



CHINO VALLEY INDEPENDENT FIRE DISTRICT FIRE PROTECTION STANDARD

PYROTECHNIC DISPLAYS AND FIREWORKS (ARTICLE 78 UFC)

STANDARD # 136

REVISED 02/24/1992 PAGES 8

I. Scope – This policy applies to aerial pyrotechnic displays and to exterior and interior stationary displays (set pieces, etc.).

II. Permit Requirements

A. Two licenses issued by the State Fire Marshal are required:

1. Public Display License
2. Pyrotechnic Operator License

Refer to the State Fire Marshal's Handbook "California Fireworks Laws and Regulations", Article 3, Section 981.9 for Pyrotechnic Operator License Classification and Definitions.

Copies of both licenses must be on file with this Department or included with the application. For license information, call the State Fire Marshal.

B. Provide documentary evidence of the following:

1. A policy of insurance which has been approved by the Fire Department, executed and delivered by a reliable insurance company authorized to carry on an insurance business in the State of California, by the terms of which said insurance company assumes responsibility for injuries to person and property resulting by reason of the display of fireworks for which the application is made in the amount of \$1,000,000.

The insurance policy shall also name the property owner, City or County and local Fire Department as co-insured.

These provisions shall not be construed as limiting in any way the extent to which the permittee may be held responsible for the payment of damages.

2. An Importer's and Exporter's License, Wholesaler's License, held by the Public Display License holder or Pyrotechnic License holder OR a

document containing the name and license number of the wholesaler(s) who supplied all items used in the display.

C. Permits – Pyrotechnic displays shall not be conducted without a permit issued by the Fire Prevention Division. Permits shall be obtained as required by the Uniform Fire Code (1988 edition) Section 4.108 f.1 and all applicable fees to be paid in full.

1. Application must be submitted at least ten days (10) in advance of display date.

Exceptions:

a. Applications may be accepted by the Fire Prevention Division forty-eight hours (48) in advance of display for previously approved sites with the same pyrotechnic operator.

b. Extended period permits for up to one year may be approved by special arrangement when a number of identical displays will be done at the same site by the same pyrotechnic operator.

2. All items on the form shall be completed.

Note: See item IV D.2.a, name of security control.

3. A diagram shall be drawn on the reverse side of the original, or on a separate sheet, which shows conditions within one thousand feet (1,000') of the firing site. The diagram shall include: point of discharge and "hazard area" (see item IV, B.; Site Requirement) in relation to: spectators, parking, buildings, roadways, overhead wires and other obstructions, and areas of grass or brush. Include compass and prevailing wind directions, and show approximate distances between items listed above. Also show location of fire extinguishers, hose lines, etc., and any other pertinent information.

4. Arrival time on-site; list under location and description of storage for fireworks.

D. Revocation of Permit – The permit may be revoked or amended, and the display shall be cancelled or altered when this is deemed necessary by the fire inspector on duty for violations of law, policy or the conditions of the permit and/or in the interest of safety.

IV. Site Requirements

A. Licensed Pyrotechnic Operator – All displays shall be under the direct, personal control of the pyrotechnic operator named on the permit, who shall display his/her license upon request from a representative of the Fire Department.

B. A Hazard Area shall be designated and protected in accordance with these requirements.

1. Aerial Fireworks

a. The Hazard Area shall be the Area within and between two circles, the centers of which are the center points of the firing area, and the projected fallout area. The distance between the center points will vary according to wind, angle at which mortars are set, etc. The fallout area may coincide with the firing area, provided that unfired devices are protected from ignition by fallout. The diameter of the firing area and fallout area circles are dependent upon the diameter of the largest shell to be fired, and shall be taken from Appendix 1, Table 1, Page 6.

b. Airborne pyrotechnics, other than those fired from mortars and having a definite trajectory, shall require special approval. The barrier shall be of sufficient height to prevent the device from traveling in the direction of the spectators.

c. Pyrotechnic devices which are suspended to produce a falling flame effect shall be placed so that the horizontal distance between the device and persons or property to be protected is not less than the vertical distance between the device and the surface beneath the persons or property to be protected.

2. Stationary Fireworks (set pieces, etc.)

a. The hazard area shall extend a minimum of twenty-five feet (25') from the display in all directions, and shall be clear of spectators and all combustible material.

b. Roman candles and other devices which produce a spark-spray effect shall be located in such a way that the horizontal distance between the device and spectators or other persons or property to be protected is not less than the maximum distance that sparks or heated particles are projected by the device in any direction.

C. Safety

1. General safety precautions shall be taken and the specific requirements contained in Title 19, Subchapter 6, Article 15 of the California Administrative Code shall be complied with.
2. Requirements to Enter Firework Site:
 - a. Minimum eighteen (18) years of age;
 - b. Name must be on permit under “name of persons who will discharge fire works”;
 - c. With approval of fire inspector on site.
3. Construction of racks, troughs, drums, mortar tubes and other equipment shall be specified in Title 19, or of equivalent substantial construction. Special attention shall be given to accomplishing the intent of blocking and depth of burial requirements for mortars.
4. Sufficient fire extinguishing equipment, including both water (two and one-half gallon [2 ½]) and dry chemical (2A10BC) type shall be provided AND trained personnel shall be on hand and specifically designated to use such equipment when necessary.
5. Smoking shall be prohibited within fifty feet (50’) of any portion of the firing area.
6. All tubes used in the display, once loaded, shall be crossed taped or provided with another approved method to aid in identifying which tubes contained misfires.
7. All shells once loaded into the tubes and failing to fire for any reason shall be considered a “misfire”. Misfires shall be cleared by one of the following:
 - a. Flood the tube for two hours or a time period specified by the on-duty fire inspector.
 - b. Attempt to refire. If shell does not fire, flood the tube for two hours or a time period specified by the on-duty fire inspector.
8. These requirements are minimums, and additional measures may be required by the fire inspector on duty.

D. Security

1. Provisions of security for the hazard area shall be the responsibility of the sponsoring organization or individual(s)
2. Security personnel shall be provided along with barricades or fences. The minimum acceptable barricade shall be a rope or other line which is at least a ¼ inch diameter, supported at least every fifty linear feet (50'), and maintained not less than thirty inches (30") nor more than forty-two inches (42") above the ground.
 - a. Security Personnel – A minimum of one person (other than the Pyrotechnic Operator) shall be specifically designated to control security of the hazard area. The name of the person so designated shall be included on the permit application. If security is to be provided by a company or group other than the pyrotechnic crew, the name of the company or group shall be included on the permit application. Security personnel shall be provided, dependent upon conditions, as follows:
 - (1) No spectators, buildings or parking within one thousand feet (1,000') of the firing site – one security person is sufficient.
 - (2) Spectators, buildings or parking within one thousand feet (1,000') of the firing site – one security person per each inch of shell size, for largest shell used.
 - (3) One security person per four inches (4") of shell size used shall be provided within the secured area.
3. These requirements are minimums, and additional measures may be required by the fire inspector on duty.
4. Standby fire personnel will be required at the discretion of the Fire Chief.

E. Noise

1. Fireworks displays shall not be permitted after 10:00 p.m. on evenings prior to a normal workday and 11:00 p.m. on evenings prior to a Saturday, Sunday or holiday.
2. No concussion type shells (salutes or reports) greater than three inches (3") shall be used at any time, unless a specific variance is granted.
3. Fireworks displays using salutes or reports permitted by this policy shall be limited to three events per thirty-day (30) period in each zip code area.

4. Variances to this policy may be issued by the Fire Chief.

F. Clean Up

It shall be the pyrotechnic operator's responsibility to ensure a complete clean up of all hazardous residue associated with the display, and to cause the removal and proper disposal of such material. Darkness during post-display period shall not excuse inadequate clean up, and the pyrotechnic operator shall make a personal inspection of the site before 8:00 a.m. on the day following the display, if necessary. Violations of this requirement will result in a suspension of permit privileges for the pyrotechnic operators and the display license holder. Clean-up of all materials used in fireworks shows to include sand and debris from fireworks.

V. Post-Display Report

A post-display report, as required under State Fire Marshal regulations, shall be prepared in accordance with such regulations and submitted to Chino Valley Fire Department Fire Prevention Division within ten days (10) following the display.

VI. Fire Lane

A fire lane road shall be maintained before and after the firing operation. The fire lane road shall be closed only during the actual firing operation. It will not be re-opened until an ordinance sweep has been completed and the area has been declared safe by the pyrotechnics operator.

VII. Proposed Site Drawing

A scale drawing of proposed site must be submitted ten days (10) prior to the scheduled event. This scale drawing must be approved by the Fire Prevention Division. This scale drawing must show the proposed firing site and the proposed fallout zone. Only after approval will the fireworks permit be issued.

APPENDIX I

	SHELL DIAMETERS	CIRCLE DIAMETERS
TABLE NO. 1	2 inch	200 feet
	3 inch	300 feet
	4 inch	400 feet
	5 inch	500 feet
	6 inch	600 feet

Center of Projected Fallout Area

HAZARD AREA
(shaded)

Circle diameter
From Table No. 1

Center of firing site

REFERENCES FOR FIREWORKS

I. CODES

A. Federal

1. 18 U.S.C. Chapter 40
2. CFR 49

B. State of California

1. HEALTH AND SAFETY CODE, division 11
2. CALIFORNIA CODE REGULATIONS, Title 19, Sub-Chapter 6
3. VEHICLE CODE, Division 8, 13 and 14

C. Chino Valley Fire District

UNIFORM FIRE CODE (as amended and adopted by the San Bernardino County)
Article 77 and 78.

D. Code Extracts

1. U.S. Treasury Department, Bureau of Alcohol, tobacco, and Firearms – Pamphlet ATFP 5400.7.
2. California State Fire Marshal – Pamphlets
 - a. California Fireworks Law & Regulations
 - b. California Explosives Regulations

II. OTHER REFERENCES

NFPA Standards 44A