

Chapter 6. Fireworks  
Article 1. Jurisdiction

**§977. Scope.**

These rules and regulations shall govern fireworks and pyrotechnic devices, fireworks licenses, registrations, and permits in the State as provided in and commencing with §12500 "State Fireworks Law" of the Health and Safety Code.

NOTE: Authority cited: §12550 and 12552, Health and Safety Code. Reference: §12550 and 12552, Health and Safety Code.

§ 979. Jurisdiction.

For the purposes of this chapter, the California CAL FIRE – Office of the State Fire Marshall shall be the primary enforcement authority for these regulations in all state-owned or state-occupied buildings. This authority shall extend to those premises leased by the state of California.

have exclusive administrative and enforcement authority for the regulations relating to fireworks within the State of California. (primary or exclusive?)

NOTE: Authority cited: Section 13108(c), 12550 and 12552 Health and Safety Code. Reference:

Sections 12550, 12552, 13100 and 13108, Health and Safety Code.

## Article 2. Definitions

### § 980. Definitions.

#### (a) "A" Definitions.

\*Need definition for advertising? Refer to 12502

(1) Aerial Shell. ~~A cylinder or spherical cartridge containing a burst charge and pyrotechnic or non-pyrotechnic effects, a fuse, a black powder lift charge and is fired from a mortar.~~ as used herein means a cylindrical or spherical cartridge containing pyrotechnic composition, a burst charge and an internal time fuse or module, that is propelled into the air from a mortar.

(2) ASTM as used herein means The American Society of Testing and Materials, a national organization publishing standards for all types of materials and products.

AFSL as used herein means American Fireworks Standard Laboratory.

Agricultural and Wildlife Fireworks as used herein means fireworks designed and intended by the manufacturer to be used to prevent damage to crops or unwanted occupancy of areas by animals or birds through the employment of sound or light, or both.

(c) APA as used herein means the American Pyrotechnics Association.

(d) Approved Laboratory as used herein means a laboratory which has been accredited by CAL FIRE-Office of the State Fire Marshal pursuant to the provisions of Chapter 1.5, Article 5, Title 19 CCR (Laboratory Accreditation).

(e) Aerial Spinner as used herein means shall mean the same as Helicopter. (See Helicopter).

~~(2)(f) ASTM The American Society of Testing and Materials, a national organization publishing standards for all types of materials and products.~~ as used herein means ASTM International, Inc. (check inc)

(g) Authority Having Jurisdiction (AHJ) as used herein means CAL FIRE Office of the State Fire Marshal, a chief (broader or remove?) of any city or county fire department or fire protection district and their respective authorized representatives in their respective jurisdictions.

(b) "B" Definitions.

(1) Barrage as used herein means A rapidly fired sequence of effects.

(2) Batten as used herein means A strip of wood to which pyrotechnic devices are attached for support.

(3) Binary Low Explosive Compounds as used herein means Special effects materials in which fuel and an oxidizer are mixed together to produce a pyrotechnic composition.

(4) Blank Cartridge as used herein means A cartridge constructed from either metal or plastic casing, with a center or rim fire primer filled with various amounts of pyrotechnic compositions measured by loads.

(5) Blasting Galvanometer. An electrical resistance measuring device designed specifically and approved for testing of electric firing circuits.

(6) Bottle Rocket. (AKA SKY ROCKET) A pyrotechnic device containing a maximum of 20 grams of pyrotechnic composition, ~~which rises into the air upon ignition.~~ is propelled into the air by the thrust of the burning composition. A stick attached to the device is used for guidance and stability, and a burst of color or noise, or both, is produced at ~~height of flight~~ the end of thrust.

(7) Break. An individual burst from an aerial shell, producing either a visible or audible effect or both, and may consist of a single burst or

multiple effects.

(8) Bullet Effect as used herein is the discharge of ~~the~~ pyrotechnics or explosive bullet hit. (may strike if not used)

(9) Bullet Hit. as used herein is A device containing various levels and amounts of pyrotechnic composition, whose purpose is to create the illusion of a bullet impact.

Base as used herein means a surface to which one or more tubes of a fireworks device are attached to provide a stable platform for the functioning of the item.

Base Plug as used herein means a plug affixed to the bottom of a mortar tube in the manner specified in Chapter 6, Article 15, Title 19 CCR.

Bang Snaps as used herein means the same as Snap Cap (See Snap Cap).

Base Fountain as used herein means a cylindrical tube containing pyrotechnic composition that produces a flame and a shower of colored sparks and sometimes a whistling and/or crackling effect or smoke. The device is usually provided with and/or is attached to a wood, cardboard or plastic base for placing on the ground.

Black Match as used herein means a type of fuse consisting of cotton string coated with a dried slurry of black powder and glue.

Box Fountain aka cylindrical or tube fountain as used herein means (1) a square, rectangular, or triangular box; or (2) a cylindrical tube containing pyrotechnic composition that produces either a flame and a shower of colored sparks, a whistling or crackling effect, smoke, other audible or visible effect, or a combination of effects, and may consist of single or multiple effects,

Burnout used herein means the same as Blowout. (See Blowout).

Blowout as used herein means the unintended release of pressure and effect from other than the intended orifice of a firework device

(c) "C" Definitions.

(1) California Candle. Hand held heavy paper or cardboard tube that upon ignition emits

A showers of color and sparks but does not expel pellets of pressed pyrotechnic composition or contain reports like a Roman Candle.

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(2) Comet. A pyrotechnic device launched from a mortar that produces an ascending burning effect, is self-consuming, and may or may not contain a burst charge or stars.

(b) Champagne Party Popper used herein means shall mean the same as Party Popper. (See Party Popper).

(c) Chaser as used herein means a paper or cardboard tube venting out the fuse-end of the tube, which contains chemical composition and travels along the ground in an uncontrollable or erratic fashion, often producing a whistling effect or other noise, and, which may produce a report. "Chaser" does not include ground spinning devices.

(d) Chemical Analysis as used herein means a qualitative or quantitative listing of all chemicals that is/are present at a level of 0.5% by weight or greater in chemical composition in a firework or novelty device.

(e) Chemical Composition as used herein means all pyrotechnic and explosive compositions contained in a firework or novelty device. Inert materials such as clay used to plug, or organic

matter such as rice hulls used for density control, are not considered to be chemical composition.

(f) Combination Item as used herein means a firework that produces two or more distinct types of pyrotechnic effects upon ignition, usually from separate tubes that are attached to a common base.  
USE 2013

(h) Common Fireworks as used herein means the same as Consumer Fireworks. (See Consumer Fireworks).

(i) Cone Fountain as used herein means a cardboard or heavy paper cone containing pyrotechnic composition that produces a shower of colored sparks and sometimes a whistling and/or crackling effect or smoke.

(j) Consumer Fireworks as used herein means any fireworks device in its finished state, exclusive of mere ornamentation, that complies with the construction, performance, composition, and labeling requirements promulgated by the United States Consumer Product Safety Commission in Title 16, Code of Federal Regulations, in addition to any limits and other requirements contained in this chapter.



(k) CPSC as used herein means United States Consumer Product Safety Commission.

(l) Crackle or Crackling Effect used herein means a burst accompanied by a popping or snapping sound, produced by granules or flakes of pyrotechnic composition.

(m) Crackling Strip used herein means a linear fireworks device that consists of small granules of pyrotechnic composition adhered to and encased in a paper wrapping that produces crackling sparks as its primary pyrotechnic effects.

(d) "D" Definitions.

(1) Darts. To move suddenly and swiftly , unpredictably, uncontrollably from one place to another.

(2) Detonator. Any device containing a detonating charge that is used for initiating detonation in an explosive. The term includes, but is not limited to, electric blasting caps of instantaneous and delay types, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps.

(3) D.O.T. means U.S. The United States  
Department of Transportation.

(4) Dud. A pyrotechnic item which leaves the mortar  
and returns to  
earth without producing the intended burst or effect.  
~~See also Misfire.~~

(d) Device used herein means an item containing a  
pyrotechnic or explosive composition used for a  
particular purpose. SEE ALSO 980.2.C CHEMICAL  
COMPOSITION (?) SEE ALSO DEFINITION FOR  
PYROTECHNIC DEVICE. PYRO DEVICE AKA  
DEVICE (IS THIS necessary.? Probably strike)

Dangerous Fireworks as used herein means (SEE  
12505)

(1) Fireworks which contain any of the prohibited  
chemicals, at the proscribed levels and subject to the  
exceptions, as set forth in Section 986.3.1.

(2) Fireworks which may be federally approved but  
are not classified as “Safe and Sane” in California,  
including, but not limited to, the following:

(a) Firecrackers.

(b) Aerial shells, Comets, Skyrockets, Missile-type Rockets, and Bottle Rockets, including all pyrotechnic devices that rise or are propelled into the air during discharge.

(c) Roman Candles including all devices which discharge balls of fire into the air.

(d) Chasers, including all devices which dart or travel about the surface of the ground during discharge.

(e) Wire and Wooden Core Sparklers (including “Sparkler Trees”).

(f) Mines.

(g) Helicopters and Aerial Spinners.

(h) Girandolas.

(i) All fireworks designed and intended by the manufacturer to create the element of surprise upon the user. These items include, but are not limited to, auto-foolers, cigarette loads, exploding golf balls, and trick matches.

(j) Fireworks known as devil-on-the-walk, or any other firework which explodes through means of friction, unless otherwise classified by CAL FIRE-Office of the State Fire Marshal pursuant to this part.

(k) Torpedoes of all kinds which explode on impact.

(l) Fireworks Kits.

(m) Such other fireworks examined, tested and determined by CAL FIRE-Office of the State Fire Marshal, with the advice of the State Board of Fire Services, to possess characteristics of design or construction which make such fireworks unsafe for use by any person not specially qualified or trained in the use of fireworks.

(e) "E" Definitions.

~~(1) Electric Firing. A technique used to discharge fireworks in which a source of electric current is used to ignite fuses, ignite a rocket motor, ignite special effects materials,~~

(1) Electric Firing. A technique used to discharge fireworks in which

~~an electric match or squib and a source of electric current are is used. to ignite fuses or lift charges.~~

(2) Electric Match. An electric device containing a pyrotechnic compound which ignites when sufficient current flows through the leads.

~~(3) Experimental High Power Rocket. Non-professional rockets which are propelled by commercially manufactured high-power solid propellant rocket motors.~~

~~(4) Experimental High Power Rocket Motor. A State Fire Marshal approved, commercially manufactured rocket propulsion device containing a solid propellant charge wherein all the ingredients are pre-mixed and which produces more than 160 Newton-seconds (36lb.-seconds) but shall not exceed 10,240 Newton-seconds (2302.2lb.-seconds) of total impulse.~~

Emergency Signaling Device used herein means a pyrotechnic device designed and intended by the manufacturer to be used as such and which provides a reasonable degree of safety to the user and does not create a fire hazard when used according to the label of instructions. (quoted from 12506)

*(d) Experimental Rocket. Non-professional rockets which are propelled by noncommercially manufactured solid, hybrid, or liquid propellant rocket motors. Or, a rocket containing two or more CAL FIRE OFFICE of the State Fire Marshal approved, commercially manufactured rocket propulsion devices which produces a total of more than 40,960 Newton-seconds (9202 lb.-seconds) of total impulse.*

*Add (e) Experimental Rocket Motor. A noncommercially manufactured rocket propulsion device utilizing a solid, hybrid, or liquid propellant charge.*

Explosive Composition used herein means any chemical compound or mixture, the primary purpose or effect of which is to function by explosion,

producing an audible effect ("report") in a firework, novelty, party or trick device. (ref AFSL 1-2.5)

(h) Exporter used herein means any person who sells, consigns, or delivers fireworks located within this state for delivery, use, or sale out of this state. (12509)

(f) "F" Definitions.

(1) Firecracker. used herein means a device containing small paper cylinder that is filled with an explosive pyrotechnic composition in an amount not to exceed 50 milligrams and that produces a loud noise when it explodes, which contains no more than (0.772 grains) (50 milligrams) in total pyrotechnic weight, in a fused container whose primary function is to produce an audible effect of explosive composition.

~~NOTE: All firecrackers are classified as "dangerous fireworks", and pyrotechnic devices similar in construction to a "firecracker" which exceed the specified weight shall be designated explosives in accordance with Health and Safety Code Section 12000.~~

(2) Flash Paper. Treated paper which is extremely sensitive to heat and creates a brief flash of fire upon ignition.

(add flash string and flash cotton)

(3) Flash Powder. Pyrotechnic composition intended for use in firecrackers and salutes, and often used for "flash"-type effects on stage and in productions involving special effects. Flash powder produces an audible report and a flash of light when ignited. Typical flash powder compositions contain potassium chlorate or potassium perchlorate, sulfur or antimony sulfide, and powdered aluminum.

(4) Flower Pot. AN AERIAL shell (not the lifting charge) that explodes at or near the bottom of a mortar blowing a shower of stars and burning material into the air.

(5) Fountain. AS used herein means one of the following, base fountain, box fountain or tube fountain.

~~(see Gerb). See Gerb.~~



ADD FIREWORKS KIT (see 12512)

ADD FIREWORKS LAUNCHING SYSTEMS \* Get language from KK (alternate means)

Need a standard on which to base approval  
OSFM has the exclusive authority to approve and authorize “alternate launch systems”.  
Or, OSFM can issue a variance.

(b) Fireworks used herein means any device containing chemical elements and chemical compounds capable of burning independently of the oxygen of the atmosphere and producing audible, visual, mechanical or thermal effects which are useful as pyrotechnic devices or for entertainment.

The term “fireworks” includes, but is not limited to devices designated by the manufacturer as fireworks, torpedoes, skyrockets, roman candles, rockets, Daygo bombs, sparklers, party poppers, paper caps, chasers, fountains, smoke sparks, aerial bombs and fireworks kits. (12511)

(d) First Fire as used herein means in connection with smoke devices, the initial burst of flame that results from the ignition of pyrotechnic material used as a primer for the internal smoke composition. First

fire appears after ignition of the primary fuse and before generation of smoke.

(i) Fun Snaps as used herein means shall mean the same as Snap Cap. (See Snap Cap).

(g) "G" Definitions.

~~(1) Gerb. (also known as a Fountain). A device that, when ignited,~~

~~emits a shower of sparks into the air at various altitudes. as used herein means shall mean the same as Fountain. (See Fountain) — NO. nfpa, apa OR 2013 restricted orifice must be in~~

Gerb as used herein is a cylindrical dangerous firework intended to produce a controlled spray of sparks with a reproducible and predictable duration, height and diameter.

(2) Ground Spinning Device. Also known as a Ground Spinner. A pyrotechnic device that discharges sparks as it spins across the surface upon which it is placed.

Girandola as used herein means a horizontal wheel with angled drivers that rotates quickly and rises into the air. Once it reaches its peak, it usually produces a visual and/or audible effect.

(b) Glow Worm as used herein means the same as Snakes. (See Snakes).

(h) "H" Definitions.

~~(1)(a) HDPE Mortar: (Also known as used herein means, is a High-Density Polyethylene Mortar constructed of high density polyethylene which is meets one or more of the following ASTM standards, which are hereby incorporated by reference: ASTM D 3350, or ASTM F 714. (move standards to table 9993D?)~~

(look into other standards needed for additional materials, such as fiberglass? Add into other standards?)

ADD High Power Rocket: used herein means non-professional rockets which are propelled by high-power rocket motors.

ADD High Power Rocket Motor- used herein means a CAL FIRE-Office of the State Fire Marshal approved, commercially manufactured rocket propulsion device containing a solid propellant charge wherein all the ingredients are pre-mixed and which produces more than 160 Newton-seconds (36 lb.-seconds) but shall not exceed ~~10,240~~ 40,960 Newton-seconds (~~2302.2~~ 9202 lb.-seconds) of total impulse.

*Hybrid Rocket Motor. A commercial or noncommercially manufactured rocket propulsion device utilizing a solid fuel and liquid oxidizer propellant charge.*

(b) Helicopter or aerial spinner as used herein means a tube with a propeller or blade attached that spins rapidly as it rises into the air with a visible or audible effect sometimes produced at or near the height of flight.

(i) "I" Definitions.

~~(1)~~(a) Ignitor or igniter- as used herein means an electric, chemical or mechanical device used to initiate burning of pyrotechnic or propellant materials.

(b) Importer as used herein means any person who for any purpose does any of the following

(1) Brings fireworks into this state or causes fireworks to be brought into this state.

(2) Procures the delivery or receives shipments of any fireworks into this state.

(3) Buys or contracts to buy fireworks for shipment into this state. cite 12513

(c) Importer/Exporter Number. The license number issued by CAL FIRE-Office of the State Fire Marshal to any importer/exporter pursuant to §987.4 of this chapter.

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(j) "J" Definitions. None.

(k) "K" Definitions. None.

(l) "L" Definitions.

(a) Labeling as used herein means a display of written, printed or graphic matter upon a fireworks device and/or upon the immediate package of such device, hereafter referred to as a label. Included are diamond-shaped labels required by DOT to be

displayed on the outside packaging for transportation purposes. Labels include any identification, cautions, and other information required by any state or federal governmental agency, including, but not limited to, CAL FIRE-Office of the State Fire Marshal seal.

(1)(b) Lance- as used herein means a thin cardboard tube packed with a color-producing pyrotechnic composition used to construct ground display pieces.

*Launch Lug. A device, attached to the rocket, that holds a rocket to a launch rail.*

(2)(c) License- as used herein means “License” means any non-transferable authorization granted by the State Fire Marshal to engage in any activity regulated by this part. A license is demonstrated by a document or card issued by CAL FIRE-Office of the State Fire Marshal’s Fireworks Program authorizing the licensee to engage in fireworks activities within the scope of the license in accordance with §12570-12579 Health and Safety Code and Chapter 6, Article 3, Title 19 CCR. ref  
12516

~~(3)~~(d) Licensee: as used herein means “Licensee” means a any person twenty-one (21) years of age or older holding a fireworks license issued pursuant to Chapter 5 (commencing with Section§12570), of the Health and Safety Code.

(e) Lift Charge as used herein means a pyrotechnic composition used to propel a comet, mine, aerial shell, props, dust, debris, or fuel into the air.

(f) Line Rocket aka Pigeon as used herein is a pyrotechnic item using mechanical devices to control the effect of flight movement.

*Liquid Rocket Motor. A commercial or noncommercially manufactured rocket propulsion device utilizing a liquid fuel and liquid oxidizer or a single liquid propellant charge.*

(4)(g) Loader as used herein means a person who places shells fireworks into mortars or holders.

(h) Low Break as used herein shall mean the same as Low Burst. (See Low Burst).

~~(5)(i) Low Burst.~~ as used herein means ~~or Low Break.~~ is an shell aerial fireworks functioning below its prescribed height.

(m) "M" Definitions.

(1) Magazine Tender. Person who distributes ~~pyrotechnic items devices~~ fireworks to the loader during the display ~~show~~.

~~(2) Match.~~ A fuse made of string or thread impregnated with black powder.

(3) Meteoric Shower. A self-contained cardboard tube mounted on a plastic base emitting a shower of stars into the air.

(4) Mines ~~or Mine Bags.~~ A device contained within a reusable or disposable tube, where upon ignition stars, firecrackers, salutes, whistles or other devices are propelled into the air, with the tube remaining on the ground.

(5) Misfire. A firework which fails to function as designed after initiation. ~~See also Dud.~~



~~(6) Model Rocket Motor. The same as a model rocket engine, as defined in Health and Safety Code Section 12520. Model rocket motors shall not produce more than 160 Newton-seconds of total impulse power.~~

as used herein means a rocket propulsion device using commercially manufactured solid propellant, that does not require mixing by the user, and that conforms to the definition of "model rocket motor" in the 2012 edition of the "NFPA 1125: Code for the Manufacture of Model Rocket and High Power Rocket Motors,"

~~(7) Monitor. A Person responsible for crowd control at a display site. watching for pyrotechnic items fireworks which do not perform properly.~~

(8) Mortar. A cylinder that is used to hold and fire public display or special effects pyrotechnic items or compositions as defined in Section 999 of this subchapter.

~~(9) Mortar Box. Also known as a Trough. A portable wooden structure used for the placement of mortars. as used herein means the same as Mortar Trough.~~

~~(10)(m) Mortar Rack-~~ as used herein means A wooden rack holding closely spaced HDPE or paper mortars. Mortar racks are limited to 10 tubes per individual rack. a frame containing one or more mortars.

(11) Multiple Break Shell. Aerial shell which has two or more breaks.

(12) Muzzle Burst. The process of an aerial shell breaking or bursting just as it leaves the mortar, scattering stars and burning material.

(n) Mortar Trough (or mortar box) as used herein means an above ground enclosure filled with sand or similar material into which mortars are positioned and securely held in place. NFPA 1123-8

\*\*Multitube or multiple tube device (non safe and sane)\*\* add if barge requirements added

(c) Mechanical Piece as used herein means the same as Set Piece. (See Set Piece).

Manufacturer as used herein means any person who manufactures, makes, constructs, fabricates, or

produces any fireworks or pyrotechnic devices, but does not include any person who affixes an ignitor, assembles or fabricates any sets or mechanical pieces for public displays of fireworks, or persons operating within the scope of public display or pyrotechnic operator licenses. (12518)

(n) "N" Definitions.

(1) N.F.P.A. or NFPA as used herein means The National Fire Protection Association.

Nitrocellulose Fountain – as used herein means a fountain containing nitrocellulose (of less than 12.6% nitrogen by weight) as the primary chemical component. Metal sparks or color effects are typically produced. Devices may have a base, spike, or handle.

Need language on new technologies such as Nontraditional Fireworks Launching Systems

(e) Novelties shall mean devices containing small amounts of chemical composition, which are designed to produce limited visual, motion or audible effects.

(b) NFPA 1123 Code for Fireworks Display as adopted by the California Fire Code is hereby incorporated by reference. (GET WORDING FROM ANDERSEN IF THIS IS NEEDED)

(o) "O" Definitions. None.

(p) "P" Definitions.

(1) Pan Type Mortar. A shallow metal container that is used to hold and fire special effect pyrotechnic compositions.

(2) Paper Mortar. A mortar constructed of spiral or convolute wound paper or chipboard.

~~(3) Party Popper. "Party Popper" also known by other names such as Champagne Party Poppers, Party Surprise Popper and Hot Shot Poppers, is a pyrotechnic device which contains less than 0.25 grain of pyrotechnic composition per unit load, designed to be held in the hand and when fired propels soft paper, cloth inserts or other similar fill material into the air.~~

Party Popper as used herein means small devices designed to be hand-held with paper or plastic exteriors that are actuated by means of friction (a string or trigger is typically pulled to actuate the device). Upon activation, the device expels flame-resistant paper streamers or soft cloth, and produces a small report. These specific items are not considered "fireworks" for transportation purposes

under federal law and may be sold year-round in the State of California, subject to certain classification requirements and restrictions set forth in this chapter.

(5) Public Display of Fireworks. "Public display of fireworks" means an entertainment feature where the public or a private group is admitted or permitted to view the display or discharge of dangerous fireworks, as defined in Section 12505 of Health and Safety Code. (12524)

(a) Package as used herein means any case, container, or receptacle, used for holding or transporting fireworks; which is closed or sealed by tape, cordage, or by any other means. (SEE 12521)

(h) Pop Pop Snappers as used herein means the same as Snap Cap. (See Snap Cap).

(k) Pyrotechnic Composition as used herein means any combination of chemical elements or chemical compounds capable of burning independently of the oxygen of the atmosphere. 12525

(l) Pyrotechnic Device as used herein means any combination of materials, including pyrotechnic compositions which, by the agency of fire, produce an audible, visual, mechanical or thermal effect designed and intended to be useful for industrial, agricultural, personal safety, or educational purposes. The term “pyrotechnic device” includes, but is not limited to, agricultural and wildlife fireworks, rockets, exempt fireworks, emergency signaling devices, and special effects. (COPY EXACT statute def) 12526

Pyrotechnic Effect Simulation Equipment NFPA 1126 and see OSFM Information Bulletin Equipment that uses a chemical mixture, heat source and the introduction of oxygen to initiate or maintain combustion and is used to produce visible or audible effects by combustion, deflagration or detonation (additional wording to be discussed)

(m) Pyrotechnic Operator as used herein means any licensed pyrotechnic operator, who by examination, experience, and training, has demonstrated the required skill and ability in the use and discharge of fireworks as authorized by the license granted. 12527

ALSO 12532 – has SE  
12511 - Fireworks

(q) "Q" Definitions. ~~None.~~

(a) Quick Match as used herein means a black match that is encased in a loose-fitting sheath.

(b)

(r) "R" Definitions.

(1) Report (written). A detailed written account of all events involving pyrotechnic materials, devices, and operations. ~~in which a fire, injury, or death occurs, or in which any violation of the laws or regulations takes place.~~

(a) Report (pyrotechnic) as used herein means a noise and a flash of light normally produced when the device explodes. Crackling effects that produce a mild audible effect and sparks, but do not rupture their container, are not considered to be reports.

APA 87-1a use that

(2) Retailer. Any person who, at a fixed place of business, sells, transfers, or gives fireworks to a consumer or user. (12528)

(h) Rocket Engine as used herein means shall mean the same as Rocket Motor. (See Rocket Motor).

Add (k) Rocket Launch Rack. A device that confines a rocket on three or more sides to straight line motion during acceleration over a distance until the rocket is stable for flight when the rocket leaves the rack.

Add (i) Rocket Launch Rail. A device, where a rocket is temporarily attached by two or more launch lugs, that restricts the rocket motion during acceleration to a straight line over a distance until the rocket is stable for flight when the rocket leaves the rail.

(3) Roman Candle. A heavy paper or cardboard tube containing pellets of pyrotechnic composition which, when ignited, are expelled into the air at several-second intervals.



(s) "S" Definitions.

(1) Salute. An aerial shell as well as other pyrotechnic items whose primary effects are detonation or explosion and flash of light.

(2) Set Piece. Also known as ground display piece or mechanical piece.

A pyrotechnic device or series of devices that while on the ground or elevated produces a visual and/or audible effect. These devices may employ fountains, gerbs, roman candles, wheels, and lances.

(3) Shunt. A deliberate short-circuit of an electrically fired pyrotechnic device or a means contained within its firing system to protect it from accidental ignition by extraneous electricity.

(4) Single Break Shell. Aerial shell having one or more effects within a cylindrical or spherical casing.

~~(5) Snap Cap. Also known by other names such as, but not limited to, Snappers, Pop Pop Snappers, Fun Snaps and Bang Snaps. It is a pyrotechnic device that typically contains less than .20 grams, but shall not contain~~

~~more than .25 grams, of gravel impregnated with not more than one milligram of pyrotechnic composition. Each unit consists of a small, roughly spherical paper parcel, approximately one-quarter (1/4) inch in diameter with a twisted paper tail. Each unit, when dropped against a hard surface, produces a small, toy cap-like report.~~

Snap Cap as used herein means a pyrotechnic device in which each unit consists of a small, roughly spherical, paper or other flame resistant material parcel, approximately one-quarter (1/4) inch (6.35 mm) in diameter which may include a twisted paper or other flame resistant material parcel tail. Each unit, when dropped against a hard surface, produces a small, toy cap-like report. These specific items are not considered “fireworks” for transportation purposes under federal law and may be sold year-round in the State of California, subject to certain classification requirements and restrictions set forth in this chapter.

~~NOTE: Studies are conducted annually by the Office of State Fire Marshal which will determine whether or not there are adverse consequences from the regulation of snap caps.~~

(6) Soft Detonator. A detonator in which the explosive or pyrotechnic

material is encased in a non-metallic container.

~~(7) Sparkler. A Stick or wire coated with a pyrotechnic composition that produces a shower of sparks upon ignition.~~

Sparkler- as used herein means Aa Sstick or wire coated with a pyrotechnic composition that produces a shower of sparks upon ignition. Sparklers are classified as “dangerous fireworks”.under 12505

~~(8)(u) Squib- as used herein shall mean-~~ an ignitor or detonator designed and used for simulating **ENERGETIC EVENTS to OBJECTS INCLUDING BUT NOT LIMITED TO walls, objects, and clothing.** (Also See Bullet Hit or Bullet Effect)

Sparkler Tree as used herein means a device that consists of multiple pieces of metal wire coated with a chemical composition that when lit produces a shower of sparks, colored flame and/or crackling effect.

Specialty Item as used herein means a firework item that resembles in physical shape and form, articles

commonly recognized. This includes, but is not limited to, devices that resemble cartoon characters, toys, vehicles, boats and animals and that are designed to produce limited visible, audible, or motion effects.

(b) Safety Fuse as used herein means a fuse consisting of a thread-wrapped black powder train that has been coated with a water-resistant material.

“Safe and Sane Fireworks” (also known as “State-Approved Fireworks”) (revisit this) shall mean any firework which does not come within the definition of “Dangerous Fireworks” or “Exempt Fireworks” as defined in this chapter, and includes but is not limited to base, box, cone and tube fountains; ground spinners; handheld and spike items; and party, trick and smoke devices.

(h) Side Ignition as used herein means a test performed by Consumer Product Safety Commission (CPSC) in accordance with CPSC Consumer Fireworks Testing Manual to ensure the fuse can only be ignited from the ignition end and not the side. (986.6f) see 2013 draft definition USE AFSL

(k) Slag as used herein means in connection with hand-held sparkling devices, a mass of molten particles generated by the burning of pyrotechnic materials during the functioning of a fireworks device. Individual sparks produced as an intended effect of a device is not considered slag.

(p) Snapper as used herein means shall mean the same as Snap Cap. (See Snap Cap).

(q) **Special Effects (re-order below)** as used herein means articles containing any pyrotechnic composition manufactured and assembled, designed, or discharged in connection with television, theater, or motion picture productions, which may or may not be presented before live audiences, and any other articles containing any pyrotechnic composition used for commercial, industrial, education, recreation, or entertainment purposes when authorized by the Authority Having Jurisdiction. **(REF: 12532)**

(m) Smoke Device as used herein means an item comprised of pyrotechnic composition that upon ignition, produces white or colored smoke as the primary effect.

(n) Snakes (aka glow worms) as used herein means pressed pellets of pyrotechnic composition. Upon burning, they produce a snake-like ash that expands in length as the pellet burns.

(e) Sell as used herein means any arrangement between two or more persons as a result of which there is a transfer of property for a consideration. (necessary?)

12531

*Static Fire. A test or an experimentation process of an immobilized rocket or rocket motor to determine the rocket motor thrust characteristics.*

*Static Fire Test Stand. A testing device or an immovable structure that the rocket motor or rocket is affixed such that it will not work itself free during the testing or experimentation process. For a hybrid or liquid motor test, the test stand may also contain components to simulate the propellant system of a rocket.*

*Solid Rocket Motor. A commercial or noncommercially manufactured rocket propulsion device utilizing a solid propellant charge composed of a mixture of both fuel and oxidizer.*

(v) Star as used herein means a pressed, cut or consolidated pellet of pyrotechnic composition that is usually cylindrical, spherical, or cuboid, in shape. Stars produce a visible display of color and light as they burn in the air, and sometimes a crackling or similar audible effect is also produced.

“ ‘State-Approved fireworks’ shall mean the same as ‘Safe and Sane Fireworks’”. ADD ???????? – safety guidance uses this ( revisit this and the safe and sane)

(t) Sparkling Device aka torch device as used herein means "Safe and Sane" hand-held sparkling items consisting of a narrow paper tube attached to a wooden stick and filled with pyrotechnic composition that produces a shower of color, sparks or both upon ignition.

(t) "T" Definitions.

(1) Travel. To move from point of ignition either vertically or horizontally.

~~(2) Trough. Also known as a Mortar Box. A portable wooden structure used for the placement of mortars.~~

(b) Toy Caps as used herein means plastic or paper caps in sheets, strips, rolls, or individual caps, containing not more than an average of 0.25 grains (16 milligrams) of explosive composition per cap.

(c) Trace Impurities as used herein means amounts less than 0.25% by weight.

Tube Fountain. See Box fountain

(u) "U" Definitions. None.

(v) "V" Definitions. None.

(w) "W" Definitions.

(c) Whistle as used herein means a device that produces a shrill noise resulting from the burning of pyrotechnic composition.

(d) Wholesaler as used herein means any person, other than an importer, exporter, or manufacturer selling only to wholesalers, who sells fireworks to a retailer or any other person for resale. It also includes any person who sells dangerous fireworks to public display permittees. 12533



(a) Wheel as used herein means a pyrotechnic device having one or more wheel drivers intended to be attached to a surface, ground piece, post or tree. Upon ignition, the wheel rotates, producing a shower of color and sparks and sometimes a whistling effect.

(2) Within This State. ~~"Within this state"~~ means all territory within the boundaries of this state.

(x) "X" Definitions. None.

(y) "Y" Definitions. None.

(z) "Z" Definitions. None.

NOTE: Authority cited: Sections 12505 and 12552, Health and Safety Code. Reference: Sections 12505 and 12552, Health and Safety Code.

Article 3. Licenses  
§ 981. General.

(a) No person shall engage in any type of fireworks activities without having submitted an application for and having obtained a license from CAL FIRE-Office of the State Fire Marshal in accordance with the provisions of this chapter. ~~Licenses shall be processed in accordance with Title 19, California Code of Regulations, Section 3.33.~~

EXCEPTIONS:

(1) Licensed Pyrotechnic Operators Basic Commercial, Restricted Commercial and Rockets, First Class may employ unlicensed assistants. Unlicensed assistants shall be not less than 18 years of age.

Unlicensed assistants shall perform only limited duties when under the direct, immediate and constant supervision of the licensee when handling fireworks and pyrotechnic compositions.

(2) Licensed special effects and theatrical pyrotechnicians may employ unlicensed assistants. Unlicensed assistants shall perform only when under the direct, immediate and constant supervision of the licensee when handling fireworks and pyrotechnic compositions.

(3) A license shall not be required for the use or discharge of safe and sane fireworks.

(b) The original Retail License shall be available on site for inspection by the Authority Having Jurisdiction.

(c) Pyrotechnic operators shall present their pyrotechnic license to the Authority Having Jurisdiction upon request.

NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 981.1. Cause for Denial.

The knowing use of any false or misleading statement or misrepresentation offered or used to secure any fireworks license, permit, classification, registration, or any other official fireworks document is a violation of these regulations, and shall be cause for denial of the license, permit, classification,

registration or other official fireworks document. -, and may be charged under §72, 115, or 470 of the California Penal Code. Persons convicted of a felony (which felony?) are prohibited from holding a pyrotechnic operator's license. (can we do this? Ask GA)

(follow up with AA)

A person who is denied an operator's license due to a felony conviction may apply for relief to the CAL FIRE OSFM. The denial can be reversed if the State Fire Marshal determines that the circumstances regarding the felony conviction and the applicant's record and reputation are such that the applicant will not be likely to act in a manner dangerous to public safety and that the granting of such relief is not contrary to the public interest.

NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 981.2. Misuse or Alteration of License.

All fireworks licensees as set forth in this chapter shall be prohibited from giving or permitting any other person to use such license for any purpose whatsoever.

Any license issued under this chapter found to be altered shall be confiscated

by the authority examining the license. The authority confiscating the license shall notify CAL FIRE-Office of the State Fire Marshal immediately, and shall cooperate with CAL FIRE-Office of the State Fire

Marshal in all matters relating to an investigation of the incident. This shall not apply to normal wear and tear.

NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12583, and 12600, Health and Safety Code.

### § 981.3. License Fees.

~~((a) Every~~All license fees required in accordance with this ~~s~~Section shall be paid as-designated ~~by check or money order made payable to "CDF/ CAL FIRE-Office of the State Fire Marshal."~~

~~(b) Every required fee shall be paid at or mailed to the office location designated by the State Fire Marshal.~~

(c) The original and annual renewal fee for a license shall be for the fiscal year or portion thereof beginning July 1 and ending June 30 of the following year, except that the fee for a Retail License shall be for the period of noon on the 28th of June through noon on the 6th of July, of the same calendar year.

(d) The original and annual renewal fees shall be as follows:

~~(1) Manufacturer \$1500.00~~

~~(2) Wholesaler 3000.00~~

- ~~(3) Importer & Exporter 4500.00~~
- ~~(4) Retailer 50.00~~
- ~~(5) Public Display (special) 350.00~~
- ~~(6) Public Display (limited) 200.00~~
- ~~(7) Public Display (general) 1,500.00~~
- ~~(8) Pyrotechnic Operator: 125.00~~
  - ~~Basic Commercial 50.00~~
  - ~~Restricted Commercial 50.00~~
  - ~~Rockets, 1st Class 50.00~~
  - ~~Rockets, 2nd Class 50.00~~
  - ~~Rockets, 3rd Class 50.00~~
  - ~~Special Effects, 1st Class 250.00~~
  - ~~Special Effects, 2nd Class 200.00~~
  - ~~Special Effects, 3rd Class 100.00~~
  - ~~Theatrical 200.00~~
  - ~~Theatrical Trainee 100.00~~
  - ~~Performer 125.00~~
- ~~(9) Manufacture, import, export, or wholesale, or any combination thereof; agricultural and wildlife fireworks 500.00~~
- ~~(10) Manufacture, import, export, or wholesale, or any combination thereof; model rocket motors 500.00~~
- ~~(11) Registration or classification fee for each model of emergency signaling device 50.00~~
- ~~(12) Party Popper/Snap Cap Distributor Permit 750.00~~
- ~~(13) Manufacture, import, export, wholesale, or any combination thereof high power or experimental high power rockets and motors 1500.00~~

~~(14) Retailer (high power rocket) 500.00~~

~~(e) The original registration and classification fees shall be as follows:~~

~~(1) Original registration and classification fee for each model of~~

~~model rocket motor, high power rocket or motor, safe and sane, party popper, snap caps/snappers, agricultural/wildlife or exempt fireworks 50.00~~

<b><u>Fireworks Company Licenses:</u></b>	
<u>(1) Manufacturer</u>	\$
<u>(2) Wholesaler</u>	\$
<u>(3) Importer/Exporter</u>	\$
<u>(4) Public Display (Special)</u>	\$
<u>(5) Public Display (Limited)</u>	\$
<u>(6) Public Display (General)</u>	\$
<u>(7) Retail Booth – “Safe and Sane”</u>	\$
	\$
<u>(9) Agriculture and Wildlife – Manufacture, Import/Export, Wholesale, or combinations thereof</u>	\$

(10) <u>High Power Rocket Motors – Manufacture, Import/Export, Wholesale, or combinations thereof</u>	\$
(11) <u>High Power Rocket Motor Retailer</u>	\$
(12) <u>Model Rocket Motors – Manufacture, Import/Export, Wholesale, or combinations thereof</u>	\$
(13) <u>Original and Annual Renewal Registration of each model of Emergency Signaling Device and</u>	\$
(14) <u>Original Registration/Classification Fee for each model of Model Rocket Motor, High Power Motor, Safe and Sane, Party Popper, Snap Caps/Snappers, Agriculture/Wildlife or Exempt fireworks (check on experimental) &gt;&gt;&gt;</u>  <u>Limited importer? Personal importer? Will revisit&gt;&gt;&gt;</u>	\$

**Fireworks Launch System Registration Fee & Evaluation Team Hourly Rate:**

<u>Fireworks Launch System Registration Fee ? revisit based on who is the authority who approves</u>	\$
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OSFM should look into develop criteria for evaluating new technologies. <<>>	
(16) Non-traditional Fireworks Launch Systems Evaluation Team	\$
<b><u>Original and Annual Renewal Fee for Pyrotechnic Operator:</u></b>	
	\$
(18) Restricted Commercial Operator	\$
(19) Basic Commercial Operator	\$
(20) Unrestricted Commercial Operator	\$
(21) Special Effects, 1st Class Operator	\$
(22) Special Effects, 2nd Class Operator	\$
(23) Special Effects, 3rd Class Operator	\$
(24) Theatrical Operator	\$
(25) Theatrical Trainee Operator	\$
(26) Performer Operator	\$
(27) Rockets, 1st Class Operator	\$
(28) Rockets, 2nd Class Operator	\$
(29) Rockets, 3rd Class Operator	\$
	\$
(31) Replacement License (maybe application for a duplicate license?)	\$


<b>Fireworks Disposal Fees: (if and when? future discussion))</b>	
<b>(32) Wholesaler Disposal</b>	\$
<b>(33) Importer/Exporter Disposal</b>	\$
<b>(34) Retailer Disposal per location Operator Disposal Seizure (?) disposal (from illegal possession or use )</b>	\$

(f) Required fees shall be submitted jointly with the appropriate application as shown below. Such Fees are non-refundable once the license has been issued.

NOTE: Authority cited: Sections 12552 and 12631-12633, Health and Safety Code. Reference: Sections 12552 and 12630-12633, Health and Safety Code.

§ 981.4. ~~Duplicate License.~~  
~~In the event a valid license is lost or destroyed, a duplicate license will~~

~~be issued upon written notice from the licensee to the State Fire Marshal and the submission of a \$25.00 fee.~~

Forms and reports associated with the Fireworks Program are to be completed, and submitted to CAL FIRE-OSFM along with any applicable fees (see §981.3) as support documentation as outlined on the form or report.

\*do we need database language similar to AES?

<u>(a) Initial Application for Pyrotechnic Operator</u> <ul style="list-style-type: none"><li>• <u>Requires completion of DOJ BCIA 8016 - Request for Live Scan Service (rev 01/11)</u></li></ul>	<u>FWX-001</u>
<u>(b) Application for Pyrotechnic Operator Background Investigation ?</u>	<u>FWX-001A</u>
<u>(c) Pyrotechnic Operator Experience Certification</u>	<u>FWX-002</u>
<u>(d) Pyrotechnic Operator – Restricted, Basic Commercial and Unrestricted</u>	<u>FWX-003</u>
<u>(e) Pyrotechnic Operator - Special Effects – 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Class</u>	<u>FWX-004</u>

<u>(f) Pyrotechnic Operator - Theatrical, Theatrical Trainee and Performer</u>	<u>FWX-005</u>
<u>(g) Pyrotechnic Operator-Rockets - 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Class</u>	<u>FWX-006</u>
<u>(h) Pyrotechnic Company (Various)</u>	<u>FWX-007</u>
<u>(i) Request for Replacement License</u>	<u>FWX-008</u>
<u>(j) Public Display Fireworks Report of Sales</u>	<u>FWX-009</u>
<u>(k) Public Fireworks Display Permit and Pre-Display Report</u>	<u>FWX-010</u>
<u>(l) Inspection Checklist - Outdoor Fireworks Display</u>	<u>FWX-011</u>
<u>(m) Pyrotechnic Operator Post Display Report</u>	<u>FWX-012</u>
<u>(n) Seized Fireworks Collection Instructions</u>	<u>FWX-013</u>
<u>(o) Fireworks Seizure Report Form</u>	<u>FWX-014</u>
<u>(p) Pyrotechnic Operator's Log (Special Effects and Theatrical Licenses)</u>	<u>FWX-015</u>
<u>(q) Retail Fireworks Booth License (NCR Hardcopy Only)</u>	<u>FWX-016</u>

<u>(r) Retail Fireworks Store License</u>	<u>FWX-017</u>
<u>(s) Fireworks Launching Systems (new tech??)</u>	<u>FWX-018</u>

NOTE: Authority cited: §12552, 12553 of the Health and Safety Code. Reference: §12552, 12580, 12589, 12595 and 12597, Health and Safety Code.

NOTE: Authority cited: Sections 12552 and 12580, Health and Safety Code. Reference: Sections 12630, 12631 and 12632, Health and Safety Code.

§ 981.5. ~~License Scope.~~ **Replacement License**

(a) In the event a valid license is lost, destroyed, or stolen the licensee may request a duplicate by fulfilling the following requirements as applicable:

(1) Payment of the replacement license fee; and,

(2) A narrative report written by the licensee for claims of a lost or destroyed license, indicating the last place the license was known to have been accounted for, or the reason the license was destroyed; or,

(3) A narrative report written by the licensee for claims of a stolen license accompanied by a report from the law enforcement agency the theft was reported to.

**NOTE:** Authority cited: Sections§12552 and 12580, Health and Safety Code. Reference: Sections§12630, 12631 and 12632, Health and Safety Code.

~~(a) Model Rockets. A Model Rocket License authorizes the manufacture, import, export or wholesale or any combination thereof.~~

~~(b) Pyrotechnic Operator. A Pyrotechnic Operator's License authorizes and places the responsibility for the handling, supervision and discharge of any fireworks item or pyrotechnic device and establishes that the operator is responsible for the training of his or her assistants in the safe handling, supervision,~~

~~and discharge of these items and devices, in accordance with the following:~~

~~(1) Pyrotechnic Operator -Unrestricted may conduct and take charge of all fireworks activities in connection with every kind of public fireworks display, whether commercial entertainment, experimental and other types of rockets, special effects in motion picture, theatrical and television production.~~

~~(2) Pyrotechnic Operator -Basic Commercial may conduct and is restricted to all fireworks activities in connection with a commercial fireworks public display, including the determination that all mortars, set pieces, rocket launchers and rockets are properly installed and that the proper safety precautions have been taken to insure the safety of persons and property. Such operator shall have charge of all activities directly related to handling, preparing and firing all fireworks at the public display, including the fixing of lifting charges and quick match as needed for aerial shells.~~

~~(3) Pyrotechnic Operator -Restricted Commercial may conduct and is restricted exclusively to the use~~

~~and discharge of firecrackers and the use of other exempt fireworks in religious ceremonies.~~

~~(4) Pyrotechnic Operator -Rockets First Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading and launching of all types of experimental rockets. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under subsection (b) are also required to obtain a local permit from the authority having jurisdiction prior to all launches.~~

~~(5) Pyrotechnic Operator -Rockets Second Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading and launching of all types of solid fuel experimental rockets only. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under subsection (b) are also required to obtain a local permit from the authority having jurisdiction prior to all launches.~~

~~(6) Pyrotechnic Operator -Rockets Third Class may purchase, transport, store, and launch high power~~



~~rockets. Experimental high power rocket motors may only be imported, exported, and wholesaled by individuals or companies holding valid import, export, or wholesale licenses. Pyrotechnic Operators -Third Class may only purchase high powered rocket motors from licensed wholesalers. Operators licensed under subsection (b) are also required to obtain a local permit from the authority having jurisdiction prior to all launches.~~

~~(7) Pyrotechnic Operator -Special Effects First Class may conduct and is restricted to the use, preparation for transportation and the preparation and use of all types of fireworks and special effects pyrotechnics, for the sole purpose of producing a visible or audible effect where and when such use is a necessary part of motion picture, television, theatrical or operatic production, as permitted by the fire authority having jurisdiction.~~

~~(8) Pyrotechnic Operator -Special Effects Second Class may conduct and is restricted to the use of special effects, the loading of blank cartridges, colored fire, flash paper, smoke composition, the preparation and use of binary A and B Flash composition and such other fireworks of whatever~~

~~kind and class as may be permitted by the authority having jurisdiction, under a special permit in connection with television and motion picture production.~~

~~(9) Pyrotechnic Operator - Special Effects Third Class authorizes the loading of blank cartridge shells, and use of special effects when under the direct supervision and control of a Pyrotechnic Operator - Special Effects First or Second Class.~~

~~(10) Pyrotechnic Operator - Theatrical authorizes the use of special effects, blank cartridges, colored fire, flash paper, flash, smoke composition, and the preparation and use of binary A and B Flash composition in stage or theatrical productions only.~~

~~(11) Pyrotechnic Operator - Theatrical Trainee authorizes the conducting of procedures permitted a Pyrotechnic Operator - Theatrical when under the direct supervision and control of a licensed Pyrotechnic Operator - Theatrical.~~

~~(12) Pyrotechnic Operator - Performer is restricted to persons who perform before an audience, directly or indirectly, and may include magicians, comedians, still photographers, and others whose primary~~

~~interest is in other than pyrotechnics. Such license is restricted to the use of blank cartridges, colored fire, flash paper, sparklers, and smoke composition in connection with the production of theatricals and operas before live audiences in theaters, opera houses, television studios, night clubs, and similar occupancies, or by the use of a still photographer.~~

~~(c) Separate License Not Required. A separate license shall not be required of licensed manufacturers, wholesalers, or importer-exporter to manufacture, wholesale, import or export agricultural and wildlife fireworks or model rocket engines.~~

~~(d) Explosive Materials Not Included in Scope of License. The license scope as defined in this section is restricted to the use of materials defined as "fireworks" (as defined in Health and Safety Code Section 12511) and in no way confers authority for the use or discharge of explosive materials defined in Health and Safety Code Sections 12000, et seq.~~

~~Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552, 12578 and 12580, Health and Safety Code.~~

## **§981.6. Penalty License Scope.**

(a) Pyrotechnic Operator. A Pyrotechnic Operator's License authorizes and places the responsibility for knowledge and comprehension of all of the current laws and regulations relating to the license, the handling, supervision and discharge of any fireworks item or pyrotechnic device; establishes the licensed operator is responsible for the training of assistants in the safe handling, supervision, security, and discharge of fireworks and/or pyrotechnic items and devices, in accordance with the following:

(1) Pyrotechnic Operator-Unrestricted may conduct all fireworks activities in connection with every kind of public fireworks display, whether commercial entertainment, experimental and other types of rockets, special effects in motion picture, theatrical and television production.

(2) Pyrotechnic Operator-Basic Commercial may conduct and is restricted to all fireworks activities in connection with a commercial fireworks public display, including the determination that all mortars, set pieces, fireworks, rockets, and rocket launchers are properly installed and that the proper safety precautions have been taken to insure the safety of persons and property. Such operator shall have charge of and be responsible for all activities directly related to handling, preparing and firing all fireworks at the public display, including the fixing ~~the fixing of~~

lifting charges of quick match as needed for aerial shells. Getting language from gary B

(3) Pyrotechnic Operator-Restricted Commercial may conduct and is restricted exclusively to the use and discharge of consumer fireworks and the use of other exempt fireworks in limited displays and religious and cultural ceremonies.

(4) Pyrotechnic Operator-Rockets 1<sup>st</sup> Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading, static fire and launching of high power and all types of experimental rockets. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under sub-section (a) are also required to obtain a local permit from the Authority Having Jurisdiction prior to all launches.

(5) Pyrotechnic Operator-Rockets 2<sup>nd</sup> Class may conduct and is restricted to all activities in connection with research experiments, production, transportation, fuel loading, static fire and launching of high power and all types of solid fuel experimental rockets only. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under sub-section (a) are also required to obtain a local permit from the Authority Having Jurisdiction prior to all launches.

(6) Pyrotechnic Operator-Rockets 3<sup>rd</sup> Class may purchase, transport, store, static fire, and launch high power rockets. Experimental High power rocket motors may only be imported, exported, and wholesaled by individuals or companies holding valid import/ export, or wholesale licenses. Pyrotechnic Operators - 3<sup>rd</sup> Class may only purchase high powered rocket motors from licensed retailers or wholesalers. Such operator shall also be responsible for the actions and conduct of all assistants. Operators licensed under sub-section (a) are also required to obtain a local permit from the Authority Having jurisdiction prior to all launches.

**(SE MAY NOT WANT TO TOUCH)**

(7) Pyrotechnic Operator-Special Effects 1<sup>st</sup> Class may conduct and is restricted to the use, preparation for transportation and the preparation and use of all types of fireworks and special effects pyrotechnics, for the sole purpose of producing a visible or audible effect where and when such use is a necessary part of motion picture, television, theatrical or operatic production, as permitted by the fire Authority Having Jurisdiction.

(8) Pyrotechnic Operator-Special Effects 2<sup>nd</sup> Class may conduct and is restricted to the use of special effects, the loading of blank cartridges, colored fire, flash paper, smoke composition, the preparation and use of binary A and B Flash composition and such

other fireworks of whatever kind and class as may be permitted by the Authority Having Jurisdiction, under a special permit in connection with television and motion picture production.

(9) Pyrotechnic Operator-Special Effects 3<sup>rd</sup> Class authorizes the loading of blank cartridge shells, and use of special effects when under the direct supervision and control of a Pyrotechnic Operator-Special Effects 1<sup>st</sup> or 2<sup>nd</sup> Class.

(10) Pyrotechnic Operator-Theatrical authorizes the use of special effects, blank cartridges, colored fire, flash paper, flash, smoke composition, and the preparation and use of binary A and B Flash composition in stage or theatrical productions only.

(11) Pyrotechnic Operator-Theatrical Trainee authorizes the conducting of procedures permitted a Pyrotechnic Operator -Theatrical when under the direct supervision and control of a licensed Pyrotechnic Operator -Theatrical.

(12) Pyrotechnic Operator-Performer is restricted to persons who perform before an audience, directly or indirectly, and may include magicians, comedians, still photographers, and others whose primary interest is in other than pyrotechnics. Such license is restricted to the use of blank cartridges, colored fire, flash paper, sparklers, and smoke composition in connection with the production of theatricals and operas before live audiences in theaters, opera

houses, television studios, night clubs, and similar occupancies, or by the use of a still photographer.

(b) Separate License Not Required. A separate license shall not be required of licensed manufacturers, wholesalers, or importer-/exporter to manufacture, wholesale, import or export agricultural and wildlife fireworks or model rocket engines.

(c) Explosive Materials Not Included in Scope of License. The license scope as defined in this Section is restricted to the use of materials defined as "fireworks" (as defined in Health and Safety Code §12511) and in no way confers authority for the use or discharge of explosive materials defined in Health and Safety Code §12000, et seq.

**NOTE:** Authority cited: Sections§12511 and 12552, Health and Safety Code. Reference: Sections§12511, 12552, 12578 and 12580, Health and Safety Code.

### **§981.7. Expired License**

(a) Pyrotechnic Operator licenses which have been expired less than one year from the last renewal date may be reinstated as follows:

(1) Payment of the last fee and one and one half times the current fee that is due, and,



(2) Successful completion (passing score of 70% or higher) of an examination for the type of license which has expired.

(b) Pyrotechnic Operator licenses expired longer than one year from the latest renewal period may not be renewed.

Exception: Persons holding a valid Pyrotechnic Operators license may put their license on hold in an inoperative state prior to the next current renewal period without paying annual renewal fees for any period of time in which either of the following circumstances occur:

(1) The licensee is currently serving in the Armed Forces of the United States either full time, as a reserve, or state military reserve and is deployed to another country for a period exceeding one year because of peace keeping or combat operations; and/or,

(2) The licensee suffers a catastrophic injury or illness expected to take longer than one year from which to recover, and during such time they are unable to use the license.

(3) The licensee shall provide documented evidence one or both of the above events occurred prior to renewal of the license without fee.

NOTE: Authority cited: §12552, Health and Safety Code. Reference: §12552, 12578 and 12580, Health and Safety Code.

## **§981.10. Fireworks Company Licenses and Registration.**

### (a) Licenses.

(1) A Manufacturer's License shall allow the manufacture of fireworks and other pyrotechnic devices of all types and the sale and transport to licensed wholesalers in California only and the sale to special effects pyrotechnic operators of materials and devices for which such pyrotechnic operators hold a valid permit.

(2) A Wholesaler's License allows the sale and transportation of all types of fireworks to licensed retailers, or retailers operating under a permit, licensed public display operators, and other licensed wholesalers in California only, and sale to special effects pyrotechnic operators holding a valid permit, and sale of exempt fireworks to those industrial and commercial concerns that possess a valid permit from the local Agency Having Jurisdiction in the area where such fireworks are to be used or stored.

(3) An Importer's and Exporter's License shall allow fireworks to be imported into and exported from the state. Import activity shall be limited to the sale of fireworks to licensed wholesalers and

licensed manufacturers only. Export activity shall be limited to the sale of fireworks to persons outside of the state. Holders of this type of license shall not be issued or possess a public display license of any type without first securing a wholesaler's license. This Section shall not require a license for a motion picture production company to transport or deliver special effects from within the state to a destination outside the state.

(4) A Fireworks Retail Sales License allows the retail sale of Safe and Sane fireworks for private use.

(a) A fireworks retail booth license shall authorize a retail sale of Safe and Sane fireworks within this state only during the period of 12 noon on the 28<sup>th</sup> of June through 12 noon on the 6th of July of the same calendar year and such license shall expire at the end of such period. No retail license shall be issued for the license period defined in this Section unless the application for such license is received by CAL FIRE-Office of the State Fire Marshal on or before June 15<sup>th</sup> proceeding the license period. A new retail sales license shall be required annually for the period specified in this Section.

(5) A Public Display License (Special) allows the holding and conducting, at various times, of public displays of dangerous fireworks at a single location only.

(6) A Public Display License (General) allows the holding and conducting of public displays of dangerous fireworks public displays at various locations and at various times.

(7) A Public Display License (Limited) allows the performance of a single public display action of a single nature, with dangerous fireworks at one location to be executed at one or more performances or exhibitions.

(8) A Model Rocket License authorizes the manufacture, import/export or wholesale or any combination thereof.

(9) Experimental High Power Rocket Motors and High Power Rocket Motors License authorizes the manufacture, import/export, wholesale, or any combination of Experimental and/or High Power Rocket Motors.

(10) An Agriculture and Wildlife License authorizes the manufacture, import/export, wholesale, or any combination of Agricultural and Wildlife fireworks.

(b) Registrations.

(1) Emergency Signaling Devices shall be registered by CAL FIRE-Office of the State Fire Marshal.

(2) The original and annual renewal application for registration of each model of Emergency Signaling Devices shall be made to CAL FIRE-Office of the State Fire Marshal. A registration fee established

and collected by CAL FIRE-Office of the State Fire Marshal for each model of signaling device shall accompany each application.

**NOTE:** Authority cited: §12571, 12572, 12573, 12575, 12576 and 12577 and 12552, Health and Safety Code. Reference: ~~Sections~~ §12500-12725, Health and Safety Code.

#### Article 4. Permits

##### § 982. Local Permit, Application For.

(a) When applying for a permit under Health and Safety Code section

12640(e), an applicant shall submit the following information and evidence

to the authority having jurisdiction:

(1) The name or the organization sponsoring the display, together with

the names and license numbers of persons actually in charge of the display.

(2) The date and time of day the display is to be held.

(3) The exact location planned for the display.

(4) The size and number of all fireworks to be discharged including the number of set pieces, shells, and other items. Shells shall be designated by diameter specifying single, multiple break or salute.

(5) The manner and place of storage of all fireworks prior to, during, and after the display.

(6) Diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone lines, or other overhead obstruction.

(7) Proof that satisfactory workers' compensation insurance is carried for all employees in compliance with Labor Code Section 3700.

(8) If the permit is for a public display or special effects, documentary proof of conformance with sections 12610 and 12611, Health and Safety Code.

(9) A State Fire Marshal's license for the public display of fireworks, under Health and Safety Code Sections 12575, 12576, or 12577. No permit for a public display of any type shall be granted unless a public display license general, special, or limited has been first obtained from the State Fire Marshal.

(10) The name and license number of the wholesaler who supplied all items used in the display.

(b) Permittee shall be responsible for compliance with the provisions under which a public display permit has been granted.

NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### **§982.1. Effective Period.**

Permits are effective during the “to and from” dates indicated on the permit by the Authority Having Jurisdiction, unless otherwise cancelled or revoked.

NOTE: Authority cited: §12552 and 12640 Health and Safety Code. Reference: §12552 and 12640 Health and Safety Code.

## **§982.2. Application.**

(a) Application for public or limited display of fireworks on state owned or leased property or on state controlled waters, shall be made on the appropriate CAL FIRE- Office of the State Fire Marshal form.

(b) Applications for local government area or other than state controlled waters shall be made to the Authority Having Jurisdiction on forms indicated by the Authority Having Jurisdiction.

NOTE: Authority cited: §12552 and 12640 Health and Safety Code. Reference: §12552 and 12640 Health and Safety Code.

## **§984. General.**

~~-(a) Test and Examination.~~ Every applicant for a pyrotechnic operator's license shall take and pass a written examination administered by ~~the~~ Cal FIRE- Office of the State Fire Marshal in accordance with the provisions of this chapter. The applicant shall submit evidence attesting to the qualifications and experience required by this Article for the type of license for which application has been submitted.



~~(1) Pyrotechnic Operator - Unrestricted shall require a minimum amount of experience as indicated for each of the following types of licenses. Such experience shall be in the actual discharge of fireworks and pyrotechnic devices for the types indicated.~~

~~(A) Pyrotechnic Operator - Basic Commercial 2 years.~~

~~(B) Pyrotechnic Operator - Rockets First Class 2 years.~~

~~(C) Pyrotechnic Operator - Special Effects First Class 2 years.~~

~~Under the provisions of this section, not less than 6 years total experience is required.~~

~~(2) Pyrotechnic Operator - Basic Commercial shall require a minimum of 2 years of active work as an unlicensed assistant to either a licensed Pyrotechnic Operator - Unrestricted, or Basic Commercial. This time requirement may be reduced by 1 year through the successful completion of a State Fire Marshal approved training course or through exceptional work experience as evidenced by log entries or work records. Notwithstanding the 2 year requirement, the applicant shall have participated in the firing of not less than 8 different public displays.~~

~~(3) Pyrotechnic Operator - Special Effects First Class shall require a minimum of 2 years of active work as a Pyrotechnic Operator - Special Effects~~

~~Second Class. This time requirement may be reduced by 1 year through the successful completion of a State Fire Marshal approved training course or through exceptional work experience as evidenced by log entries or work records.~~

~~(4) Pyrotechnic Operator -Special Effects Second Class shall require a minimum of 2 years of active work as a Pyrotechnic Operator -Special Effects Third Class. This time requirement may be reduced by 1 year through the successful completion of a State Fire Marshal approved training course or through exceptional work experience as evidenced by log entries or work records.~~

~~(5) Pyrotechnic Operator -Special Effects Third Class. No experience required.~~

~~(6) Pyrotechnic Operator -Theatrical shall require a minimum of 2 years of active work as a Pyrotechnic Operator -Theatrical Trainee. This time requirement may be reduced by 1 year through the successful completion of a State Fire Marshal approved training course or through exceptional work experience as evidenced by log entries or work records.~~

~~(7) Pyrotechnic Operator -Theatrical Trainee. No experience required.~~

~~(8) Pyrotechnic Operator Performer. No experience required.~~

~~(b) Qualifications. Adequate qualification for the issuance of the requested license shall be~~

~~determined by the State Fire Marshal. It shall be incumbent upon the applicant to present to the State Fire Marshal evidence of such qualifications which may include a physical demonstration of knowledge and ability.~~

~~(c) Experience. The required experience for issuance of a pyrotechnic operator's license shall be in accordance with this section. In addition, applications shall be accompanied by the names and complete addresses of not less than five persons as reference who are not a relative, and who can attest to the applicant's experience, integrity and training. The references shall be licensed pyrotechnic operators of a class equal to or greater than the class applied for and shall have been licensed for at least one year.~~

~~NOTE: Authority cited: Section §12552, Health and Safety Code. Reference: Sections §12552, 12580, 12589, 12603 and 12607 Health and Safety Code.~~

### **§984.1. Examinations, Qualifications and Experience.**

(a) The written examination required for pyrotechnic operators shall consist of at least three parts, one pertaining to laws relating to fireworks, one pertaining to regulations relating to fireworks

and one relating to the practices and procedures of the license scope.

(b) The applicant shall submit evidence attesting to the qualifications and experience required by this Article for the type of pyrotechnic operator's license for which an application has been submitted.

(1) Pyrotechnic Operator – Restricted Commercial shall require two (2) years active work as an unlicensed assistant to a licensed Pyrotechnic Operator-Restricted Commercial.

(2) Pyrotechnic Operator – Basic Commercial shall require a minimum of ~~one (1) year of active work~~ as an unlicensed assistant to either a licensed Pyrotechnic Operator -Unrestricted, or Basic Commercial. This time requirement may be reduced by ~~1-year~~ 6 months through the successful completion of a State Fire Marshal approved, nationally recognized training course adapted to the law and regulation of the State of California training course or through exceptional work experience as evidenced by log entries or work records.

Notwithstanding the 6-month or 2-1-year requirement, the applicant shall have fully participated in the

setup, firing, and striking of not less than 8 different public displays

(3) Pyrotechnic Operator--Unrestricted shall require a minimum amount of experience as indicated for each of the following types of licenses. Such experience shall be in the actual discharge of fireworks and pyrotechnic devices for the types indicated.

(A) Pyrotechnic Operator – Basic Commercial: Two (2) years.

(B) Pyrotechnic Operator – Rockets 1<sup>st</sup> Class: Two (2) years.

(C) Pyrotechnic Operator – Special Effects, 1<sup>st</sup> Class: Two (2) years.

(4) Pyrotechnic Operator -Special Effects, 1<sup>st</sup> Class shall require a minimum of two (2) years of active work as a Pyrotechnic Operator -Special Effects, 2<sup>nd</sup> Class. This time requirement may be reduced by one (1) year through exceptional work experience as evidenced by log entries or work records.

(5) Pyrotechnic Operator -Special Effects, 2<sup>nd</sup> Class shall require a minimum of two (2) years of active work as a Pyrotechnic Operator -Special Effects, 3<sup>rd</sup> Class. This time requirement may be reduced by one (1) year through exceptional work experience as evidenced by log entries or work records.

(6) Pyrotechnic Operator -Special Effects, 3<sup>rd</sup> Class shall require documentation of one (1) year experience observing the active work of a licensed Pyrotechnic Operator-Special Effects, 1<sup>st</sup> Class or a licensed Pyrotechnic Operator, 2<sup>nd</sup> Class or possession of a valid Pyrotechnic Operator- Special Effects from a different state within the United States.

(7) Pyrotechnic Operator -Theatrical shall require a minimum of two (2) years of active work as a Pyrotechnic Operator -Theatrical Trainee. This time requirement may be reduced by one (1) year through exceptional work experience as evidenced by log entries or work records.

(8) Pyrotechnic Operator -Theatrical Trainee shall require documentation of one (1) year experience observing the active work of a licensed Pyrotechnic Operator-Theatrical or possession of a valid Pyrotechnic Operator- Special Effects or Theatrical License from a different state within the United States.

(9) Pyrotechnic Operator-Performer shall require one (1) year active work as an unlicensed assistant to a licensed Pyrotechnic Operator-Performer.

(c) Qualifications. Adequate qualifications for the issuance of the requested license shall be determined by CAL FIRE-Office of the State Fire Marshal. It shall be incumbent upon the applicant to

present to CAL FIRE-Office of the State Fire Marshal evidence of such qualifications which may include a physical demonstration of knowledge and ability.

(c) Experience. The required experience for issuance of a pyrotechnic operator's license shall

be in accordance with this section. Except for

Pyrotechnic Operator - Basic Commercial

applicants, ~~h~~in addition, applications shall be accompanied by the

names and complete addresses of not less than five persons as reference who are not a

relative, and who can attest to the applicant's experience, integrity and training. The references

shall be licensed pyrotechnic operators of a class equal to or greater than the class applied for

and shall have been licensed for at least one year.

Applications for Pyrotechnic Operator - Basic

Commercial licenses a shall be accompanied by 5

Certification of Display Participation forms signed by

5 different licensees of a class equal to or greater

than the class applied for who have been licensed

for at least one year at the time of the displays for

which they are certifying participation. The

Certification of Display Participation forms shall be in a form provided by the State Fire Marshal and shall contain a checklist of the skills determined by the State Fire Marshal as appropriate to qualification for the license to be initialed by the Certifier. In order to reduce the experience time by 6 months, the Application shall be accompanied by a certificate of completion from a nationally recognized Basic Commercial training program approved by the State Fire Marshal.

**NOTE:** Authority cited: ~~Section~~§12552 and 12580, Health and Safety Code. Reference: Sections§12552 and 12580, Health and Safety Code.

### **§984.2. Examination Process.**

(a) To satisfactorily pass the written examination, the applicant ~~must~~shall obtain a minimum grade of seventy percent (70%) in each part.

(b) Every person taking an examination for pyrotechnic operator shall have the right to contest the validity of individual examination questions of ~~such examination.~~

(c) Every objection as to the validity of individual questions of an examination shall be made in writing



within five (5) days after taking the said examination. Objections shall state the reasons for each objection.

(d) The decision as to the action to be taken on the submitted objection(s) shall be made by the CAL FIRE Office of the State Fire Marshal Fireworks Program Coordinator and such decisions shall be final.

(e) The decision made by the CAL FIRE Office of the State Fire Fireworks Program Coordinator, and the action taken shall be reflected in all future examinations but shall not affect the grades established in past examinations.

(f) Any applicant failing an ~~the~~ examination may ~~reapply and take~~ another examination not less than fifteen (15) days from the date of the previous examination.

(g) Applicants ~~applying to take repeat examinations shall file a new application. An additional fee is not required in those instances where the applicant has taken a test and failed it.~~ who fail may reapply for and pay applicable fees for a new examination, no longer than one (1) year from the original examination date, but before the expiration of the issued background certification number, whichever comes first.

(h) The CAL FIRE-Office of the State Fire Marshal may require a re-examination of any licensee. This

examination may be of any type permitted by these regulations. A fee shall not be required for a re-examination.

(i) Any licensee required to undergo re-examination, who fails to achieve a passing score, shall be allowed a second examination not less than fifteen (15) days from the date of the first re-examination.

(j) Any licensee required to undergo re-examination who fails to achieve a passing score on a second attempt, shall be required to undergo the initial application and background investigation process prior to re-applying for a Pyrotechnic Operator's examination.

(i)(k) Any Applicants found using any extrinsic aids during the an examination shall automatically fail, the examination, and shall forfeit admission to future examinations for a period of one year, and shall be required to undergo the initial background investigation process before re-applying for a Pyrotechnic Operator's License.

**NOTE:** Authority cited: ~~Section~~§12552, Health and Safety Code. Reference: ~~Sections~~§12552, 12580 and 12589, Health and Safety Code.

### **§984.3 Application Period**

An original pyrotechnic operator's license shall not be issued for the month of June of any fiscal year unless the application has been received by in the Cal Fire-Office of the State Fire Marshal on or before the preceding May 15.

**Note:** Authority cited ~~Section~~ §12552, Health and Safety Code. Reference: Sections §12552, 12589, 12595, and 12597, Health and Safety Code.

#### 984.4. Investigation and Letters of Reference.

Applicants for a pyrotechnic operator's license are subject to an investigation by the State Fire

Marshal. The investigation is intended to determine, but will not be limited to, compliance with

state laws and regulations, and competency of applicant to perform in a safe manner. To assist

in this investigation five letters of reference or

Certification of Display Participation Forms, as

applicable, in conformance with Section 984(c) shall be

submitted with this application. Additionally, a review of the applicant's training certifications and

documentation, if any, and their log or journal detailing

the kind of materials used, the quantity, how fired, date, time and location, and name and license number of the supervising pyrotechnician shall be conducted.

~~NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552, 12580, 12587, 12590 and 12615, Health and Safety Code.~~

### **§984.5. Renewal Applications.**

Application for renewal of a license shall be made by the person to whom the license was issued. In all cases, applicants for license renewal shall pass an examination every four (4) years as required for an original application in accordance with the provisions of this Chapter ~~every four years~~.

~~NOTE: Authority cited: Section §12552, Health and Safety Code. Reference: Section§12552, Health and Safety Code.~~

### **§984.6 Notice of Conviction**

(a) Applicants for original and renewal Pyrotechnic Operators' Licenses and current licensed

Pyrotechnic Operators, shall make notification in writing to CAL FIRE-Office of the State Fire Marshal within 10 days of any felony conviction.

(b) Licenses of applicants convicted of felonies who fail to notify CAL FIRE-Office of the State Fire Marshal in writing within ten (10) days of the conviction are subject to revocation

NOTE: Authority cited: §12552, 12607, 12608, Health and Safety Code. Reference: §12552, 12607, 12608, Health and Safety Code.

## Article 6. Classification of Fireworks

### **§986. Classification.**

(a) Fireworks or pyrotechnic devices that are to be used or sold for use in this state and found by CAL FIRE-Office of the State Fire Marshal to come within the definition of “~~party poppers~~”, “~~snap caps~~”, “~~s~~Safe and ~~s~~Sane”, “**Safe and Sane**” Novelty, “~~a~~Agricultural and ~~w~~Wildlife”, “~~m~~Model ~~r~~Rocket ~~m~~Motors”, “~~h~~High ~~p~~Power ~~r~~Rocket ~~m~~Motors”, “~~e~~Emergency ~~s~~Signaling ~~d~~Device” or “~~e~~Exempt” fireworks shall be classified as such by CAL FIRE-Office of the State Fire Marshal.

EXCEPTION: Special Effects items developed and compounded on location for single time usage.

(b) The classification of an item shall not be construed as conferring classification to any similar item without the approval of CAL FIRE-Office of the State Fire Marshal. The trade name of an item shall not be changed without notifying CAL FIRE-Office of the State Fire Marshal thirty (30) days prior to such a change.

**12505a-k = Dangerous Fireworks (reference)**

12505k revisit, do we need more on this?

**NOTE:** Authority cited: Sections §12552 and 12553, Health and Safety Code. Reference: Sections §12560-12569 and 12671, Health and Safety Code.

### **§986.1. Sparklers**

~~— Sparklers, which are defined as a stick or wire coated with a pyrotechnic composition that produces a shower of sparks upon ignition are classified as dangerous fireworks under the authority of the Health and Safety Code Section 12505(k).~~

~~**Note:** Authority cited: §12552 Health and Safety Code. Reference: 12505(k), 12552, 12560, and 12561 Health and Safety Code.~~

## **§986.2. Test Samples. Chemical Analysis**

~~(a) Undischarged samples of each item of fireworks which are to be examined, classified and labeled as “Party Poppers”, “Snap Caps,” or “safe and sane” shall be submitted to the State Fire Marshal for testing. The number of samples necessary shall be determined by the State Fire Marshal and in no case shall be less than ten (10).~~

~~(b) Undischarged samples of each item which is to be examined, classified, and labeled as agricultural wildlife”, “emergency signaling devices”, “model rocket engine”, and “high-power rocket engine” shall be submitted to the State Fire Marshal for testing. The number of undischarged samples necessary for each test shall be determined by the State Fire Marshal and in no case shall be less than three (3).~~

The request for classification of all fireworks as “Safe and Sane” or “Safe and Sane” Novelty shall be accompanied by a qualitative chemical analysis showing every chemical and substance used in the manufacturing of such fireworks. Such qualitative analysis shall be made by a Cal FIRE-Office of the State Fire Marshal approved Laboratory and shall include the total pyrotechnic weight of each item.

**NOTE:** Authority cited: Sections §12552 and 12553, Health and Safety Code. Reference: Sections

§12552, 12560-12569 and 12671, Health and Safety Code.

~~§ 986.3. Chemical Analysis.~~

~~The request for classification of all fireworks as "safe and sane" fireworks or any item as a "party popper" or "snap caps", shall be accompanied by a qualitative chemical analysis showing every chemical and substance used in the manufacture of such fireworks, "party poppers" or "snap caps". Such qualitative analysis shall be made by the manufacturer, and shall include the total pyrotechnic weight of each item.~~

~~NOTE: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12560-12569 and 12671, Health and Safety Code.~~

**§986.3 Prohibited Chemicals.**

**The following chemicals are prohibited in fireworks classified by CAL FIRE-Office of the State Fire Marshal as "Safe and Sane" or Novelties:**



(a) Arsenic sulfide, arsenates, or arsenites.

(b) Boron.

(c) Chlorates, except:

(1) In colored smoke mixtures in which an equal or greater weight of sodium bicarbonate is included;

(2) In Party Poppers;

(3) In small items (such as ground spinners) wherein the total powder content does not exceed 0.14 ounces (4 grams) of which not greater than 15% (or 0.02 ounces (600 milligrams)) is potassium, sodium, or barium chlorate.

(d) Gallates or gallic acid.

(e) Lead and lead compounds (including red oxide).

(f) Hexachlorobenzene (Perchlorobenzene) at the limit to 0.01% by weight.

(g) Magnesium (magnesium/aluminum alloys, called magalium, are permitted).

(h) Mercury Salts.

(i) Phosphorous (Red or White), (exception: red phosphorous is permissible in Snap Caps and Party Poppers).

(j) Picrates or Picric Acid.

(k) Thiocyanates.

(l) Titanium (exception: in particle size greater than 100 mesh).

(m) Zirconium.

NOTE: Authority cited: §12505, 12552 and 12553, Health and Safety Code. Reference: §12552 and 12553, Health and Safety Code.

#### ~~§ 986.4. Re-Tests.~~

~~Licenseses shall advise the State Fire Marshal of any change in quality, content, or construction of any fireworks article classified by the State Fire Marshal and shall resubmit such articles for re-test and classification.~~

~~Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12560-12569 and 12671, Health and Safety Code.~~

#### **§986.4. Re-Tests. Testing of “Safe and Sane” and “Safe and Sane” Novelty Fireworks.**

~~Licensees shall advise the State Fire Marshal of any change in quality, content, or construction of any fireworks article classified by the State Fire Marshal and shall resubmit such articles for re-test and classification.~~

(should be “safe and sane novelty” or “novelty”)  
clarify

(a) All fireworks which a manufacturer, wholesaler or importer/exporter seek to have classified by CAL FIRE-Office of the State Fire Marshal as “Safe and Sane” or “Safe and Sane” Novelty fireworks within the State of California, distributed within the State of California and intended for use by consumers within the State, are subject to certain performance, labeling and testing requirements established by the CPSC, the DOT and CAL FIRE-Office of the State Fire Marshal.

(b) Ten (10) samples of all fireworks which a manufacturer, wholesaler or importer/ exporter seek

to have tested and classified by CAL FIRE-Office of the State Fire Marshal as "Safe and Sane" or "Safe and Sane" Novelty fireworks within the State of California, distributed within the State of California and intended for use by consumers within the State, shall be submitted to CAL FIRE-Office of the State Fire Marshal for testing pursuant to the most recently adopted version of the testing procedures and mandates established by CAL FIRE-Office of the State Fire Marshal.

(c) Upon the completion of successful testing CAL FIRE-Office of the State Fire Marshal shall classify the fireworks item as "Safe and Sane" or "Safe and Sane" Novelty under these Regulations. This classification shall not be construed as conferring classification to any similar device without CAL FIRE-Office of the State Fire Marshal performing the appropriate testing on that similar item. The trade name of an item shall not be changed without notifying CAL FIRE-Office of the State Fire Marshal within thirty (30) days prior to such change.

(d) The request for classification of a firework item as "Safe and Sane" or "Safe and Sane" Novelty shall also be accompanied by a qualitative chemical analysis showing every chemical and substance used in the manufacturing of the firework item. Such qualitative analysis shall be performed by the

manufacturer and/or the appropriate federal agency and shall include the total pyrotechnic weight of each item.

(e) The Licensee shall advise CAL FIRE-Office of the State Fire Marshal of any change in quality, content, performance and/or construction of any firework item previously classified by CAL FIRE-Office of the State Fire Marshal as "Safe and Sane" or "Safe and Sane" Novelty fireworks and shall resubmit such firework item for re-test and re-classification pursuant to the testing procedures established by CAL FIRE-Office of the State Fire Marshal.

NOTE: Authority cited: Sections §12552 and 12553, Health and Safety Code. Reference: Sections §12552 12560-12569 and 12553 12671, Health and Safety Code.

### **§986.5. Revocation. Test Samples**

~~The classification may be revoked by the State Fire Marshal if he or she finds that the material being marketed is not the same as that submitted for classification or when such fireworks or it's labeling, does not conform to the provisions of this chapter.~~

~~(a) Undischarged samples of each item of fireworks which are to be examined, classified and labeled as "Safe and Sane" or "Safe and Sane" Novelty shall be submitted to CAL FIRE-Office of the State Fire Marshal for testing. The number of samples necessary shall be determined by CAL FIRE-Office of the State Fire Marshal and in no case, shall be less than ten (10).~~

~~(b) Undischarged samples of each "Safe and Sane" or "Safe and Sane" Novelty firework which are subject to re-classification requirements and shall be submitted to CAL FIRE-Office of the State Fire Marshal for testing. The number of undischarged samples necessary for each test shall be determined by CAL FIRE-Office of the State Fire Marshal and in no case, shall be less than three (3).~~

~~(c) Undischarged samples of each item which is to be examined, classified, and labeled as "Agricultural Wildlife", "Emergency Signaling Devices", "Model Rocket Engine", and "High-Power Rocket Engine" shall be submitted to CAL FIRE-Office of the State Fire Marshal for testing. The number of undischarged samples necessary for each test shall be determined by CAL FIRE-Office of the State Fire Marshal and in no case, shall be less than three (3).~~

**NOTE:** Authority cited: Sections §12552 and 12553, Health and Safety Code. Reference: Sections §12560-12569 and 12671, Health and Safety Code.

### **~~§986.6. Specifications for Safe and Sane Fireworks. Re-Test~~**

~~The provisions of this section shall apply to all handle goods, stick, dowel, spike and California candle fireworks having a stick dowel or inside diameter greater than 1/8 inch and other devices as noted.~~

~~Handle goods are exempt from compliance with the provisions of subsections (a), (d) and (e) of this section if they incorporate all of the following features: (1) a soft, crushable type paper tube, (2) an inside diameter of 3/8 inch or less, (3) 3 inches or less of combustible chemical composition, and having an overall length not exceeding 12 inches without any choke or other muzzle restriction.~~

~~(a) The chemical composition tubes or cases of all stick or handle fireworks items, whether spike or dowel, except flares, shall not exceed 9 inches in length or have an inside diameter greater than 5/8 inch and shall be convolute or spiral wound of chip board or other paper having equivalent strength and shall be well glued. The above dimensions do not include the stick, dowel or tubular handles of such items.~~

~~The chemical composition tubes in all fireworks items shall be sealed in a manner that prevents leakage of the pyrotechnic composition during shipping, handling, or normal operation and shall be constructed in a manner to allow functioning without burnout or blowout.~~

~~(b) The use of any choke or other muzzle restriction in any stick or handle fireworks item, whether spike or dowel or California candle is prohibited.~~

~~(c) Compositions in all devices shall be designed and manufactured to prevent loosely compacted charges. Pyrotechnic compositions shall not discharge a flame longer than 8 inches or throw sparks further than 10 feet from the composition tube muzzle. Handle goods shall not throw sparks further than 6 feet from the composition tube muzzle.~~

~~(d) Clay base shall have a minimum finished thickness of 1/2 inch and shall be formed in place inside the tube. In no case shall the final composition charge and the clay be formed in a combined operation. All clay used as clay base shall be sufficiently moistened to insure permanent effective adhesion to the inside of the tube or case.~~

~~(e) Fireworks devices which are intended to be hand-held and are so labeled shall incorporate a handle at least 4 inches in length. Handles shall~~



~~remain firmly attached during transportation, handling and full operation of the device, or shall consist of an integral section of the device at least 4 inches below the pyrotechnic chamber.~~

~~Spikes and dowels shall be inserted into the chemical composition tubes a minimum distance not less than 25% of the length of tubes 6 inches or less in length and not less than 2 inches into tubes 6 inches long. They shall be cemented firmly in place against the clay base. There shall be no void space within the chemical composition tube.~~

~~Spikes provided with fireworks devices shall protrude at least 2 inches from the base of the device and shall have a blunt tip not less than 1/8 inch in diameter or 1/8 inch square.~~

~~(f) All fuses of every type and kind of fireworks items shall be securely fixed in contact with the composition charge to insure against accidental loss. Each fuse shall be capable of either supporting the combined weight of the fireworks item plus eight ounces dead weight, or double the weight of the item without separation from the fireworks article.~~

~~Fuses on all items shall burn for not less than 3 seconds but not more than 6 seconds.~~

~~Fuses on all items shall be treated or coated in such a manner as to reduce the possibility of side ignition. The fuse on devices such as "ground spinners" that require a restricted orifice for proper~~

~~thrust and contain less than 6 grams of pyrotechnic composition are exempt from this requirement.~~

~~Fireworks items sold or offered for sale at retail which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by the State Fire Marshal to provide reasonable protection from unintentional ignition.~~

~~(g) All pyrotechnic devices having a base shall provide stable support to maintain the item in a vertical position when firing. When bases are added to the device, they shall be firmly glued in place.~~

~~The base or bottom of fireworks devices having a base or fireworks devices that operate in a standing upright position shall have the minimum horizontal dimensions or the diameter of the base equal to at least one-third (1/3) of the height of the device including any base or cap affixed thereto.~~

~~(h) The appearance of any fireworks items resembling those articles classified by statute as "dangerous fireworks" shall constitute sufficient grounds for their classifications, by the State Fire Marshal, as "dangerous fireworks." Special reference is intended, though not by way of limitation, to cherry bombs and sky rockets and other fireworks which normally explode or rise in the air during discharge.~~

~~(i) Pinwheels shall be limited to a maximum overall diameter of 15 inches, shall be substantially constructed and all driver gerbs, firepots and other elements shall be firmly fixed to the wheel.~~

~~Drivers shall be securely attached to the device so that they will not come loose in transportation, handling, and normal operation. Wheel devices intended to operate in a fixed location shall be designed in such a manner that the axle remains attached to the device during normal operation.~~

~~(j) Smoke devices shall conform to the following:~~

~~(1) Smoke devices shall be so constructed that they will neither burst nor produce external flame (excluding the fuse and first fire upon ignition).~~

~~(2) Smoke devices shall not be of such color or configuration so as to be confused with dangerous fireworks, such as firecrackers or cherry bombs.~~

~~(3) Smoke devices shall not incorporate plastic as an exterior material if the pyrotechnic composition would come in direct contact with the plastic.~~

Licensees shall advise CAL FIRE-Office of the State Fire Marshal of any change in quality, content, performance and/or construction of any fireworks article classified by CAL FIRE-Office of the State Fire Marshal and shall resubmit such articles for re-test and classification.

**NOTE:** Authority cited: Sections §12552 and 12553, Health and Safety Code. Reference: Sections §12560-12569 and 12671, Health and Safety Code.

~~§ 986.7. Party Poppers.~~

~~(a) General. Party Poppers, as defined in Section 980, may be sold at retail outlets without requirement of a state fireworks retailer license or other retail sales restrictions so long as these Party Poppers are units of a particular manufacturer and design which have been classified by the Office of State Fire Marshal.~~

~~(1) Only entities or individuals maintaining a valid Office of State Fire Marshal importer/exporter's license may import Party Poppers into California and may sell Party Poppers only to entities or individuals maintaining a valid Office of State Fire Marshal wholesaler's license.~~

~~(2) Only entities or individuals maintaining a valid Office of State Fire Marshal's wholesaler's license or Party Popper/Snap Cap Distributor permit may sell Party Poppers to a retail outlet. Entities or individuals maintaining a Party Popper/Snap Cap Distributor Permit may purchase Party Poppers only from an individual or entity maintaining a valid Office~~

~~of State Fire Marshal wholesaler's license and may sell Party Poppers only to retail outlets.~~

~~(3) Only entities or individuals maintaining either a valid Office of State Fire Marshal wholesaler's or importer/exporter's license or Party Popper/Snap Cap Distributor Permit may transport, or cause to be transported for sale, Party Poppers within California.~~

~~(4) All wholesaler licenses and Party Popper/Snap Cap Distributor permittees must file with the Office of State Fire Marshal by the close of the month immediately following each quarter, a list of the names and addresses of all retail outlets to whom they sold Party Poppers in the preceeding quarter. Retail outlets holding valid Office of State Fire Marshal retail sales licenses for the sale of Safe and Sane fireworks within the State for the period of 12:00 noon on the 28th of June through 12:00 noon on the 6th of July of that calendar year, as required by Health and Safety Code Section 12599, need not appear on this list filed with the Office of State Fire Marshal as required by this Section.~~

~~(b) In addition to the tests required by this Section, Party Poppers shall conform to the following:~~

~~(1) The device shall contain not more than 0.25 grains of explosive.~~

~~(2) The device shall not contain any materials specified in Section 12505 of the Health and Safety Code.~~

~~(3) The tube casing or body shall be constructed so as to eliminate any emission into the hand of the user.~~

~~(4) The streamers or other fill material shall be flame retardant when tested in accordance with this section.~~

~~(5) Every individual party popper item shall bear the classification label of the State Fire Marshal, including the manufacturer's and importer/exporter's registration number. The words "party poppers" shall appear in legible print on such label.~~

~~(6) The body of every party popper shall have, in legible print, operating instructions and warning labels as may be required by the State Fire Marshal.~~

~~(c) The testing of Party Poppers shall require the submission of a minimum of ten (10) samples. The streamers or other fill material from all of the ten (10) samples shall be arranged in a loose pile and subjected to the flame from a common paper match for not less than 5 seconds. The test material shall not continue to burn or smolder for more than 2 seconds after the match has been removed.~~

~~If the streamers or other fill material fail the above tests, the device shall be rejected.~~

~~Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505, 12560-12569 and 12671, Health and Safety Code.~~

~~§ 986.8. Snap Caps.~~

~~(a) General. Snap Caps as defined in Section 980, may be sold at retail outlets without requirement of a state fireworks retailer license or other retail sales restrictions so long as these Snap Caps are units of a particular manufacturer and design which have been classified by the State Fire Marshal for testing and classification in accordance with this Section. Only entities or individuals maintaining a valid Office of State Fire Marshal importer/exporter's license may import Snap Caps into California and may sell Snap Caps only to entities or individuals maintaining a valid Office of State Fire Marshal wholesaler's license.~~

~~Only entities or individuals maintaining a valid Office of State Fire Marshal wholesaler's license or Party Popper/Snap Cap Distributor permit may sell Snap Caps to a retail outlet. Entities or individuals maintaining a Party/Snap Cap Distributor Permit may purchase Snap Caps only from an individual or entity maintaining a valid Office of State Fire Marshal wholesaler's license and may sell Snap Caps only to retail outlets.~~

~~Only entities or individuals maintaining either a valid Office of State Fire Marshal wholesaler's or importer/exporter's license or Party Popper/Snap~~

~~Cap Distributor Permit may transport, or cause to be transported, for sale, Snap Caps within California. All wholesaler licenses and Party Popper/Snap Cap Distributor permittees must file with the Office of State Fire Marshal by the close of the month immediately following each quarter, a list of the names and addresses of all retail outlets to whom they sold Snap Caps in the preceding quarter. Retail outlets holding valid Office of State Fire Marshal retail sales licenses for the sale of Safe and Sane fireworks within the State for the period of 12:00 noon on the 28th of June through 12:00 noon on the 6th of July of that calendar year, as is required by Health and Safety Code Section 12599, need not appear on this list filed with the Office of State Fire Marshal as required by this Section.~~

~~(b) In addition to the tests required by this Section, Snap Caps shall conform to the following:~~

~~(1) Each device typically contains less than .20 grams, but shall not contain more than .25 grams, of gravel impregnated with not more than one milligram of pyrotechnic composition.~~

~~(2) Each device shall not contain any prohibited materials specified in Section 12505 of the Health and Safety Code.~~

~~(3) Each device shall be constructed of a paper parcel which shall be flame retardant when tested in accordance with this Section.~~



~~(4) The packaging for these devices shall bear the classification label of the State Fire Marshal, including the manufacturer's and importer/exporter's registration numbers. The words "Snap Caps/Snappers" shall appear in legible print on such label.~~

~~(5) The packaging for these devices shall have, in legible print, operating instructions and warning labels as may be required by the State Fire Marshal.~~

~~(c) The testing of Snap Caps shall require the submission of a minimum of ten (10) samples. The paper material from all of the ten (10) samples shall be arranged in a loose pile and subjected to the flame from a common paper match for not less than five (5) seconds. The test material shall not continue to burn or smolder for more than two (2) seconds, after the match has been removed.~~

~~If the paper material fails the above test, the device shall be rejected.~~

#### ~~§ 986.9. Similar Devices.~~

~~A firecracker, as defined in Section 980(f)1, which exceeds 50 milligrams (.772 grains) in net pyrotechnic composition weight shall be classified as explosives in accordance with Health and Safety Code Section 12000.~~

~~Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections~~

~~12505(b) and (k), 12511, 12540 and 12560, Health and Safety Code.~~

## **Section 986.10 Standard for Safe and Sane Combination Items**

(a) General. This standard applies to the manufacture of safe and sane fireworks items that consist of significant combinations of devices defined separately in other sections of this chapter (for example, a fountain with a ground spinner or smoke effect). This standard excludes items that are defined as “Specialty Items” in Section 986.18.

**NOTE:** Incidental effects such as comet tails or whistles, which comply with Section 986.12 height limits, are not considered to be significant for purposes of defining a Combination.

(b) Product Design

(1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or

explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage or loss of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Items subject to this standard must be assembled and packaged so as to prevent damage to the items during transportation, handling, and normal operation.

(G) The pyrotechnic chamber of a fireworks device subject to this standard must be constructed in a manner to allow functioning in normal manner without burnout or blowout.

(H) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

## (2) Fuse Requirement

(A) The fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) For multi-effect or multi-tube items, timing between effects (or tubes) must not exceed ten (10) seconds.

(D) Exposed fuse, including connection fuse between tubes, must resist side ignition for at least three (3) seconds.

**NOTE:** Items requiring a restricted orifice for proper functioning and containing less than 0.21 ounces (6 grams) of pyrotechnic composition do not require a fuse that is resistant to side ignition.

(E) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double the weight of the item, whichever is less, without separation from the item.

(F) The location of the fuse must be obvious or must be clearly identified on the exterior of the device.

(G) Devices subject to this standard must contain only one ignition fuse. Additional fuses, points of ignition, openings for fuse insertion, or points for ignition transfer are not permitted.

(H) Firework items sold or offered for sale at retail which are not enclosed in sealed packages shall have their fuses or other igniting means covered in a manner approved by the CAL FIRE-State Fire Marshal to provide reasonable protection from unintentional ignition.

### (3) Limits For Chemical Composition

(A) A component of a combination item must not exceed the chemical composition limits defined for that component in the appropriate standard.

(B) Combination items consisting of several individual items must not exceed a total chemical composition content of 7.25 ounces (200 grams).

**NOTE:** Any combination that consists of more than one tube where the tubes are securely attached to a single wood or plastic base, and the tubes are separated from each other on the base by a distance of at least 0.50 inches (12.7 mm) must not contain in excess of 17.65 ounces (500 grams) total chemical composition.

#### (4) Specific Requirements For Base Items

(A) The base or bottom of fireworks devices that are operated in a standing, upright position must have the minimum horizontal dimensions or the diameter of the base equal to at least one-third of the height of the device, including any base or cap affixed thereto, but excluding any protruding fuse.

(B) In addition, any item designed to operate on a base must be able to pass a tilt test for stability (static test) appropriate for that item (see individual standards).

#### (5) Limits On Performance

(A) The performance of any Combination item must not exceed the performance limits for the individual component item as stated in the Standard for that item.

B

**NOTE:** Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.

## Section 986.11. Standard for Safe and Sane Hand-Held Sparkling Devices

(a) General. This standard applies to the manufacture of the traditional category of safe and sane hand-held sparkling items consisting of a narrow paper tube attached to a wooden stick and filled with pyrotechnic composition that produces a shower of color and sparks upon ignition. The unit of sale normally consists of a number of individual items boxed or packaged as a unit.

### (b) Product Design

#### (1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.



(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage or loss of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) The pyrotechnic composition of the item subject to this standard must not produce a continuous flame beyond that required to sustain the effect.

(G) Items subject to this standard must be assembled and packaged so as to prevent damage to the items during transportation, handling or normal operation.

(H) Items subject to this standard must not bear a name or bear graphics suggesting a use of the

product that is inconsistent with the cautionary labeling instructions.

(2) Limits For Pyrotechnic Composition

(A) Hand-held Sparkling Devices which contain any chlorate must not contain more than 0.14 ounces (4 grams) of pyrotechnic composition each, of which not greater than 15 percent (600 mg) is potassium, sodium or barium chlorate.

(B) Hand-held Sparkling Devices which contain any perchlorate must not contain more than 0.18 ounces (5 grams) of pyrotechnic composition each.

(C) Hand-held Sparkling Devices that do not contain chlorate or perchlorate must not contain more than 3.6 ounces (100 grams) of pyrotechnic composition each.

(3) Limits On Performance

(A) Items subject to this standard must produce only visual and crackle effects.

(B) The ignition temperatures of items subject to this standard must be sufficiently high that the item cannot be ignited by sparks from another hand-held sparkling device.

(C) The pyrotechnic composition must produce a uniform display with no slag or other molten particles having the potential to cause burns or fires.

(D) Spark residues from Hand-held Sparkling Devices must be non-toxic and not physically injurious if ingested.

(4) Specific Requirements For Handles

(A) Items having a length of 10 inches (25 centimeters) or less overall, must have a handle at least 3 inches (7.5 centimeters) long.

(B) Items having a length of more than 10 inches (25 centimeters) but less than 20 inches (50 centimeters) overall, must have a handle at least 4 inches (10 centimeters) long.

(C) Items having a length of 20 inches (50 centimeters) or greater overall, must have a handle at least 6 inches (15 centimeters) long.

(5) Specific Requirement For Sparkling Devices With Wooden Sticks

(A) Wooden sticks must not continue to burn as a result of operation of the item.

(B) Wooden sticks must not break, resulting in pieces of burning composition (significantly larger than sparks) falling from the stick.

(C) When the Hand-held Sparkling Device is operated horizontally, the stick must be adequate to prevent droop of the spent device by more than 50 percent of the length of the pyrotechnic coating.

NOTE: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.

## **Section 986.12. Standard for Safe and Sane Fountains**

(a) General. This standard applies to the manufacture of the traditional category of safe and sane fountains, designed to produce showers of various colored sparks. Whistles, smoke, flame and crackling effects may also be included as part of the overall fountain effect. The unit of sale usually consists of a fully assembled single-container unit.

## (b) Product Design

### (1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Fountains must be assembled so as to prevent damage to the items during transportation, handling, and normal operations.

(G) Fountains must be constructed of a material that will allow the item to function without burnout or blowout.

(H) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with cautionary labeling instructions.

## 2) Fuse Requirement

(A) The fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist fuse side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double

the weight of the item, whichever is less, without separation from the item.

(D) For multi-effect or multi-tube items, timing between effects (or tubes) must not exceed ten (10) seconds.

(E) The location of the fuse must be obvious or must clearly identified on the exterior of the Fountain.

(F) Exposed fuses, including connecting fuse between tubes must resist side ignition for at least three (3) seconds.

(G) Nitrocellulose Fountains may use a point of ignition instead of a fuse, which shall not be subject to additional fuse requirements.

(H) Devices subject to this standard must contain only one ignition fuse. Additional fuses, points of ignition, openings for fuse insertion, or points for ignition transfer are not permitted.

(I) Fireworks items sold or offered for sale at retail, which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by the CAL

FIRE-State Fire Marshal to provide reasonable protection from unintentional ignition.

(3) Limits On Pyrotechnic Composition

(A) Hand-held Fountains must not contain more than 2.6 ounces (75 grams) total of pyrotechnic composition.

(B) Single-tube Fountains must not contain more than 2.6 ounces (75 grams) of total pyrotechnic composition each.

(C) Cone Fountains must not contain more than 1.8 ounces (50 grams) total of pyrotechnic composition.

(D) Multiple-tube Fountains must not contain more than 7.2 ounces (200 grams) total of pyrotechnic composition.

**NOTE 1:** Any Fountain device consisting of more than one tube where the tube is securely attached to a single wood or plastic base, and the tubes are separated from each other on the base by a distance of at least 0.50 inches (12.7 mm) must not contain in excess of 17.5 ounces (500 grams) total chemical composition.



**NOTE 2:** For multiple-tube Fountains, the maximum content of pyrotechnic composition per tube is 12.6 ounces (75 grams).

(E) Nitrocellulose Fountains must not contain more than 0.53 ounces (15 grams) total pyrotechnic composition.

(F) Fountains must have a firmly installed plug.

(4) Specific Requirement For Tube And Cone Items

(A) Bases must be made of material that will not break during transportation, handling, or normal operation.

(B) Bases must remain firmly attached to the item during transportation, handling, and normal operation.

(C) The base or bottom of a tube or cone Fountain must have the minimum horizontal dimensions or the diameter of the base equal to at least one-third of the height of the device including any base or cap affixed thereto but excluding any protruding fuse.

(D) Any tube or cone Fountain must remain upright when tilted 12 degrees from the horizontal against its shortest base dimension.

(5) Specific Requirements For Handle And Spike Items

(A) Spikes or handles of these items must be securely attached or be an integral part of the item.

(B) These items must have adequate provisions to prevent expulsion of the plug or flame through the handle.

(C) Any handle area (including spikes) must be free of pyrotechnic composition.

(D) Attached handles must have an exposed length of at least 4 inches (10.2 centimeters).

(E) The distance from the bottom of the plug to the external blunt end of the spike must be at least 4 inches (10.2 centimeters) with at least 2 inches (5.1 centimeters) exposed.

**NOTE:** Nitrocellulose Fountains are exempt from this requirement provided they have a spike with an exposed length of at least 2 inches (5.1 centimeters).

(F) Spikes must have a blunt tip, not less than 1/8 inch (3.2 millimeters) in cross-section.

(G) Spikes and handles must be constructed of materials that do not produce sharp fragments when the item operates (or malfunctions).

(H) Spikes must be constructed of a material that allows the device to be mounted in the ground.

## (6) Limits On Performance

### (1) Limit Of Visual Effects

(A) Visual effects of base and spike Fountains must not extend beyond 16.4 feet (5 meters) diameter circle at ground level.

(B) Visual effects of base and spike Fountains must not extend beyond 10 feet (3.05 meters) in height.

(C) Visual effects of hand-held Fountains must not extend beyond 6.6 feet (2 meter) diameter.

(D) Visual effects of hand-held Fountains must not extend beyond 6.6 feet (2 meter) diameter.

(E) The pyrotechnic composition must not produce a continuous flame longer than 20 inches (0.5 meters).

**NOTE:** Sparks produced as part of the effect are not considered to be continuous flame.

(F) Visual effects of Nitrocellulose Fountains must not extend beyond 3.3 feet (1 meter) in length and pyrotechnic composition must not produce a continuous flame longer than 6 inches (150 mm).

(G) Sparks or other pyrotechnic effects must not contact the user while the device is operated in accordance with cautionary labeling instructions.

**NOTE:** Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.

### **Section 986.13. Standard for Safe and Sane Ground Spinners.**

(a) General. This standard applies to the manufacture of the category of safe and sane items designed to operate on the ground by spinning motion or by random movement. Ground Spinners

generally produce a shower of colored sparks while spinning.

(b) Product Design

(1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Ground Spinners must not contain reports.

(G) Items meeting this standard must not produce flaming balls or glowing fragments.

**NOTE:** Uniform showers of sparks are not considered to be flaming effects.

(H) Ground Spinners must be assembled so as to prevent damage during transportation, handling, and normal operations.

(I) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

## 2) Fuse Requirement

(A) The fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) Exposed fuse must resist side ignition for at least three (3) seconds.

**NOTE:** Items such as Ground Spinners that require a restricted orifice for proper functioning and contain less than 0.21 ounces (6 grams) of chemical composition per unit do not require a fuse that is resistant to side ignition.

(D) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double the weight of the item, whichever is less, without separation from the item.

(E) The location of the fuse must be obvious or must be clearly identified on the exterior of the device.

(F) Firework items sold or offered for sale at retail which are not enclosed in sealed packages, shall have their fuses or other igniting means

covered in a manner approved by the CAL FIRE-State Fire Marshal to provide reasonable protection from unintentional ignition.

(3) Limits For Chemical Composition

(A) Ground Spinners must not contain more than 0.7 ounces (20 grams) total of chemical composition per pack.

(4) Limits For Performance

(A) Ground Spinners must not rise more than 1 foot (0.3 meters) into the air during functioning.

(B) Ground Spinners must function within an area not exceeding 12 feet (3.6 meters) in diameter.

(C) The pyrotechnic chamber in fireworks devices subject to this standard must be constructed in a manner that allows functioning in a normal manner without burnout or blowout.

**NOTE:** Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.



## Section 986.14. Standard for Safe and Sane Wheels

(a) General. This standard applies to the manufacture of the traditional category of safe and sane wheel-like items, which are designed to spin on an axle or string and produce various effects. The unit of sale usually consists of a small number of individual wheels boxed or packaged together but may be single units.

### (b) Product Design

#### (1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Wheels must not contain reports.

(G) Wheels must be assembled and packaged so as to prevent damage to the items during transportation, handling, and normal operation.

(H) Driver tubes must be constructed of material that will allow the item to function without burnout or blowout.

(I) Wheels shall be limited to a maximum diameter of 15 inches (381 mm).

(i) Wheel drivers must be attached well enough to remain in place during transportation, handling, and normal operation.

## 2) Fuse Requirement

(A) The fuse used as the lead into the body of the item must be safety fuse.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) Exposed fuse must resist side ignition for at least three (3) seconds.

**NOTE:** Items that require a restricted orifice for proper functioning and contain less than 0.2 ounces (6 grams) of pyrotechnic composition do not require a fuse that is resistant to side ignition.

(D) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams), or double the weight of the item, whichever is less, without separation from the item.

(E) The method of fuse attachment must not affect the performance of the drivers during operation.

(F) For multi-effect or multi-tube items, the timing between effects (or tubes) must not exceed ten (10) seconds.

(G) The location of the initiating fuse must be obvious or must be clearly identified on the exterior of the device.

(H) The pyrotechnic composition must produce a uniform display with no slag or other molten particles which have the potential to cause burns or fires.

(I) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

(J) Fireworks items sold or offered for sale at retail, which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by the State Fire Marshal to provide reasonable protection from unintentional ignition.

### (3) Limits On Pyrotechnic Composition

(A) Individual drivers must not contain more than 2 ounces (60 grams) total of pyrotechnic composition.

(B) Wheels must not contain more than 7.2 ounces (200 grams) total of pyrotechnic composition each.

(4) Specific Requirements For Axle-Type Wheels

(A) Nails or other suitable fasteners must be provided for axle-type Wheels.

(B) The nail or other fastener must allow free spinning of the wheel while at the same time securely positioning the wheel during operation.

(C) Wheel devices intended to be operated in a fixed location shall be designed in such a manner that the axle remains attached to the device during normal operation.

(5) Specific Requirements For String-Type Wheels

(A) String-type Wheels must have a securely attached string so that the string remains attached to the device during normal operation.

(6) Limits On Performance

(A) The radius of the flame from an operating wheel must not exceed 39 inches (1 meter) when measured from the center of the axle to the outside edge of the flame.

**NOTE:** Sparks are not considered to be flame effects.

**NOTE:** Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.

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## Section 986.15 Standard for Safe and Sane Crackling Strips

(a) General. This Standard applies to the manufacture of the traditional category of fireworks designed to produce sparks and crackling effects at the ground level. The unit of sale normally consists of items individually fused and packaged as a unit.

### (b) Product Design

#### (1) General Requirements For Crackling Strips

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) The total pyrotechnic composition for a single device must not exceed 2.12 ounces (60 grams) (exclusive of fuse).

(G) The total weight of pyrotechnic composition per finale must not exceed 0.35 ounces (10 grams).

(H) The delay between the end of the Crackling Strip and the beginning of the crackling finale must not exceed three (3) seconds.

(I) Crackling Strips must not contain any pyrotechnic effects other than the explosive composition designed to produce sparks and a crackling sound.

(J) Crackling Strips must not be capable of ignition by friction.



(K) The finished item must be assembled and packaged so as to prevent damage to the item during transportation, handling, and normal operations.

(L) Sparks expelled from a Crackling Strip device must not travel more than 6.5 feet (2 meters) in any direction from the device.

## (2) Fuse Requirements

(A) The fused used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) Exposed fuses must resist side ignition for at least three (3) seconds.

(D) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double the weight of the item, whichever is less, without separation from the item.

(E) The location of the fuse must be obvious or must be clearly identified on the exterior of the Crackling Strip.

(F) Devices subject to this Standard must contain only one ignition fuse. Additional fuses, points of ignition, openings for fuse insertion, or points for ignition transfer are not permitted.

### (3) Requirements For Packaging

(A) Crackling Strips must be contained in a retail package that resists ignition from pyrotechnic sparks.

## **Section 986.16. Standard for Novelties - Party Poppers and Snap Caps**

(a) General. This standard applies to the manufacture of the category of small items frequently used as party items. These devices usually contain small amounts of chemical composition, which produce limited visual, or audible effects, including Party Poppers and Snap Caps. These specific devices are not considered regulated explosive for transportation purposes by the U.S. Department of Transportation and may, subject to certain classification requirements or restrictions, be sold year-round in California. The unit

of sale usually consists of a number of individual items boxed or packaged as a unit.

(1) Party Poppers

(A) General. Party Poppers may be sold at retail outlets without requirement of a state fireworks retailer license or other retail sales restrictions so long as these items are unit of a particular manufacturer and design which have been classified by the CAL FIRE-Office of State Fire Marshal.

(i) Only entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal importer/exporter license may import Party Poppers into California and may sell Party Poppers only to entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal wholesaler license.

(ii) Only entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal's wholesaler license may sell Party Poppers to a retail outlet

(iii) Only entities or individuals maintaining either a valid CAL FIRE-Office of State Fire Marshal wholesaler or importer/exporter license may transport for sale, or cause to be transported for sale, Party Poppers within California.

(2) Snap Caps

(A) General. Snap Caps may be sold at retail outlets without requirement of a State-Fireworks Retail License or other retail sales restriction so long as the Snap Caps are units of a particular manufacture and design which have been classified by the CAL FIRE-Office of State Fire Marshal for testing and classification in accordance with this Chapter.

(i) Only entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal importer/exporter license may import Snap Caps into California and may sell Snap Caps only to entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal wholesaler license.

(ii) Only entities or individuals maintaining a valid CAL FIRE-Office of State Fire Marshal wholesaler license may sell Snap Caps to a retail outlet.

(iii) Only entities or individuals maintain either a valid CAL FIRE-Office of State Fire Marshal wholesaler or importer/exporter license may transport for sale, or cause to be transported, for sale, Snap Caps within California.

(b) Product Design Of Party Poppers And Snap Caps

(1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

**NOTE:** The requirement that items must not be impact sensitive during normal operation does not apply to Snap Caps.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Items meeting this standard must not produce flaming debris.

(G) Items subject to this standard must be assembled so as to prevent damage to the items during transportation, handling, and normal operation.

(H) Items subject to this standard must produce only visual and audible effects.

(I) The pyrotechnic chamber of items subject to this standard must be constructed so as to allow functioning in a normal manner without burnout or blowout.

(J) Items subject to this standard must not have the shape and color or bear a name that resembles banned hazardous fireworks and/or explosives, such as M-80 Salutes, Silver Salutes, Cherry Bombs, etc.

**NOTE:** Use of such names in conjunction with the word “brand” and the name of the classification, where all components of the name (i.e., “name:, brand, and classification) are prominent, is acceptable under this standard, if and only if, such use was approved by the CAL FIRE-Office of State Fire Marshal and had appeared in the most recent published edition of that office’s office fireworks evaluation procedure of safe and sane fireworks required by Section 987.6 prior to the adoption of these revised regulations.

(K) Items subject to this standard must not bear a name or bear graphics suggesting a use of the

product that is inconsistent with the cautionary labeling instructions.

## (2) Limits On Chemical Composition

### (A) Party Poppers

(i) Party Poppers must not contain more than .25 grains (16 milligrams) of chemical composition per unit.

### (B) Snap Caps

(i) Snap Caps must not contain more than 0.01 ounces (.25 grams) of gravel impregnated with not more than 0.02 grains (1.0 milligram) of chemical composition per unit.

(ii) Each unit may only contain silver fulminate coated on small bits of sand or gravel.

## (3) Specific Requirements For Party Poppers

(A) The tube casing or body shall be constructed so as to eliminate any emission into the hand of the user.



(B) The streamers or other fill material, consisting of soft paper or cloth, shall be flame resistant when tested in accordance with these regulations.

(C) Each unit shall be designed to be handheld and when actuated, propel soft, flame resistant, paper, cloth inserts or similar fill material into the air.

(D) Party Poppers not regulated as an explosive for transportation purposes must be packaged in an inner packaging, which contains not more than 72 devices.

(4) Specific Requirements For Snap Caps

(A) Each unit shall be constructed of a paper, or other non-flammable material, parcel, which shall be flame resistant.

(B) Each unit shall consist of small, roughly spherical, flame resistant, paper parcel, approximately one-quarter (1/4) inch in diameter with a twisted paper tail.

(C) Snap Caps must be packaged in an inner packaging, which contains no more than 50 Snap

Caps with sawdust or other impact-absorbing material.

**NOTE:** Authority cited: Sections 12552 and 12553, Health and Safety Code, Reference: Sections 12505(k), 12552, 12560, 12561, Health and Safety Code.

## **Section 986.17. Standard for Safe and Sane Snake and Smoke Devices**

(a) General. This standard applies to the manufacturer of the category of small items frequently used as party items. These devices usually contain small amounts of chemical composition, which produce limited visual, or audible effects, including Snakes and safe and sane Smoke devices. The unit of sale usually consists of a number of individual items boxed or packaged as a unit.

### (b) Product Design

#### (1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Items meeting this standard must not produce flaming debris.

(G) Items subject to this standard must be assembled so as to prevent damage to the items during transportation, handling, and normal operation.

(H) Items subject to this standard must produce only visual and audible effects.

(I) The pyrotechnic chamber of items subject to this standard must be constructed so as to allow functioning in a normal manner without burnout or blowout.

(J) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

(K) Items subject to this standard must not have the shape and color or bear a name that resembles banned hazardous fireworks and/or explosives, such as M-80 Salutes, Silver Salutes, Cherry Bombs, etc.

**NOTE:** Use of such names in conjunction with the word “brand” and the name of the classification, where all components of the name (i.e., name, brand, and classification) are prominent, is acceptable under this Standard.

## (2) Fuse Requirements

(A) Fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

**NOTE:** Items requiring a restricted orifice for proper functioning and that contains less than 0.23 ounces (6 grams) of pyrotechnic composition do not require a fuse that is resistant to side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device must be at least three (3) seconds but not more than nine (9) seconds.

(C) Exposed fuses must resist side ignition for at least three (3) seconds.

(D) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double the weight of the item, whichever is less, without separation from the item.

(E) For multi-effect or multi-tube items, the timing between effects (or tubes) must not exceed ten (10) seconds.

(F) The location of the fuse must be obvious or be clearly identified on the exterior of the device.

(G) Fireworks items sold or offered for sale at retail, which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by the CAL FIRE-State Fire Marshal to provide reasonable protection from unintentional ignition.

### (3) Specific Requirements For Snakes

(A) Each unit or article shall consist of a small, pressed pellet with a maximum diameter of 0.50 inches (12.7 mm) and a maximum height of 0.50 inches (12.7 mm).

(B) The primary effect of each unit, upon burning, is to produce a snake-like ash that expands in length as the pellet burns.

(C) Snakes must not contain more than 0.07 ounces (2.0 grams) of chemical composition per unit.

### (4) Specific Requirements For Smoke Devices

(A) Smoke devices must not have plastic components in contact with their pyrotechnic composition.

B) Smoke devices must be constructed so that they will neither burst nor produce external flame upon ignition.

**NOTE 1:** Burning fuse and first fire upon ignition are not considered to be external flame.

**NOTE 2:** Small, brief or mild burst of flame accompanying smoke production may not exceed 25% of the total smoke production time of the device.

(C) First fire in Smoke devices must not exceed 25% of the total operating time.

(D) Items subject to this standard must produce a uniformly fine effect with no slag or other molten particles that are large enough to have the potential to cause burns.

(E) Smoke devices not regulated as an explosive for transportation purposes must be packaged in an inner packaging that contains no more than 72 devices.

(F) Smoke devices must not contain more than 3.6 ounces (100 grams) of chemical composition per unit.

**NOTE:** For Smoke devices not regulated as an explosive for transportation purposes, the chemical composition is limited to 0.18 ounces (5 grams) and must be packaged in a cork or cardboard casing. The chemical composition is limited to potassium nitrate and Sulphur for white smoke and combinations of potassium chlorate, Sulphur, sugar, and organic dyes for colored smoke. All units containing potassium chlorates must also contain an equal amount of a bicarbonate, such as sodium bicarbonate.

(5) Specific Requirements For Base Smoke Items

(A) The base or bottom of devices that are operated in a standing or upright position must have the minimum horizontal dimension or the diameter of the base equal to at least one-third of the height of the device including any base or cap affixed thereto but excluding any protruding fuse.

(B) In addition, any item designed to operate on a base must remain upright when tilted 12



degrees from horizontal against its shortest base dimension.

## **986.18 Standards for Safe and Sane Specialty Items**

(a) General. This standard applies to the manufacture of small items that contain relatively small amounts of chemical composition and which are designed to produce limited visual, audible or motion effects.

**NOTE:** Items that consist of significantly different multiple effects will be considered under the standard for Combination Items at Section 986.9.

(b) Product Design

(1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage or loss of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals as listed in §986.3, except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Items subject to this standard must be assembled and packaged so as to prevent damage to the items during transportation, handling, and normal operation.

(G) The pyrotechnic chamber of a fireworks device subject to this standard must be constructed to allow functioning in normal manner without burnout or blowout.

(H) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

## (2) Fuse Requirements

(A) The fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device shall be at least three (3) seconds but not more than nine (9) seconds.

(C) For multi-effect or multi-tube items, timing between effects (or tubes) must not exceed five (5) seconds.

**NOTE:** Multiple tube items subject to this standard are not required to be fused so that the tubes fire sequentially.

(D) Exposed fuse must resist side ignition for at least three (3) seconds.

**NOTE:** Items requiring a restricted orifice for proper functioning, and containing less than 0.21 ounces (6 grams) of pyrotechnic composition, do not require a fuse that is resistant to side ignition.

(E) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams) or double the

weight of the item, whichever is less, without separation from the item.

(F) The location of the fuse must be obvious or be clearly identified on the exterior of the device.

(G) Fireworks items sold or offered for sale at retail, which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by CAL FIRE-Office of the State Fire Marshal to provide reasonable protection from unintentional ignition.

### (3) Limits On Chemical Composition

(A) Specialty Items must not contain more than 0.7 ounces (20 grams) of total chemical composition.

(B) Total chemical composition per individual tube of an item subject to this standard must not exceed 0.07 ounces (2 grams).

### (4) Limits On Performance

(A) Effect propelled from a Specialty Item must not travel an initial distance in the air greater than 6.6 feet (2 meters) in any direction.

(B) The item must not catch fire as a result of operation.

(C) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

#### (5) Specific Requirements for Base Items

(A) The base or bottom of fireworks devices that are operated in a standing, upright position must have the minimum horizontal dimensions or the diameter of the base equal to at least one-third of the height of the device, including any base or cap affixed thereto, but excluding any protruding fuse.

(B) In addition, any item designed to operate on a base must remain upright when tilted 12 degrees from horizontal against its shortest base dimension.

### **986.19 Standards for Safe and Sane Miscellaneous Ground Items**

(a) General. This standard applies to the manufacture of the traditional category of fireworks designed to

produce crackling/flashing/strobe light effects. This standard shall not apply to items which meet the definition of “Sparkler Tree”.

(b) Product Design

(1) General Requirements

(A) The construction of the item must be of such composition and design that no sharp fragments are produced upon functioning (or malfunctioning).

(B) The finished item must not be impact sensitive or have a risk of premature ignition or explosion during transportation, handling, or normal operation.

(C) The finished item must not be designed or packaged in such a manner that it could be confused with candy or other foods if it is of a size or configuration that could be ingested.

(D) The construction of the item must be adequate to prevent leakage or loss of the chemical composition at any time.

(E) The chemical composition of the item must not contain prohibited chemicals as listed in §986.3, except as trace impurities.

**NOTE:** Prohibited chemicals are listed in Section 986.3.

(F) Items subject to this standard must be assembled and packaged so as to prevent damage to the items during transportation, handling, and normal operation.

(G) The pyrotechnic chamber of a fireworks device subject to this standard must be constructed to allow functioning in a normal manner without burnout or blowout.

**NOTE:** Flashers (Strobe) are exempt from this requirement.

(H) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

## (2) Fuse Requirements

(A) The fuse used as the lead into the body of the item must be only safety fuse or other fuse that has been protected to resist side ignition.

(B) The fuse burning time from ignition of the tip of the fuse to ignition of the device shall be at least three (3) seconds but not more than nine (9) seconds.

(C) For multi-effect or multi-tube items, timing between effects (or tubes) shall not exceed ten (10) seconds.

(D) Exposed fuse must resist ignition for at least three (3) seconds.

(E) The entire fuse must be securely attached to the item so that it will support either the weight of the item plus 8 ounces (227 grams), or double the weight of the item, whichever is less, without separation from the item.

(F) The location of the fuse must be obvious or be clearly identified on the exterior of the device.

(G) Fireworks items sold or offered for sale at retail, which are not enclosed in sealed packages, shall have their fuses or other igniting means covered in a manner approved by CAL FIRE-Office of the State Fire Marshal to provide reasonable protection from unintentional ignition.

### (3) Limits On Chemical Composition

(A) Crackling Balls and Crackling Tubes must not contain more than 0.71 ounces (20 grams) of total chemical composition.

(B) Crackling Balls and Crackling Tubes must not exceed 2.66 ounces (75 grams) per inner package.

(C) Flashers (Strobes) must not contain more than 0.18 ounces (5 grams) of total chemical composition.

(D) Flashers (Strobes) must not exceed 2.13 ounces (60 grams) per inner package.

### (4) Limits On Performance



(A) Device shall only produce sparks, a colored flame and/or a crackling effect.

(B) Effects propelled from Crackling Balls, Crackling Tubes and Flashers (Strobes) must not travel an initial distance in the air greater than 6.6 feet (2 meters) in any direction.

(C) Crackling Balls and Crackling Tubes must not catch fire as a result of operation.

(D) Items subject to this standard must not bear a name or bear graphics suggesting a use of the product that is inconsistent with the cautionary labeling instructions.

## Article 7. Seal of Registration and Labeling

### § 987. Seal of Registration, Description.

(a) The CAL FIRE-Office of the State Fire Marshal's Seal of Registration required by this chapter shall conform to the provisions of this article. The Seal of Registration shall be applied to all classified fireworks and pyrotechnic devices by a licensed manufacturer, importer, exporter or wholesaler, and shall indicate the classification assigned by the CAL FIRE-Office of the State Fire Marshal or any CAL FIRE-Office of the State Fire Marshal approved laboratory.

(b) The licensee registration number shall appear in the boxes below the seal as illustrated in this article.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12567 and 12568, Health and Safety Code.

#### § 987.1. Unlawful Use.

No person or concern shall produce, reproduce or use the Seal of Registration in any manner or for any purpose except as provided in this chapter.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12567 and 12568, Health and Safety Code.

#### § 987.2. Permissive Use.

(a) Licensed manufacturers, importer/exporters, or wholesalers may, after review by the CAL FIRE-Office of the State Fire Marshal, use the Seal of Registration bearing their license registration number for any of the following:

(1) Printed matter including advertising and copy for publication.

(2) Letterhead, personal cards and similar stationery.

(3) Stencils for any of the foregoing.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12502 and 12618, Health and Safety Code.

### § 987.3. Reproduction.

No person shall reproduce the fireworks Seal of Registration unless the seal reproduction conforms to the approved copy as issued at the time the license and registration number is granted. No alteration shall be made to the original or copy, or to any reproduction of the Seal of Registration unless approved by ~~the~~ CAL FIRE Office of the State Fire Marshal.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12502 and 12618, Health and Safety Code.

### § 987.4. Registration Numbers.

Before reproduction of the Seal of Registration, there shall be inserted in the box at the bottom of the reproduction, the registration number assigned by ~~the~~ CAL FIRE-Office of the State Fire Marshal to designate the category of the licensee. The category shall be designated by the capital letter ~~preceeding~~ preceding the registration number as follows: “M” for manufacturing; “I/E” for importer/exporter; “W”

~~for wWholesaler; . The designation for model rockets and signaling devices shall be as follows: "MR" for mModel rRockets; "HPR" for hHigh-pPower rRocket mMotors; "L" for lLand sSignaling dDevices; "S" for sSea sSignaling dDevices, and "A" for aAir sSignaling dDevices. Signaling dDevices intended for more than one function shall use all of the appropriate letters. Any "Safe and Sane" fireworks device or Safe and Sane Novelties imported for retail sale in California 180 days after the effective date of these Regulations shall bear both a CAL FIRE-Office of the State Fire Marshal Seal of Registration for "Manufacturer" and a CAL FIRE Office of the State Fire Marshal Seal of Registration for "Importer/Exporter".~~

**NOTE:** Authority cited: ~~Section~~§12552, Health and Safety Code. Reference: ~~Sections~~§12502 and 12618, Health and Safety Code.

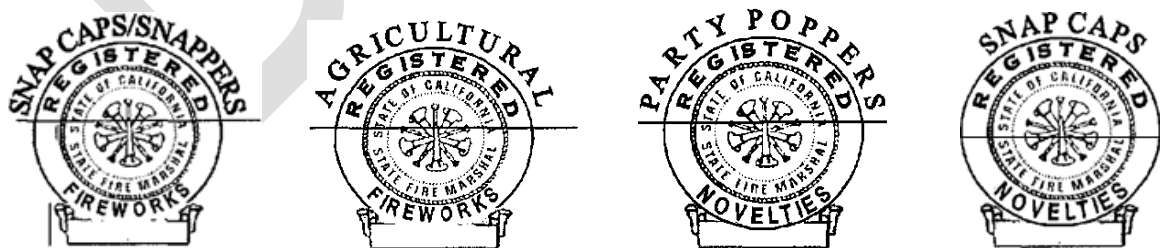
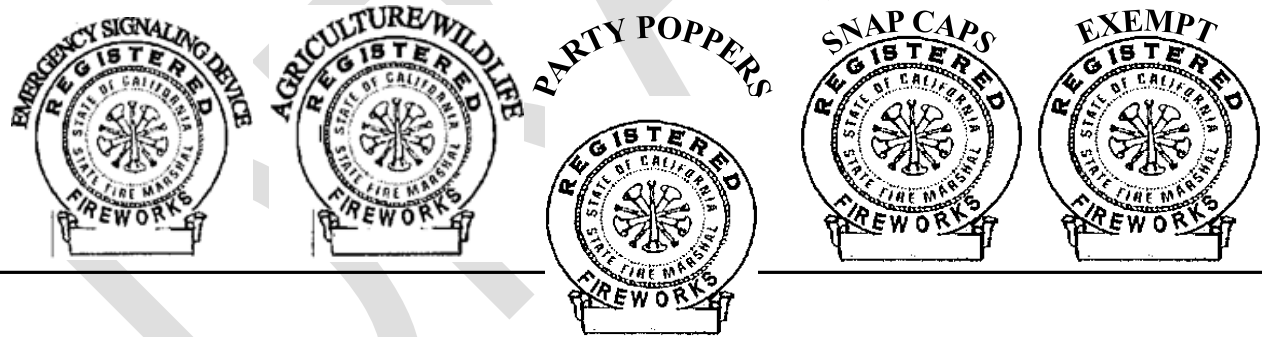
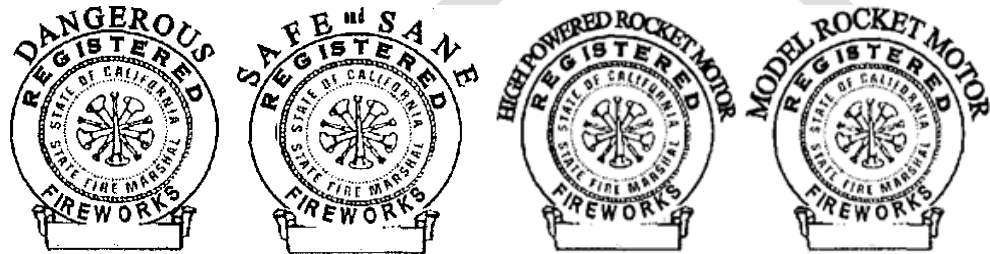
#### § 987.5. Cease Use Order.

No person or concern shall continue use of the Seal of Registration in any manner or for any purpose after receipt of a notice in writing from the CAL FIRE-Office of the State Fire Marshal to discontinue such use. (**consequences or enforcement?**)

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12502 and 12618, Health and Safety Code.

§ 987.6. CAL FIRE Office of the State Fire Marshal's Seal of Registration.

The Seal of Registration shall appear in a format illustrated by the following samples below:



(old graphic)



CAL FIRE-OFFICE OF THE STATE FIRE  
MARSHAL

SEALS OF REGISTRATION  
AND FIREWORKS CLASSIFICATION

SAMPLES ABOVE, INCLUDING CLASSIFICATION

(a)1. Enter one of the appropriate classification titles above the seal (see preceding samples) as listed below: **Is novelty allowed for novelty or must they all say fireworks? Or novelty fireworks?**

(a<sub>1</sub>) Dangerous

(b<sub>2</sub>) Safe and Sane

(3) **Safe and Sane Novelty**

(c<sub>4</sub>) Agriculture/Wildlife

(d<sub>5</sub>) Model Rocket Motor

(e<sub>5</sub>) Emergency Signaling Device (L), (S), or (A)

(f<sub>6</sub>) Exempt

(g<sub>7</sub>) Party Popper

(~~h~~8) High Power Rocket Motor

4. (9) Snap Caps/~~Snappers~~

~~(b)2.~~ Enter the CAL FIRE-Office of the State Fire Marshal manufacturer's registration number in the box at the bottom of the seal. The seal that ~~must~~ shall appear on all Party Poppers and the seal that ~~must~~ shall appear on all packaging for all Snap Caps ~~must~~ shall also include the CAL FIRE-Office of the State Fire Marshal importer/exporter's registration number.

~~(address this. What number is currently on seals?)~~

~~(c)3.~~ On or before May 15<sup>th</sup> of the first year an importer intends to distribute in California, whichever comes later, an importer of “Safe and Sane” fireworks shall be required to file with the CAL FIRE-Office of the State Fire Marshal in Sacramento, a notarized list of all “Safe and Sane” firework devices which:

(1) they have previously submitted for testing and which have been classified as “Safe and Sane” by the CAL FIRE-Office of the State Fire Marshal; and,

(2) indicate by placing an asterisk(\*) before the name of each “Safe and Sane” firework device they intend to distribute in California for retail sale between June 28<sup>th</sup> and July 6<sup>th</sup> of that year.

(d) On or before May 15<sup>th</sup> of each year thereafter, each importer shall be required to file with ~~the~~ CAL FIRE-Office of the State Fire Marshal in Sacramento, a ~~notarized~~ list of all “Safe and Sane” firework devices they intend to distribute in California for retail sales between June 28<sup>th</sup> and July 6<sup>th</sup> of that year, including all new “Safe and Sane” firework devices which have been submitted for testing and which have been classified as “Safe and Sane” by ~~the~~ CAL FIRE-Office of the State Fire Marshal since that importer filed its first list with ~~the~~ CAL FIRE-Office of the State Fire Marshal in accordance with this Section.

(e) These lists ~~must~~ shall include the name and address of the importer and the importer/exporter's registration number. The devices on these lists ~~must~~ shall be segregated by type of device [(i.e., cone fountains, base fountains, wheels, smoke items, ground spinners, hand-held items, and other devices which have been classified as “Safe and Sane” by ~~the~~ CAL FIRE-Office of the State Fire Marshal)]. These firework devices ~~must~~ shall be listed by the name as it appears on each item and within each firework device category, and these items ~~must~~ shall be segregated into two sub-categories:



(1) those items to which ~~this~~ the importer has exclusive trademark and/or distribution rights; and;

(2) those items to which ~~this~~ the importer does not have exclusive trademark and/or distribution rights.

(f) On or by June 20<sup>th</sup> of each year, ~~the~~ CAL FIRE-Office of the State Fire Marshal shall distribute a master list or compilation of all said individual lists, segregated by importer, to all members of the fire service in California. This list shall also include a listing of ~~s~~S~~n~~n~~a~~a~~p~~p ~~€~~C~~a~~a~~p~~p and ~~p~~P~~a~~a~~r~~r~~t~~t~~y~~y ~~p~~P~~o~~o~~p~~p~~e~~e~~r~~r devices which have been submitted for testing and classified as a “Snap Cap” or “Party Popper” by ~~the~~ CAL FIRE-Office of the State Fire Marshal. This listing of ~~s~~S~~n~~n~~a~~a~~p~~p ~~€~~C~~a~~a~~p~~ps and ~~p~~P~~a~~a~~r~~r~~t~~t~~y~~y ~~p~~P~~o~~o~~p~~p~~e~~e~~r~~rs ~~must~~ shall include the name and address of the importer and the importer/exporter's registration number.

(g) On or before June 1<sup>st</sup> of each year, ~~the~~ CAL FIRE-Office of the State Fire Marshal shall supply each importer who submitted an individual list, a draft copy of how that importer's list will appear on the forthcoming master list. ~~That~~ The importer shall then have ten (10) business days from its receipt of ~~this~~ the draft list to review, approve and/or request any corrections in its the listing. Any request for corrections ~~must~~ shall be submitted along with appropriate documentation to ~~the~~ CAL FIRE-Office of the State Fire Marshal ~~in Sacramento~~.

(h) The failure of an importer to timely file its the individual list and/or to file a timely request for substantiated corrections to the draft copy of how that importer's list will appear on the master list, as required by this Section, shall subject any item which does not appear on the CAL FIRE-Office of the State Fire Marshal's master list to immediate seizure by any law enforcement or fire service entity in California at any location where these devices are being offered for retail sale.

**NOTE:** Authority cited: Section§12552, Health and Safety Code. Reference: Section§12552, Health and Safety Code.

### **§ 988. Labeling, General Provisions.**

(a) All fireworks or pyrotechnic devices classified by the CAL FIRE- Office of the State Fire Marshal, in addition to bearing the CAL FIRE- Office of the State Fire Marshal Seal of Registration, shall be labeled in accordance with the provisions of this article.

Such labeling may be by stamp, stencil or printing or by a firmly attached printed adhesive label. The entire label shall appear in legible type.

Exceptions: (1) Special Effects items developed and compounded on location for single time usage. (2) Set pieces used for public display. (3) Any device that is too small for practical single-item labeling

such that it would render the label illegible, as determined by the CAL FIRE- Office of the State Fire Marshal.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12560-12569, Health and Safety Code.

### **§ 988.1. Labeling of Dangerous Fireworks.**

All dangerous fireworks, in addition to bearing the CAL FIRE- Office of the State Fire Marshal's Seal of Registration showing the classification and registration number as required in this article, shall bear a warning label with the wording: "Warning: Do Not Hold in Hand." 12568 concerns labels of dangerous FW (let's revisit)

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552 and 12560, Health and Safety Code. (nope, not applicable)



### **§ 988. Labeling, General Provisions.**

(a) All fireworks or pyrotechnic devices classified by the CAL FIRE- Office of the State Fire Marshal, in addition to bearing the CAL FIRE- Office of the State

Fire Marshal Seal of Registration, shall be labeled in accordance with the provisions of this article.

Such labeling may be by stamp, stencil or printing or by a firmly attached printed adhesive label. The entire label shall appear in legible type.

Exceptions: (1) Special Effects items developed and compounded on location for single time usage. (2) Set pieces used for public display. (3) Any device that is too small for practical single-item labeling such that it would render the label illegible, as determined by the CAL FIRE- Office of the State Fire Marshal.

### **§ 988.1. Labeling of Dangerous Fireworks.**

All dangerous fireworks, in addition to bearing the CAL FIRE- Office of the State Fire Marshal's Seal of Registration showing the classification and registration number as required in this article, shall bear a warning label with the wording: "Warning: Do Not Hold in Hand." 12568 concerns labels of dangerous FW (let's revisit)

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552 and 12560, Health and Safety Code. (nope, not applicable)

§ 988.2. Labeling of Agricultural and Wildlife Fireworks, Model Rocket Motors, High Power Rocket Motors, and Emergency Signaling Devices. All agricultural and wildlife fireworks, model rocket motors, high power rocket motors and emergency signaling devices offered for sale, sold or used in this state shall bear, in addition to the seal, classification, and registration number required in this article, a warning label indicating to the user where and how the item is to be used and necessary safety precautions to be taken.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552 and 12560, Health and Safety Code.

~~§ 988.3. Instruction Labeling. Safe and Sane Fireworks.~~

~~(a) The following fireworks classified as “safe and sane” shall be labeled as indicated herein. Any “safe and sane” fireworks device not required to have a specific label as indicated below shall carry a legible warning label clearly indicating to the user where and how the item is to be used and necessary safety precautions to be observed. The use of the word “close” is optional.~~

### **988.3 Instruction Labeling – Safe and Sane Fireworks or Novelties**

(a) Fireworks Classified as “Safe and Sane” or Novelties by CAL FIRE-Office of State Fire Marshal pursuant to this chapter shall be labeled in accordance with the product-specific labeling set forth for each item in AFSL’s “Standards for Consumer Fireworks, February 2019 Version” and shall bear the appropriate approved CAL FIRE-Office of State Fire Marshal Seal of Registration. Any “Safe and Sane” firework or Novelty device not required to have a specific label as indicated in the above regulations shall carry a legible warning label clearly indicating to the user where and how the item is to be used, and necessary safety precautions to be observed.

(b) Individual items must bear cautionary labeling giving a signal word, statement of hazard(s), and instructions for proper use.

(c) All cautionary labeling must be located prominently and in the English language and conspicuous and legible type in contrast by typography, layout or color with any other printed or graphic matter on the label.

**(1) Fountains, Spike Fountains, and Whistles.**

WARNING (OR CAUTION)

EMITS SHOWERS OF SPARKS

DO NOT HOLD IN HAND

Use only under (close) adult supervision

For outdoor use only

Place on level surface

Stick firmly in ground in an upright position (Spike items only)

Light fuse and get away

(2) Handle Fountains, California Candles

WARNING (OR CAUTION)

EMITS SHOWERS OF SPARKS

Use only under (close) adult supervision

For outdoor use only

Hold in hand at bottom of tube or handle

Point away from body so that neither ends points toward body or another person

(3) Ground Spinners or Ground Spinning Devices

WARNING (OR CAUTION) - SPINS ON GROUND

DO NOT HOLD IN HAND

EMITS SHOWERS OF SPARKS (either on the side, front, back, top, or bottom panel)

Use only under (close) adult supervision

For outdoor use only

Place on hard, flat, smooth, and level surface

Light fuse and get away

(4) Wheels-Vertical

WARNING (OR CAUTION)

EMITS SHOWERS OF SPARKS

DO NOT HOLD IN HAND

Use only under (close) adult supervision

For outdoor use only

Attach securely by means of a nail through the hole

Light fuse and get away

(5) Wheels-Horizontal

WARNING (OR CAUTION)

EMITS SHOWER OF SPARKS

Use only under (close) adult supervision

For outdoor use only

Attach string to object so that item hangs freely

Do not hold in hand

Light fuse and get away

(6) Toy sSmoke devices and fFlitter dDevices;

WARNING (OR CAUTION)

FLAMMABLE (OR EMITS SHOWERS OF SPARKS,  
IF MORE DESCRIPTIVE)

Use only under (close) adult supervision

For outdoor use only

Do not hold in hand

Light fuse and get away

Note: Authority cited: Sections 12552 and 12553,  
Health and Safety Code. Reference: Sections  
12562, 12567 and 12568, Health and Safety Code.

**(CFR TITLE 16 FEDERAL, SEE 2013 LANGUAGE FOR  
ALL WARNING LABELS)**



**INCORPORATE BY REFERENCE IN LIEU , GET FROM TT  
OR DR**

Article 8. Storage

~~§ 989. General~~

~~All magazines shall meet the requirements as set forth in the Code of Federal Regulations, Title 27, Part 55, Subpart K (Storage).~~

~~Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12640, 12671, 12673, 12674, 12679 and 12722, Health and Safety Code.~~

~~§ 989.1. Storage, General Provisions,~~

~~(a) All fireworks, pyrotechnic compositions and pyrotechnic devices shall be kept in a locked magazine and in a manner approved by the authority having jurisdiction unless they are:~~

- ~~(1) In the process of being manufactured;~~
- ~~(2) In the process of being used; or~~
- ~~(3) Being transported to a place of storage or use by a licensee, in accordance with the Code of Federal Regulations, Title 49, Part 173, Subpart C, and Title 13, Chapter 6, Article 3 of the California Code of Regulations.~~

~~(b) Class C Common Fireworks and those devices designated as “safe and sane” fireworks shall be~~

~~stored in a manner consistent with the Code of Federal Regulations, Title 49, Section 173.88.~~

~~Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.~~

### **§989.1 Storage--General Provisions.**

(a) Display fireworks, pyrotechnic compositions and pyrotechnic devices classified as 1.3 G by Code of Federal Regulations, Title 49, §172.101, which is hereby incorporated by reference, shall be stored in a locked magazine in accordance with the California Fire Code as approved by the authority having jurisdiction.

(b) Display fireworks, pyrotechnic compositions and pyrotechnic devices classified as 1.4 G by Code of Federal Regulations, Title 49, Section 172.101 stored in buildings shall be in accordance with the California Fire Code as approved by the authority having jurisdiction.

(c) Fireworks and pyrotechnic devices classified as 1.4 G and 1.4 S by the Code of Federal Regulations, Title 49, Section 172.101, but not classified by CAL FIRE-Office of State Marshal as “Safe and Sane” fireworks which are in the possession of any of the following; Pyrotechnic Operator Basic Commercial, Restricted Commercial Licensee, Special Effects Licensee or Theatrical Pyrotechnic Operator Licensee, for use in their permitted

activities shall be stored in accordance with the 2016 California Fire Code Section ~~5601.1.3~~ 5601 and 5609\* as approved by the authority having jurisdiction.

(d) Consumer fireworks and pyrotechnic devices classified as 1.4 G by the Code of Federal Regulations, Title 49, Section 172.101 shall be stored in accordance with 2016 California Fire Code Section ~~5601.1.3~~ 5601 and 5609 \*as approved by the authority having jurisdiction.

Check to see if 5601 and 5609 is pre-empted by ATF

NOTE: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## § 989.2. Access Roads and Signs.

All magazine storage sites shall have access roads suitable for use by fire apparatus posted with the following warning sign or other sign approved by the authority having jurisdiction:

DANGER  
NEVER FIGHT EXPLOSIVES FIRES  
EXPLOSIVES ARE STORED ON THIS SITE  
CALL \_\_\_\_\_

The sign shall be weather-resistant with a reflective surface and lettering at least two (2) inches high.

Note: Authority cited: Sections 12081 and 12552, Health and Safety Code. Reference: Sections 12081, 12101 and 12552, Health and Safety Code.

### § 989.3. Activities and Devices Prohibited.

Smoking, matches, flame-producing devices, open flames, and firearms shall not be permitted inside or within fifty (50) feet of magazines.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code

### § 989-4- Magazines in Dwelling Prohibited.

No loaded indoor storage magazine shall be located in a residence or dwelling. (whats a dwelling?)

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 9. Shipping and Transportation

### **§ 990. Transportation of Fireworks.**

(a) Only fireworks and pyrotechnic devices classified by and bearing the Seal of Registration of the CAL FIRE-Office of the State Fire Marshal shall be transported within this state.

Exceptions: 1. Unclassified fireworks being transported to the CAL FIRE-Office of the State Fire

Marshall for classification. 2. Unclassified fireworks being transported for verified out-of-state delivery. 3. Fireworks being imported and moving directly from the port of importation to the facilities of the licensed importer for purposes of application for the Seal of Registration for the CAL FIRE-Office of the State Fire Marshal.

(b) All fireworks and pyrotechnic devices being transported in this state, whether classified or unclassified, shall be packaged and transported in accordance with the Code of Federal Regulations, Title 49, Part 173, Subpart C, or with Health and Safety Code Sections 12650-12654.

Note: Authority cited: Section 12552, Health and Safety Code . Reference: Sections 12650-12654, Health and Safety Code.

#### § 990.1. General Safety.

Every vehicle transporting fireworks or pyrotechnic devices shall comply with Sections 27903, 31610, and 31616 of the Vehicle Code of the State of California.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code; and Section 27903, Vehicle Code.

### Article 10. Reports

## § 990.2. Filing Reports.

Import/export licensees shall file written reports with ~~the~~ CAL FIRE-Office of the State Fire Marshal involving the importation of fireworks, in accordance with Health and Safety Code Sections 12619 and 12620.

(1) Prior to importing fireworks, the licensee shall file a report with the CAL FIRE-Office of the State Fire Marshal. Reports shall indicate the name and address of the manufacturer, of the consignee and of the shipper, the point of origin and bill of lading number, the type and kind of fireworks being imported, the quantity of each type and kind of fireworks, the estimated arrival ~~time~~ date of shipment, the name of the carrier, and the load number or other identification carton marks.

(2) Upon arrival or prior thereto, ~~the~~ CAL FIRE-Office of the State Fire Marshal shall be notified as to contemplated disposition of fireworks. Contemplated storage, classification, and reshipment plans shall be included in this report.

**Exception:** Import/export licensees shall not be required to file reports as outlined in this section for pyrotechnic devices and materials used solely for special effects.

Note: Authority cited: Sections 12552 and 12620, Health and Safety Code. Reference: Sections 12619

and 12620, Health and Safety Code. **No double report requested for items re-entering California**

NO 11, 12

**\*\*not sure if Article 13 was ever reviewed\*\***

## Article 13. General Safety Requirements

### § 991. Safety Inspection.

Retail fireworks stands and sales areas are subject to inspection by the authority having jurisdiction. All areas where fireworks, pyrotechnic compositions or devices are used, stored or discharged shall be free from any condition which increases, or may cause an increase of, the hazard or menace of fire or explosion to a greater degree than customarily recognized as normal by persons in the public service of preventing, suppressing or extinguishing fire, or which may become the cause of any obstruction, delay or hindrance to the prevention, suppression or extinguishment of fire.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12682, Health and Safety Code.

### § 991.1. Disposition Unsold Stock.

All retail fireworks licensees shall return unsold fireworks stocks to the wholesaler from whom they were purchased. The retail licensee may store unsold stock in a place and manner approved by the fire authority having jurisdiction until stock is returned to the wholesaler. Such return of stock shall be accomplished no later than the thirty-first of July of each year.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 991.2. Personnel.

The employer or permittee shall be responsible for instructing his or her personnel who handle fireworks, pyrotechnic compositions or devices in any capacity, in the hazards of and safety procedures relating to fireworks, pyrotechnic compositions or devices as contained in this chapter.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code

### § 991.3. Smoking, Storage and Handling Facilities.



Smoking shall be prohibited and “No Smoking” signs posted in all portions of the premises or locations where fireworks, pyrotechnic compositions, or devices are stored, or handled.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code

#### § 991.4. Smoking, Sales Facilities.

Smoking shall be prohibited and signs bearing the words “No Smoking” shall be posted on and in every building, mobile facility, or structure used for the sale of fireworks. Signs shall be positioned at the entrance to and inside such buildings, mobile facilities, or structures and at such other locations as designated by the authority having jurisdiction.

Lettering shall be red in color on a white background. Letters shall be at least 3 inches in height with a stroke of at least 1/2 inch.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 991.5. Prohibited Substances.

Intoxicating liquids, narcotics, and controlled substances are prohibited within the area of the firing site as determined by the authority having jurisdiction, and shall not be used by any person

handling fireworks or special effects at any time during transportation, set-up, firing or removal. Exception: Prescription drugs not impairing the motor functions and/or judgment of the persons affected by this section. Drugs must be taken as directed and specifically prescribed for the individual to be covered by this exception.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 13.5. Electrical Firing Circuits

### § 992. Electric Firing Circuits, General.

Connecting any electric firing circuit to any power supply, is prohibited until all special effects devices, fireworks, and pyrotechnics in the sequence are connected to firing leads and the firing area is clear of all unauthorized personnel.

Exception: Circuit testing as described in section 992.3.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532 and 12552, Health and Safety Code

### § 992.1. Power Sources.

Power sources for firing special effects devices, fireworks, and pyrotechnics shall be restricted to

batteries or individually isolated, ungrounded generators used for firing purposes only.

Commercial or house power may be used provided the firing system is electrically isolated from the commercial or house power through the use of such items as isolation transformers. Under no condition may commercial or house power be used directly for firing purposes.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532 and 12552, Health and Safety Code.

#### § 992.2. Firing Systems Safeguards.

All firing systems, including battery and power circuit types, shall be designed to insure against accidental firing by providing, a shunt or other control method in which no firing power may be applied to any firing circuits unless the operator intentionally enables or arms the firing system before applying firing power.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532 and 12552, Health and Safety Code.

#### § 992.3. Circuit Tests.

All electrically fired pyrotechnic circuits shall be tested with a galvanometer or other test device in

which the test current is not capable of firing the pyrotechnic device being tested.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532 and 12552, Health and Safety Code.

#### § 992.4. Sight Firing.

Special effects devices, and pyrotechnics shall not be fired unless the area involved with the firing is in the continuously unobstructed full view of the pyrotechnic operator or his/her assistant at the time of firing.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532 and 12552, Health and Safety Code.

### Article 14. Special Effects

#### § 992.5. Scope.

This article shall govern all “Special Effects Devices/ Materials” including those materials which have been classified and described by the regulations of the Department Of Transportation, Title 49, parts 172, 173 and 177 as Special Fireworks **new language: 1.3, 1.4** ~~Class B Explosives and Common Fireworks Class C Explosives~~ and such additional items as listed in Table 14A.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552, 12553, 12560 and 12651, Health and Safety Code.

#### § 992.6. Responsibility.

The company representative shall provide to the authority having jurisdiction the name and license number of the special effects operator who shall have the authority, responsibility and be in charge of handling all Special Effects Materials. The company representative shall also allocate sufficient time to the Special Effects Pyrotechnic Operator to prepare for the transportation, packing, storing, securing daily, discharging, disposing of, or otherwise handling of fireworks, pyrotechnic devices, or materials in a safe manner. Upon completion of firing, no unauthorized person shall be permitted access to the firing area until the licensed pyrotechnic operator has determined the area to be safe and secure.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552, 12583 and 12600, Health and Safety Code.

#### § 992.7. Orientation Meeting.

Prior to the activity, a discussion of the events planned and all aspects and ramifications concerning safety issues as they relate to the safe

use of fireworks, pyrotechnic devices and materials shall be held among all appropriate parties, as determined by the authority having jurisdiction.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 992.8. Special Effects Materials.

(a) Materials described in this chapter as Special Effect Materials can be used as Special Effects. Other hazardous materials may be used when so authorized by the authority having jurisdiction.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12532, 12578 and 12603, Health and Safety Code.

#### § 992.9. Storage and Working Supplies.

(a) Special Effects Materials storage facilities shall be used exclusively for the storage of Special Effects Materials. Storage facilities shall not be used for the assembling, compounding, or manufacture of Special Effects Materials or any other item of fireworks. Magazines shall be kept locked at all times except when supplies are being withdrawn or replenished. Special Effects Materials shall be stored in accordance with the Code of Federal Regulations, Title 27, Part 555, Subpart K.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Sections 12532, 12578 and 12603, Health and Safety Code.

#### § 992.10. Quantities.

(a) The quantities of special effects materials removed from magazines shall be limited to the amount necessary for immediate use. Under no condition shall any surplus or excess be permitted to remain outside a magazine, unless under the direct supervision of a licensed pyrotechnic operator.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code

#### § 992.11. Equipment.

All tools, scoops and devices used in loading and handling Special Effects Materials shall be made of non-sparking materials.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 992.12. Mixing.

No persons shall mix any Special Effects Material except a licensed manufacturer or a licensed Special Effects Pyrotechnic Operator -First Class. All mixing, assembling, or compounding when done by

other than a licensed manufacturer shall be conducted in accordance with the applicable provisions of this chapter and with approval of the authority having jurisdiction.

Exception: Binary A & B Flash composition pre-packaged by a licensed manufacturer may be mixed and utilized according to manufacturer's instructions by a Pyrotechnic Operator, Special Effects -Second Class, or Pyrotechnic Operator, Theatrical.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 992.13. Special Effects Water Locations.

All special effects devices and explosive charges set in or on the surface of water, either salt or fresh, or any other liquid, shall be fired by a separate, individual, ungrounded, and uncommon two-wire circuit.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 992.14. Special Effects Not Allowed to Be Carried in Wearing Apparel.

No Special Effects Materials other than blank cartridges may be carried within the wearing apparel



of a person. This shall not apply to actors portraying a scene in a theatrical, television, or film production. Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 992.15. Special Effect Packaging.

All Special Effects Materials shall be packaged in accordance with Department of Transportation standards as contained in Title 49 of the Code of Federal Regulations, parts 172, 173 and 177, and shall remain in the prescribed containers until used or placed in a magazine.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 992.16. Special Effects Mortars.

Mortars and other items used to hold special effects, pyrotechnic or explosive materials during discharge shall be made of a material having a thickness proportional to the strength of the explosive or pyrotechnic material being used, and in every case sufficient to prevent distortion in service. Tubular mortars for firing aerial pyrotechnic and fireworks shells shall conform to the requirements of article 15 of this chapter.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 992.17. Flash Powder Mortars.

The use of special effects flash powder mortars consisting of converted switch boxes, sockets, or similar components is prohibited.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code

#### § 992.18. Special Effects Reports.

(a) Verbal reports shall be made to ~~the~~ CAL FIRE-Office of the State Fire Marshal within 24 hours after a firing under this article when either of the following events occur:

(1) Injury or death to the public or the crew as a result of the firing.

(2) Fires requiring emergency action or response.

(b) Within ten (10) working days following an incident giving rise to a verbal report, the licensed pyrotechnician in charge of the activity shall submit a complete, accurate and factual report directly to ~~the~~ CAL FIRE-Office of the State Fire Marshal on the episode.

Note: Authority cited: Sections 12552 and 12553, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### TABLE 14A Special Effects Materials

The following materials, when used in the motion picture/television/theatrical industry by licensed special effects pyrotechnicians and when permitted by the authority having jurisdiction, are to be regulated under this chapter as fireworks, pyrotechnic materials and devices and not as explosives under Health and Safety Code Section 12000.

#### BULK POWDER COMPOSITIONS AND DEVICES

Black Powder

Smokeless Powder

Smoke Flash Compositions

Common Photo Flash Compositions

Illuminating Compositions

Atomized Flash Compositions

Two Component Flash Powder

Flash Paper

Flash Cotton

Flash Powder

Simulated Phosphorus

Sparking Granules

Lifters

#### SMOKE POWDER COMPOSITION AND DEVICES

All Colors

Smoke Compositions

Smoke Pellets

Smoke Granules

Smoke Candles

Smoke Cookies

Smoke Grenade

Smoke Pots

Smoke Signals

MATCHES AND FUSES

Quick Match

Black Match

Arcing Match

Silver Match

Cannon Fuse

Safety Fuse

Thermalite

Instantaneous Fuse

Igniter Cord

SQUIBS AND DETONATORS

Bullet Hits

Electric Match

Soft Detonators

Squibs Detonators

Igniters

FIREWORKS

~~Common Class C~~ Safe and Sane Fireworks

~~Common Class C~~ Dangerous Fireworks

~~Special Class B 1.3 & 1.4 Fireworks~~ (wording)

## OTHER MATERIALS

Primacord or Detonating Cord

Exploding Bolts and Cable Cutters

Non Electric Fuse

Shape Charges

Trick Noise Makers

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 15. Public Display

### **§993. Insurance.**

(a) Any person, firm, or corporation applying for a public display license shall furnish to CAL FIRE-Office of the State Fire Marshal a policy of public liability and property damage insurance. The policy may have a deductible not to exceed fifteen thousand dollars (\$15,000). ~~The policy shall provide limits of bodily injury and property damage liability of not less than one million dollars (\$1,000,000.00) combined single limits for each occurrence annually as payment for damages to persons or property which may result from or be caused by such public display of fireworks, or any negligence on the part of the licensee or his or its agents, servants,~~

~~employees, or subcontractors presenting such public display.~~

A policy of no less than one million dollars (\$1,000,000.00) shall annually provide bodily injury and property damage liability coverage (combined single limits) for each occurrence as payment for damages to persons or property resulting from or caused by public display fireworks or any negligence on the part of the licensee, their agents, servants, employees or subcontractors.

**Exception:** A deductible in excess of fifteen thousand dollars (\$15,000) may be permitted provided a security deposit, such as, but not limited to a surety bond, pledge of assets or bank letter of credit covering the value of the excess, is approved by CAL FIRE-Office of the State Fire Marshal.

(b) The certificate of insurance shall provide all of the following:

~~(1) That the insurer will not cancel the insured's coverage without fifteen (15) days prior written notice to CAL FIRE-Office of the State Fire Marshal.~~

The insured will not cancel coverage without written notice to CAL FIRE-Office of the State Fire Marshal of no less than 15 days and will notify CAL FIRE within 10 days of receiving notice of cancellation from the insurer.

(2) ~~That~~ the duly licensed pyrotechnic operator required by law to supervise and discharge the public display, acting either as an employee of the insured or as an independent contractor and the State of California, its officers, agents, employees, and servants are included as additional insurers, but only insofar as any operations under this Chapter are concerned.

(3) ~~That~~ the State of California nor its agencies, divisions, offices or employees shall not be responsible for any premium or assessments on the policy.

**NOTE:** Authority cited: ~~Section~~§12552, Health and Safety Code. Reference: ~~Sections~~§12552 and 12610, Health and Safety Code.

### **§993.1. Reports.**

General public display and special public display licensees shall report to CAL FIRE-Office of the State Fire Marshal prior to the date of each display, all public displays of fireworks contemplated under their license.

Licensees ~~must~~ shall report to CAL FIRE-Office of the State Fire Marshal at least 72 hours prior to each display on state-owned or state-occupied property.

Applicants for limited public display licenses shall report at the time of applying for their license. The

report shall contain the information set forth within Section §982.

**Exception:** A general public display licensee conducting special effects activities for motion picture, television, and theatrical productions need not comply with any of the above reporting requirements.

**NOTE:** Authority cited: ~~Section §12552~~, Health and Safety Code. Reference: ~~Section §12552~~, Health and Safety Code.

### **§996. Spectators.**

~~NFPA 1123 Table 5.1.3.1. as cited in the California Fire Code (where, when?) is hereby incorporated by reference and~~

The following table shall be used in the approval of spectator site distance from an outdoor display. Safe spectator site distance from outdoor public displays of fireworks shall be approved by the Authority Having Jurisdiction.

Exception: Special effects activities need not comply with these distance requirements for cast and crew.

**NOTE:** Authority cited: ~~Section 11349.1~~ §12541.12541.1., 12552 of the Health and Safety Code,



Reference: Section ~~11349.1~~ §12541. 12541.1., and 12552 of the Health and Safety Code.

### **§997. Pyrotechnic Operators, - Basic Commercial Responsibilities.**

(a) No basic commercial, public display permit shall be granted unless there is a licensed basic commercial pyrotechnic operator and at least one additional experienced person present. Pyrotechnic Operators, - Basic Commercial, shall:

(1) Be responsible for and have control over on-site unloading, storing, and security of all fireworks;

(2) Be responsible for placement of mortars, set pieces, and all other fireworks on-site as approved by the Authority Having Jurisdiction. No fireworks shall be discharged over areas occupied by spectators;

(3) Insure that no person under the age of eighteen (18) is in the firing or fireworks storage sites;

(4) Be in possession of a current Basic Commercial License at the time of display; and,

(5) Be responsible for and have control over the safe handling and return of all unfired fireworks, misfires and duds.

**NOTE:** Authority cited: ~~Section~~ §12552, Health and Safety Code. Reference: ~~Section~~ §12552, Health and Safety Code.

## **§999. Mortars, Aerial Shells.**

(a) General.

(1) Electric firing shall be required for all mortars eight inches (8") or greater in diameter.

(2) Multiple-break shells that include a salute as one of the breaks shall be fired in HDPE mortars, ~~only.~~ or from engineered Fireworks Launching Systems other materials approved by CAL FIRE-Office of the State Fire Marshal. (keep discussing)

(b) Steel Mortars.

(1) Steel ~~M~~mortars shall be constructed of commercially manufactured, first quality eElectric ~~r~~Resistance ~~w~~Weld (ERW) or ~~d~~Drawn ~~e~~Over ~~m~~Mandrel (DOM) steel tubing conforming to ASTM Standard A135-83, which is incorporated by reference. Mortars constructed of cast iron, other fragmenting types of steel, and all other types of metal are prohibited. Salutes shall not be fired from metallic mortars.

(2) Steel mortars shall have a base plate the same thickness of the mortar wall, welded continuously around its perimeter.

(3) The inside length of steel mortars shall meet the minimum specifications set forth ~~below~~ as follows:

Shell Size	Inside Length
1.99 inches or less	8 inches
2 inches	13 inches
2 1/2 inches	13 inches
3 inches	15 inches
4 inches	20 inches
5 inches	25 inches
6 inches	30 inches
7 inches	32 inches
8 inches	32 inches
10 inches	40 inches
12 inches	40 inches
16 inches	64 inches
24 inches	96 inches

(4) Mortars shall not have any visible cracks in the body of the tube, nor any cracks or voids in the weld around the base plug. Mortars shall not be dented or distorted beyond the point that such distortion interferes with the smooth and unimpeded travel of the shell throughout the entire length of the mortar.

(c) Paper Mortars.

(1) Reusable paper mortars shall be of spiral or convolute wound ~~kraft~~ craft paper or chipboard, and shall meet the minimum specifications set forth ~~below~~ as follows:

Shell Size	Wall Thickness	Inside Length	Base Plug *
Less than 2 inches	1/8 inch	8 inches	1 inch
2 inches	1/4 inch	13 inches	2 inches
2 1/2 inches	3/8 inch	13 inches	3 inches
3 inches	3/8 inch	15 inches	3 inches
4 inches	1/2 inch	20 inches	3 inches
5 inches	1/2 inch	25 inches	4 inches
6 inches	1/2 inch	30 inches	4 inches
7 inches	3/4 inch	32 inches	4 inches
8 inches	3/4 inch	32 inches	4 inches

~~\* Sizes for base plugs are nominal.~~ \* Base plug sizes are nominal.

(2) Base plugs for paper mortars shall be wooden and securely glued, as well as nailed, screwed or bolted to the base of the mortar. Base plugs shall be discarded and replaced when damaged. Minor cracks and checks are acceptable.

(3) Multiple-break shells shall not be fired from paper mortars.

(d) HDPE Mortars. High Density Polyethylene (HDPE) Mortars shall meet the following minimum specifications set forth below; however minor variations in wall thickness shall be considered due to the HDPE manufacturing process. Variations shall not be such that they would interfere with the trajectory of a launching shell.

Shell Size Base Plug *	Wall Thickness	Inside Length	
Less than 2 inches	1/8 inch	10 inches	1 inch
2 inches	1/4 inch	13 inches	2
2 1/2 inches	1/4 inch	13 inches	3 inches
3 inches	1/4 inch	15 inches	3
4 inches	1/4 inch	20 inches	3
5 inches	1/4 inch	25 inches	4
6 inches	3/8 inch	30 inches	4

7 inches inches	3/8 inch	32 inches	4
8 inches inches	3/8 inch	32 inches	6

\*Base plug sizes are nominal.

HDPE Mortars shall not be reloaded for a period of at least one (1) hour after use. All base plugs for HDPE mortars shall be wooden, ~~and~~ securely glued, as well as nailed, screwed, ~~or~~ bolted, or mechanically press fit into ~~to~~ the base of the mortar. Base plugs shall be discarded and replaced when damaged. Mortar tube and mechanically fit base plugs shall be discarded when a plug becomes damaged or dislodged. Minor cracks and checks are acceptable.

~~(e) Other Materials. Recognizing that new materials for the construction of mortars may be developed, such materials may be used when specifically approved by the State Fire Marshal. Persons wishing to use material not specifically covered in this section shall submit the material in an amount sufficient for testing to the State Fire Marshal for determination of its safety and its inclusion in this section.~~

**NOTE:** For illustrations of typical mortar racks, troughs and drums see Diagrams A, B and C following ~~section~~§1002.

**NOTE:** Authority cited: ~~Section~~§12552 and 12553 12553 Health and Safety Code. Reference: ~~Section~~§12552 and 12553, Health and Safety Code.

### **999.1 Nontraditional Fireworks Launching Systems and Materials.**

Recognizing that new materials and designs for fireworks and launching systems may be developed, such materials and designs may be used when specifically approved by the CAL FIRE Office of the State Fire Marshal. Persons wishing to use material and/or designs not specifically covered in this Chapter shall submit the material and/or designs to the CAL FIRE Office of the State Fire Marshal for determination of its approval.

Keep talking

(borrow 1123 1.3)

(a) Persons shall register Nontraditional Fireworks Launching Systems for use in public displays of fireworks with CAL FIRE-Office of the State Fire Marshal.

(b) Applying for registration of Nontraditional Fireworks Launching Systems shall be made on forms provide by CAL FIRE-Office of the State Fire Marshal and shall be submitted along with the applicable registration and evaluation fees as provided in Section 981.3(c)(15) and Section 981.3(c)(16).

(c) The valid registration period for Nontraditional Fireworks Launching Systems is from July 1<sup>st</sup> through June 30<sup>th</sup> annually.

(d) Renewal of Nontraditional Fireworks Launching Systems shall be made on forms provided by CAL FIRE-Office of the State Fire Marshal and shall be submitted along with the applicable fee no later than May 1<sup>st</sup> of each annual registration period.

(e) Registrations are non-transferable and valid only for the registered Nontraditional Fireworks Launching Systems.

(f) CAL FIRE-Office of the State Fire Marshal will publish a list of all approved Nontraditional Fireworks Launching Systems annually.

(g) Unregistered Nontraditional Fireworks Launching Systems shall not be approved for use.



NOTE: Authority cited: §12552 and 12553, Health and Safety Code. Reference: §12552 and 12553, Health and Safety Code.

## **§1000.1. Floating Vessels and Floating Platforms.**

Coast Guard rules?

Use NFPA 1123 regarding this follow up

NOTE: Authority cited: §12552 and 12553 Health and Safety Code and Reference: §12552 and 12553 Health and Safety Code.



## **§1001. Setting Mortars.**

(a) Metallic, re-usable paper and HDPE mortars shall be securely buried to a minimum of  $2/3^{\text{rds}}$  of their minimal legal length in earth or in drums or troughs filled with moist earth or sand essentially free of debris.

(b) Mortars other than metallic mortars may be placed in wooden or other CAL FIRE-Office of the State Fire Marshal approved finale racks.

(c) Planking below mortars shall be required when the base of the mortar trough, or drum is not on a stable and level surface.

(d) Mortars in non-electrically-fired shows shall meet all of the following requirements:

(1) Mortars up to five (5) inches in diameter and buried in earth or placed in troughs or drums shall be spaced a minimum of three (3) inches apart or from the sides of the drum or trough.

(2) Mortars six (6) inches or larger in diameter and buried in earth or placed in troughs or drums shall be spaced a minimum of five (5) inches apart or from the sides of the drum or trough. When a mortar requiring five (5) inches of space is placed adjacent to a mortar requiring only three (3) inches of spacing, the larger spacing shall apply.

(e) Mortars in electrically-fired shows shall meet all of the following requirements:

(1) All mortars buried in earth or placed in drums and troughs shall be nominally spaced two (2) inches apart or from the sides of the drum or trough.

~~(2) All technicians shall be positioned a minimum of one hundred (100) feet from any mortar and positioned so as to be protected from the direct line of fire.~~

~~(3) No one shall be allowed to enter the firing area during the firing of the display.~~

(f) Mortars shall be set in a stable and secure manner so that accidental impact and shell discharge will not change the trajectory of adjacent unfired shells.

**NOTE:** For illustrations of typical mortar racks, troughs and drums, see Diagrams A, B and C following section §1002.

**NOTE:** Authority cited: Section §12550 and 12552, Health and Safety Code. Reference: Section §12550 and 12552, Health and Safety Code.

## **§1002. Design Specifications for Mortar Racks, Troughs, Drums, and Ready Boxes.**

(a) Mortar ~~r~~Racks shall be of wood construction and are limited to a maximum of ten (10) tubes mortars per unit. The base and ends of the rack shall be nominal two (2) inch thick lumber. The inside width shall be equal to the outside diameter of the mortar ~~tube~~. Each mortar ~~tube~~ shall be separated by horizontal or vertical blocks nominally two (2) inches thick and four (4) inches wide. Side braces for mortar racks of three (3) inch size mortars and up shall be 1 inch x 6-inch nominal lumber or 1/2 inch x 4-inch plywood securely fastened by nails, screws, or attached with construction grade staples

along the top and bottom of the rack. A diagonal side brace ~~must~~ shall be employed on all mortar racks with more than five (5) mortars ~~tubes~~. Mortar racks shall not incorporate steel brackets or other metallic parts in their construction with the exception of nails, screws, or construction-grade staples. Metallic braces shall not be fastened to mortar racks at the firing site.

(b) Troughs shall not be more than eight (8) feet in length. Troughs may be placed in a continuous row provided they are stable and secure. The sides, bottom and ends of troughs shall be minimum 3/4-inch plywood or nominal two (2) inch lumber, except in cases where the surface at the bottom of the trough is sufficiently stable to support the firing of the mortar, no bottom shall be required. Troughs shall be secured by minimum 3/8 inch through bolts, rods or angle iron “U” brackets at each end and center to prevent bulging.

(c) Drums shall be constructed of steel, aluminum or plastic.

(d) Ready ~~to~~ Boxes shall be constructed of wood not less than 1/2-inch thickness or 3/8-inch plywood, chipboard or press wood. Ready ~~to~~ Boxes shall not be equipped with any type of hold open device.

**Develop strapping guidelines as per Advisory Committee meeting**

Note: For illustrations of typical mortar racks, troughs and drums, see Diagrams A, B and C immediately following this section.

**NOTE:** Authority cited: ~~Section~~ §12550 and 12552, Health and Safety Code. Reference: ~~Section~~ §12550 and 12552, Health and Safety Code; and ~~Section~~ §55.200, 27, Code of Federal Regulations.

DRAFT

DIAGRAM A

DIAGRAM OF A TYPICAL RACK

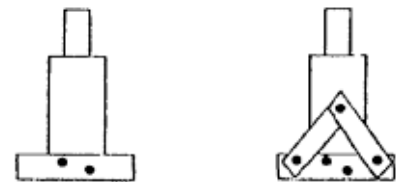
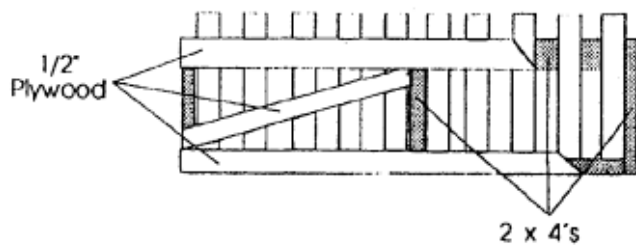
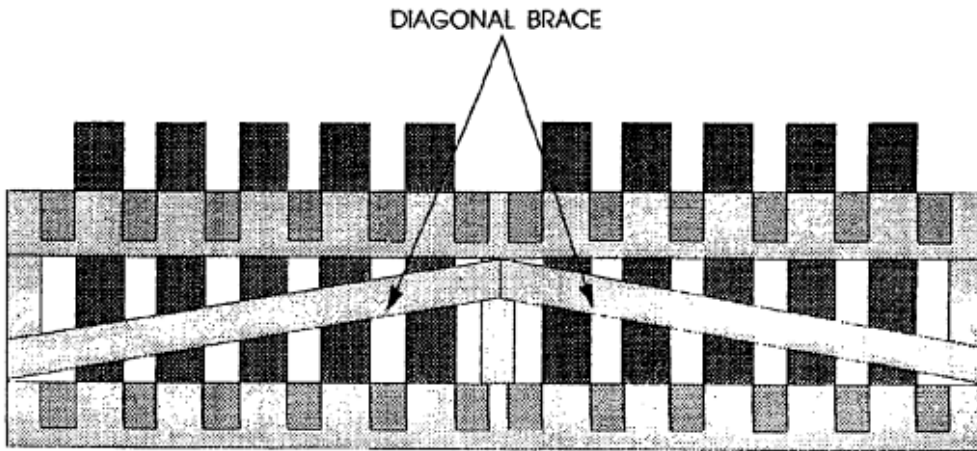
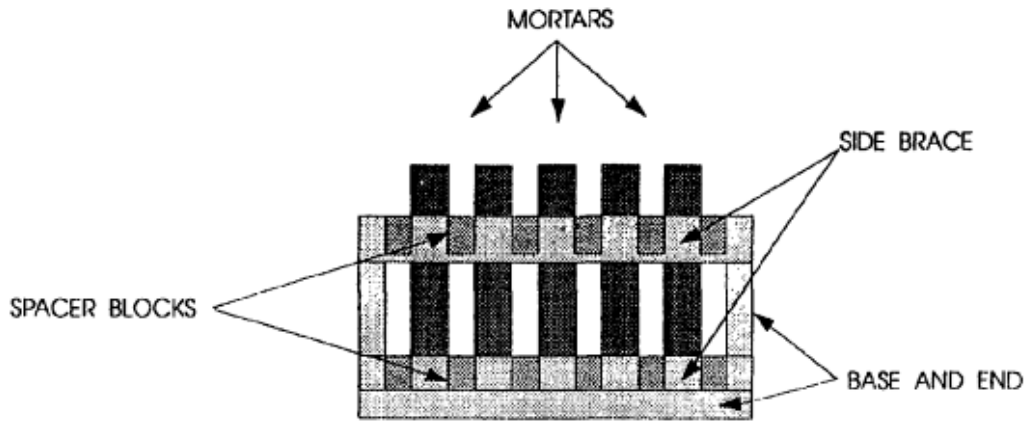
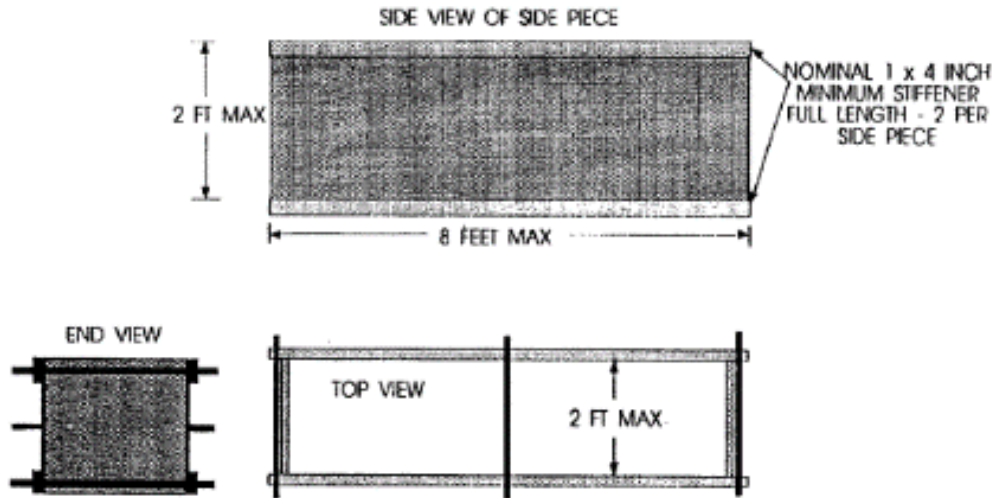
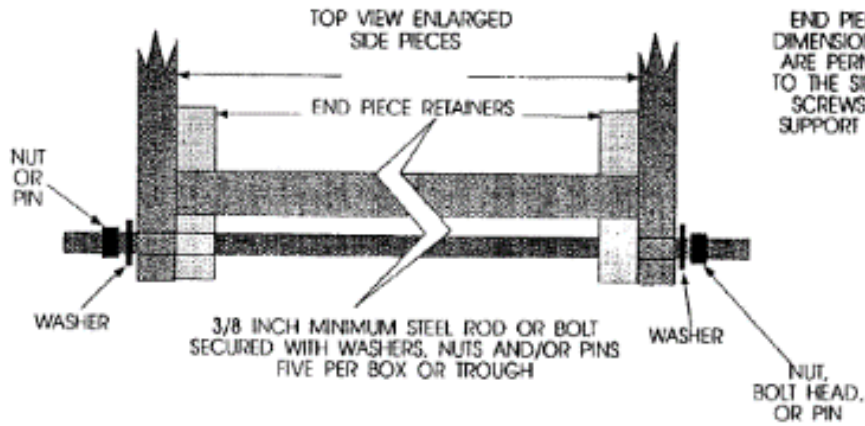


DIAGRAM B  
 DIAGRAM OF A TYPICAL TROUGH SETTING



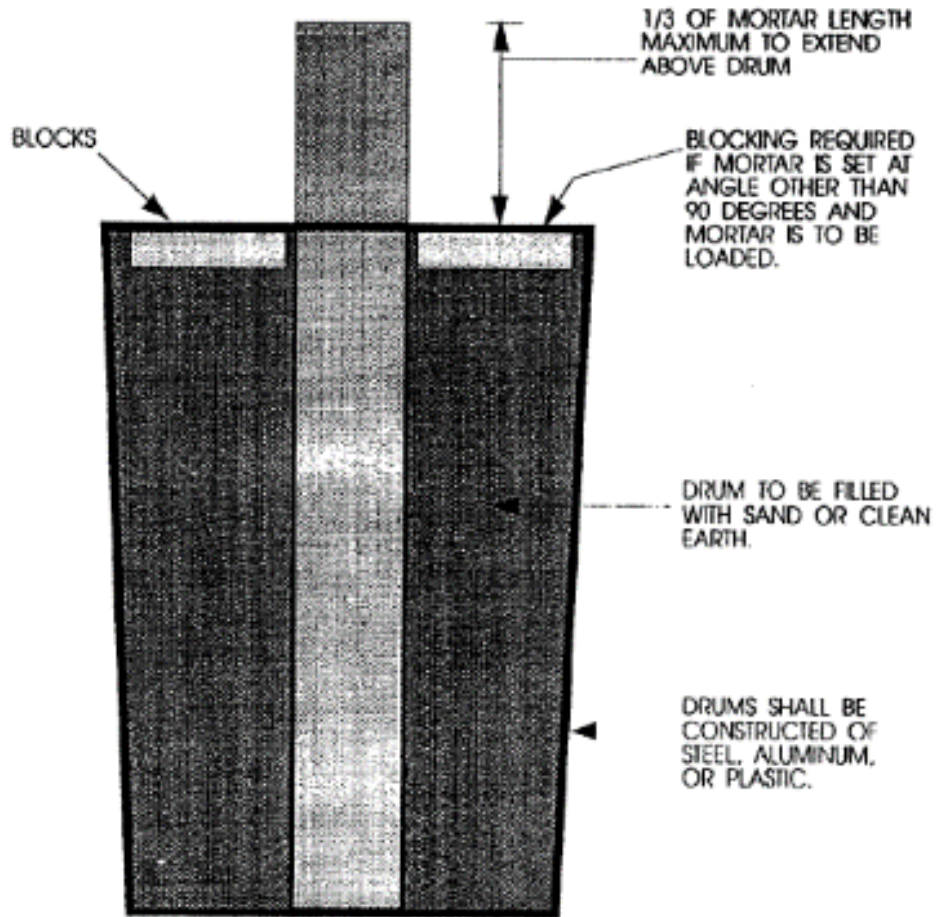
(STIFFENERS ARE NOT SHOWN FOR CLARITY)



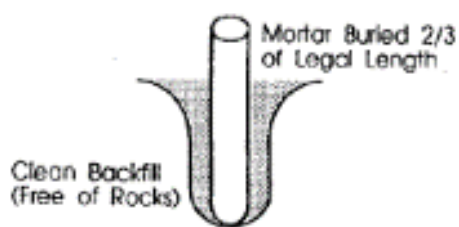
END PIECE RETAINERS ARE  
 DIMENSIONAL LUMBER WHICH  
 ARE PERMANENTLY SECURED  
 TO THE SIDE PIECES BY NAILS,  
 SCREWS OR STAPLES AND  
 SUPPORT THE END PIECES IN  
 PLACE.

# DIAGRAM C

## DIAGRAM OF A TYPICAL DRUM SETTING



Buried setting



Drum Setting





Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code; and Section 55.200, 27 Code of Federal Regulations.

### **§1003. Operation of Display.**

(a) General.

~~(1)~~(2) All fireworks at a display site shall be stored in a place and manner secure from fire, accidental discharge, and theft. All storage shall be approved by the ~~a~~Authority ~~h~~Having ~~j~~Jurisdiction.

~~(2)~~(3) Shells shall be sized for proper fit and for damaged lift charge bags, lead fuse tears, tears in the piping of the quick match leaders, and missing safety caps.

~~(3)~~(4) Safety caps protecting the fuse shall not be removed until firing or electric hookup.

(b) Ready Boxes.

(1) Shells used for reloading shall be placed in ~~r~~Ready ~~b~~Boxes prior to the start of the display.

(2) Ready ~~b~~Boxes shall not be located less than twenty-five (25) feet upwind from the nearest mortar prior to any firings.

(3) Ready ~~b~~Boxes shall be divided into separate compartments for each shell size.

(4) When containing shells, ready boxes shall be set with the bottom facing the mortars with the front elevated, or set on the bottom with the hinges towards the mortar, providing the lid cannot be opened fully.

(5) Once in place, the ~~Ready~~ Box shall be covered with a flame-resistive, water-repellant canvas cover.

(c) Loading Mortars.

(1) At no time shall any person place any part of their body over the mortar muzzle during loading or firing.

(2) Mortars shall be cleaned of debris or burning material prior to loading, and prior to reloading, as necessary.

(3) Steel or paper Mortars ~~racks~~ may be reloaded with non-chained, single-break shells when there is no longer any burning material in the ~~racks~~ mortars.

~~(4)(3) Finale racks shall have tape placed over the mortar muzzles when loaded with finale chained shells.~~

~~(5)(4)~~ Salutes and detonating shells shall not be fired from steel mortars.

~~(6)(5)~~ Multiple-break shells that include a salute as one of the breaks shall be fired from HDPE or other CAL FIRE-Office of the State Fire Marshal approved mortars only.

(d) Firing.

(1) All firing shall be done upon order or signal of the licensed pyrotechnic operator controlling the display.

(2) Electric firing, ~~if utilized~~, shall comply with all of the requirements of Article 13.5 of this Chapter.

(3) Upon conclusion of firing, no unauthorized person shall be permitted access to the firing area until the licensed pyrotechnic operator has determined the area to be safe and secure.

(4) Electric firing shall be required for all mortars eight (8") inches or greater in diameter.

(e) Ground Effects.

(1) Set pieces, wheels, and mechanical devices shall be braced, guyed and securely attached or set as required to prevent displacement.

(2) Low level Roman Candles, multiple batteries and projectiles shall be securely set to prevent accidental displacement.

(f) Duds.

(1) The licensed pyrotechnic operator shall account for and retrieve all duds immediately following the display.

(2) The entire firing range shall be inspected ~~immediately following~~ a minimum of fifteen (15) minutes after the display to locate any duds. Any burning shells found shall be immediately doused with water before handling. ~~The shell shall then be~~

~~placed in a separate container filled halfway with water.~~

(g) Misfires.

(1) When a shell misfires, and the fuse has burned, but the lift charge has not functioned, the mortar shall be identified and marked, and left undisturbed for a minimum of fifteen (15) minutes, ~~then filled halfway with water.~~ The Pyrotechnic Operator in charge shall determine the safest method of removing and handling any misfired shell.

(2) When the shell misfires due to electric malfunction, and the fuse has not yet burned, the shell shall be removed and stored pursuant to the permit.

(3) When the display is concluded, the misfired shell shall be placed in a safe area pursuant to the permit.

(h) Unfired shells, including duds ~~and misfires~~, ~~must~~ shall be removed immediately following the display and returned directly to the wholesaler/manufacturer unless provision has been made for storage and/or destruction with the aAuthority aHaving jJurisdiction.

**NOTE:** Authority cited: ~~Section~~§12550 and 12552, Health and Safety Code. Reference: ~~Section~~§12550 and 12552, Health and Safety Code.

## **§1004. Safety Tools and Equipment.**

(a) Tools required at the display site shall be, at a minimum, a shovel, a serviceable pressurized water fire extinguisher, a bucket or other container to soak duds, and any other equipment as required by the aAuthority ~~h~~Having jJurisdiction.

(b) Any person manually discharging aerial shells shall wear at a minimum a hard hat, eye protection, long sleeved shirt, gloves, long pants, ~~and shoes or boots, and have available~~ ear protection, as required by the Authority Having Jurisdiction, and/or requirements of California Code of Regulations, Title 8, Industrial Relations.

**NOTE:** Authority cited: Section §12550 and 12552, Health and Safety Code, Title 8, California Code of Regulations. Reference: Section §12550 and 12552, Health and Safety Code, Title 8, California Code of Regulations.

## **§1005. Post Display.**

(a) Reports.

(1) Reports - Cal FIRE Office of the State Fire Marshal Post Display report Form number XX shall be submitted ~~W~~within ten (10) working days following any public display, ~~;~~ †The licensed pyrotechnician in charge of the display shall submit

a complete, accurate and factual written report directly to the CAL FIRE-Office of the State Fire Marshal, covering:

(A) A brief report of any duds or ~~misfires~~ including manufacturer's name, type and size;

(B) A brief account of the cause of injury to any person from fireworks and such person's name and address;

(C) A brief account of any fires caused by fireworks;

(D) Any violations of the Health and Safety Code or of these regulations relating to public display fireworks; and

(E) The names of all licensed and unlicensed assistants.

Exception: A general public display licensee conducting special effects activities for motion picture, television, and theatrical productions need not comply with the requirements of subsections (A) and (E).

(b) Notification.

Verbal reports are required within twenty-four (24) hours to the CAL FIRE-Office of the State Fire Marshal when any of the following occur:

(1) Fire requiring emergency action or response as a result of the firing; or

(2) Injury or death to the public or crew.

Written Reports shall be submitted ~~W~~within ten (10) working days following an incident giving rise to a

verbal report, the licensed pyrotechnician in charge of the activity shall submit a complete, accurate and factual report directly to the CAL FIRE-Office of the State Fire Marshal on the event.

(c) Unfired Shells. Unfired shells shall either be removed following the display and returned directly to the wholesaler or supplier or stored in a manner approved by the Authority Having Jurisdiction until such time as the shells can be transported directly to the wholesaler or supplier.

**NOTE:** Authority cited: Section 12550 and 12552, Health and Safety Code. Reference: Section 12550 and 12552, Health and Safety Code.

### **§1005.1. Public Display Fireworks Report of Sales.**

(a) Importer/Exporter and Wholesale Licensees who sell public display fireworks shall complete and submit a Public Display Fireworks Report of Sales annually identifying all sales between January 1<sup>st</sup> and December 31<sup>st</sup> of each calendar year. Each report shall include:

(1) The name of the person purchasing the public display fireworks.

(2) The company name associated with the person purchasing the public display fireworks.

(3) The CAL FIRE-Office of the State Fire Marshal license number of the person purchasing the public display fireworks.

(4) The CAL FIRE-Office of the State Fire Marshal license number of the company purchasing the public display fireworks, if any.

(5) The amount of public display fireworks purchased.

(6) The individual items purchased.

(b) Reports shall be submitted to the CAL FIRE-Office of the State Fire Marshal Fireworks Program Coordinator no later than January 30<sup>th</sup> of each calendar year. (requested to delete this)

\*\* this does not include public displays\*\*

NOTE: Authority cited: §12615, 12618, 12619 and 12620, Health and Safety Code. Reference: §12615, 12618, 12619 and 12620, Health and Safety Code.

§ 1006. Smoking.

No person shall smoke in any area where fireworks are handled or stored.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

\*\*\*Articles 16-19 not reviewed in this document\*\*\*



## Article 16. Experimental Rockets/Unlimited

### § 1010. General.

This article applies to all rockets except approved model rockets as defined in Article 14 and experimental high power rockets and experimental high power rocket motors as defined in Article 2.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1011. Test Areas.

(a) Experimental rockets unlimited shall not be launched within this State from any site other than test areas approved for such purpose by the fire authority having jurisdiction.

(b) These test areas shall meet the following minimum requirements:

(1) Test areas shall consist of a launching site and an impact range.

(2) The launching site is that area immediately surrounding the launching devices, including positions to protect all personnel.

(3) The impact range is that area over which rockets may travel by design or accident and upon which they fall. Its length should be not less than the maximum calculated ideal ballistic range of any rocket to be fired from its launching site and extends

as the radius of a circular sector 90 from the launching site apex into the prevailing wind.

(c) Test areas should include no dwellings or structures other than those provided for operating and nonoperating personnel protection and loading rockets.

(d) Operating personnel protection shall consist of a bunker, blockhouse or similar protection designed to withstand shrapnel and mass impact equal to the potential created by the heaviest rocket intended to be

fired, and falling from its zenith or exploding at any point. This bunker when located not less than 50 feet distant from the launching device shall afford minimum protection equal to a 2-foot wide slit trench not less than 5 feet deep and parapet observation ports with protection equal to a double thickness of sand bags. Overhead protection should consist of substantial structural materials, and these materials shall be covered to afford protection equivalent to that of a double layer of filled sand bags. Non-operating personnel minimum protection when located not less than 250 feet distant from the launching device shall consist of construction at least equal to the slit trench shelter described above.

(e) Rocket loading facilities shall be housed in a lightly constructed and covered structure located not

less than 100 feet distant from any other structure including any launching device.

Within this State, all fuel or propellant compounding or loading of experimental rockets unlimited shall be performed by licensed pyrotechnic operators or by experienced persons directly supervised by these pyrotechnic operators.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1012. Rocket Launchers.

Rocket launchers shall have a length sufficient to insure stabilization to any rocket fired from them and shall be constructed of appropriate material such as metal or rigid flame-resistant plastic and designed for the specific intended purpose and use. Special protection shall be provided for persons setting and arming all rockets. The use of any two rail, “V” or “U” trough launcher, which depends solely on gravity to control the rocket during launching is prohibited.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1013. Setting Rocket Launchers.

All adjustments and alignments of the rocket launcher and connections shall be completed before

the rocket is armed. Final rocket launcher adjustments shall be checked by the licensed pyrotechnic operator in charge.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code

#### § 1014. Firing Procedure.

A definite ordered firing procedure shall be established by the licensed pyrotechnic operator in charge. Both visible and audible signals shall be used to alert all persons in the test area. Any launch or firing code used shall be reduced to writing and posted conspicuously in the test area.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1015. Launching Rockets.

(a) Rockets may not be armed or launched except by an experienced pyrotechnic operator, who, if he or she is not licensed, shall be directly responsible to the licensed pyrotechnic operator in charge. The actual arming operation shall be accomplished by a competent person. During all arming operations all personnel shall take shelter when launching, excepting only the individual arming the rocket and his or her necessary assistants.

All internal self-contained firing circuits (within the rocket) including, but not by way of limitation, multiple stage ignition, parachute releases, bursting charges, etc., shall be provided with an arming and disarming device operable remotely from without the assembled rocket in the launching position.

(b) The firing circuit shall be shunted at both the control center and the launching site by the pyrotechnic operator assigned to arm the rocket. Both shunts shall be in place and he or she shall test them to insure that the firing circuit is effectively short circuited, before the rocket is set in the launching position.

(c) The single special key, which removes the launching site shunt from the firing circuit, shall be the sole means for completing the firing circuit at the control center. The arming operator shall retain the shunt key in his or her personal possession from the time the circuit is initially shunted until the arming operations are completed and he or she removes the last shunt in the control center and establishes a ready firing circuit.

(d) No other means or device than a remotely controlled electric circuit of an approved design may be used to launch single stage rockets or the first stage of multistage rockets.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 17. Model Rockets

### § 1020. General.

Nothing in this article is intended to regulate the sale or the construction of model rockets, provided that such model rockets are not equipped with a model rocket motor.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1021. Classification and Labeling.

All types of model rocket motors shall be submitted to the State Fire Marshal by a licensed model rocket motor manufacturer, importer/exporter, or wholesaler for classification. A copy of a certificate of classification indicating the item has been classified as a model rocket motor by a laboratory approved by the Department of Transportation shall accompany the request for classification by the State Fire Marshal. Three samples of each motor type shall be submitted to the State Fire Marshal for classification. Standards for the classification of model rocket motors shall conform to the National

Fire Protection Association (N.F.P.A.) 1122 (1987), Code for Unmanned Rockets, Sections 3-1.1, 3-1.2, 3-1.3, 3-1.4, 3-1.5, 3-1.6, 3-1.7, 3-1.8, 3-1.9, 3-1.10. (b) Individual engines shall bear the California State Fire Marshal seal and the registration number of the licensee.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Sections 12552, 12560 and 12565, Health and Safety Code.

#### § 1022. Model Rocket Standards and Use.

(a) Model rocket standards and use shall comply with: N.F.P.A. 1122, the Code for Unmanned Rockets, Chapter 3, Sections 3-1.1 through 3-1.10, Chapter 4, Chapter 5, Chapter 6, and Appendix A-2- (1987), which is incorporated by reference herein except for Appendices A-2.3 and A-2.4.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1023. Storage and Sale.

No model rocket motors shall be stored, sold or offered for sale at retail unless such model rocket motors have been classified by the California State Fire Marshal.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1024. Restrictions.

The provisions of this article shall not be used to establish the authority to possess, launch or use experimental unlimited or experimental/high powered rocket motors.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1025. Authorization.

(a) No model rocket user shall launch any model rocket motor from any site without first securing authorization from the authority having jurisdiction. The authority having jurisdiction may require notification each time that model rockets are to be launched.

(b) It shall be the responsibility of the model rocket user to secure permission of the owner of private lands when such land is intended to be used to launch model rockets.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.



## § 1026. Revocation of Permits and Authorized Use of Launching Area.

The authority having jurisdiction may immediately revoke a permit to sell model rocket motors at retail if it is found that those persons granted a permit have violated these regulations. The authority having jurisdiction may immediately revoke its authorization to use a firing area if it is found that an undue hazard exists, including, but not limited to, fire safety hazards or life safety hazards.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## § 1027. Minimum Age.

(a) No model rocket motors shall be sold, given, or delivered to any person under 18 years of age.

Exceptions: (1) Model rocket motors bearing the standardized coding 1/4A, 1/2A, A, B, C, and D may be sold, given, or delivered to any person 14 years of age or older. (2) Persons who are 12 years of age or older and who are taking part in a model rocket education program may receive model rocket motors and launch approved model rockets when under the direct supervision and control of a person 18 years of age or older. Model rocket motors must be

obtained only from the adult in charge of the launching. Approved model rocket motors for this exception shall bear the motor coding 1/4A, 1/2A, A, B, C, or D.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1028. Supervision.

The permittee shall be responsible for the safety of all spectators and other persons connected with the launching of model rockets.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 18. Experimental High Power Rockets and Motors

### § 1030. General.

This article is intended to regulate the sale, storage, construction and use of experimental high power rocket motors and experimental high power rockets.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1031. Classification and Labeling.

(a) All types of experimental high power rocket motors shall be submitted by a licensed experimental high power rocket motor manufacturer, importer/exporter, or wholesaler to the State Fire Marshal for classification.

(b) All motors shall bear the State Fire Marshal seal and the registration number of the licensee.

Classified motors contained within packages may have the State Fire Marshal seal and registration number on the package, provided that such packages are sealed.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1032. Experimental High Power Rocket Motor Standards and Use.

(a) Experimental high power rocket motor design and construction standards shall comply with all of the following:

(1) The maximum total impulse per rocket motor shall not exceed 10,240 Newton-seconds (2302.2 lb.-seconds).

(2) When more than one rocket motor is utilized, the combined total impulse shall not exceed 20,480 Newton-seconds (4604.4 lb.-seconds).

(b) If an experimental high power rocket is equipped with an experimental high power rocket motor, then the rocket shall:

(1) be constructed of paper, plastic, rubber, aluminum or wood except that minor components such as screw eyes or motor mounts may be of other light-gauge metals; and

(2) include an effective means or device for returning the rocket safely to the ground without causing personal injury or property damage; and

(3) The rocket shall not contain any type of explosive or pyrotechnic warhead of any type.

(c) An experimental high power rocket shall not be used as a weapon.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1033. License Required.

No person shall possess, receive, transport, store, or launch any experimental high power rocket motor without first securing a valid license as a Pyrotechnic

Operator -Rockets First, Second, or Third Class from the State Fire Marshal. No person shall sell an experimental high power rocket motor to any person unless the seller possesses a valid license as a wholesaler or retailer under this chapter.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1034. Local Permit Required-Seller.

No person shall sell an experimental high power rocket motor without first securing a permit from the authority having jurisdiction. This permit shall be in addition to, not in lieu of, a valid license issued by the State Fire Marshal for the sale of these motors. This permit shall be deemed separate from a local permit allowing the launching of rockets utilizing such motors.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1035. Local Permit Required-Launch.

(a) No experimental high power rocket motor user shall launch any experimental high power rocket motor from any site without first securing a permit from the authority having jurisdiction.

(b) The authority having jurisdiction may require notification by the permittee each time an experimental high power rocket motor is to be launched. It shall be the responsibility of the experimental high power rocket motor user to also secure the permission of the owner of private land when such land is intended to be used as a launch site.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

#### § 1036. Launching Facilities.

(a) Experimental high power rocket motors shall be launched from platforms meeting the following specifications:

(1) A launch guide (tube, rod, tower or other suitable device) shall be used to restrict the horizontal motion of the rocket until flight velocity sufficient to maintain stability during flight is achieved.

(2) A launch angle of not more than twenty degrees (20 degrees) from the vertical shall be used.

(b) Rocket motor launching shall be by remote electrical means only, and under the supervision and control of an individual properly licensed in accordance with this chapter.

(c) Surface wind at the launch site shall not exceed twenty miles per hour (20 m.p.h.), and visibility


above the launching area shall be at least five thousand feet (5,000 ft.).

(d) The recovery device wadding ejected from the rocket during the launch flight sequence, if used, shall be of flame retardant material meeting the standards of Title 19, California Code of Regulations, Chapter 8, Sections 1171 through 1355.

(e) Experimental high power rocket motors shall be launched only during daylight hours unless specifically approved by the authority having jurisdiction.

(f) All personnel, including those conducting the actual launching of the experimental high power rocket motor(s), shall maintain a clear radial distance from the launch platform during the countdown and launch, pursuant to the guidelines in Table 18A.

TABLE 18A  
REQUIRED LAUNCH DISTANCES



Total Impulse of Rocket From Launcher	Radial Distance
0-320 Newton-Seconds [FNa1]	30 feet
320.01-1280 Newton-Seconds [FNa1]	150 feet

1280.01-2560 Newton-Seconds [FNa1] feet	200
2560.01-5120 Newton-Seconds [FNa1] feet	300
5120.01-10240 Newton Seconds [FNa1] feet	500
10241-20480 Newton Seconds [FNa1] feet	1000

[FNa1] Rockets propelled by clusters of motors shall use the distance specified for the next higher impulse category.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

### § 1037. Launch Site Standards.

(a) The launch site shall consist of a launching area and a recovery area. The launching area shall consist of an area surrounding the launching devices a radial distance from the launching device as specified in Table 18A above. The recovery area shall consist of the launching area and the minimum area necessary to retrieve the rocket, based on the estimated altitude likely to be achieved by the rocket. These calculations shall take into account the weight of the rocket and the specific type of



motor used (or combined total impulse). Table 18B shall be used to determine the minimum launch site dimensions for the various classes of experimental high power rockets.

(b) The launch site shall not be located in any grain field, dry grass, brush- or forest-covered lands.

(c) The launch site shall not contain any buildings or structures, unless specifically approved in advance by the authority having jurisdiction, and under no circumstances shall such buildings or structures be less than one thousand five hundred feet (1,500 ft.) from the launch site.

(d) The launch site shall not contain any high voltage electrical lines or major highways.

(e) The launch site shall not contain any natural or artificially constructed obstacle deemed by the authority having jurisdiction to pose a hazard during launching.

(f) The launching area shall be located as near as possible to the center of the launch site but in no case less than seven hundred fifty feet (750 ft.) from the boundary of the launch site.

(g) The launching area shall have appropriate barriers around it such that spectators will be restrained from encroaching upon it. These barriers may be of any type approved by the authority having jurisdiction.

TABLE 18B  
 MINIMUM EXPERIMENTAL HIGH POWER  
 ROCKET MOTOR LAUNCH SITE STANDARDS

Equivalent Minimum Launch Motor Type Dimensions	Maximum Combined Total Impulse (N-Seconds)	Site (feet)
H	320	1,500
I	640	2,500
J	1,280	3,500
K	2,560	5,000
L	5,120	7,000
M	10,240	10,000
N	20,480	15,000

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.



§ 1038. Testing.

At locations approved by the authority having jurisdiction, experimental high power rocket motors may be ignited on the ground for the purpose of determining their performance. All of the following

procedures shall be followed during the firing of these motors:

(a) The experimental high power rocket motor shall be affixed to a testing device or to an immovable structure in such a manner that the motor will not work itself free during the testing or the experimentation process.

(b) The experimental high power rocket motor shall be ignited only by remotely operated electrical means fully under the control and supervision of the licensed pyrotechnic operator conducting the testing or experimentation.

(c) The exhaust path of the motor shall be cleared of all flammable objects prior to its firing.

(d) All persons, whether they are conducting, participating in or observing the testing or experiment, shall stand away from the motor, and particularly its exhaust path, at all times during the test or experiment.

(e) Under no circumstances shall testing or experimentation of experimental high power rocket motors be conducted indoors.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

§ 1039. Supervision and Responsibility.

The licensed pyrotechnic operator in charge of the launch site or test sites shall supervise the arming of every experimental high power rocket motor, the launching of all motors, and the disposal of all unwanted or defective motors. The licensed pyrotechnic operator shall also be responsible for the safety of all spectators or observers and all other persons connected with the launching of experimental high power rocket motors.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## Article 19. Emergency Signaling Devices § 1045. Fire Hazard.

Whenever the authority having jurisdiction declares that the use of an emergency signaling device would create a fire hazard, no emergency signaling device shall be used regardless of its indicated registration and labeling. This prohibition shall continue as long as the fire hazard condition exists in the specific area, as determined by the authority having jurisdiction.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12552, Health and Safety Code.

## § 1046. License Required.

Manufacturers of emergency signaling devices whose manufacturing operations take place in California must possess a valid fireworks manufacturing license from the State Fire Marshal to manufacture emergency signaling devices.

Note: Authority cited: Section 12552, Health and Safety Code. Reference: Section 12526, 12552 and 12571, Health and Safety Code.

## ARTICLE 20. DISPOSAL OF FIREWORKS

### **§1047. General.**

These regulations have been prepared and adopted for the purpose of establishing minimum standards for the disposal of fireworks.

**NOTE:** Authority cited: Sections 12550 and 12552, Health and Safety Code. Reference: Sections 12550 and 12552, Health and Safety Code.

\*\*\*A model ordinance was drafted and removed, it remains in the working document developed in March\*\*\*

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