display such as electric matches, mortars, mines and any other devices used. The MSDS should provide a manufacturer's statement regarding whether the pyrotechnic device or material is intended for outdoor or indoor use.
 - J. A route map and schedule for transporting pyrotechnic devices through each hotel property when the outdoor pyrotechnic display is being held on the roof top. Also add the location, time, and date of each of the building's entry ways or exits that will be temporarily out of service for the use of loading the outdoor fireworks display. Only an approved amount of exits and entry ways are allowed to be used during the loading of the outdoor fireworks display. Additionally, should an alarm condition occur within the hotel property, the display will be stopped and the patrons will be allowed to immediately use all exits within the facility.
 - K. Emergency procedures should include all of the following:
 - a. Description of alerting the staff of emergencies
 - b. Identification of the signal and means to notify the display operator, technician or both to terminate the loading or firing of fireworks in the event a hazard arises during the outdoor display.
 - c. Identification of the means of notifying public emergency personnel.
 - d. Emergency reporting instructions describing the information that should be provided to emergency operators.
- **Monitors:** Provide monitors that shall have radios to communicate with the firing technician. The sole duty of the monitor is to enforce crowd control around the display area and fall out zone. Unauthorized persons will not be allowed to enter the fall out zone or display area until the site has been inspected and deemed safe by the technician. All monitors must report status of assigned areas to the lead technician. Clark County Fire Department reserves the right to determine the minimum number of monitors required for each display.
 - **Spotters:** Provide spotters that shall have radios to communicate with the firing technician. The sole duty of the spotter shall be to observe the firing and

bursting of aerial shells and other display fireworks for the purpose of detecting the occurrence of duds and observing other potential hazardous situations. All spotters must report status of assigned areas to the lead technician. Clark County Fire Department reserves the right to determine the minimum number of spotters required for each display.

- **Constantly Staffed Fire Control Room:** The individual(s) stationed in the fire control room must be knowledgeable in all aspects of fire protection, smoke control systems and fire alarm panels. The individuals disabling any fire alarm devices must possess a valid Nevada State Fire Marshal's license for fire alarms and must be approved by Clark County Fire Department. These items are subject to change as required by the on-site fire inspector(s).
4. **Site Plan:** A detailed site plan must be provided and drawn to a measurable scale of the entire property where the fireworks display is being held, as well as, any adjoining properties or vacant lands where the fireworks display is being held. The site plan will also indicate the following:
- A. Location of buildings, streets, parking areas, vegetation, and any other non-combustible structures that are located within the fallout zone and the distances from the discharge site. Additionally, provide the location of the property lines and utility lines for the property where the fireworks display will be held.
 - B. Location of detention and correctional facilities, health care facilities including, but not limited to, hospitals, quick care centers, medical treatment/rehab centers, and hospices. These facilities are required to have at least twice the distance specified in the fallout zone. Additionally, provide the location of any tents or temporary membranes that are adjacent to the property for the outdoor fireworks display.
 - C. Location of the designated fallout area as with the approved distances drawn to a measurable scale as required for all the devices to be used during the outdoor fireworks display and any other associated separation distances.
 - D. Location of the spectators viewing area and the distance from the discharge site.
 - E. Description of the surface upon which the outdoor fireworks display will be located including, but not limited to, the stability of the surface, elevation, approved fire apparatus access, level conditions and location of any open trenches.
 - F. Location of fire extinguishers that shall be posted in the entire discharge area and fall out zone. The fire extinguishers shall be compatible to the fireworks product being used, i.e., two (2) 2-A:10-B:C rated Dry Chemical and two (2)-5 gallon water type. Clark County Fire Department reserves the right to determine the minimum number of fire extinguishers required for each display.

- G. Location of a minimum of 5/8-inch charged water hose(s) and nozzle(s) capable of reaching all areas required by Clark County Fire Department. Clark County Fire Department reserves the right to determine the minimum number of charged hoses and size required for each display.
 - H. Locations outside of the fallout zone that may be used by fire protection personnel and their vehicles and other emergency response personnel during the fireworks display.
 - I. Location of the storage equipment used for the fireworks and the type of equipment used for the storage of the fireworks, such as magazines and ready boxes.
- **Discharge Site:** A detailed layout must be provided showing the location of all fireworks devices including but not limited to, mortar racks, mortar trough, shooter and spotters. This layout will also indicate the following:
 1. Type of ignition used to ignite fireworks, such as manual ignition or electrical ignition.
 2. Location of the firing unit and type of firing unit to be used to ignite electrical matches, if using electrical ignition.
 3. Location of storage and amounts of fuses and port fires to be used to ignite fireworks display.
 4. Description of chain-fused devices, if used during the fireworks display.
 - **Distances:** The following are considered aerial devices by Clark County Fire Department including, but not limited to, comets, mines, shells, cakes, roman candles, and aerial shells or aerial devices fired from a mortar. These devices shall follow the following distance criteria:
 1. Any device with an internal diameter greater than 3-inches shall provide a minimum distance of 70 feet per inch from spectators, viewing areas and buildings. All devices will be fired at a 90-degree angle to the horizontal plane. Only pre-manufactured cakes shall be allowed to be angled with an internal diameter less than 2-inches. All rooftop displays will be limited to a maximum internal mortar diameter of 3-inches.
 2. Any devices with an internal diameter of less than 3-inches shall provide a minimum distance of 70 feet per inch from spectators, viewing areas and buildings. All devices will be fired at a 90-degree angle to the horizontal plane. Only pre-manufactured cakes shall be allowed to be angled with an internal diameter less than 2-inches. All rooftop displays will be limited to a maximum internal mortar diameter of 3-inches.
 3. Minimum separation distances for ground pieces shall be 150-feet from all spectators.
 4. Distances may be increased based on the hazard characteristics determined during the demonstration, site inspection or review of submittal.

- **Demonstration:** Prior to the issuance of a permit, Clark County Fire Department may require a demonstration of the fireworks provided in the submittal. A minimum of one of each device may be required to be shown. The acceptance of each device is at the discretion of the Clark County Fire Department representative witnessing the demonstration. Additional requirements may be determined by the Clark County Fire Department representative at the time of the demonstration.
- **Notification:** The following agencies must be notified by the pyrotechnic company of the show a minimum of 48 hours prior to the outdoor fireworks show. The pyrotechnic company will provide confirmation that notification has been made either by providing the time and date of contact and person that contact was made with, or by providing a copy of the letter sent to the agencies.
 - A. McCarran International Airport Control Tower – (702) 388-6559
 - B. Nellis Air Force Military Base – (702) 652-1110
 - C. Metro Police Department – (702) 229-3111
 - D. Fire Department Dispatch – (702) 229-0291

Governing agencies that manage the adjacent properties will be contacted in writing. Confirmation of the approval for the pyrotechnics display concerning any noise abatement, debris and any other pertinent requirements that may need to be met shall be provided with the submittal package to Clark County Fire Department.

- **Required Fire Department Personnel/Engine Standby:**
 1. A minimum of two (2) inspectors from the Clark County Fire Prevention Bureau shall be required at every outdoor fireworks display as determined by the Chief. If multiple firing sites are requested, additional inspectors may be requested at the discretion of the Chief. Should the outdoor fireworks display not occur during the normal work shift of Fire Prevention Bureau personnel, the permit applicant or property owner shall submit an overtime request form with the initial package submittal. Fire Prevention personnel requested to work outside of their normal works shift will be compensated at a rate of \$80.00 per hour, per person, for a minimum of 3 hours, including travel time.
 2. At the discretion of the inspector overseeing the fireworks show, a minimum of one (1) stand-by engine from Clark County Fire Department will be required for any pyrotechnic display on any outdoor fireworks display as determined by the Chief. If multiple firing sites are requested additional stand-by engines may be requested at the discretion of the Chief. Costs will be estimated and an account must be established with Clark County Fire Department with the amount estimated for total costs

prepaid into the account. Portable radios will be required by this department and costs incurred will be paid by the pyrotechnics company.

- **Security**: A 24-hour security detail shall be provided once the pyrotechnics are delivered on site. A fence shall be provided around the perimeter of the fireworks display. The security personnel shall:
 1. Be physically capable to walk the perimeter, discharge site and any locations that are part of the fireworks display during the duration of the shift, except for breaks.
 2. Replacement security personnel must be provided to continue walking the perimeter, discharge site and any locations that are part of the display, during the breaks.
 3. Be advised of the duty to not allow any persons other than pyrotechnic personnel in the discharge site or fireworks display area.
 4. Be trained in the use of a portable fire extinguisher and capable of extinguishing a small incipient fire utilizing a portable fire extinguisher.
 5. Upon discovery of a fire, contact the Clark County Fire Department immediately (dial 9-1-1), then advise all other security personnel of the emergency. Security personnel will be provided a remote radio to a 24-hour monitoring station or a cellular phone.

- **Cancellations and Wind Speed**: Permit applicants and the applicant's agents and employees shall carry out the proposed activity in compliance with this guideline, NFPA 1123 and Article 78 of the Clark County Fire Code and other laws or regulations applicable thereto, whether specified or not, and in complete accordance with approved plans and specifications. The revocation of the permit and cancellation of the fireworks display shall occur when any of the following has been determined:
 1. The permit has been used by a person other than the person to whom the permit was issued.
 2. The permit has been used for a location other than that for which it was issued.
 3. Any of the conditions or limitations set forth in the permit have been violated.
 4. The permittee failed, refused, or neglected or comply with orders or notices duly served in accordance with the provisions of any of the governing codes within the time provided therein.
 5. There has been a false statement or misrepresentation as to a material fact in the application or plans on which the permit or application was based.
 6. The permit was issued in error or in violation of an ordinance, regulation or any governing code.

The pyrotechnic company shall provide an anemometer for the discharge site. The fireworks display may be cancelled if the winds are in excess of 10 miles per

hour. Clark County Fire Department reserves the right to make the determination within 10 minutes prior to the fireworks display beginning.

PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved devices or plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan or sample of device shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, a detailed list of changes is required.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red-lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to:
www.accessclarkcounty.com/fire.

INSPECTIONS THAT MAY BE REQUIRED AND SCHEDULING INSTRUCTIONS:

If approved, an inspection will need to be scheduled. To schedule an inspection, also go to: www.accessclarkcounty.com/fire. A fire inspector will review your site in accordance with the approved device, plans, and this guideline.

Each open flame device will be inspected in its location and condition of use.

Fire Prevention Bureau (FPB) may perform testing, acceptance, and maintenance of fire & life safety systems as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Clark County Fire Code and does not take precedence over any fire code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Clark County Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.

Technical Assistance, when required by the Fire Chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the

property owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the property owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.