

Chapter 212-17 WAC

FIREWORKS

WAC		212-17-235 212-17-240	Pyrotechnic operators—Responsibility. Pyrotechnic operators—Observance of laws, rules and regulations.
	PART I—GENERAL		
212-17-001 212-17-010 212-17-015 212-17-020 212-17-025 212-17-030 212-17-032 212-17-035 212-17-040 212-17-042 212-17-045 212-17-050 212-17-055 212-17-060	Title. Purpose. Scope. Authority. Definition—"Fireworks." Definition and classification—"Trick and novelty devices." Definition and classification—"Articles pyrotechnic." Definition and classification—"Consumer fireworks." Definition and classification—"Display fireworks." Definition and classification—"Special effects." Definition and classification—"Agricultural and wild-life fireworks." Firework device chemical content, construction. Firework device, labeling. Public purchase of fireworks.		
	PART II—MANUFACTURER		
212-17-065 212-17-070 212-17-075 212-17-080 212-17-085 212-17-090 212-17-095 212-17-100 212-17-105 212-17-110	Fireworks manufacturer—General. Fireworks manufacturer—Licensing. Fireworks manufacturer—Local ordinances. Fireworks manufacturer—License limitations. Fireworks manufacturer—Records and reports. Fireworks manufacturer—Restrictions. Fireworks manufacturer—Building and structures. Fireworks manufacturer—Personnel. Fireworks manufacturer—Visitors. Fireworks manufacturer—Fire nuisance.		
	PART III—WHOLESALER		
212-17-115 212-17-120 212-17-125 212-17-130 212-17-135 212-17-140 212-17-145 212-17-150 212-17-155 212-17-160	Fireworks wholesaler—General. Fireworks wholesaler—Licensing. Fireworks wholesaler—Investigation. Fireworks wholesaler—Local ordinances. Fireworks wholesaler—License limitations. Fireworks wholesaler—Records and reports. Fireworks wholesaler—Importing. Fireworks wholesaler—Personnel. Fireworks wholesaler—Visitors. Fireworks wholesaler—Fire nuisance.	212-17-350	Proximate display—Use of proximate before an audience.
	PART IV—IMPORTER		
212-17-165 212-17-170 212-17-175 212-17-180	Importers of fireworks—General. Importers of fireworks—Licensing. Importers of fireworks—License scope. Importers of fireworks—Restrictions.	212-17-352 212-17-355 212-17-360 212-17-362 212-17-365	Transportation—By common carrier. Proximate display—Proximate permit. Proximate display—Pyrotechnic display plans. Storage—By common carrier. Proximate display—Pyrotechnic display demonstrations.
	PART V—RETAILER		
212-17-185 212-17-198 212-17-203 212-17-21503 212-17-21505 212-17-21507 212-17-21509 212-17-21511 212-17-21513 212-17-21515 212-17-21517 212-17-21519	Retailers of fireworks—License and permit. Retailers of fireworks—List. Retailers of fireworks—List to be posted. Retailers of fireworks—Definitions. Retailers of fireworks—General provisions. Retailers of fireworks—Transportation. Retailers of fireworks—Location. Retailers of fireworks—Area around the retail fireworks stand. Retailers of fireworks—Stand use and construction. Retailers of fireworks—Operation of retail fireworks stands. Retailers of fireworks—Temporary fireworks storage associated with the retail fireworks stand operation. Retailers of fireworks—Cleanup.	212-17-370 212-17-375 212-17-380 212-17-385 212-17-390 212-17-395 212-17-400 212-17-405 212-17-410 212-17-415 212-17-420 212-17-425 212-17-430	Proximate display—Definitions. Proximate display—Transportation of pyrotechnic material. Proximate display—Storage of pyrotechnic materials and WAC devices. Proximate display—Separation from heat sources. Proximate display—Identification of pyrotechnic devices or binary systems. Proximate display—General fire protection. Proximate display—Firing prerequisites. Proximate display—Firing safeguards. Proximate display—Separation distances from audience. Proximate display—Performance. Proximate display—After the performance.
	PART VI—PYROTECHNIC OPERATOR		
212-17-220 212-17-225 212-17-230	Pyrotechnic operators—General. Pyrotechnic operators—Application for license. Pyrotechnic operators—Examination, investigation and licensing.	212-17-435 212-17-440 212-17-445	Storage—General. Storage—Explosive safety. Storage—By common carrier.
			PART VII—PUBLIC DISPLAY LICENSE
		212-17-245 212-17-250 212-17-255 212-17-260 212-17-270 212-17-275 212-17-280 212-17-285 212-17-290	Public displays of fireworks—General. Public displays of fireworks—Application, state license. Public displays of fireworks—Type of license. Public displays of fireworks—General licenses. Public displays of fireworks—Local permit, application for. Public displays of fireworks—Investigation. Public displays of fireworks—Permits may not be granted, when. Public displays of fireworks—Spectators. Public displays of fireworks—Pyrotechnic operators.
			PART VIII—PUBLIC DISPLAYS
		212-17-295 212-17-300 212-17-305 212-17-310 212-17-315 212-17-317 212-17-320 212-17-321 212-17-323 212-17-325 212-17-327 212-17-330 212-17-335 212-17-340 212-17-342 212-17-345	Public display—General. Public display—Definitions. Public display—Construction of shells. Public display—Storage of shells. Public display—Installation of mortars. Public display—Electrical firing unit. Public display—Site selection. Public display—Installation of buried mortars. Installation of mortar racks. Public display—Discharge site. Requirements for chain fusing. Public display—Operation. Public display—Firing of shells. Public display—Ground pieces. Public display—Floating vessels and platforms. Public display—Reports.
			PART IX—PROXIMATE DISPLAYS
		212-17-370 212-17-375 212-17-380 212-17-385 212-17-390 212-17-395 212-17-400 212-17-405 212-17-410 212-17-415 212-17-420 212-17-425 212-17-430	Proximate display—Storage of pyrotechnic materials and WAC devices. Proximate display—Separation from heat sources. Proximate display—Identification of pyrotechnic devices or binary systems. Proximate display—General fire protection. Proximate display—Firing prerequisites. Proximate display—Firing safeguards. Proximate display—Separation distances from audience. Proximate display—Performance. Proximate display—After the performance.
			PART X—TRANSPORTATION
		212-17-435 212-17-440 212-17-445	Transportation—General. Transportation—By common carrier.
			PART XI—STORAGE
		212-17-450 212-17-455	Fines and penalties. Definitions.
			PART XII—FINES AND PENALTIES

212-17-460	General rules.
212-17-465	Violation types and penalty assessments.
212-17-470	Violation assessment at the local level.
212-17-475	Hearings.
212-17-480	Informal conference.
212-17-485	Formal hearing.
212-17-490	Penalty adjustment.
212-17-495	Payment of civil penalty.
212-17-500	Type I violations.
212-17-505	Type II violations.
212-17-510	Type III violations.
212-17-515	Type IV violations.
212-17-900	Appendix.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

212-17-190	Retailers of fireworks—Sales dates. [Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-190, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-190, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-195	Retailers of fireworks—Sales locations. [Statutory Authority: Chapter 70.77 RCW. WSR 89-17-024 (Order 89-03), § 212-17-195, filed 8/8/89, effective 9/8/89; WSR 88-08-027 (Order FPS 88-01), § 212-17-195, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-195, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-200	Retailers of fireworks—Safety inspection. [Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-200, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-205	Retailers of fireworks—No smoking signs. [Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-205, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-210	Retailers of fireworks—Smoking and discharge of fireworks. [Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-210, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-215	Retailers of fireworks—Disposition of unsold stock. [Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-215, filed 11/2/82.] Repealed by WSR 98-13-038, filed 6/9/98, effective 7/10/98. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW.
212-17-265	Reports. [Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-265, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-265, filed 11/2/82.] Repealed by WSR 05-12-033, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapters 43.43 and 70.77 RCW.

PART I—GENERAL

WAC 212-17-001 Title. These rules shall be known as the "rules of the director of fire protection relating to fireworks," and may be cited as such.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-001, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-001, filed 11/2/82. Formerly chapter 212-16 WAC.]

WAC 212-17-010 Purpose. The purpose of these rules is to implement the state fireworks law, chapter 70.77 RCW, administered and enforced by the director of fire protection.

[Ch. 212-17 WAC p. 2]

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-010, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-010, filed 11/2/82.]

WAC 212-17-015 Scope. These rules apply to fireworks manufacture, storage, transportation, sale, importation, possession, classification, and discharge of fireworks of every class or kind in this state.

- Exceptions:
- (1) Explosives, as defined and regulated under the state explosives law, chapter 70.74 RCW;
 - (2) Firearms and ammunition, including blank cartridges and pistols of the type used at sporting events or theatrical productions;
 - (3) Research or experiments with rockets or missiles, including model rockets and model rocket motors designed, sold and used for the purpose of propelling recoverable aero models;
 - (4) Toy paper and/or plastic caps, manufactured in accordance with DOT regulations, 49 C.F.R. 173.100(p), 1981, as of October 29, 1982, or toy pistols, toy canes, toy guns, or other devices in which toy paper and/or plastic caps are used;
 - (5) Emergency signaling devices.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-015, filed 11/2/82.]

WAC 212-17-020 Authority. These rules are adopted pursuant to the Washington Administrative Procedure Act, chapter 34.04 RCW.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-020, filed 11/2/82.]

WAC 212-17-025 Definition—"Fireworks." The term "fireworks" shall mean any composition or device for the purpose of producing a visible or an audible effect by combustion, deflagration, or detonation, and which meets the definition of articles pyrotechnic, consumer, or display fireworks.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-025, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-025, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-025, filed 11/2/82.]

WAC 212-17-030 Definition and classification—"Trick and novelty devices." The term "trick and novelty devices" shall mean any small firework device not classified as consumer or display fireworks by the United States Department of Transportation or elsewhere in these rules, including:

(1) Snakes, glow worm. Pressed pellet of pyrotechnic composition that produces a large, snake-like ash upon burning. The ash expands in length as the pellet burns. These devices may not contain mercuric thiocyanate.

(2) Trick noisemaker. Item that produces a small report intended to surprise the user. These devices include:

(a) Party popper. Small plastic or paper item containing not more than 16 mg of explosive composition that is friction sensitive. A string protruding from the device is pulled to ignite it, expelling paper streamers and producing a small report.

(b) Booby trap. Small tube with string protruding from both ends, similar to a party popper in design. The ends of the string are pulled to ignite the friction sensitive composition, producing a small report.

(c) Snapper. Small, paper-wrapped item containing a minute quantity of explosive composition coated on small bits of sand. When dropped, the device explodes, producing a small report.

(d) Trick match. Kitchen or book match that has been coated with a small quantity of explosive or pyrotechnic composition. Upon ignition of the match, a small report or a shower of sparks is produced.

(e) Cigarette load. Small wooden peg that has been coated with a small quantity of explosive composition. Upon ignition of a cigarette containing one of the pegs, a small report is produced.

(f) Auto burglar alarm. Tube which contains pyrotechnic composition that produces a loud whistle and/or smoke when ignited. A small quantity of explosive, not exceeding 50 mg, may also be used to produce a small report. A squib is used to ignite the device.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-030, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-030, filed 11/2/82.]

WAC 212-17-032 Definition and classification—
"Articles pyrotechnic." The term "articles pyrotechnic" shall mean pyrotechnic devices for professional use similar to consumer fireworks in chemical composition and construction but not intended for consumer use which meet the weight limits for consumer fireworks but which are not labeled as such and which are classified as UN0431 or UN0432 by the Department of Transportation at 49 C.F.R. Sec. 172.101.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-032, filed 5/24/05, effective 6/24/05.]

WAC 212-17-035 Definition and classification—
"Consumer fireworks." The term "consumer fireworks" shall mean any fireworks designed primarily to produce visible or audible effects by combustion. The term includes:

(1) Ground and hand-held sparkling devices.

(a) Dipped stick, sparkler. Stick, or wire coated with pyrotechnic composition that produces a shower of sparks upon ignition. Total pyrotechnic composition may not exceed 100 grams per item. Those devices containing any perchlorate or chlorate salts may not exceed 5 grams of pyrotechnic composition per item. Wire sparklers which contain no magnesium and which contain less than 100 grams of composition per item, not Division 1.4, 1.5, or 1.6 explosives under DOT regulations, are included in this category.

(b) Cylindrical fountain. Cylindrical tubes not more than 3/4 inch (19 mm) inside diameter, containing up to 75 grams of pyrotechnic composition. Upon ignition, a shower of colored sparks, and sometimes a whistling effect is produced. This device may be provided with a spike for insertion into the ground (spike fountain), a wood or plastic base for placing on the ground (base fountain), or a wood or cardboard handle, if intended to be hand-held (handle fountain).

(c) Cone fountain. Cardboard or heavy paper cone containing up to 50 grams of pyrotechnic composition. The effect is the same as that of a cylindrical fountain.

(d) Illuminating torch. Cylindrical tube containing up to 100 grams of pyrotechnic composition. Upon ignition, colored fire is produced. May be spike, base, or hand-held.

(e) Wheel. Pyrotechnic device attached to a post or tree by means of a nail or string. Each wheel may contain up to six "driver" units; tubes not exceeding 1/2 inch (12.5 mm) inside diameter and containing up to 60 grams of pyrotechnic composition. Total pyrotechnic composition of each wheel shall not exceed 240 grams. Upon ignition, the wheel revolves, producing a shower of color and sparks and, sometimes, a whistling effect.

(f) Ground spinner. Small device similar to a wheel in design and effect and placed on the ground and ignited. A shower of sparks and color is produced by the rapidly spinning device.

(g) Flitter sparkler. Narrow paper tube filled with pyrotechnic composition that produces color and sparks upon ignition. This device does not have a fuse for ignition. The paper at one end of the tube is ignited to make the device function.

(2) Aerial device.

(a) Helicopter, aerial spinner. A tube not more than 1/2 inch (12.5 mm) inside diameter and containing up to 20 grams of pyrotechnic composition. A propeller or blade is attached, which, upon ignition, lifts the rapidly spinning device into the air. A visible or audible effect is produced at the height of flight.

(b) Roman candles. Heavy paper or cardboard tube containing up to 20 grams of pyrotechnic composition. Upon ignition, up to ten "stars" (pellets of pressed pyrotechnic composition that burn with bright color) are individually expelled at several-second intervals.

(c) Mine, shell. Heavy cardboard or paper tube up to 2 1/2 inches (63.5 mm) inside diameter attached to a wood or plastic base and containing up to 40 grams of pyrotechnic composition. Upon ignition, "stars," or other devices are propelled into the air. The tube remains on the ground.

(3) Combination items. Fireworks devices containing combinations of two or more of the effects described in this section.

(4) Smoke device. Tube or sphere containing pyrotechnic composition that, upon ignition, produces white or colored smoke as the primary effect.

(5) Aerial shell. A 1 3/4" or smaller cylindrical or spherical cartridge containing up to 40 grams of chemical composition.

(6) Mortar. A 1 3/4" or smaller cardboard tube in which aerial shells are discharged into the air.

(7) Division 1.4G explosives classified on January 1, 1984, as consumer fireworks by the United States Department of Transportation except that the term shall not include firecrackers, salutes, chasers, skyrockets, or missile-type rockets.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-035, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-035, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-035, filed 11/2/82.]

WAC 212-17-040 Definition and classification— "Display fireworks." The term "display fireworks" shall mean large fireworks designed primarily for exhibition display by producing visible or audible effects. The term includes, but is not limited to:

(1) Sky rocket. Tubes not exceeding 1/2 inch (12.5 mm) inside diameter that may contain up to 20 grams of pyrotechnic composition. Sky rockets contain a wooden stick for guidance and stability and rise into the air upon ignition. A burst of color or noise or both is produced at the height of flight.

(2) Missile-type rocket. A device similar to a sky rocket in size, composition, and effect that uses fins rather than a stick for guidance and stability. Firework devices which use a cylindrical bore or rod for launching stability, even though the word "missile" may appear on the label, are not included in this category.

(3) Firecrackers, salutes. Small paper-wrapped or cardboard tube containing not more than 2 grains (130 mg) of explosive composition. Upon ignition, noise and a flash of light is produced.

(4) Chaser. Small paper or cardboard tube that travels along the ground upon ignition. A whistling effect, or other noise, is often produced. The explosive composition used to create the noise may not exceed 50 mg.

(5) Display pieces. Fireworks containing more than 2 grains (130 mg) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces which exceed the limits for classification as "consumer fireworks." Display fireworks are classified as Division 1.3G explosives by the United States Department of Transportation.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-040, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-040, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-040, filed 11/2/82.]

WAC 212-17-042 Definition and classification— "Special effects." The term "special effects" shall mean a visual or audible effect for entertainment purposes created exclusively by "display fireworks" or "articles pyrotechnic."

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-042, filed 5/24/05, effective 6/24/05.]

WAC 212-17-045 Definition and classification— "Agricultural and wildlife fireworks." The term "agricultural and wildlife fireworks" shall mean (1) fireworks devices, including but not limited to, firecrackers containing more than 50 mg (.772 grains) of pyrotechnic composition designed to produce audible effects, which are distributed to farmers, ranchers and growers through a wildlife management program administered by the United States Department of Interior (or by equivalent state or local governmental agencies); and, such distribution is in response to a written application describing the wildlife management problem that requires use of such devices, is of a quantity no greater than required to control the problem described, and is where other means of control is unavailable or inadequate or, (2) seal control units, purchased under a Certificate of Inclusion, issued by the United States Department of Commerce, National

Oceanic and Atmosphere Administration, or sold by bona fide dealers to licensed commercial fishermen or licensed commercial fishing boat owners for marine mammal control.

[Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-045, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-045, filed 11/2/82.]

WAC 212-17-050 Firework device chemical content, construction. All consumer fireworks devices shall meet the following chemical content, design, and construction requirements.

(1) Prohibited chemicals. Fireworks devices shall not contain any of the following chemicals:

(a) Arsenic sulfide, arsenates, or arsenites.

(b) Boron.

(c) Chlorates, except:

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

(ii) In caps and party poppers;

(iii) In those small items wherein the total powder content does not exceed four grams of which not greater than fifteen percent is potassium, sodium, or barium chlorate.

(d) Gallates or gallic acid.

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

(f) Mercury salts.

(g) Phosphorus (red or white). EXCEPT that red phosphorus is permissible in caps and party poppers.

(h) Picrates or picric acid.

(i) Thiocyanates.

(j) Titanium, except in particle size greater than 100-mesh.

(k) Zirconium.

(2) Fuses.

(a) Fireworks devices that require a fuse shall:

(i) Utilize only a fuse that has been treated or coated in such manner as to reduce the possibility of side ignition. 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.

(ii) Utilize only a fuse which will burn at least three seconds but not more than six seconds before ignition of the device.

(b) The fuse shall be securely attached so that it will support either the weight of the fireworks device plus eight ounces dead weight or double the weight of the device, whichever is less, without separation from the fireworks device.

(3) Bases. The base or bottom of fireworks devices that are operated in a standing upright position shall 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.

(4) Pyrotechnic leakage. The pyrotechnic chamber in fireworks devices shall be sealed in a manner that prevents leakage of the pyrotechnic composition during shipping, handling and normal operation.

(5) Burnout and blowout. The pyrotechnic chamber in fireworks devices shall be constructed in a manner to allow functioning in a normal manner without burnout or blowout.

(6) Handles and spikes. Fireworks devices that are intended to be hand-held and are so labeled shall incorporate a handle at least four 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 four inches below the pyrotechnic chamber, except sparklers 10" or less in length shall have handles at least 3" in length. Spikes provided with fireworks devices shall protrude at least two 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.

(7) Wheel devices. Drivers in fireworks devices commonly known as "wheels" 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.

(8) Toy smoke devices and flitter devices.

(a) Toy smoke devices shall be so constructed that they will neither burst nor produce external flame (excluding the fuse and small but brief bursts of flame accompanying normal smoke production) during normal operation.

(b) Toy smoke devices and flitter devices shall not be of such color and configuration so as to be confused with illegal explosive devices such as M-80 salutes, silver salutes, or cherry bombs.

(c) Toy smoke devices shall not incorporate plastic as an exterior material if the pyrotechnic composition comes in direct contact with the plastic.

(9) Rockets with sticks. Rockets with sticks (including sky rockets and bottle rockets) shall utilize a straight and rigid stick to provide a direct and stable flight. Such sticks shall remain straight and rigid and attached to the driver so as to prevent the stick from being damaged or detached during transportation, handling, or normal operation.

(10) Party poppers. Party poppers (also known by other names such as "champagne party poppers" and "party surprise poppers" shall not contain more than 0.25 grains of pyrotechnic composition. Such devices may contain non-flammable soft paper or cloth inserts.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-050, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-050, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-050, filed 11/2/82.]

WAC 212-17-055 Firework device, labeling. (1) Any consumer fireworks device not required to have a specific label by 16 C.F.R. 1500.14 (b)(7), 1981, as of October 29, 1982, shall carry a warning label indicating to the user where and how the item is to be used and necessary safety precautions to be observed.

(2) Every fireworks device, or fireworks device container where the device is packaged in an immediate container intended or suitable for delivery to the ultimate consumer, shall be conspicuously labeled with the name and place of business of the manufacturer, packer, distributor, or seller and the United States Department of Transportation designation as "Division 1.4G consumer fireworks" or "Division 1.3G special fireworks."

(5/26/06)

(3) All label wording shall be prominently located, in the English language, and in conspicuous and legible type in contrast by typography, layout, or color with the printed matter on the fireworks device or container.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-055, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-055, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-055, filed 11/2/82.]

WAC 212-17-060 Public purchase of fireworks. (1)

The public may purchase consumer fireworks only from licensed retail fireworks stands between noon, June 28th and 9:00 p.m. July 5th of each year. Purchase or discharge is prohibited between the hours of 11:00 p.m. and 9:00 a.m., except on July 4th, in which fireworks can be discharged between the hours of 9:00 a.m. and 12:00 midnight. Possession and discharge of fireworks is lawful during this period only, except as provided in subsection (2) of this section.

(2) Religious organizations or private organizations or adult persons may be authorized to purchase consumer fireworks or such audible ground devices as firecrackers, salutes, and chasers, as defined in WAC 212-17-040 (3) and (4) from licensed manufacturers, importers, or wholesalers for use on prescribed dates and locations for religious or specific purposes, when a permit is obtained from the fire chief or other designated local official. Application shall be on forms provided by the director of fire protection and shall contain the following information:

(a) The name and mailing address of the organization or person desiring to purchase and discharge the fireworks;

(b) The date and time of the proposed discharge;

(c) The location of the proposed discharge;

(d) The quantity and type of fireworks desired to be purchased and discharged;

(e) The reason or purpose of the discharge; and

(f) The signature of the applicant, following a statement that: "The applicant understands and agrees to comply with all provisions of the application and requirements of the approving authority, will discharge the fireworks only in a manner that will not endanger persons or property or constitute a nuisance, and assumes full responsibility for all consequences of the discharge, intended or not." Upon approval by the fire official, the applicant may submit a copy of the approval to any licensed wholesaler as proof of authorization to purchase the fireworks listed therein. The applicant shall retain the approval and have it available for inspection by any public official at the actual discharge of the fireworks.

(3) The purchase or receipt of mail-order fireworks through any medium of either interstate or intrastate commerce is prohibited unless the purchaser has first obtained an importers license.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-060, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-060, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-060, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-060, filed 11/2/82.]

[Ch. 212-17 WAC p. 5]

PART II—MANUFACTURER

WAC 212-17-065 Fireworks manufacturer—General. Persons intending to manufacture fireworks in this state shall procure a license from the director of fire protection and a permit from the local governmental agency having jurisdiction prior to engaging in business. Applications for license shall be made on forms provided by the director of fire protection and the annual license fee shall accompany the application. License applications shall be made on or before January 31 of the year for which the license is desired. Fireworks manufacturers domiciled in other than the state of Washington shall have a designated agent in the state of Washington, registered with the director of fire protection.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-065, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-065, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-065, filed 11/2/82.]

WAC 212-17-070 Fireworks manufacturer—Licensing. Upon receipt of application and license fee, the director of fire protection will cause an investigation to be made. If the investigation discloses compliance with state laws governing the manufacture of fireworks and that granting of a license would not be contrary to public safety or welfare, a license will be granted. If the license is denied, then the applicant shall be notified in writing of the reason why license was denied, and he shall be given an opportunity to make such alterations and corrections as are deemed necessary. License applications shall be either granted or denied by the director of fire protection within ninety days following receipt of a properly submitted or amended application.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-070, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-070, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-070, filed 11/2/82.]

WAC 212-17-075 Fireworks manufacturer—Local ordinances. Applicants, before applying for a license, should determine that their facilities conform to local zoning, health and building safety standards, fire safety requirements, and any other local ordinances pertaining to manufacture and storage of fireworks. (See appendix.)

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-075, filed 11/2/82.]

WAC 212-17-080 Fireworks manufacturer—License limitations. (1) A fireworks manufacturer license, together with a permit from local authorities having jurisdiction, authorizes the holder to engage only in the business of manufacturing fireworks of all types and their sale and transportation to licensed wholesalers in Washington. If they desire to engage in other types of fireworks business, they shall first procure the necessary license.

(2) By virtue of its license, a licensed fireworks manufacturer is permitted to sell fireworks for direct shipment out of this state. Such shipment must be made by a public carrier or by the manufacturer in vehicles owned or leased by the manufacturer.

[Ch. 212-17 WAC p. 6]

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-080, filed 11/2/82.]

WAC 212-17-085 Fireworks manufacturer—Records and reports. Manufacturers shall, when requested to do so, submit written reports to the chief of the Washington state patrol, through the director of fire protection on production, sale and distribution of fireworks and name of the person to whom such fireworks were sold.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-085, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-085, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-085, filed 11/2/82.]

WAC 212-17-090 Fireworks manufacturer—Restrictions. The storage, transportation, sale and transfer of ownership of all classes and types of fireworks by manufacturers shall be subject to the restrictions and provisions of the state fireworks law and these rules.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-090, filed 11/2/82.]

WAC 212-17-095 Fireworks manufacturer—Building and structures. All buildings and structures used for manufacturing fireworks are subject to the provisions of these rules as well as all local ordinances relating to building, design, construction, location and zoning.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-095, filed 11/2/82.]

WAC 212-17-100 Fireworks manufacturer—Personnel. All employees who handle fireworks in any stage of storage, manufacture, or assembly shall be instructed in the hazards of the materials involved and of the processes in which they are engaged, and shall be made familiar with the rules and safety precautions governing such materials and processes.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-100, filed 11/2/82.]

WAC 212-17-105 Fireworks manufacturer—Visitors. No persons other than employees shall be permitted in portions of the premises where live fireworks or components are manufactured, processed, assembled, stored, or exposed. Visitors having business on the premises shall be restricted to the areas directly related to the purpose of their visit. No loitering shall be permitted on the premises.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-105, filed 11/2/82.]

WAC 212-17-110 Fireworks manufacturer—Fire nuisance. The premises of a fireworks manufacturing establishment shall be maintained in a clean, neat and orderly condition at all times and be free from any condition that would create a "fire nuisance." (See RCW 70.77.165.)

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-110, filed 11/2/82.]

PART III—WHOLESALE

WAC 212-17-115 Fireworks wholesaler—General.

Fireworks wholesaler licenses cover those persons engaged in the business of selling fireworks at wholesale to licensed persons in this state. Wholesale licensees may transport the class of fireworks for which they hold a valid license. Fireworks wholesalers domiciled in other than the state of Washington shall have a designated agent in the state of Washington, registered with the director of fire protection.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-115, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-115, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-115, filed 11/2/82.]

WAC 212-17-120 Fireworks wholesaler—Licensing.

Persons intending to engage in the sale of fireworks at wholesale in this state shall procure a license from the director of fire protection. A permit from the local governmental agency having jurisdiction shall also be obtained for the storage of all classes and types of fireworks in possession of the wholesaler licensee. The application shall be made on forms provided by the state fire marshal and the annual license fee shall accompany the application. License applications shall be made on or before January 31 of the year for which the license is desired.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-120, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-120, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-120, filed 11/2/82.]

WAC 212-17-125 Fireworks wholesaler—Investigation. Upon receipt of an application and the license fee, the director of fire protection will cause an investigation to be made. If the investigation discloses compliance with state laws governing fireworks and that granting of a license would not be contrary to public safety or welfare, a license will be granted. If the license is denied, then the applicant shall be notified in writing of the reason why the license was denied, and he shall be given an opportunity to make such alterations and corrections as are deemed necessary. License applications shall be either granted or denied by the director of fire protection within ninety days following receipt of a properly submitted or amended application.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-125, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-125, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-125, filed 11/2/82.]

WAC 212-17-130 Fireworks wholesaler—Local ordinances. Applicants, before applying for a license should determine that their facilities conform to local zoning, health and building safety standards, fire safety requirements, and any other local ordinances pertaining to storage of fireworks. (See appendix.)

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-130, filed 11/2/82.]

(5/26/06)

WAC 212-17-135 Fireworks wholesaler—License limitations. (1) A fireworks wholesaler's license authorizes the holder to engage only in the sale of fireworks at wholesale. A fireworks wholesaler's license entitles him to sell fireworks to licensed retailers, licensed public display operators, other licensed wholesalers, religious organizations or private organizations or adult persons authorized to purchase specific fireworks items in accordance with WAC 212-17-060(2). Fireworks wholesaler licensees desiring to engage in other types of fireworks business shall first secure the necessary license as required by the state fireworks law.

(2) By virtue of its license, a licensed fireworks wholesaler is permitted to sell fireworks for direct shipment out of this state. Such shipment must be made by a public carrier or by the wholesaler in vehicles owned or leased by the wholesaler.

(3) It is unlawful for a licensed fireworks wholesaler to sell fireworks, at wholesale or retail, for direct shipment out of this state, or delivery into another state, to any person who does not possess and present to the wholesaler for inspection at the time of sale, a valid license and/or permit, where such a license and/or permit is required to purchase, possess, transport, store, distribute, sell, or otherwise deal with or use fireworks by the laws of such other state specifically prohibiting or regulating the use of fireworks.

(4) The burden of ascertaining whether the laws of such other state require a license and/or permit and whether the purchaser possesses such a valid license and/or permit shall be entirely on the wholesaler. The wholesaler shall record, in a manner prescribed by the director of fire protection, each sale as described in this section, to include the type and quantity of fireworks sold, name of purchaser, state of destination, state issuing license and/or permit, and number or other identifying description and date of issue of license and/or permit.

(5) Each sale of fireworks in violation of this section shall be considered a separate offense. Notwithstanding the existence or use of any other remedy, any wholesaler violating this section may be enjoined from continuing such violation.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-135, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-135, filed 11/2/82.]

WAC 212-17-140 Fireworks wholesaler—Records and reports. The licensee shall maintain and make available to the director of fire protection full and complete records including imports, purchases, sales, and consumption of fireworks items by kind and class.

[Statutory Authority: Chapter 70.77 RCW. WSR 89-17-024 (Order 89-03), § 212-17-140, filed 8/8/89, effective 9/8/89; WSR 88-08-027 (Order FPS 88-01), § 212-17-140, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-140, filed 11/2/82.]

WAC 212-17-145 Fireworks wholesaler—Importing. Wholesalers who engage in the business of importing fireworks shall first procure a state license as is required for import licensees.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-145, filed 11/2/82.]

[Ch. 212-17 WAC p. 7]

WAC 212-17-150 Fireworks wholesaler—Personnel.

All employees who handle fireworks in any stage of storage or assembly shall be instructed in the hazards of the materials involved and of the processes in which they are engaged, and shall be made familiar with the rules and safety precautions governing such materials and processes.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-150, filed 11/2/82.]

WAC 212-17-155 Fireworks wholesaler—Visitors.

No persons other than employees shall be permitted in portions of the premises where live fireworks or components are assembled, stored, or exposed. Visitors having business on the premises shall be restricted to the areas directly related to the purpose of their visit. No loitering shall be permitted on the premises.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-155, filed 11/2/82.]

WAC 212-17-160 Fireworks wholesaler—Fire nuisance. The premises of a fireworks wholesaling establishment shall be maintained in a clean, neat or orderly condition at all times and be free from any condition that would create a "fire nuisance." (See RCW 70.77.165.)

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-160, filed 11/2/82.]

PART IV—IMPORTER**WAC 212-17-165 Importers of fireworks—General.**

Importer fireworks licenses are for the importation of fireworks to this state. Such a license does not authorize the licensee to engage in wholesale or retail trade or in any other activity requiring a special fireworks license. Fireworks importers domiciled in other than the state of Washington shall have a designated agent in the state of Washington, registered with the state fire marshal.

[Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-165, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-165, filed 11/2/82.]

WAC 212-17-170 Importers of fireworks—Licensing. Every person who desires to import fireworks to this state shall file application and procure a license. Application shall be made on forms provided by the director of fire protection and shall be accompanied by the required license fee. License applications shall be made on or before January 31 of the year for which the license is desired. The application shall be either granted or denied by the director of fire protection within ninety days following receipt of a properly submitted or amended application.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-170, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-170, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-170, filed 11/2/82.]

WAC 212-17-175 Importers of fireworks—License scope. An importer fireworks license shall authorize the licensee to engage only in importing fireworks. Importer

[Ch. 212-17 WAC p. 8]

licensees desiring to engage in any type of fireworks distribution shall first procure the necessary license.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-175, filed 11/2/82.]

WAC 212-17-180 Importers of fireworks—Restrictions. The storage of all classes and types of fireworks in possession of an import licensee shall be subject to the restrictions and provisions of the local fire official. (See appendix.)

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-180, filed 11/2/82.]

PART V—RETAILER

WAC 212-17-185 Retailers of fireworks—License and permit. (1) Persons desiring to engage in the business of selling fireworks at retail shall secure a license from the director of the Washington state patrol fire protection bureau.

(2) In addition to the state license, a permit must be obtained from the local governmental officials having jurisdiction.

(a) The application shall be made on forms provided by the director of fire protection and shall be accompanied by the license fee of forty dollars.

(b) License applications shall be made on or before May 1 of the year for which the license is desired.

(c) The director of fire protection shall grant or deny the license within fifteen days of receipt of the application.

(d) Applicants are cautioned to first determine whether a local retail sales permit for fireworks can be obtained.

(3) A retailer's license to sell fireworks shall not authorize the licensee to engage in any other fireworks activity. Retailers are limited to selling only those fireworks which have been approved for sale to the public and appear on the list of approved fireworks published annually by the director of fire protection. A copy of the list shall be prominently posted at each retail outlet.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-185, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-185, filed 1/23/98, effective 2/23/98. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-185, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-185, filed 11/9/84. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-185, filed 11/2/82.]

WAC 212-17-198 Retailers of fireworks—List. The following is the list of fireworks that may be sold to the public.

(1) Ground and hand-held sparkling devices.

(a) Dipped stick, sparkler. Stick, or wire coated with pyrotechnic composition that produces a shower of sparks upon ignition. Total pyrotechnic composition may not exceed 100 grams per item. Those devices containing any perchlorate or chlorate salts may not exceed 5 grams of pyrotechnic composition per item. Wire sparklers which contain no magnesium and which contain less than 100 grams of composition per item, not Class C explosives under DOT regulations, are included in this category.

(b) Cylindrical fountain. Cylindrical tubes not more than 3/4 inch (19 mm) inside diameter, containing up to 75 grams

of pyrotechnic composition. Upon ignition, a shower of colored sparks, and sometimes a whistling effect is produced. This device may be provided with a spike for insertion into the ground (spike fountain), a wood or plastic base for placing on the ground (base fountain), or a wood or cardboard handle, if intended to be hand-held (handle fountain).

(c) Cone fountain. Cardboard or heavy paper cone containing up to 50 grams of pyrotechnic composition. The effect is the same as that of a cylindrical fountain.

(d) Illuminating torch. Cylindrical tube containing up to 100 grams of pyrotechnic composition. Upon ignition, colored fire is produced. May be spike, base, or hand-held.

(e) Wheel. Pyrotechnic device attached to a post or tree by means of a nail or string. Each wheel may contain up to six "driver" units; tubes not exceeding 1/2 inch (12.5 mm) inside diameter and containing up to 60 grams of pyrotechnic composition. Total pyrotechnic composition of each wheel shall not exceed 240 grams. Upon ignition, the wheel revolves, producing a shower of color and sparks and, sometimes, a whistling effect.

(f) Ground spinner. Small device similar to a wheel in design and effect and placed on the ground and ignited. A shower of sparks and color is produced by the rapidly spinning device.

(g) Flitter sparkler. Narrow paper tube filled with pyrotechnic composition that produces color and sparks upon ignition. This device does not have a fuse for ignition. The paper at one end of the tube is ignited to make the device function.

(2) Aerial devices.

(a) Helicopter, aerial spinner. A tube not more than 1/2 inch (12.5 mm) inside diameter and containing up to 20 grams of pyrotechnic composition. A propeller or blade is attached, which, upon ignition, lifts the rapidly spinning device into the air. A visible or audible effect is produced at the height of flight.

(b) Roman candles. Heavy paper or cardboard tube not exceeding 3/8 inch (9.5 mm) inside diameter and containing up to 20 grams of pyrotechnic composition. Upon ignition, up to ten "stars" (pellets of pressed pyrotechnic composition that burn with bright color) are individually expelled at several-second intervals.

(c) Mine, shell. Heavy cardboard or paper tube up to 2 1/2 inches (63.5 mm) inside diameter attached to a wood or plastic base and containing up to 40 grams of pyrotechnic composition. Upon ignition, "stars," firecrackers, or other devices are propelled into the air. The tube remains on the ground.

(d) Aerial shell. A 1 3/4" or smaller cylindrical or spherical cartridge containing up to 40 grams of chemical composition.

(e) Mortar. A 1 3/4" or smaller cardboard tube in which aerial shells are discharged into the air.

(3) Combination items. Fireworks devices containing combinations of two or more of the effects described in this section.

(4) Smoke device. Tube or sphere containing pyrotechnic composition that, upon ignition, produces white or colored smoke as the primary effect.

(5) Division 1.4G explosives classified on January 1, 1984 as consumer fireworks by the United States Department

of Transportation except that the term shall not include firecrackers, salutes, chasers, skyrockets or missile-type rockets.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-198, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-198, filed 11/9/84.]

WAC 212-17-203 Retailers of fireworks—List to be posted. Retailers shall post prominently at each retail outlet a list of the fireworks that may be sold to the public. The posted list shall be in a form approved by the director of fire protection. The director of fire protection shall make available the list.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-203, filed 3/31/88. Statutory Authority: RCW 70.77.250. WSR 84-23-009 (Order FM 84-05), § 212-17-203, filed 11/9/84.]

WAC 212-17-21503 Retailers of fireworks—Definitions. (1) "Consumer fireworks" means those fireworks defined as consumer fireworks in RCW 70.77.136.

(2) "Following year" means the year immediately following the year in which a license or permit is issued.

(3) "License" means a license as defined in RCW 70.77.170.

(4) "Magazine" means a structure as defined in Section 3302.1 of the International Fire Code.

(5) "Membrane material" means a thin, flexible, impervious material capable of being supported by an air pressure of 1.5 inches of water column (373 Pa).

(6) "Permanent retail or wholesale structure" means an enclosure or shelter erected for a period of thirty days or more used for the sales, at retail or wholesale, of legal fireworks of any kind.

(7) "Permanent storage structure" means a building or other structure used to store any fireworks not authorized within the scope of a retail fireworks stand permit.

(8) "Permit" means a permit as defined in RCW 70.77-180.

(9) "Private way" means any privately owned driveway, lane, access way or similar parcel of land essentially unobstructed from the ground to the sky which serves as access from private property to a public road.

(10) "Public road" means any street or alley essentially unobstructed from the ground to the sky which is deeded, dedicated or otherwise permanently appropriated to the public for public use.

(11) "Recognized testing laboratory" means a nationally recognized testing laboratory approved by the state fire marshal.

(12) "Temperature overheat protection" means a device which immediately interrupts the power to the heating element of a portable heating unit when the portable heating unit exceeds its designed operating temperature.

(13) "Temporary power drop" means an electrical service connection to a temporary retail fireworks stand.

(14) "Retail fireworks stand" means a structure used for the retail sales of consumer fireworks.

(15) "Temporary storage structure" means a building or other structure used for storage of consumer fireworks directly related to a retail fireworks stand and authorized within the scope of a retail fireworks stand permit.

(16) "Temporary structure" means an enclosure or shelter erected for a period of less than thirty days and not otherwise defined in the International Fire Code as a tent or canopy.

(17) "Tip-over protection" means a device which immediately interrupts the power to the heating element of a portable heating unit when the portable heating unit is tipped or tilted more than forty-five degrees from its designed operating position.

(18) "International Building Code" means the edition currently adopted by the state of Washington.

(19) "International Fire Code" means the edition currently adopted by the state of Washington.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21503, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21503, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21505 Retailers of fireworks—General provisions. (1) The state of Washington hereby fully occupies the entire field of regulation relating to the construction and use of temporary and permanent structures for the retail sale and storage of fireworks including: The location of and areas surrounding, the operation of and the cleanup after the use of said structures, pursuant to RCW 70.77.270.

(2) The state of Washington hereby preempts the authority of local jurisdictions with respect to the retail sale and associated storage of consumer fireworks from temporary structures. This rule constitutes the entire and exclusive authority for regulation of all such matters. Subject to the limitations imposed by chapter 70.77 RCW, a city or county may ban fireworks; or a city or county may restrict the dates of sale, purchase, possession and use of fireworks; or a city or county may restrict the types of fireworks that may be sold and purchased within its boundaries. If a city or county allows the sale of fireworks classified as consumer fireworks from temporary structures these rules preempt that city's or that county's authority to enact or enforce any other regulations.

(3) Except as prescribed by this rule, the use of permanent structures or temporary structures over four hundred square feet for fireworks sales and storage shall be subject to the provisions of the International Fire Code and the International Building Code, and local ordinances.

(4) The use of temporary structures for the temporary sale or storage of consumer fireworks are exempt from the International Building Code, International Fire Code and local ordinances except that where a city or county ordinance regulates the sale or use of fireworks as a part of that city's or that county's building code or fire code, those provisions of that county's or that city's building code or fire code which are not in conflict with this rule are not hereby preempted or affected.

(5) Each license and permit shall be issued and shall remain valid and effective for the thirteen-month period beginning on January 1 of the year in which application is made and ending January 31 of the following year.

(6) Only Division 1.4G consumer fireworks, obtained from state-licensed wholesalers, not otherwise prohibited by chapter 70.77 RCW or local ordinance, and holiday related

products incidental but related to these products, may be sold in retail fireworks stands.

(7) Except as limited by local ordinance, fireworks may be sold from 12:00 noon to 11:00 p.m. on June 28 through 9:00 p.m. on July 5. Fireworks may not be sold between the hours of 11:00 p.m. and 9:00 a.m. from June 28 through July 3. Fireworks may not be sold from 12:00 midnight on July 4 through 9:00 a.m. on July 5.

(8) Except as limited by local ordinance, fireworks may be sold from 12:00 noon to 11:00 p.m. on each day from the 27th of December through the 31st of December of each year.

(9) Licensees shall familiarize all persons working in a retail fireworks stand with the provisions of these rules.

(10) Failure to comply at any time with the provisions of this rule or any other applicable regulation shall constitute a violation of chapter 70.77 RCW and may result in the temporary suspension or immediate revocation of the license or permit, closure of the fireworks sales or storage structure, the seizure and/or forfeiture of some or all of the fireworks, and other criminal penalties as specified by law.

(11) The local authority having jurisdiction, with the concurrence of the state fire marshal, is authorized to modify any of the provisions of WAC 212-17-21509, 212-17-21511, 212-17-21513, 212-17-21515, and 212-17-21517 upon written application by the licensee or a duly authorized representative, where there are practical difficulties in the way of carrying out the provisions of these sections, provided that the spirit of the rule shall be complied with, public safety secured and substantial justice done. The particulars of such modification shall be registered with the state fire marshal.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21505, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21505, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21507 Retailers of fireworks—Transportation. When transporting fireworks, licensees shall comply with all federal, state and local transportation requirements, provided that, upon request of the licensee, the local authority having jurisdiction may waive or modify the local transportation requirements. Nothing in these rules shall restrict the right of any person to transport, in a private vehicle, fireworks which have been legally purchased from a retail fireworks licensee.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21507, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21507, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21509 Retailers of fireworks—Location. (1) Activities or uses subject to this rule shall not be limited in location except where such activities or uses are prohibited or controlled by local development regulation, traffic safety or road construction standards.

(2) Temporary retail fireworks stands shall not be located more than one hundred fifty feet from a private way, fire department access road, public road, street or highway as measured by an approved route around the exterior of the stand. The minimum requirements for a private way shall be determined by the local authority having jurisdiction, but

shall not exceed the requirements of locally adopted street, road and access standards.

(3) Any two retail fireworks stands shall be at least one hundred feet apart or shall be separated by a road, street or highway not less than thirty feet in width.

(4) Retail fireworks stands shall be located as required by Table 212-17-21509 in this section. The minimum required area surrounding the stand shall be marked or flagged, except that flagging and marking shall not block a sidewalk or pedestrian pathway. Flagging need not exceed twenty feet in any direction.

Retail Fireworks Stands - Minimum Clearances						
	Buildings	Combustibles	Property Line	Parking	Motor Vehicle Traffic PUBLIC ROAD*	Motor Vehicle Traffic PRIVATE WAY
BACK OF STAND	20 FT.	20 FT.	5 FT.	20 FT.	20 FT.	5 FT.
SIDE OF STAND	20 FT.	20 FT.	5 FT.	20 FT.	20 FT.	5 FT.
FRONT OF STAND	40 FT. 20 FT.**	40 FT. 20 FT.**	20 FT.	20 FT.	20 FT.	20 FT.

NOTE: Clearance distances are not cumulative

* Measured from the outer edge of the nearest traffic lane.

** If stand is equipped with 135 fusible links which will automatically close all sales doors in case of fire, or is equipped with a wire-mesh screen with openings of not more than one inch which covers not less than 90% of all sales openings.

(5) Retail fireworks stands shall not be located closer than one hundred feet from any motor vehicle dispensing station, retail propane dispensing station, flammable liquid storage, or combustible liquid storage. Retail fireworks stands shall not be located closer than three hundred feet from any bulk storage of flammable or combustible liquid or gas, including bulk plant dispensing areas.

70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21511, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21513 Retailers of fireworks—Stand use and construction. (1) Fireworks may be sold from:

(a) A permanent structure which meets provisions of WAC 212-17-21505(3).

(b) Temporary, stable structures made from wood, metal, fiberglass or other material. Any temporary fireworks retail stand greater than four hundred square feet shall meet the requirements of a permanent structure, except tents or canopies as defined in the International Fire Code.

(c) Tents, canopies, or structures utilizing temporary membrane material. All tents, canopies or temporary membrane materials structures shall be made from fire retardant material or treated with a fire retardant as identified in the International Fire Code. Any tent, canopy or temporary membrane material structure falling within the scope of the International Fire Code shall comply with those requirements. When those requirements are in conflict with other provisions of these rules, the more restrictive provisions shall apply.

(2) Battery powered equipment, electrical equipment and electrical cords which are used in conjunction with a retail fireworks stand or a temporary storage structure or location must be listed by a recognized laboratory and used in accordance with that listing. If electrical power is supplied by an extension cord, the size of the cord, the length of the cord and the amperage and the voltage supplied shall be in compliance with the requirements of the National Electrical Code, current edition. The cord shall be protected as necessary from "drive-over" and other physical damage. No additional permits from a city or county or state official having jurisdiction shall be required for these temporary uses except as specified in subsection (5) of this section.

(3) All heating units shall be listed by a recognized testing laboratory and shall be used in accordance with the listing. Heating sources shall have "tip-over" and temperature

EXCEPTION: 1. Fuel for generators as allowed by WAC 212-17-21513(4).
2. Fuel within the tanks of motor vehicles.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21509, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21509, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21511 Retailers of fireworks—Area around the retail fireworks stand. (1) The minimum areas around the retail fireworks stand specified in WAC 212-17-21509 shall be kept free of accumulation of dry grass, dry brush and combustible debris. No parking shall be permitted within this minimum area.

(2) No motor vehicle or trailer may be parked within twenty feet of a retail fireworks stand except when delivering, loading or unloading fireworks.

(3) Fireworks shall not be discharged within one hundred feet of a retail fireworks stand. Signs reading "NO FIREWORKS DISCHARGE WITHIN 100 FEET" in letters at least two inches high, with a principal stroke of not less than one-half inch, on contrasting background, shall be conspicuously posted on all four sides of the stand.

(4) No smoking shall be allowed within the retail fireworks stand or within the minimum flagged off area. Signs reading "NO SMOKING WITHIN 20 FEET" in letters at least two inches high, with principal stroke of not less than one-half inch, on a contrasting background, shall be conspicuously posted on all four sides of the stand.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21511, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW

overheat protection. All heating devices shall have sealed type elements (i.e., oil filled or water filled radiator type). Open flame heating devices are prohibited.

(4) Generators which use combustible fuel and which are at least twenty feet from the retail fireworks stand or the temporary fireworks storage structure shall be allowed. Generator fuel shall be limited to not more than five gallons and stored at least twenty feet from all stands.

(5) Compliance with the National Electrical Code, current edition, shall be required for all new, permanent electrical installations, including temporary power drops, subject to possible permit fees.

(6) Retail sales of fireworks and other products which are holiday related shall be from buildings used for no other purpose.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21513, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21513, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21515 Retailers of fireworks—Operation of retail fireworks stands. (1) A clear aisle or walkway not less than twenty-four inches wide shall be maintained inside the full length of the structure. Customers shall only be permitted inside a temporary retail fireworks stand that is greater than four hundred square feet and which meets minimum exit requirements of the International Building Code and International Fire Code, as now or amended hereafter.

(2) Each temporary retail fireworks stand must have at least two exits, at least twenty-eight inches in width, located at opposite ends of the structure. Exits must remain unlocked and unobstructed during the hours of operation or when the stand is occupied.

(3) Sleeping inside a retail fireworks stand or an associated temporary fireworks storage facility is prohibited.

(4) The location of the nearest permanently mounted telephone must be posted inside the retail fireworks stand and persons working in the stand shall be informed of that location.

(5) The local emergency telephone number shall be conspicuously posted inside the retail fireworks stand.

(6) Each retail fireworks stand shall be equipped with two approved, pressurized two and one-half gallon water-type fire extinguishers.

(7) No open flames nor any type of open flame equipment shall be allowed in any retail fireworks stand.

(8) Retail fireworks stands shall be secured when unoccupied and not open for business if fireworks are kept in the structure during these times. Retail fireworks stands shall never be locked when occupied. The fireworks may be removed and transferred to a temporary storage structure or location approved as a part of the license and permit.

(9) At least one adult person, eighteen years of age or older shall be present at all times in every retail fireworks stand during the hours of sale to the public and shall be responsible for supervision of the retail fireworks stand and its operation. No person, other than customers, under the age of sixteen shall be allowed within a retail fireworks stand when it is open to the public. Fireworks, except for prepackaged assortments, boxes, or similarly packaged containers of more than one item, whether of the same or different kind,

must be displayed in a manner which prevents the fireworks from being handled by the public or a customer without the direct intervention of the licensee or his or her representative who shall maintain visual contact.

(10) Retail fireworks stands may be required to be inspected by the state fire marshal and/or the local jurisdiction issuing the permit prior to opening for business and other inspections may occur on other days as warranted but there shall be no additional charge for all such inspections.

(11) In order to obtain return of a clean-up bond if required by the local authority having jurisdiction as a condition of permit, the cleanup of debris associated with the retail fireworks activity and the removal of all structures authorized by the license and permit shall occur on or before the last day of the storage period specified in these rules.

(12) Fireworks retailers shall not knowingly sell fireworks to persons under the age of sixteen.

(a) A sign reading "no sale of fireworks to persons under the age of sixteen years. PHOTO ID REQUIRED" in letters at least two inches high, with a principal stroke of not less than one-half inch, on contrasting background, shall be conspicuously posted on the front of each retail fireworks stand.

(b) Sellers shall require proof of age by means of display of a driver's license or photo identification card showing date of birth issued by a public or private school, state, federal or foreign government. No other forms of identification shall be accepted.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21515, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21515, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21517 Retailers of fireworks—Temporary fireworks storage associated with the retail fireworks stand operation. (1) Temporary fireworks storage is not permanent fireworks storage. Temporary fireworks storage is defined as storage associated with retail fireworks sales and may only be from June 13 through July 31 and from December 12 through January 10 of the following year. Permanent fireworks storage is associated with retail or wholesale fireworks activities when the period of time of storage is other than, or longer than that specified for temporary storage. Temporary fireworks storage shall be in accordance with this section. Permanent fireworks storage is subject to the International Fire Code and the International Building Code and local ordinances.

(2) Delivery of fireworks to a location, or storage of fireworks in a facility, not authorized by the license and permit is prohibited. If the approved storage location is outside the jurisdiction issuing the permit, the authority issuing the permit shall notify the appropriate authorities of the jurisdiction in which the storage is to be located.

(3) A temporary fireworks storage facility or a temporary fireworks storage location shall be authorized as a part of a license and permit if it meets the requirements specified herein.

(4) No open flames nor any type of open flame equipment shall be allowed in any temporary fireworks storage structure.

(5) Storage of fireworks authorized by a retail license and permit is legal only during the periods specified in this section.

(6) Fireworks may be stored:

(a) In a locked or secured retail fireworks stand; or

(b) In a locked or secured truck, container, trailer, other vehicle or anything similar which is not less than twenty feet from the retail fireworks stand during hours of retail sales; or

(c) In a locked or secured truck, container, trailer, other vehicle or anything similar which is not less than twenty feet from an inhabited building where the term "inhabited building" is defined as in the International Fire Code; or

(d) In a magazine which meets the minimum standards of Type 4 as prescribed by the International Fire Code, and which is not less than ten feet from an inhabited building where the term "inhabited building" is defined as in the International Fire Code; or

(e) In a locked or secured metal or wooden garage, shed, barn or other accessory building, or anything similar which is not less than:

20 feet from an inhabited building for storage of fireworks for one or two retail stands; or

30 feet from an inhabited building for storage of fireworks for three or more stands.

The term "inhabited building" is defined as in the International Fire Code.

(7) The local authority having jurisdiction may reduce the minimum separation requirements of this section provided that safety of life and property is not diminished.

(8) No cooking is permitted in a retail fireworks stand or in a temporary fireworks storage structure.

(9) Temporary fireworks storage structures may be inspected prior to use and other inspections may occur on other days as warranted. There shall be no additional charge for all such inspections.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21517, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21517, filed 1/23/98, effective 2/23/98.]

WAC 212-17-21519 Retailers of fireworks—Cleanup. (1) At the end of the legal selling period, all fireworks must remain in the retail fireworks stand, temporary storage location authorized by the retail permit or another location approved by the local authority having jurisdiction or his or her designee until returned to the suppliers from which they were obtained, or until transferred to an approved location.

(2) Cities and counties may require a clean-up bond, not to exceed five hundred dollars, as a condition of the permit, to ensure the removal of all structures and debris from the site.

(3) In order to obtain return of a clean-up bond, cleanup of debris associated with the retail fireworks activity and the removal of all temporary structures authorized by the license and permit shall be completed no later than 11:59 p.m., July 15 for the Fourth of July selling period or no later than 11:59 p.m., January 10 for the New Year's selling season.

(4) Failure of the licensee to comply with subsection (3) of this section shall constitute forfeiture of the clean-up bond and the licensee shall be liable for any clean-up costs incurred by the city or county which exceed the amount of the bond.

(5/26/06)

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-21519, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapters 70.77 and 43.43 RCW. WSR 98-04-007, § 212-17-21519, filed 1/23/98, effective 2/23/98.]

PART VI—PYROTECHNIC OPERATOR

WAC 212-17-220 Pyrotechnic operators—General.

Pyrotechnic operators are licensed to conduct public displays of fireworks and articles pyrotechnic. No public display license is issued unless at least one licensed pyrotechnic operator is listed on the application as being responsible for conducting the display.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-220, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-220, filed 11/2/82.]

WAC 212-17-225 Pyrotechnic operators—Application for license. Application for license shall be made on forms prepared by the director of fire protection and shall be accompanied by the annual license fee. Every applicant for a pyrotechnic operators license shall take and pass a written examination administered by the director of fire protection and shall submit evidence attesting to the qualifications and experience of the applicant, including participation in the firing of at least six public displays as an assistant, at least one of which shall have been in the current or preceding year.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-225, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-225, filed 11/2/82.]

WAC 212-17-230 Pyrotechnic operators—Examination, investigation and licensing. Upon receipt of application and license fee, the director of fire protection shall cause an investigation to be made as to the experience and competency of the applicant to conduct and supervise a public display of fireworks in a safe manner. Past experience in assisting in public displays shall be verified with the licensed pyrotechnic operator under whose supervision the applicant assisted. If experience requirements are satisfactory, the director of fire protection shall schedule a written examination for the applicant. A passing score of at least eighty percent shall be attained on the written examination. An applicant failing the written examination may reapply within thirty days to retake the examination. No reexamination shall be taken within thirty days of the previous and no more than two examinations may be taken by the applicant in the same calendar year. Any applicant failing to appear for the written examination at the time and location established or who fails the written examination and fails to reapply within thirty days, or fails the examination on the second attempt, is deemed to have forfeited the license fee. All applicants shall submit to a background check through the Washington state patrol criminal records division. Costs for the background check shall be the responsibility of the applicant. The director of fire protection shall grant or deny the license on the basis of the successful completion of the investigation and examination.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-230, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter

70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-230, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-230, filed 11/2/82.]

WAC 212-17-235 Pyrotechnic operators—Responsibility. The pyrotechnic operator shall be responsible for properly setting up the fireworks public display in accordance with the rules and regulations of the director of fire protection. He/she shall determine that all the mortars, set pieces, are properly installed and that the proper safety precautions have been taken to insure the safety of persons and property. He/she shall have charge of all activities directly related to handling, preparing and firing all fireworks at the public display, including fixing lifting charges and quick match as needed to aerial shells.

The pyrotechnic operator shall refuse to fire any fireworks that are deemed by him/her to be unsafe or where its discharge might jeopardize life or property.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-235, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-235, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-235, filed 11/2/82.]

WAC 212-17-240 Pyrotechnic operators—Observance of laws, rules and regulations. Pyrotechnic operators shall strictly observe the provisions of the state fireworks law and these rules.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-240, filed 11/2/82.]

PART VII—PUBLIC DISPLAY LICENSE

WAC 212-17-245 Public displays of fireworks—General. Persons desiring to hold a public display of fireworks shall secure a license from the director of fire protection and a permit from the governmental agency having jurisdiction. Application for local permit must be made at least ten days in advance.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-245, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-245, filed 11/2/82.]

WAC 212-17-250 Public displays of fireworks—Application, state license. Application for fireworks public display license shall be made on forms provided by the director of fire protection and shall be accompanied by the prescribed license fee.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-250, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-250, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-250, filed 11/2/82.]

WAC 212-17-255 Public displays of fireworks—Type of license. A public display license authorizes the applicant to conduct a public display of fireworks at a given location only. A "general" license for public display of fireworks authorizes public displays of fireworks at any locations or dates within the current year.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-255, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW

70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-255, filed 11/2/82.]

WAC 212-17-260 Public displays of fireworks—General licenses. Application for a "general" license to hold public displays of fireworks shall be accompanied by a surety bond or a certificate evidencing public liability insurance. Such bond and public liability insurance shall be noncancelable except upon fifteen days' written notice by the insurer to the director of fire protection.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-260, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-260, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-260, filed 11/2/82.]

WAC 212-17-270 Public displays of fireworks—Local permit, application for. When applying for permit, applicant shall submit information and evidence to local fire authorities covering the following:

(1) The name of the organization sponsoring the display, if other than the applicant.

(2) The date the display is to be held.

(3) The exact location for the display.

(4) The name and license number of the pyrotechnic operator who is to supervise discharge of the fireworks and the name of at least one experienced assistant.

(5) The number of set pieces, shells (specify single or multiple break), and other items.

(6) The manner and place of storage of such fireworks prior to the display.

(7) A 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, highways, and other lines of communication, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone lines, or other overhead obstruction.

(8) Documentary proof of procurement of:

Surety bond;

Public liability insurance; or

A director of fire protection's "general license" for the public display of fireworks.

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

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-270, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-270, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-270, filed 11/2/82.]

WAC 212-17-275 Public displays of fireworks—Investigation. The officer to whom the application for permit is made shall make, or cause to be made, investigation of site of the proposed display for the purpose of determining if the fireworks will be of such a character or so located as to be hazardous to property or dangerous to any person. He shall also determine whether the provisions of the state fireworks law and these rules and regulations are complied with in the case of a particular display. He shall, in the exercise of reasonable discretion, grant or deny the application subject to reasonable conditions, if any, as he may prescribe, taking into

account locations, parking of vehicles, controlling spectators, storage and firing fireworks, and precautions in general against danger to life and property from fire, explosion, and panic.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-275, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-275, filed 11/2/82.]

WAC 212-17-280 Public displays of fireworks—Permits may not be granted, when. No permit shall be granted for any public display of fireworks where the discharge, failure to fire, faulty firing, or fallout of any fireworks or other objects would endanger persons, buildings, structures, forests, brush, or other grass covered land.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-280, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-280, filed 11/2/82.]

WAC 212-17-285 Public displays of fireworks—Spectators. Spectators at public displays of fireworks shall be restrained behind lines or barriers as designated by local authorities. Only authorized persons and those in actual charge of the display shall be allowed inside these lines or barriers during the unloading, preparation, or firing of fireworks.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-285, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-285, filed 11/2/82.]

WAC 212-17-290 Public displays of fireworks—Pyrotechnic operators. No public display permit shall be granted unless at least two experienced pyrotechnic operators are provided, one of whom shall be a licensed pyrotechnic operator. The licensed operator shall:

(1) Be responsible for and have charge of the display with respect to preparation for transporting, unloading, storing, preparing special effects, set and mechanical pieces, setting mortars and rocket launchers, loading, arming and firing and disposing of all unfired or defective (dud) rockets, missiles and fireworks articles or items;

(2) Be responsible for setting all fireworks including mortars, finale batteries (hedgehogs) and rocket launchers at locations designated by the authority having jurisdiction and take into account wind direction and velocity predicted for the firing time in setting the firing angles. Shells, rockets and/or missiles shall not be permitted to cross or burst above areas occupied by persons;

(3) Be held responsible for acts of his assistants in connection with the display, from delivery to final firing who, through smoking, drinking, carelessness or negligence or any other act, endangers the safety of himself, any other person, or any property.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-290, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-290, filed 11/2/82.]

(5/26/06)

PART VIII—PUBLIC DISPLAYS

WAC 212-17-295 Public display—General. The intent of this chapter shall be to provide requirements for clearances upon which the authority having jurisdiction shall base its approval of an outdoor fireworks display site. Where added safety precautions have been taken, or particularly favorable conditions exist, the authority having jurisdiction shall be permitted to decrease the required separation distances as it deems appropriate, upon demonstration that the hazard has been reduced or the risk has been properly protected. Where unusual or safety-threatening conditions exist, the authority having jurisdiction shall be permitted to increase the required separation distances as it deems necessary.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-295, filed 5/26/06, effective 6/26/06; WSR 05-12-033, § 212-17-295, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-295, filed 11/2/82.]

WAC 212-17-300 Public display—Definitions. For the purpose of this section, the following terms shall have the meanings shown:

(1) Assistant. A person who works under the direction of the pyrotechnic operator in charge to put on an outdoor fireworks display. The duties of an assistant include such tasks as: Loading mortars, spotting the bursting location of aerial shells, tending a ready box, setting up and cleaning the discharge site, igniting fireworks, etc.

(2) Barrage. A rapidly fired sequence of aerial fireworks. Mortars are loaded prior to the display and the aerial shells are chain fused to fire in rapid sequence.

(3) Black match. A fuse made from thread impregnated with black powder and used for igniting pyrotechnic devices.

(4) Boxed finale. A number of mortars grouped closely together and contained by a suitable frame. The mortars are loaded prior to the display and fused for rapid sequence firing.

(5) Break. An individual effect from an aerial shell; generally either color (stars) or noise (salute). Aerial shells can be single-break (having only one effect) or multiple-break (having two or more effects).

(6) Chain fusing. A series of two or more aerial shells fused so as to fire in sequence from a single ignition. Finales and barrages are typically chain fused.

(7) Colored pot. A paper tube containing pyrotechnic composition that produces a colored flame on ignition. Colored pots are used in the construction of ground display pieces.

(8) Discharge site. The area immediately surrounding the mortars used to fire the aerial shells.

(9) Electric match. A device consisting of wires terminating at a high resistance element surrounded with a small quantity of heat sensitive pyrotechnic composition. When a sufficient electric current is passed through the wire circuit, the heat that is generated ignites the pyrotechnic composition, producing a small burst of flame. This flame can be used to ignite a fuse or a lift charge in a fireworks device.

(10) Electrical firing unit. The source of electrical current used to ignite electric matches. Generally the firing unit

will have switches to control the routing of the current to various firework items and shall have test circuits and warning indicators, etc.

(11) Electrical ignition. A technique used to discharge fireworks in which an electric match and source of electric current are used to ignite fuses or lift charges. The electric matches are attached prior to the display, generally with wires connected to an electrical firing unit during the display.

(12) Fallout area. The area over which aerial shells are fired. The shells burst over this area, and unsafe debris and malfunctioning aerial shells fall into this area.

(13) Finale. A rapidly fired sequence (barrage) of aerial fireworks, typically fired at the end of a display. The mortars are loaded prior to the display and the aerial shells are chain fused to fire in rapid sequence.

(14) Finale rack. A row of closely spaced two-inch (51 mm) or three-inch (76 mm) inside diameter, mortars held in a wooden frame. It is similar to a boxed finale.

(15) Fireworks display. An outdoor display of special fireworks performed as entertainment.

(16) Flash powder. Explosive composition intended for use in firecrackers and salutes. Flash powder produces an audible report and a flash of light when ignited. Typical flash powder composition contains potassium chlorate or potassium perchlorate, sulfur or antimony sulfide, and powdered aluminum.

(17) Fusee. A highway distress flare, sometimes used to ignite fireworks at outdoor fireworks displays.

(18) Ground display piece. A pyrotechnic device that functions on the ground (as opposed to an aerial shell which functions in the air). Typical ground display pieces include fountains, roman candles, wheels, "set pieces."

(19) Lance. A thin cardboard tube packed with color-producing pyrotechnic composition used to construct ground display pieces. Lances are mounted on a wooden frame and fused so that ignition of all tubes is simultaneous.

(20) Lift charge. That part of an aerial shell which actually lifts the shell into the air. It usually consists of a black powder charge ignited by a quick match fuse. A delay fuse then ignites the main part of the shell, producing the desired effect.

(21) Manual ignition. A technique used to ignite fireworks using a handheld ignition source such as a fusee or port fire.

(22) Monitor. A person designated by the licensee of the display to keep the audience in the intended viewing area and out of the discharge site and fallout area.

(23) Mortar. A metal or heavy cardboard tube from which aerial shells are fired.

(24) Mortar rack. A strong wooden or metal frame containing closely spaced mortars. Such racks are most often used for barrages and finales, and in electrically ignited displays.

(25) Mortar trough. Above ground structures filled with sand or similar material into which mortars are positioned ready for use in a fireworks display.

(26) Movable ground piece. A ground display piece having movable parts, such as a revolving wheel.

(27) No-fire current. The maximum current that can be applied to an electric match for five seconds at room temperature without the match igniting.

(28) Operator. The licensed pyrotechnician (pyrotechnic operator) responsible for setting up and firing a public fireworks display.

(29) Potential landing area. The area over which shells are fired. The shells will normally burst over this area, but debris and malfunctions will fall into this area; therefore, it must be kept clear of spectators.

(30) Quick match. Black match that is encased in a loose-fitting paper sheath. While exposed black match burns slowly, quick match propagates flame extremely rapidly, almost instantaneously. Quick match is used in fuses for aerial shells and for simultaneous ignition of a number of pyrotechnic devices, such as lances in a ground display piece.

(31) Safety cap. A paper tube, closed at one end, that is placed over the end of the fuse of an aerial shell to protect it from accidental ignition. The cap is not removed until just before firing of the shell.

(32) Salute. A special firework that is designed to produce a loud report.

(33) Salute powder. A pyrotechnic composition which makes a loud report when ignited and constitutes the sole pyrotechnic mixture in a salute.

(34) Shell (aerial). A cylindrical or spherical cartridge containing pyrotechnic composition, a long fuse, and a black powder lift charge. The shells are most commonly three-inch (76 mm) to six inch (152 mm) outside diameter and are fired from mortars. Upon firing, the fuse and lift charge are consumed.

(35) Stars. Small masses of pyrotechnic compounds that are projected from aerial shells, mines, or roman candles.

(36) Theatrical flash powder. A pyrotechnic composition intended for use in theatrical shows. Theatrical flash powder produces a flash of light when ignited. Typical theatrical flash powder burns more slowly than salute powder and may also produce a shower of sparks. Theatrical flash powder is not intended to produce a loud report.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-300, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-300, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-300, filed 11/2/82.]

WAC 212-17-305 Public display—Construction of shells. (1) Shells shall be classified and described only in terms of the inside diameter of the mortar in which they can be safely used (e.g., 3-inch shells are only for use in 3-inch mortars).

(2) Shells shall be constructed so that the difference between the inside diameter of the mortar and the outside diameter of the shell is no less than 1/8 inch (3.2 mm) and no more than 1/4 inch (6.4 mm) for two-inch (51 mm) and three-inch (76 mm) shells or 1/2 inch (12.7 mm) for shells larger than three-inch (76 mm).

(3) Shells shall be labeled with the type of shell, the diameter measurement, and the name of the manufacturer or distributor. Shells shall also carry a warning label complying with 16 C.F.R. 1500.121, 1981.

(4) The label or wrapper of any type of aerial salute shall be conspicuously marked with the word "salute."

(5) Single-break salute shells shall not exceed three inches in diameter or three inches in length (exclusive of the

propellant charge). The maximum quantity of salute powder in such salutes shall not exceed 2.5 ounces (71 g).

(6) For single-break shells containing multiple internal salutes and for multibreak shells, the maximum quantity of salute powder per internal unit shall not exceed 2.5 ounces (71 g) with no more than 5 ounces (142 g) total salute powder in any one shell.

(7) The length of the internal delay fuse and the amount of lift charge shall be sized to insure proper functioning of the shells in their mortars. Quick match fuse shall be long enough to allow not less than 6 inches (152 mm) of fuse to protrude from the mortar after the shell has been properly inserted.

Exception: For electrically ignited displays, the requirement shall be that the length of wire on the electric match shall be long enough that not less than 6 inches (152 mm) protrude from the mortar when the shell has been properly inserted.

(8) The length of exposed black match on a shell shall not be less than 3 inches (76 mm) and the fuse shall not be folded or doubled back under the safety cap.

In order to allow the person igniting the aerial shells to safely retreat, the time delay between igniting the tip of the shell's fuse and the firing of the shell shall not be less than three seconds or more than six seconds.

Exception: For electrically ignited displays, there is no requirement for a delay period.

(9) A safety cap shall be installed over the exposed end of the fuse. The safety cap shall be of a different color than that used for the paper of the fuse.

Exception: For electrically ignited displays, there is no requirement for safety caps except that there shall be no exposed pyrotechnic composition.

[Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-305, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-305, filed 11/2/82.]

WAC 212-17-310 Public display—Storage of shells.

A ready box shall be a portable, weather-resistant container that protects contents from burning debris with a self-closing cover or equivalent means of closure required.

(1) After delivery and prior to the display, all shells shall be separated according to size and their designation as salutes.

(2) Any display fireworks that will be temporarily stored at the display site during the fireworks display shall be stored in ready boxes separated according to size and their designation as salutes. Tarpaulins shall not be considered as ready boxes.

Exception: For electrically ignited displays, or displays where all shells are loaded into mortars prior to the show, there is no requirement for separation of shells according to size, for their designation as salutes, or for the use of ready boxes.

(3) During the performance of an outdoor fireworks display, ready boxes shall be located at a distance not less than twenty-five feet upwind from the mortar placements. If the wind shifts during a display, the ready boxes shall be located again to be upwind from the discharge site.

(5/26/06)

Exception No. 1: Where permitted by the authority having jurisdiction, alternate measures shall be taken.

Exception No. 2: Where there are no shells requiring storage during a display, such as for an electrically ignited display, no ready boxes shall be required.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-310, filed 5/26/06, effective 6/26/06; WSR 05-12-033, § 212-17-310, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-310, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-310, filed 11/2/82.]

WAC 212-17-315 Public display—Installation of mortars. (1) Prior to placement, mortars shall be inspected carefully for defects, such as dents, bent ends, damaged interiors, and damaged plugs. Defective mortars shall not be used.

(2) Mortars shall be positioned and spaced so that shells are propelled away from spectators, over the fallout area, and to afford maximum protection to the shooter and loader. Under no circumstances shall mortars be angled toward the spectator viewing area.

(3) Where mortars are to be reloaded during a display, mortars of various sizes shall not be intermixed. Mortars of the same size shall be placed in groups, and the groups shall be separated from one another.

(4) Mortars of any type six inches in diameter or less shall be permitted to be reloaded and fired up to seven times during a performance.

Exception: There shall be no limit to the number of times a steel mortar six inches or less is permitted to be reloaded.

(5) Mortars shall be positioned to afford protection to the spectators and display personnel.

(6) Mortars shall be inspected before the first shells are loaded to ensure that no water or debris has accumulated in the bottom of the mortar.

(7) Mortars shall be of sufficient strength and durability to fire the aerial shells and be used safely.

(8) Paper, HDPE, and fiberglass mortars are among the types of mortar that shall be permitted to be used.

(9) Cast iron, stove pipe, corrugated culvert, clay, bamboo, and wood shall not be used to make mortars.

(10) Metal mortars shall be either seamed or seamless; however, seamed mortars shall be placed so that all seams face either right or left when viewing the line of mortars.

(11) Steel mortars used to fire single break salute shells shall be buried according to WAC 212-17-321.

(12) Mortars shall be of sufficient length to cause aerial shells to be propelled to safe heights.

(13) The dimension of the inside diameter of the mortar shall be conspicuously painted or otherwise marked on the top of the mortar.

Exception: Designation of the inside diameter shall not be required for outdoor fireworks displays fired under the direct control of a professional fireworks display company.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-315, filed 5/26/06, effective 6/26/06. Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-315, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-315, filed 11/2/82.]

WAC 212-17-317 Public display—Electrical firing unit. (1) At no point shall electrical contact be allowed to occur between any wiring associated with the electrical firing unit and any metal object in contact with the ground.

(2) If the electrical firing unit is powered from AC power lines, some form of line isolation shall be employed (e.g., a line isolation transformer).

(3) The electrical firing unit shall include a key operated switch or other similar device that greatly reduces the possibility that unauthorized or unintentional firings can occur.

Exception: When the electrical firing unit is very small in size, and is only in the immediate area and attached to the wire running to electric matches for the brief duration of the actual firing, there is no requirement for a key operated switch.

(4) Manually activated electrical firing units shall be designed such that at least two positive actions must be taken to apply electric current to an electric match. For example, this might be accomplished with two switches in series, both of which must be operated in order to pass current.

(5) Computer activated electrical firing units shall have some form of "dead-man-switch," such that all firings will cease the moment the switch is released.

(6) If the electrical firing unit has a built-in test circuit, the unit shall be designed to limit the test current (into a short circuit) to 0.05 ampere or to twenty percent of the no-fire current of the electric match, whichever is less. Multitesters such as Volt-Ohm Meters shall not be used for testing unless their maximum current delivering potential has been measured and found to meet these requirements.

(7) When any testing of firing circuits is performed, no person shall be allowed to be present in the immediate area of fireworks that have been attached to the electrical firing unit.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-317, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-317, filed 4/19/90, effective 5/20/90.]

WAC 212-17-320 Public display—Site selection. The intent of this section is to provide minimum clearances between the discharge site and permanent buildings and spectator viewing areas, and recommended guidelines for overall site dimensions and other separation distances. Where unusual conditions exist, dimensions and separations may vary in accordance with the joint agreement of the operator and the local fire official.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-320, filed 11/2/82.]

WAC 212-17-321 Public display—Installation of buried mortars. (1) Mortars shall be buried to a depth of at least two-thirds to three-quarters of their length, either in the ground or in aboveground troughs or drums.

(2) Where paper mortars are to be placed in damp ground or damp sand or are to be in the display, they shall be placed inside a water-resistant bag prior to placement in the ground.

(3) Wherever there is the likelihood of groundwater leaking into the mortar, the mortar shall be placed inside a water-resistant bag prior to placement in the ground.

[Ch. 212-17 WAC p. 18]

(4) Weather-resistant coverings shall be placed over the mouth of mortars wherever there is imminent danger of water accumulating inside the mortar.

(5) Buried mortars shall be placed to prevent them from being driven into the ground or reangled when fired.

Exception: Where a mortar is to be used only once, such as for an electrically fired display, added support shall be optional and shall not be required.

(6) Mortars that are buried in the ground, in troughs, or in drums shall be separated from adjacent mortars by a distance at least equal to the diameter of the mortar.

Exception: Where electrical ignition of unchained aerial shells six inches and less in diameter is used, there is no requirement for separation of mortars.

(7) Mortars in troughs and drums shall be positioned to afford the maximum protection to the shooter.

(8) There shall be a separation distance of at least two inches or half the diameter of the mortar, whichever is greater, between the mortar and the trough or drum.

Exception: Where electrical ignition is used, all mortars placed in drums or troughs shall be spaced at least two inches from the wall of the drum or trough.

(9) If troughs and drums are used, they shall be filled with sand or soft dirt. In no case shall stones or other potentially dangerous debris be present.

(10) Troughs shall be reinforced or braced in a minimum of two places on the sides at intervals no greater than every four feet.

(11) Where possible, the narrow side of the trough shall face the greatest number of spectators and the firing progression shall develop in a direction away from the spectators.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-321, filed 5/26/06, effective 6/26/06.]

WAC 212-17-323 Installation of mortar racks. (1) Single break shells not exceeding six inches in diameter shall be permitted to be fired from securely positioned mortar racks.

(2) Firing of single break shells that are seven or eight inches in diameter shall be permitted from securely positioned mortar racks provided the following conditions are met:

- (a) The mortar is not metallic;
- (b) Electrical or equivalent means of remote ignition is used to fire the shell; and
- (c) The shell is not chain fused to any other shells.

(3) Mortar racks or bundles shall be constructed in a thorough and workmanlike manner to be capable of holding multiple mortars in position during normal functioning.

(4) Mortar racks or bundles that are not inherently stable shall be secured or braced to stabilize them. Stabilization shall be accomplished by using stakes, legs, A-frames, sideboards or equivalent means.

(5) Mortar racks of bundles shall be oriented, angled, or oriented and angled in such a way that maximizes the audience's safety.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-323, filed 5/26/06, effective 6/26/06.]

(5/26/06)

WAC 212-17-325 Public display—Discharge site. (1)

The area selected for the discharge of aerial shells shall be so located that the trajectory of the shells will not come within 25 feet (7.6 m) of any overhead object.

(2) Ground display pieces shall be located at a minimum distance of 75 feet (22.9 m) from spectator viewing areas and parking areas.

Exception: For movable ground pieces, such as wheels, this minimum distance shall be increased to 125 feet (38 m).

(3) Mortars shall be separated from spectator viewing areas, parking areas and occupied residences by at least 70 feet per inch of internal mortar diameter, except as noted.

MINIMUM RADIUS OF DISPLAY SITE FOR OUTDOOR DISPLAY OF FIREWORKS

Mortar Sizes	Minimum Radius of Display Site
Under 3 in.	140 ft.
3 in.	210 ft.
4 in.	280 ft.
5 in.	350 ft.
6 in.	420 ft.
8 in.	560 ft.
10 in.	700 ft.
12 in.	840 ft.
Over 12 in.	As approved by local fire official

(4) Distances from bulk storage areas of materials that have a flammability, explosive, or toxic hazard shall be twice that required in the table.

(5) Distances from health care and detention and correctional facilities shall be at least twice the distances specified in the table.

(6) The potential landing area shall be a large, clear, open area which has been approved by the local fire official.

(7) Spectators, vehicles, or any readily combustible materials shall not be located within the potential landing area during the display.

(8) When mortars are positioned vertically, the mortars shall be placed at the approximate center of the display site.

(9) When aerial shells are to be stored at the discharge site for subsequent loading into mortars during the display, mortars shall be placed at least 1/6, but not more than 1/3, the distance from the center of the display site toward the main spectator area. The mortars shall be angled such that any dud shells will fall at a point approximately equal to the offset of the mortars from the center of the display site but in the opposite direction.

[Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-325, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-325, filed 11/2/82.]

WAC 212-17-327 Requirements for chain fusing. (1)

Wherever more than three shells are to be chain fused, such

as for sequential firing, additional measures shall be required to prevent adjacent mortars from being repositioned in the event that a shell explodes in a mortar, causing it to burst.

(2) For buried mortars, prevention of repositioning shall be accomplished by spacing the mortars with a minimum separation distance of four times their diameter.

(3) For mortars in racks, prevention of repositioning shall be accomplished by mortar racks that have sufficient strength to withstand such a failure successfully.

(4) Chain-fused mortar racks shall be positioned to maximize the placement of racks perpendicular to spectator viewing areas.

(5) Chain-fused mortar racks containing mortars three inches or less in diameter shall be limited to a maximum of fifteen mortars per unit. Racks containing mortars four inches in diameter shall be limited to a maximum of twelve mortars. Racks containing mortars five to six inches in diameter shall be limited to a maximum of ten mortars. Chain-fused racks shall not be used for mortars greater than six inches.

Exception: Boxed finale items containing tubes two and one-half inches or less in diameter only shall not be required to comply with the limitation above.

(6) All chain-fused aerial fireworks devices, including those not in mortar racks such as roman candle batteries and multitube aerial items, shall be positioned securely to prevent tip over or hazardous movement during operation. This shall be accomplished by the use of stakes, racks, sandbags, earth, or equivalent means.

(7) Staple guns shall not be permitted to be used to secure quick match that is connected to aerial shells, mines, or comets.

(8) Chain-fused aerial shells shall not be permitted to be reloaded.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-12-010, § 212-17-327, filed 5/26/06, effective 6/26/06.]

WAC 212-17-330 Public display—Operation. General requirements.

(1) The licensee of the display shall provide adequate fire protection for the display, as required by the local fire official.

(2) The licensee shall consult with the local fire official to determine the level of fire protection and crowd control necessary.

(3) Monitors whose sole duty shall be the enforcement of crowd control shall be located around the display area by the licensee. The local fire and/or police officials shall determine the number of monitors needed and their placement.

(4) Monitors shall be located around the discharge site to prevent spectators or any other unauthorized persons from entering the discharge site. The discharge site shall be so restricted throughout the display and until the discharge site has been inspected after the display. Where practical, fences and rope barriers shall be used to aid in crowd control.

(5) If, in the opinion of local fire and/or police officials or the pyrotechnic operator, lack of crowd control should pose a danger, the display shall be immediately discontinued until such time as the situation is corrected.

(6) The pyrotechnic operator has the primary responsibility for safety. While the operator is allowed to actively par-

ticipate in the firing of the fireworks display, the operator shall not become so busy as to allow interference with attention to safety.

(7) The pyrotechnic operator is responsible to ensure that a sufficient number of assistants are on hand for the safe conduct of the fireworks display. Only the operator and necessary assistants shall be permitted in the discharge area while the display is in progress.

(8) The pyrotechnic operator is responsible to ensure that all assistants are fully trained in the proper performance of their assigned tasks, and that they are knowledgeable of safety hazards.

(9) If, at any time, high winds or unusually wet weather prevail, such that in the opinion of local officials or the pyrotechnic operator a definite danger exists, the public display shall be postponed until weather conditions improve to an acceptable level.

(10) Light snow or mist need not cause cancellation of the display; however, all materials used in the display shall be protected from the weather by suitable means until immediately prior to use.

(11) Display operators and assistants shall use only flashlights or electric lighting for artificial illumination.

(12) No smoking or open flames shall be allowed in the shell storage area as long as shells are present. Signs to this effect shall be conspicuously posted.

[Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-330, filed 4/19/90, effective 5/20/90. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-330, filed 11/2/82.]

WAC 212-17-335 Public display—Firing of shells. (1)

Shells shall be carried from the storage area to the discharge site only by their bodies, never by their fuses.

(2) Shells shall be checked for proper fit in their mortars prior to the display.

(3) When loaded into mortars, shells shall be held by the thick portion of their fuses and carefully lowered into the mortar. At no time shall the operator place any part of his body over the throat of the mortar.

(4) The operator shall be certain that the shell is properly seated in the mortar.

(5) Shells shall not, under any circumstances, be forced into a mortar too small to accept them. Shells that do not fit properly into the mortars shall not be fired; they shall be disposed of according to the supplier's instructions.

(6) Shells shall be ignited by lighting the tip of the fuse with a fusee, torch, portfire, or similar device. The operator shall never place any part of his body over the mortar at any time. As soon as the fuse is ignited, the operator shall retreat from the mortar area.

Exception: Alternatively, electrical ignition may be used.

(7) The safety cap protecting the fuse shall not be removed by the operator responsible for igniting the fuse until immediately before the shell is to be fired.

Exception: Where electrical ignition is used.

(8) The first shell fired shall be carefully observed to determine that its trajectory will carry it into the intended fir-

ing range and that the shell functions over, and any debris falls into, the potential landing area.

(9) The mortars shall be re-angled or reset if necessary at any time during the display.

(10) In the event of a shell failing to ignite in the mortar, the mortar shall be left alone for a minimum of fifteen minutes, then carefully flooded with water. Immediately following the display, the mortar shall be emptied into a bucket of water. The supplier shall be contacted as soon as possible for proper disposal instructions.

Exception: When electrical ignition is used and the firing failure is electrical in nature or the aerial shell was intentionally not fired, the shell may be salvaged by the pyrotechnic operator.

(11) It is the responsibility of the person igniting the aerial shells to detect when a shell does not fire from a mortar. The person shall warn others in the area and shall immediately cause the mortar to be marked to indicate the presence of an unfired aerial shell.

Exception: When electrically firing, it is not necessary to mark the mortar; however, persons entering the area after the fireworks display shall be warned that an unfired shell remains.

(12) Operators shall never attempt to repair a damaged shell nor shall they attempt to dismantle a dry shell. In all such cases, the supplier shall be contacted as soon as possible for proper disposal instructions.

(13) Operators shall never dry a wet shell, lance, or pot for reuse. In such cases, the shell, lance, or pot shall be handled according to disposal procedures.

(14) The entire firing range shall be inspected immediately following the display for the purpose of locating any defective shells. Any shells found shall be immediately doused with water before handling. The shells shall then be placed in a bucket of water. The supplier shall then be contacted as soon as possible for proper disposal instructions.

(15) When fireworks are displayed at night, the licensee shall insure that the firing range is inspected right after the show and at first light the following morning.

(16) The operator of the display shall keep a record, on a form provided by the director of fire protection, of all shells that failed to ignite or fail to function. The form shall be completed and returned to the director of fire protection. Failures shall also be reported to the supplier.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-335, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 90-10-006 (Order 90-02), § 212-17-335, filed 4/19/90, effective 5/20/90; WSR 88-08-027 (Order FPS 88-01), § 212-17-335, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-335, filed 11/2/82.]

WAC 212-17-340 Public display—Ground pieces. (1)

All ground pieces shall be positioned out of the firing range of aerial displays. Mortars shall be positioned so that they do not fire towards any ground pieces.

(2) No dry grass or combustible material shall be located beneath ground pieces. If dry, the area should be thoroughly wet down before the display.

(3) Poles for ground pieces shall be securely placed and firmly braced so that they will not fall over when they function.

(4) Specific instructions from the supplier shall accompany ground pieces. A list of required accessories shall also be supplied.

[Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-340, filed 11/2/82.]

WAC 212-17-342 Public display—Floating vessels and platforms. (1) Floating vessels and floating platforms shall be permitted to be manned or unmanned as long as the pyrotechnic crew remains in control of the site and firing of the display.

(2) Floating vessels and floating platforms shall be held in control at all times, whether self-propelled, controlled by another vessel, or secured by mooring or anchoring.

(3) Floating vessels and floating platforms shall be of sufficient strength and stability to safely allow the firing of the display.

(4) The types of fireworks and placement of the fireworks launch tubes and accompanying equipment shall be such that, when fired, the stability of the site structures and sea-worthiness of the floating vessels or platforms shall not be jeopardized.

(5) Floating vessels and floating platforms that are manned during electrical firing shall have a safety shelter. The safety shelter shall meet the following requirements:

(a) Be of sufficient size to accommodate all personnel present during the actual firing of the display;

(b) Have a minimum of three sides and a roof; and

(c) Have walls and a roof constructed of at least three-quarter-inch plywood or equivalent material.

(6) The minimum size for the floating vessel or floating platform for electrically fired programs that are manned shall be based upon the area for the setup of the display plus the safety area for the safety shelter.

Exceptions: (a) Multishot devices up to three inches in diameter shall be calculated at twice the actual footprint of each device (length x width).
(b) Ground display pieces shall be excluded from the calculations for minimum display set-up area.

The required minimum size for a barge (in square feet) for a particular display shall be determined by the following calculations: Minimum discharge site (in square feet) = sum of (total number of each size mortar times its inside diameter) divided by two.

Example:

A display containing one hundred three-inch shells, fifty four-inch shells, twenty five-inch shells, ten six-inch shells, and five eight-inch shells would require the following minimum display set-up area.

$$\frac{100 \times 3 + 50 \times 4 + 20 \times 5 + 10 \times 6 + 5 \times 8}{2}$$

$$\frac{300 + 200 + 100 + 60 + 40}{2}$$

$$700 / 2 = 350 \text{ square feet}$$

(7) Separation between mortars and safety shelter shall be two feet per inch of diameter of any mortars up to six inches in diameter. For shells larger than six inches in diameter, the minimum separation distance shall be four feet per inch of shell diameter.

Exception: If the safety shelter is constructed of stronger material, then the separation distance between mortars and the shelter shall be permitted to be reduced.

(8) At all times a minimum of two separate egress paths shall be provided. Only one egress path shall be required from protective barricades or safety shelters.

(9) Egress paths shall be unobstructed and free of impediments.

(10) Floating platforms constructed of wood or other combustible material shall be permitted to be used as a fireworks launch vessel.

(11) Manual firing of displays shall be permitted on floating vessels and floating platforms under the following conditions:

(a) All shells shall be preloaded into mortars prior to the display;

(b) Shells shall be limited to single-break and shall not exceed six inches in diameter;

(c) The minimum size of the floating vessel or floating platform shall be twice that required for an electrically fired display;

(d) A protective barrier(s) meeting the strength requirements of three-quarter-inch plywood or equivalent shall be provided. All personnel other than the shooter(s) and operator shall be behind the barrier(s) during the display; and

(e) Electrical firing on the same vessel or platform where manual firing is used shall be in accordance with the requirements for the electrical fired display.

(12) Shells shall be loaded into mortars and in place prior to the start of a display. There shall be no reloading of any material during the display.

(13) All personnel, other than spotters of fire watch, shall be in safety shelters. Spotters and fire watch on a floating platform or floating vessel shall be behind protective barriers during the display with a minimum wall construction of three-quarter-inch plywood or equivalent material.

(14) A U.S. Coast Guard approved personal flotation device (PFD) shall be provided and available for each person on a display launched from floating vessels and floating platforms. Those PFDs shall be properly worn any time the vessel is not moored at the dock. PFDs shall have or include a visual location device.

(15) A watercraft ready and capable of providing rapid emergency response shall be present during the display.

(16) The positions of the shells or mortars on floating vessels and floating platforms from which fireworks are launched shall comply with minimum safety distance requirements as outlined in WAC 212-17-325.

(17) An operational means of communication, such as a cellular/digital telephone, marine radio, or walkie-talkie system, shall be on board manned vessels and platforms from which fireworks are being discharged.

(18) During the display only necessary personnel shall be aboard any floating vessel or floating platform.

(19) Floating vessels and floating platforms shall be free of all nonessential flammable or combustible materials.

(20) Portable power-generation equipment, motorized vehicles, and material-handling equipment deemed necessary for the performance of the display shall be permitted.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 06-06-003, § 212-17-342, filed 2/16/06, effective 3/19/06.]

WAC 212-17-345 Public display—Reports. After every public display, it shall be the responsibility of the licensed pyrotechnic operator in charge of the display to submit a written report to the director of fire protection, within ten days following the display, covering:

- (1) A brief report of any duds, defective shells, with manufacturer's name, and the type and size of shell.
- (2) A brief account of the cause of injury to any person(s) from fireworks and such person's name and address.
- (3) A brief account of any fires caused by fireworks.
- (4) Any violation of the state fireworks law or of these regulations relating to public display fireworks, with special observations on any irregularities on the part of persons present at the firing site.
- (5) The names of pyrotechnic assistants who satisfactorily assisted in all phases of the display, if other than those shown on the license.

Failure to file this report shall constitute grounds for revocation of the operator's current license and/or rejection of his application for his license renewal.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-345, filed 5/24/05, effective 6/24/05. Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-345, filed 3/31/88. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-345, filed 11/2/82.]

PART IX—PROXIMATE DISPLAYS

WAC 212-17-350 Proximate display—Use of proximate before an audience. This section shall provide requirements for the indoor use of pyrotechnics in the performing arts in conjunction with theatrical, musical, or similar productions before a proximate audience, performers, or support personnel. This section shall also apply to any outdoor use of pyrotechnics at distances from the audiences less than those required for public fireworks displays; however, the use of pyrotechnics before a proximate audience shall not be construed as a public display of fireworks as defined in WAC 212-17-295.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-350, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-350, filed 11/2/82.]

WAC 212-17-352 Transportation—By common carrier. No common carrier, as defined in RCW 81.29.010, shall deliver fireworks from an out-of-state shipper to any person or firm within this state without first determining that the person or firm possesses an importer's license, issued by the director of fire protection to receive them, or the shipper has an importer's license, issued by the director of fire protection to ship them into this state.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-352, filed 3/31/88.]

WAC 212-17-355 Proximate display—Proximate permit. (1) No permit shall be granted for the use of articles pyrotechnic or special effects unless at least one state

licensed pyrotechnician is provided to direct and control the display. The permit applicant shall provide the following:

- (a) Name of the person, group, or organization sponsoring the production.
- (b) Date and time of day of the production.
- (c) Exact location of the production.
- (d) Name and license number of the pyrotechnician in charge of firing the pyrotechnic display.
- (e) Qualifications of the pyrotechnic operator.
- (f) Evidence of the permittee's insurance carrier or financial responsibility.
- (g) Number and types of pyrotechnic devices and materials to be used.
- (h) Diagram of the grounds or facilities where the production is to be held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the fallout radius of each pyrotechnic device used in the performance, and the lines behind which the audience shall be restrained.
- (i) Point of the on-site assembly of pyrotechnic devices.
- (j) Manner and place of storage of the pyrotechnic materials and devices.
- (k) Certification that the set, scenery, and rigging materials are inherently flame-retardant or have been treated to achieve flame retardancy.
- (l) Certification that all materials worn by performers in the fallout area during use of pyrotechnic effects shall be inherently flame retardant or have been treated to achieve flame retardancy.

(2) All plans shall be submitted as soon as is possible so that the authority having jurisdiction has time to be present and to notify interested parties. In no event shall such advance notice be less than twenty-four hours.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-355, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-355, filed 11/2/82.]

WAC 212-17-360 Proximate display—Pyrotechnic display plans. (1) Before the performance of any production, the permittee shall submit a plan for the use of pyrotechnics to the authority having jurisdiction. The approved plan shall be kept at the site for review by the authority having jurisdiction.

(2) Any changes or additions to the performance must receive approval of the authority having jurisdiction.

(3) The plan for the use of pyrotechnics shall be made in writing or such other form as is approved by the authority having jurisdiction.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-360, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-360, filed 11/2/82.]

WAC 212-17-362 Storage—By common carrier. No common carrier shall store fireworks while in transit within a building without first obtaining a storage permit from the local fire authority.

[Statutory Authority: Chapter 70.77 RCW. WSR 88-08-027 (Order FPS 88-01), § 212-17-362, filed 3/31/88.]

WAC 212-17-365 Proximate display—Pyrotechnic display demonstrations. A walk through and a representative demonstration of the pyrotechnics shall be approved by the authority having jurisdiction before a permit is approved. (The local authority having jurisdiction may waive this requirement based on past history, prior knowledge, and other factors, provided the local authority having jurisdiction is confident the discharge of pyrotechnics can be conducted safely.)

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-365, filed 5/24/05, effective 6/24/05.]

WAC 212-17-370 Proximate display—Definitions. For the purpose of this section the following definitions are used:

(1) Aerial shell. Usually a cylindrical or spherical cartridge containing pyrotechnic material, a long fuse or electric match wires, and a black powder lift charge.

(2) Airburst. A pyrotechnic device that is suspended in the air to simulate outdoor aerial fireworks shells without producing hazardous debris.

(3) Binary system. A two-component pyrotechnic system.

(4) Black powder. A low explosive consisting of an intimate mixture of potassium or sodium nitrate, charcoal, and sulfur.

(5) Comet. A pellet of pyrotechnic composition that is ignited and propelled from a mortar tube by a charge of black powder.

(6) Concussion effect. A pyrotechnic effect that produces a loud noise and a violent jarring shock for dramatic effect.

(7) Concussion mortar. A device specifically designed and constructed to produce a loud noise and a violent jarring shock for dramatic effect without producing any damage.

(8) Electric match. A device containing a small amount of pyrotechnic material that ignites when a specified electric current flows through the leads. An electric match is used to initiate pyrotechnics. Electric matches are often incorrectly called squibs.

(9) Fallout radius. A line that defines the fallout area of a pyrotechnic device.

(10) Fixed production. Any production performed repeatedly in only one geographic location.

(11) Flare. A pyrotechnic device designed to produce a single source of intense light for a defined period of time.

(12) Flash pot. A device used with flash powder that produces a flash of light and is capable of directing the flash in an upward direction.

(13) Gerb. A cylindrical preload intended to produce a controlled spray of sparks with a reproducible and predictable duration, height, and diameter.

(14) Integral mortar. A preloaded mortar containing pyrotechnic materials and intended for a single firing only.

(15) Lift charge. The composition in a pyrotechnic device that propels the effect into the air when ignited.

(16) Manufacturer. An individual who performs the following:

- (a) Prepares any pyrotechnic material; and
- (b) Loads or assembles any pyrotechnic device.

(17) Mine. A pyrotechnic device, usually a preload, that projects multiple pellets of pyrotechnic material that produce sparks or flame.

(18) Mortar. A tube or pot-like device used to direct and control the effect of the pyrotechnic material.

(19) Proximate audience. An audience closer to pyrotechnic devices than permitted by WAC 212-17-325.

(20) Pyrotechnic device. Any device containing pyrotechnic materials and capable of producing a special effect as defined in the section.

(21) Pyrotechnic material. (Articles pyrotechnic.) A chemical mixture used in the entertainment industry to produce visible or audible effects by combustion, deflagration, or detonation.

(22) Pyrotechnic operator. (Special effects operator.) An individual who has responsibility for pyrotechnic safety and who controls, initiates, or otherwise creates special effects.

(23) Pyrotechnic special effect. A special effect created through the use of articles pyrotechnic materials and devices. (See also special effects.)

(24) Pyrotechnics. Controlled exothermic chemical reactions that are timed to create the effects of heat, gas, sound, dispersion of aerosols, emission of visible electromagnetic radiation, or a combination of these effects to provide the maximum effect from the least volume.

(25) Rocket. A pyrotechnic device that moves by the ejection of matter produced by the internal combustion of propellants.

(26) Saxon. A pyrotechnic device consisting of a tube that rotates around a pivot point to produce a circular shower of sparks.

(27) Special effect. A visual or audible effect used for entertainment purposes, created exclusively by articles pyrotechnic.

(28) Waterfall, falls, park curtain. An effect of a cascade of sparks usually produced by multiple devices fired simultaneously.

(29) Wheel. A pyrotechnic device that rotates on a central axis consisting of multiple gerbs or rockets attached to a framework.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-370, filed 5/24/05, effective 6/24/05.]

WAC 212-17-375 Proximate display—Transportation of pyrotechnic material. All ingredients, pyrotechnic materials, and pyrotechnic devices shall be transported in accordance with all state and local requirements.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-375, filed 5/24/05, effective 6/24/05.]

WAC 212-17-380 Proximate display—Storage of pyrotechnic materials and WAC devices. All pyrotechnic materials and devices shall be stored in accordance with any state and local regulations. Provisions for lockable storage for pyrotechnics, approved by the authority having jurisdiction, shall be provided.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-380, filed 5/24/05, effective 6/24/05.]

WAC 212-17-385 Proximate display—Separation from heat sources. Pyrotechnic materials and devices shall not be stored within fifty feet of any unprotected source of heat or open flame.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-385, filed 5/24/05, effective 6/24/05.]

WAC 212-17-390 Proximate display—Identification of pyrotechnic devices or binary systems. All pyrotechnic products or binary systems used shall have been identified or marked by the manufacturer with the following information:

- (1) Name of the pyrotechnic device or binary system;
- (2) Name, address, and phone number of the manufacturer;
- (3) Statement describing the conditions of use and potential hazards;
- (4) Manufacturer's statement regarding whether the pyrotechnic device or binary system is intended for indoor use.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-390, filed 5/24/05, effective 6/24/05.]

WAC 212-17-395 Proximate display—General fire protection. (1) Two or more fire extinguishers of the proper classification and size as approved by the authority having jurisdiction shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

(2) Fire detection and life safety systems shall not be permitted to be interrupted during the operation of pyrotechnic effects except portions of fire detection and life safety systems may be permitted to be interrupted during the operation of temporarily installed pyrotechnic effects when all of the following conditions are met:

- (a) Approval of the authority having jurisdiction;
- (b) Approval of the owner or owner's representative;
- (c) An approved fire watch capable of directing the operation of all fire detection and life safety systems installed in the building is present.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-395, filed 5/24/05, effective 6/24/05.]

WAC 212-17-400 Proximate display—Firing prerequisites. (1) All pyrotechnic devices shall be mounted in a secure manner to maintain their proper positions and orientations so that, when they are fired, the pyrotechnic effects described in the plan submitted by the permittee are produced.

(2) Pyrotechnic devices shall be mounted so that no fallout from the device endangers human lives, results in personal injury, or damages property.

(3) Before firing the pyrotechnic device, the pyrotechnic operator or designated performance security staff shall prevent unauthorized entry into the area where the special effects are to occur.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-400, filed 5/24/05, effective 6/24/05.]

WAC 212-17-405 Proximate display—Firing safeguards. Firing systems shall not be left unattended while connected to loaded pyrotechnic devices.

[Ch. 212-17 WAC p. 24]

Pyrotechnic devices shall be fired only when the area where the effect is to occur is in clear view of the pyrotechnic operator, or an assistant who is in direct communication with the operator.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-405, filed 5/24/05, effective 6/24/05.]

WAC 212-17-410 Proximate display—Separation distances from audience. (1) Each pyrotechnic device fired during a performance shall be separated from the audience by at least fifteen feet, but not by less than twice the fallout radius of the device.

(2) Concussion mortars shall be separated from the audience by at least twenty-five feet.

(3) There shall be no glowing or flaming particles within ten feet of the audience.

(4) No smoking is permitted within twenty-five feet of the area where pyrotechnics are being handled or fired.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-410, filed 5/24/05, effective 6/24/05.]

WAC 212-17-415 Proximate display—Performance. (1) The pyrotechnic effect operator shall advise all performers and support personnel that they are exposed to a potentially hazardous situation when performing or otherwise carrying out their responsibilities in the vicinity of a pyrotechnic effect.

(2) Immediately before any performance, the pyrotechnic operator shall make a final check of wiring, position, hookups, and pyrotechnic devices to ensure that they are in proper working order. The pyrotechnic operator also shall verify safety distances.

(3) When pyrotechnics are fired, the quantity of smoke developed shall be controlled so as not to obscure the visibility of exit signs or paths of egress.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-415, filed 5/24/05, effective 6/24/05.]

WAC 212-17-420 Proximate display—After the performance. (1) The pyrotechnic operator shall verify that all pyrotechnic devices have been fired. Any unfired materials or devices shall either be fired or disposed of in accordance with the manufacturer's recommendations.

(2) Life safety and other systems that have been disarmed or disengaged shall be restored to normal operating condition as soon as the likelihood of false alarms from the use of pyrotechnics has passed.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-420, filed 5/24/05, effective 6/24/05.]

PART X—TRANSPORTATION

WAC 212-17-425 Transportation—General. Licensees are authorized to transport the class and quantity of fireworks for which they have a license to possess from the point of acceptance from a licensed source to an approved storage facility or use site. Transportation shall be in accordance with the regulations of the United States Department of Transportation and the laws of the state of Washington governing the transportation of Division 1.3G and 1.4G explosives.

(5/26/06)

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-425, filed 5/24/05, effective 6/24/05.]

WAC 212-17-430 Transportation—By common carrier. No common carrier, as defined in RCW 81.29.010, shall deliver fireworks from an out-of-state shipper to any person or firm within this state without first determining that the person or firm possesses an importer's license, issued by the director of fire protection to receive them, or the shipper has an importer's license, issued by the director of fire protection to ship them into this state.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-430, filed 5/24/05, effective 6/24/05.]

PART XI—STORAGE

WAC 212-17-435 Storage—General. Storage of fireworks shall be free from any condition which increases or may cause an increase of the hazard or menace of fire or explosion or which may obstruct, delay or hinder, or may become the cause of any obstruction, delay or hindrance, to the prevention or extinguishment of fire.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-435, filed 5/24/05, effective 6/24/05.]

WAC 212-17-440 Storage—Explosive safety. Any person storing fireworks shall have a license for the possession (manufacturer, wholesaler, importer, retailer, display) and, in addition, a permit from the local fire authority for the storage site. Storage shall be in accordance with requirements of the local fire official, who may use the safety practices in the appendix of these rules as guidelines in approving the storage permit.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-440, filed 5/24/05, effective 6/24/05.]

WAC 212-17-445 Storage—By common carrier. No common carrier shall store fireworks while in transit within a building without first obtaining a storage permit from the local fire authority.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-445, filed 5/24/05, effective 6/24/05.]

PART XII—FINES AND PENALTIES

WAC 212-17-450 Fines and penalties. (1) These rules establish the basis and process by which citations and penalties will be determined and issued for violations of chapters 70.77 RCW and 212-17 WAC.

(2) Each violation(s) is classified and penalty(ies) assessed according to violation type and instance.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-450, filed 5/24/05, effective 6/24/05.]

WAC 212-17-455 Definitions. (1) "Citation" means a document issued by the office of the state fire marshal pursuant to chapter 70.77 RCW to issue a civil penalty for a violation of RCW 70.77.480 through 70.77.520. A citation may include, but is not limited to, a description of the violation(s) and a notice of civil penalty assessment.

(5/26/06)

(2) "Formal hearing" is a hearing before a hearings officer where the laws, rules, and evidence are presented, considered, and a proposed opinion issued.

(3) "Hazard" means a condition which could result in fire loss injury or damage to a person or property.

(4) "Hearings request" means the written request for a formal hearing to contest a civil penalty.

(5) "Instance" means the number of times a person has been cited. These are identified as 1st, 2nd, and 3rd instances.

(6) "Local fire authority" means the local fire official having authority.

(7) "Person" means one or more individuals, legal representatives, partnerships, joint ventures, associations, corporations (whether or not organized for profit), business trusts, or any organized group of persons and includes the state, state agencies, counties, municipal corporations, school districts, and other public corporations.

(8) "Type" means the classification of violation, i.e., least, minimal, moderate, or severe. These are identified as Type I, II, III, or IV.

(9) "Violation types" shall mean:

(a) "Least violation" means a Type I Violation which poses very little hazard or threat;

(b) "Minimal violation" means a Type II Violation which poses a minor hazard or threat;

(c) "Moderate violation" means a Type III Violation which poses a significant hazard or threat;

(d) "Severe violation" means a Type IV Violation which poses a substantial hazard or threat.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-455, filed 5/24/05, effective 6/24/05.]

WAC 212-17-460 General rules. (1) These rules establish civil penalty criteria for Types I, II, III, and IV Violations and the instances for each type of violation.

(2) These rules apply to persons who violate the requirements of chapters 70.77 RCW and/or chapter 212-17 WAC.

(3) Each separate instance of noncompliance with chapters 70.77 RCW and/or 212-17 WAC shall be considered a separate violation.

(4) Each day that a violation continues shall be considered a separate violation.

(5) The distribution, sale, use, manufacture, or possession of any amount of illegal fireworks is prohibited and subject to citation and penalty.

(6) In addition to the issuance of citations and penalties under these rules, the state fire marshal and local fire marshal acting in accordance with chapters 70.77 RCW and/or 212-17 WAC:

(a) May confiscate any amount of illegal fireworks; and

(b) May confiscate other fireworks possessed by persons violating chapters 70.77 RCW and/or 212-17 WAC.

(7) In addition to the issuance of citations, penalties, and the confiscation of fireworks, the state fire marshal may also revoke, suspend, or deny any fireworks license provided for under chapter 70.77 RCW to any person who fails to pay a penalty(ies) assessed under these rules.

(8) The penalty for each violation shall range from \$0 to \$1,000 per day and occurrence.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-460, filed 5/24/05, effective 6/24/05.]

WAC 212-17-465 Violation types and penalty assessments. (1) Penalties shall be assessed according to violation type.

- (2) The types of violations are:
 - (a) Least—Type I;
 - (b) Minimal—Type II;
 - (c) Moderate—Type III;
 - (d) Severe—Type IV.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-465, filed 5/24/05, effective 6/24/05.]

WAC 212-17-470 Violation assessment at the local level. (1) Local fire authorities shall have the authority to issue civil penalty citations for violations of chapters 70.77 RCW and/or 212-17 WAC.

(2) A citation may impose a penalty or provide a warning.

(3) The citation shall be forwarded to the office of the state fire marshal within ten days of issuance. Where possible, each citation shall be accompanied by a copy of the issuing authority's written report, inspection sheets, evidence receipt, or any other forms that are completed during the process of issuing citations.

(4) The office of the state fire marshal shall issue a notice of civil penalty based upon the information contained in the citation and any accompanying documentation.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-470, filed 5/24/05, effective 6/24/05.]

WAC 212-17-475 Hearings. (1) Any person may request a hearing regarding the assessment of a civil penalty.

(2) Hearings requests shall be filed with the office of the state fire marshal within fourteen days from the date of the service of civil penalty.

(3) Any person who requests a hearing shall be entitled to a hearing.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-475, filed 5/24/05, effective 6/24/05.]

WAC 212-17-480 Informal conference. (1) The office of the state fire marshal will provide an opportunity for a person to informally discuss a civil penalty that has been assessed against them.

(2) An informal conference may be requested prior to a request for a formal hearing; however, a formal hearing shall be requested within twenty-eight days of the date of service of the notice of civil penalty.

(3) The request for an informal conference may be in any form; and

(a) Shall be addressed to the office of the state fire marshal; and

(b) Shall clearly state the subject to be discussed.

(c) An informal conference concerning civil penalties shall not exceed the fourteen days allowed for filing a formal hearing request.

(d) If the parties agree, an informal conference may be held by telephone.

(e) As the result of an informal conference, the state fire marshal may, for good cause, amend, withdraw, or reduce a civil penalty.

[Ch. 212-17 WAC p. 26]

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-480, filed 5/24/05, effective 6/24/05.]

WAC 212-17-485 Formal hearing. (1) A person may request a formal hearing at any time before or after an informal conference, as long as the twenty-eight day period for requesting a hearing has not lapsed.

(2) The office of the state fire marshal will arrange for a hearings officer to conduct the formal hearing.

(3) The office of the state fire marshal will set a date, time, and location for the formal hearing.

(4) The office of the state fire marshal will notify, by letter, the person requesting the hearing (or their designated representative) of the date, time, location and the hearings officer conducting the formal hearing.

(5) The hearings officer will hear the case and render a proposed opinion and order including recommended findings of fact and conclusions of law, according to chapter 34.05 RCW.

(6) The formal hearing shall be conducted as follows:

(a) The hearings officer will act as an impartial third party.

(b) It is not necessary for the person that requested the hearing to be represented by legal council.

(c) Testimony shall be taken under oath.

(d) All evidence of a type commonly relied upon by a reasonably prudent person in the conduct of their serious affairs is admissible.

(e) Hearsay evidence is admissible if it meets statutory standards for being reliable and trustworthy.

(7) The proposed opinion and order shall be reviewed by the state fire marshal and, if accepted, finalized and issued as a final order.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-485, filed 5/24/05, effective 6/24/05.]

WAC 212-17-490 Penalty adjustment. (1) The assessment of adjustment of penalties for amounts other than those set by chapter 70.77 RCW shall be done only by the state fire marshal through a hearings process either formally or informally.

(2) The assessment of penalties for not being in conformance with chapters 70.77 RCW and/or 212-17 WAC may be made only after considering:

(a) The gravity and magnitude of the violation;

(b) The person's previous record;

(c) Such other considerations as the state fire marshal may consider appropriate.

(3) During a formal hearing or informal conference, the office of the state fire marshal may modify or adjust the citation, cited violations, or penalties assessed in order to meet the requirements of these rules and to ensure uniformity and consistency in their application statewide.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-490, filed 5/24/05, effective 6/24/05.]

WAC 212-17-495 Payment of civil penalty. (1) The penalty shall be paid to the office of the state fire marshal immediately after an order assessing a civil penalty becomes final by operation of law or on an appeal.

(5/26/06)

(2) The attorney general may bring an action in the name of the Washington state patrol, through the director of fire protection, in the superior court of Thurston County or of any county in which the violator may do business to collect any penalty imposed under chapter 70.77 RCW.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-495, filed 5/24/05, effective 6/24/05.]

WAC 212-17-500 Type I violations. (1) Type I violations are subject to penalties ranging from a warning to seventy-five dollars per day depending upon the instance and in accordance with WAC 212-17-390.

(2) Examples of Type I violations include, but are not limited to:

- (a) Failure to post "no smoking" signs at the retail fireworks stand;
- (b) Failure to provide required fire extinguishing equipment at the retail fireworks stand;
- (c) Failure to maintain a clean, orderly area within twenty feet of the retail sales area;
- (d) Failure to keep a copy of the retail fireworks stand license at the retail stand while the stand is open;
- (e) Possession of illegal fireworks worth less than fifty dollars.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-500, filed 5/24/05, effective 6/24/05.]

WAC 212-17-505 Type II violations. (1) Type II violations are subject to penalties ranging from a warning to one hundred fifty dollars per day depending upon the instance and in accordance with WAC 212-17-390.

(2) Examples of Type II violations include, but are not limited to:

- (a) Failure to have a person eighteen years of age or over inside the retail stand during business hours;
- (b) Possession of more than fifty dollars but less than one hundred dollars of illegal fireworks;
- (c) Discharge of less than fifty dollars worth of illegal fireworks;
- (d) Smoking or the ignition of fireworks within fifty feet of any fireworks stand.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-505, filed 5/24/05, effective 6/24/05.]

WAC 212-17-510 Type III violations. (1) Type III violations are subject to penalties ranging from seventy-five dollars to two hundred fifty dollars per day depending upon instance and in accordance with WAC 212-17-390.

(2) Examples of Type III violations include, but are not limited to:

- (a) Possession of one hundred dollars or more of illegal 1.4G fireworks.
- (b) Sale of any amount of illegal 1.4G fireworks without the necessary licenses issued by the office of the state fire marshal and/or, where required, a permit from the local authority having jurisdiction.
- (c) The purchase of fireworks by a Washington state retail fireworks stand operator from an unlicensed wholesaler.

(5/26/06)

(d) Manufacturing or altering fireworks without the necessary state license and local permit.

(e) Storage of any amount of 1.3G fireworks without the necessary license issued by the office of the state fire marshal and a permit from the local authority having jurisdiction.

(f) Use of fireworks in a manner that presents a danger to life or property.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-510, filed 5/24/05, effective 6/24/05.]

WAC 212-17-515 Type IV violations. (1) Type IV violations are subject to penalties ranging from one hundred twenty-five dollars to one thousand dollars per day depending on instance and in accordance with WAC 212-17-390.

(2) Examples of Type IV violations include, but are not limited to:

- (a) Possession of fifty dollars or more of 1.3G fireworks without the necessary license issued by the office of the state fire marshal and the required permit from the local authority having jurisdiction;
- (b) Conducting a public fireworks display without the necessary license issued by the office of the state fire marshal and the required permit from the local authority having jurisdiction;
- (c) Purchase of any amount of 1.3G fireworks without the necessary licenses issued by the office of the state fire marshal and/or, where required, the local authority having jurisdiction;
- (d) Conducting a public display using illegal or unauthorized fireworks;
- (e) Intentional or indiscriminate use of fireworks which injure someone or cause more than two hundred fifty dollars in property damage;
- (f) Wholesale sales of fireworks without a valid Washington state wholesalers license;
- (g) Importing, or causing to be imported, fireworks into the state of Washington without a valid Washington state importers license.

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-515, filed 5/24/05, effective 6/24/05.]

WAC 212-17-900 Appendix. This appendix is not a part of this rule but is included to provide guidelines, based on nationally-recognized standards, for use by licensees in establishing safe practices involving the manufacture or storage of fireworks and for use by local fire officials in determining compliance with safety standards for the purpose of issuing permits for fireworks manufacture or storage.

In addition to the definitions in chapter 70.77 RCW and this rule, the following definitions apply to this appendix:

Barricade. A natural or artificial barrier that will effectively screen a magazine, building, railway, or highway from the effects of an explosion in a magazine or building containing explosives. It shall be of such height that a straight line from the top of any sidewall of a building or magazine containing explosives to the cave line of any magazine, or building, or to a point twelve feet above the center of a railway or highway, will pass through such natural or artificial barrier.

Natural barricade. Natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures that require protection cannot be seen from the

[Ch. 212-17 WAC p. 27]

magazine or building containing explosives when the trees are bare of leaves.

Artificial barricade. An artificial mound or revetted wall of earth of a minimum thickness of three feet.

Breakaway construction. A general term which applies to the principle of purposely providing a weak wall so that the explosive effects can be directed and minimized. The term "weak wall" as used in this code refers to a weak wall, weak wall and roof, or weak roof.

The term "weak wall" is used in a relative sense as compared to the construction of the entire building. The design strength of a "weak wall" will vary as to the building construction, as well as to the type and quantity of explosive or pyrotechnic materials in the building. The materials used for "weak wall" construction are usually light gauge metal, plywood, hardboard or equivalent lightweight material, and the material is purposely selected to minimize the danger from flying missiles. Method of attachment of the weak wall shall be such as to aid the relief of blast pressure and fireball.

Fireworks plant. Means all lands, and buildings thereon, used for or in connection with the manufacture or processing of fireworks. It includes storage buildings used with or in connection with plant operation.

Highway. Means any public street, public alley or public road.

Inhabited building. Means a building or structure regularly used in whole or part as a place of human habitation. The term "inhabited building" shall also mean any church, school, store, passenger station, airport terminal for passengers, and any other building or structure where people are accustomed to congregate or assemble, but excluding any building or structure occupied in connection with the manufacture, transportation, and storage of explosive materials or fireworks.

Magazine. Means any building or structure, other than a manufacturing building, meeting the requirements specified in chapter 3 of this code.

Manufacture of fireworks. Means the preparation of fireworks mixes and the loading and assembling of all fireworks, except pyrotechnic display items made on-site by qualified personnel for immediate use when such operation is otherwise lawful.

Mixing building. Means any building used primarily for mixing and blending pyrotechnic composition, excluding wet sparkler mixes.

Motor vehicle. Means any self-propelled passenger vehicle, truck, tractor, semitrailer, or truck-full trailer used for the transportation of freight over public highways.

Nonprocess building. Means office buildings, warehouses, and other fireworks plant buildings where no fireworks or explosive compositions are processed or stored.

Person. Means any individual, firm, copartnership, corporation, company, association, joint stock association, and including any trustee, receiver, assignee, or personal representative thereof.

Process building. Means any mixing building, any building in which pyrotechnic or explosive composition is pressed or otherwise prepared for finishing and assembling, or any finishing and assembling building, including a building used for preparation of fireworks for shipment. If a pyrotechnic or explosive composition while in the state of processing is

stored in a process building, the building is classified as a process building. See also storage building.

Public conveyance. Means any vehicle carrying passengers for hire.

Pyrotechnic composition. Means a chemical mixture which on burning and without explosion produces visible or brilliant displays or bright lights, or whistles.

Railway. Means any steam, electric, diesel electric or other railroad or railway which carries passengers for hire on the particular line or branch in the vicinity where explosives or fireworks are stored or where fireworks manufacturing buildings are situated.

Screen type barricade. Means any of several barriers for containing embers and debris from fires and deflagrations in process buildings that could cause fires and explosions in other buildings. Screen type barricades are constructed of metal roofing, one-quarter-inch and one-half-inch mesh screen or equivalent material. A screen type barricade extends from the floor level of the donor building to such height that a straight line from the top of any side wall of the donor building to the cave line of the acceptor building will go through the screen at a point not less than five feet from the top of the screen. The top five feet of the screen are inclined at an angle of between 30 and 45 degrees, toward the donor building.

Squib. Means a device containing a small quantity of ignition compound in contact with a bridge wire.

Storage building. Means any building, structure, or facility in which Division 1.4G, 1.5G or 1.6G fireworks in any state of processing, or finished Division 1.4G, 1.5G, or 1.6G fireworks are stored, but in which no processing or manufacturing is performed.

Warehouse. Means any building or structure used exclusively for the storage of materials, except fireworks or combustible or explosive compositions used to manufacture fireworks.

PART I MANUFACTURING OPERATIONS

1. General

11. All fireworks plants shall comply with the requirements of this section except that those plants that meet all of the conditions of the following paragraphs a, b and c need not comply with Articles 2 and 6:

a. Making only customized fireworks not for general sale.

b. Having not more than five pounds of explosive composition, including not more than one-half pound of initiating explosive, in a building at one time.

c. All explosive and pyrotechnic compositions are removed to an appropriate storage magazine at the end of each work day.

2. Building site security

21. All fireworks plants shall be completely surrounded by a substantial fence having a minimum height of six feet. All buildings, except office buildings in which no processing or storage is permitted, must be located within the fence. All openings in the fence shall be equipped with suitable gates which shall be kept securely locked at all times, except when in actual use; except that the main gate of the plant may be

left open during the regular hours of plant operation while in plain view of and under observation by authorized responsible employees or guards. Conspicuous signs indicating "WARNING—NO SMOKING—NO TRESPASSING" shall be posted along the plant fence at intervals not to exceed 500 feet.

22. No person other than authorized employees or representatives of departments of federal, state, or political subdivisions of the state governments having jurisdiction over the establishment shall be allowed in any fireworks plants, except by special permission secured from the plant office.

3. Separation distances

31. All process buildings shall be separated from inhabited buildings, public highways and passenger railways in accordance with Table 1.

32. The separation distance between process buildings shall be in accordance with Table 2.

33. Separation distances of nonprocess buildings from process buildings and magazines shall be in accordance with Table 2.

34. Separation of magazines containing black powder or salutes classified as Division 1.3G fireworks from inhabited buildings, highways, and other magazines containing black powder or salutes classified as Division 1.3G fireworks shall be in accordance with Table 3.

4. Building construction

41. Process buildings, except buildings in which customers' orders are prepared for shipment, shall embody break-away construction. The exterior of process buildings constructed after this Code is adopted shall be constructed of materials no more combustible than painted wood.

42. No building shall have a basement or be more than one story high. Interior wall surfaces and ceilings of buildings shall be smooth, free from cracks and crevices, noncombustible, and with a minimum of horizontal ledges upon which dust may accumulate. Wall joints and openings for wiring and plumbing shall be sealed to prevent entry of dust. Floors and work surfaces shall not have cracks or crevices in which explosives or pyrotechnic compositions may lodge.

43. Mixing and pressing buildings shall have conductive flooring, properly grounded.

44. The number and location of exits in buildings in which fireworks are being processed shall comply with a, b and c.

a. From every point in every undivided floor area of more than one hundred square feet there shall be at least two exits accessible in different directions. Where building floors are divided into rooms, there shall be at least two ways of escape from every room of more than one hundred square feet; toilet rooms need have only one exit and shall be so located that the points of access thereto are away from or suitably shielded from fireworks processing areas.

b. Exits shall be so located that it will not be necessary to travel more than twenty-five feet from any point to reach the nearest exit. The routes to the exits shall be unobstructed.

c. Exit doors shall open outward, and shall be capable of being pressure-actuated from the inside.

5. Heat, light, electrical equipment

51. No stoves, exposed flames, or electric heaters may be used in any part of a building except in a boiler room, machine shop, office building, pumphouse, or lavatory in which the presence of fireworks, fireworks components, or flammable liquids are prohibited. Heating shall be by means of steam, indirect hot air radiation, hot water, or any other means approved by local authorities. Unit heaters, located inside buildings that at any time contain explosive or pyrotechnic composition, shall be equipped with motors and switches suitable for use in Class II, Division 1 locations.

52. Where artificial lighting is required in fireworks processing buildings it shall be by electricity. Temporary or loose electrical wiring shall not be used. Extension lights are prohibited except that during repair operations approved portable lighting equipment may be used after the area has been cleared of all pyrotechnic or explosive composition and after all dust has been removed by washing down.

53. All wiring in process buildings shall be in rigid metal conduit or be Type MI cable. The wiring, lighting fixtures, and switches shall comply with the requirements for Class II, Division 1 locations in Article 502 of the National Electrical Code, 1981 Edition.

54. Wiring, switches, and fixtures in storage buildings shall comply with the requirements for Class II, Division 2 locations in Article 502 of the National Electrical Code, 1981 Edition.

55. All presses and other mechanical devices shall be properly grounded.

56. A master switch shall be provided at the point where electric current enters the plant, which will, upon being opened, immediately cut off all electric current to the plant, except that to emergency circuits such as a supply to a fire pump or emergency lighting.

6. Maximum building occupancy and quantities of explosive or pyrotechnic compositions permitted

61. The number of occupants in each process building and magazine shall be limited to that number necessary for the proper conduct of those operations.

Note: This requirement is for purposes of minimizing personnel exposure and is distinct from any requirement on maximum building occupancy that may be in the local building code.

62. The maximum number of occupants permitted in each process building and magazine shall be posted in a conspicuous location.

63. No more than 500 pounds of pyrotechnic and explosive composition shall be permitted at one time in any mixing building or any building in which pyrotechnic and explosive compositions are pressed or otherwise prepared for finishing and assembling.

64. No more than 500 pounds of pyrotechnic and explosive composition shall be permitted in a finishing and assembling building at one time.

7. Fire, explosion prevention

71. All buildings shall be kept clean, orderly, and free from accumulation of dust or rubbish. Powder or other explosive or pyrotechnic materials, when spilled, shall be immediately cleaned up and removed from the building.

72. Rags, combustible, pyrotechnic or explosive scrap, and paper shall be kept separate from each other and placed in approved marked containers. All waste and reject hazardous material shall be removed from all buildings daily and removed from the plant at regular intervals and destroyed by submersion in water or by burning in a manner acceptable to local authorities.

73. No smoking or carrying of lighted pipes, cigarettes, cigars, matches, lighters, or open flame, is permitted within the plant fence; except that smoking may be permitted in office buildings or buildings used exclusively as lunchrooms or rest rooms and in which the presence of fireworks or any explosive composition is prohibited. Authorized smoking locations shall be so marked, contain suitable receptacles for cigarette and cigar butts and pipe residue, and contain at least one serviceable fire extinguisher suitable for use on Class A fires. Persons whose clothing is contaminated with explosives, pyrotechnic, or other dangerous materials to the degree that may endanger the safety of personnel shall not be permitted in smoking locations.

74. Matches, cigarette lighters or other flame-producing devices shall not be brought into any process building or magazine.

75. No employee or other person shall enter or attempt to enter any fireworks plant with liquor or narcotics in his possession, or while under the influence of liquor or narcotics, or partake of intoxicants or narcotics or other dangerous drugs while in a fireworks plant.

76. All persons working at or supervising the operations in fireworks mixing and pressing buildings shall be provided with, and wear, cotton working uniforms. In addition, conductive shoes and cotton socks shall be required for all Division 1.3G fireworks operations and all mixing, pressing, loading, and matching related to Division 1.4G, 1.5G or 1.6G fireworks. Facilities for changing into these uniforms, and safekeeping for the employees' street clothes shall be provided. The uniforms shall be frequently washed, to prevent accumulation of explosive or other pyrotechnic compounds, and shall not be worn outside the fireworks plant. Washing and shower facilities for employees shall be provided. All persons working in or supervising the operations in a process building shall wear protective clothing and eye protection as needed. All persons working in or supervising mixing areas shall wear respirators when the situation dictates their need.

77. Each fireworks plant shall have an employee designated as safety officer. All employees of a fireworks plant, upon commencing employment and at least annually thereafter, shall be given formal instruction by this safety officer, regarding proper methods and procedures in fireworks plants and safety requirements and procedures for handling explosives, pyrotechnics and fireworks.

78. In areas where there is a danger of ignition of materials by sparks, properly maintained and nonferrous safety hand tools shall be used.

79. In no case shall oxidizers such as nitrates, chlorates, or perchlorates be stored in the same building with combustible powdered materials such as charcoal, gums, metals, sulfur, or antimony sulfide.

8. Testing fireworks

81. Testing of fireworks and components of fireworks shall be performed in an area set aside for that purpose and located at a safe distance, considering the nature of the materials being tested, from any plant building or other structure.

9. Fire extinguishers; emergency procedures

91. Fire extinguishers shall be provided in all buildings except those in which pyrotechnic mixtures are exposed. The number and location of extinguishers shall be in accordance with the requirements of the local fire official.

92. Emergency procedures shall be formulated for each plant which will include personnel instruction in any emergency that may be anticipated. All personnel shall be made aware of an emergency warning signal.

93. Emergency procedures shall include instruction in the use of portable fire extinguishers and instructions on the type of fires on which they may and may not be used.

a. The employees shall be told that if a fire is involving or is in danger of spreading to pyrotechnic mixtures, they are to leave the building at once and follow prescribed procedures for alerting other employees.

b. Extinguishers may be used on fires involving ordinary combustible materials, if the fire can be fought and extinguished without exposing pyrotechnic mixtures.

PART II

STORAGE OF DIVISION 1.3G FIREWORKS

1. General provisions

11. Division 1.3G fireworks shall be stored in magazines that meet the requirements of this section.

12. Division 1.3G fireworks shall be stored in magazines unless they are in process of manufacture, being physically handled in the operating process, being packaged or being transported.

13. Magazines required by this section shall be constructed in accordance with Articles 2 and 3.

14. Division 1.3G fireworks that are bullet-sensitive, shall be stored in Type 1, 2, or 3 magazines.

a. Black powder, and Division 1.3G fireworks that are not bullet-sensitive shall be stored in a Type 1, 2, 3, or 4 magazine.

15. Magazines containing black powder shall be separated from inhabited buildings, passenger railways, and public highways, and other magazines in accordance with Table 3.

16. Magazines containing Division 1.3G fireworks shall be separated from inhabited buildings, passenger railways and public highways in accordance with Table 1.

17. Magazines containing Division 1.3G fireworks shall be separated from other magazines and from fireworks plant buildings by barricades or screen-type barricades and the distances from other magazines and process buildings shall be in accordance with Table 2.

2. Construction of magazines—General

21. Magazines shall be constructed in conformity with the provisions of this section or may be of substantially equivalent construction.

22. The ground around magazines shall be graded in such a manner that water will drain away from the magazines.

23. Magazines requiring heat shall be heated by either hot water radiant heating within the magazine building, or air directed into the magazine building over either hot water or low pressure steam (15 psig maximum) coils located outside the magazine building.

24. The magazine heating systems shall meet the following requirements:

1. The radiant heating coils within the building shall be installed in such a manner that the fireworks containers cannot contact the coils and air is free to circulate between the coils and the fireworks.

2. The heating ducts shall be installed in such a manner that the hot air discharge from the duct is not directed against the fireworks or fireworks containers.

3. The heating device used in connection with a magazine shall have controls that prevent the ambient building temperature from exceeding 130°F.

4. The electric fan or pump used in the heating system for a magazine shall be mounted outside and separate from the wall of the magazine and shall be grounded.

5. The electric fan motor and the controls for an electrical heating device used in heating water or steam shall have overloads and disconnects, which comply with the I.C.C. Electrical Code, 2003. All electrical switch gear shall be located a minimum distance of 25 feet from the magazine.

6. The heating source for water or steam shall be separated from the magazine by a distance of not less than 25 feet when electric and 50 feet when fuel-fired. The area between the heating unit and the magazine shall be cleared of all combustible materials.

7. The storage of fireworks and fireworks containers in the magazine shall allow uniform air circulation so temperature uniformity can be maintained throughout the stored materials.

25. When lights are necessary inside the magazine, electric safety flashlights or electric safety lanterns shall be used.

a. The authority having jurisdiction may authorize interior lighting of special design for magazines provided that adequate safety is maintained.

26. When ventilation is required in a magazine, sufficient ventilation shall be provided to protect the stored materials in storage for the specific area in which the magazine is located. Stored materials shall be so placed in the magazine as not to interfere with ventilation and shall be stored so as to prevent contact with masonry walls or with any steel or other ferrous metal by means of a nonsparking lattice or equivalent lining.

3. Construction of magazines

31. Type 1 magazine. A Type 1 magazine shall be a permanent structure such as a building or an igloo that is bullet-resistant, fire-resistant, theft-resistant, weather-resistant, and ventilated.

a. Walls. Examples of wall construction considered suitable for Type 1 magazines are:

1. Hollow masonry block construction with 8-inch blocks having the hollow spaces filled with well-tamped dry sand or a well-tamped cement/sand mixture.

2. Brick or solid cement block construction 8 inches thick.

3. Wood construction covered with 26-gauge metal having 3/4-inch plywood or wood sheathing with a 6-inch space between the exterior and interior sheathing and the space between the sheathing filled with well-tamped dry sand or well-tamped cement/dry sand mixture, with not less than 1-to-8 ratio of cement to sand.

4. Fourteen-gauge metal construction lined with 4 inches of brick, solid cement block or hardwood; or filled with 6 inches of sand.

b. Doors. Examples of door construction considered suitable for Type 1 magazines are:

1. Steel plate 3/8-inches thick lined with four layers of 3/4-inch tongue and groove hardwood flooring.

2. Metal plate not less than 14 gauge lined with four inches of hardwood.

c. Roof. The roof of a Type 1 magazine may be constructed of metal not less than 14 gauge; or 3/4-inch wood sheathing covered by metal not less than 26 gauge or other noncombustible roofing material. All exposed wood on the exterior including the eaves shall be protected by metal not less than 26 gauge.

d. Ceiling. Where the natural terrain around a Type 1 magazine makes it possible to shoot a bullet through the roof at such an angle that a bullet could strike the explosives stored in the magazine, then either the roof or the ceiling shall be of bullet-resistant construction. A bullet-resistant ceiling may be constructed at the eave line, covering the entire area of the magazine except the space necessary for ventilation. Examples of ceiling construction that are considered bullet-resistant are:

1. A tray having a depth of not less than 4 inches of sand.

2. A hardwood ceiling not less than 4 inches thick.

e. Foundation. The foundation may be of masonry, wood, or metal and shall be completely enclosed except for openings to provide cross ventilation. A wooden foundation enclosure shall be covered on the exterior with not less than 26-gauge metal.

f. Floor. The floor may be constructed of wood or other suitable floor materials. Floors constructed of materials that may cause sparks shall be covered with a surface of nonsparking material or the packages of explosives shall be placed on pallets of nonsparking material. Magazines constructed with foundation ventilation shall have at least a 2-inch air space between the side walls and the edge of the floor.

g. Ventilation. Type 1 magazines shall be ventilated to prevent dampness and heating of stored explosives. Ventilating openings shall be screened to prevent the entrance of sparks. Ventilators in side walls shall be offset or shielded. Magazines having foundation and roof ventilators with the air circulating between the side walls and the floor and between the side walls and the ceiling shall have constructed a wooden lattice lining or equivalent to prevent the packages of explosives from being stacked against the side walls and blocking the air circulation.

h. Locks. Each door of a Type 1 magazine shall be equipped with two mortise locks; or with two padlocks fastened in separate hasps and staples; or with a combination of mortise lock and a padlock; or with a mortise lock that requires two keys to open; or a three-point lock, or equivalent type of lock that secures a door to the frame at more than one point. Padlocks shall be steel having at least five tumblers

and at least a 7/16-inch-diameter case-hardened shackle. All padlocks shall be protected by steel hoods that are installed in a manner to discourage insertion of bolt cutters. Doors that are secured by a substantial internal bolt do not require additional locking devices. Hinges and hasps shall be securely fastened to the magazine and all locking hardware shall be secured rigidly and directly to the door frame.

32. Type 2 magazine. A Type 2 magazine shall be a portable or mobile structure, such as a box, skid-magazine, trailer or semitrailer, that is fire-resistant, theft-resistant, weather-resistant, and ventilated. It shall also be bullet-resistant except when used for indoor storage.

a. Type 2 outdoor box magazine

1. The sides, bottom, top and covers or doors of Type 2 outdoor box magazines shall be constructed of metal, lined with at least 4 inches of hardwood or equivalent bullet-resistant material. The floor shall be of wood or other suitable nonsparking floor materials. Floors constructed of ferrous metal shall be covered with a surface of nonsparking material. Magazines with top opening shall have a lid that overlaps the sides by at least 1 inch when in closed position.

2. Type 2 outdoor box magazines shall be supported in such a manner as to prevent the floor from having direct contact with the ground. Small magazines shall be securely fastened to a fixed object to prevent theft of the entire magazine.

3. Hinges, hasps, locks, and locking hardware shall conform to the provisions for Type 1 magazines as specified in paragraph 31(h).

b. Type 2 vehicular magazine

1. The sides and roof shall be not less than 20 gauge metal. The walls shall be lined with 4 inches of brick or solid cement block or hardwood, or 6 inches of sand, or other bullet-resistant material. The exposed interior walls may be lined with wood. The roof shall be protected by a bullet-resistant ceiling meeting the construction requirements for bullet-resistant ceilings in paragraph 31(d).

2. The doors shall be of metal, lined with not less than 4 inches of hardwood, or a metal exterior with a hardwood inner door not less than 4 inches in thickness.

3. The floors shall be in accordance with the provisions for Type 1 magazines in paragraph 31(f).

4. The doors shall be locked with at least two padlocks for each door opening, either two padlocks on the exterior door fastened on separate hasps and staples or one padlock on the exterior door and one padlock on the interior door. The padlocks shall be steel having at least five tumblers and at least a 7/16-inch-diameter case-hardened shackle. The padlocks need not be protected by steel hoods. Hinges and hasps shall be securely fastened to the magazine and all locking hardware shall be secured rigidly and directly to the door frame. When unattended, vehicular magazines shall have wheels removed, or be locked with a kingpin locking device, or otherwise be effectively immobilized.

c. Type 2 indoor magazine

1. An indoor Type 2 magazine shall be provided with substantial wheels or casters to facilitate removal from a building in an emergency. The cover for the magazine shall have substantial strap hinges and a means for locking. The magazine shall be kept locked except during the placement or removal of explosive materials with one five-tumbler padlock or equivalent.

2. Type 2 indoor magazines shall be painted red and shall bear lettering in white, on top, at least three inches high, "Explosives—Keep fire away."

3. Type 2 indoor magazines constructed of wood shall have sides, bottoms, and covers or doors constructed of 2-inch hardwood and shall be well braced at corners. The magazines shall be covered with sheet metal of not less than 20 gauge. Nails exposed to the interior of such magazines shall be countersunk.

4. Type 2 indoor magazines constructed of metal shall have sides, bottoms, and covers or doors constructed of 12-gauge metal and shall be lined inside with a nonsparking material. Edges of metal covers shall overlap sides at least 1 inch.

33. Type 3 magazine. Type 3 magazines shall be portable structures that are bullet-resistant, fire-resistant, theft-resistant, and weather-resistant.

a. Type 3 magazines shall be equipped with a five-tumbler padlock.

b. Type 3 magazines constructed of wood shall have sides, bottoms, and covers or doors constructed of 4-inch hardwood and shall be well braced at corners. They shall be covered with sheet metal of not less than 20 gauge. Nails exposed to the interior of such magazines shall be countersunk.

c. Type 3 magazines constructed of metal shall have sides, bottoms, and covers or doors constructed of 12-gauge metal and shall be lined inside with a nonsparking material. Edges of metal covers shall overlap sides at least 1 inch.

34. Type 4 magazine. A Type 4 magazine shall be a permanent, portable, or mobile structure, such as a building igloo, box, semitrailer, or other mobile container that is fire-resistant, theft-resistant, and weather-resistant.

a. Type 4 outdoor magazine

1. A Type 4 outdoor magazine shall be constructed of masonry, wood covered with metal, fabricated metal or a combination of these materials. The doors shall be metal or wood covered with metal. Permanent magazines shall be constructed in accordance with those provisions for Type 1 magazines pertaining to: Foundations (paragraph 31(e)); ventilation (paragraph 31(g)); and locks, hinges, hasps and locking hardware (paragraph 31(h)). Vehicular Type 4 magazines shall be in accordance with the provisions for Type 2 vehicular magazines for locks, hinges, hasps and locking hardware (paragraph 32(b)4) and shall be immobilized when unattended (paragraph 32(b)2).

b. Type 4 indoor magazine

1. A Type 4 indoor magazine shall be in accordance with the provisions of a Type 2 indoor magazine (paragraph 32(d)).

4. Magazine operations

41. Storage within magazines

a. Magazines shall be in the charge of a competent person at all times who shall be at least 21 years of age, and who shall be held responsible for the enforcement of all safety precautions. The competent person shall keep an up-to-date inventory of the contents of magazines.

b. All magazines containing Division 1.3G fireworks or black powder shall be opened and inspected at intervals of not greater than three days to determine whether there has

been an unauthorized entry or attempted entry into the magazines; or to determine whether there has been unauthorized removal of the magazines or the contents of the magazines.

c. Magazine doors shall be kept locked, except during the time of placement and removal of stocks or during inspection.

d. Safety rules covering the operations of magazines shall be posted on the interior of the magazine door.

e. Corresponding grades and brands shall be stored together in such a manner that brands and grade marks show. All stocks shall be stored so as to be easily counted and checked.

f. Containers shall be piled in a stable manner.

g. Containers of Division 1.3G fireworks shall be laid flat with top side up.

h. Black powder in shipping containers, when stored in magazines with other explosives, shall be segregated. Black powder stored in kegs shall be stored on ends, bungs down, or on side, seams down.

i. Open containers shall be securely closed before being returned to a magazine. Only fiberboard containers may be opened in the magazine. No container without a closed lid may be stored in the magazine.

j. Wooden packages of Division 1.3G fireworks or black powder shall not be unpacked or repacked in a magazine nor within 50 feet of a magazine or in close proximity to other explosive materials.

k. Tools used for opening containers of Division 1.3G fireworks or black powder shall be constructed of nonsparking material, except that metal slitters may be used for opening fiberboard containers. A wood wedge and a fiber, rubber or wood mallet shall be used for opening or closing wood containers of explosives.

l. Magazines shall be used exclusively for the storage of Division 1.3G fireworks and black powder. Metal tools other than nonferrous transfer conveyors, shall not be stored in any magazine containing Division 1.3G fireworks or black powder. Ferrous metal conveyor stands may be stored in the magazine when the stands are protected by a coat of paint.

m. Magazine floors shall be regularly swept, kept clean, dry, free of grit, paper, empty used packages and rubbish. Brooms and other cleaning utensils shall not have any spark-producing metal parts. Sweepings from floors of magazines shall be properly disposed of, in accordance with the instructions of the manufacturer.

n. When magazines need interior repairs, all fireworks and black powder shall be removed therefrom and the floors cleaned.

o. In making exterior magazine repairs, when there is a possibility of causing sparks or fire, the fireworks and black powder shall be removed from the magazine.

p. Fireworks and black powder removed from a magazine under repair shall either be placed in another magazine or placed a safe distance from the magazine, where they shall be properly guarded and protected until repairs have been completed. Upon completion of repairs, the fireworks and black powder shall be promptly returned to the magazine.

42. Miscellaneous safety precautions

a. Smoking, matches, open flames, spark-producing devices and firearms (except firearms carried by authorized

guards) shall not be permitted inside of or within 50 feet of magazines.

b. The land surrounding magazines shall be kept clear of brush, dried grass, leaves and similar combustibles for a distance of at least 25 feet.

c. Combustible materials shall not be stored within 50 feet of magazines.

d. Property upon which magazines are located shall be posted with signs reading "Explosives—Keep off." Such signs shall be located so as to minimize the possibility of a bullet's traveling in the direction of the magazine if anyone shoots at the sign.

PART III

STORAGE OF DIVISION 1.4G FIREWORKS

1. General provisions

11. Division 1.4G fireworks shall be kept in storage buildings that meet the requirements of this section.

12. Division 1.4G fireworks shall be stored in storage buildings unless they are in process of manufacture, being physically handled in the operating process, being used, packaged, or being transported.

13. Storage buildings required by this section shall be constructed in accordance with Article 2.

14. Storage buildings containing Division 1.4G fireworks shall be separated from inhabited buildings, passenger railways and public highways, in accordance with Table 1.

15. Storage buildings containing Division 1.4G fireworks shall be separated from other storage buildings, magazines and fireworks plant buildings in accordance with Table 2.

2. Construction of storage buildings

21. Storage buildings for Division 1.4G fireworks may be a building, igloo, box, trailer, semi-trailer or other mobile facility. They shall be constructed to resist fire from an outside source and to be weather-resistant and theft-resistant.

22. Storage buildings for Division 1.4G fireworks shall be vented, or in the alternative, shall be constructed in such a manner that venting will occur by yielding of weaker parts of the structure under pressure generated by burning fireworks.

23. All storage buildings shall be equipped with locking means for all openings.

24. All doors shall open outward and all exits must be clearly marked. Aisles and exit doors shall be kept free of any obstructions.

25. Only dust-ignition proof type electrical fixtures shall be used and wiring shall comply with Section 502-4(b) of the National Electrical Code. No wall receptacles are permitted. All light fixtures must have guards.

26. An outside master electrical switch shall be provided at each storage building where electricity is used.

3. Storage building operations

31. Storage.

a. Storage buildings shall be in the charge of a competent person at all times who shall be at least 21 years of age, and who shall be held responsible for the enforcement of all safety precautions.

b. Doors shall be kept locked, except during hours of operation.

c. Safety rules covering the operations of storage buildings shall be posted.

d. Containers shall be piled in a stable manner.

e. Division 1.4G fireworks shall be stored in their original packaging and in unopened cases or cartons so as to take advantage of the insulation provided by such packaging; provided, however, unpackaged fireworks which have been returned by retailers may be temporarily retained in bins for repackaging.

f. Tools used for opening containers of Division 1.4G fireworks shall be constructed of nonsparking material, except that metal slitters may be used for opening fiberboard containers.

g. Storage buildings shall be regularly swept, kept clean, dry, free of grit, paper, empty used packages and rubbish. Brooms and other cleaning utensils shall not have any spark-producing metal parts. Sweepings shall be properly disposed of.

h. When storage buildings need interior repairs, all fireworks shall be removed therefrom and the interior cleaned.

i. In making exterior storage building repairs, when there is a possibility of causing sparks of fire, the fireworks shall be removed from the storage building.

j. Fireworks removed from a storage building under repair shall either be placed in another storage building or placed a safe distance from the storage building, where they shall be properly guarded and protected until repairs have been completed. Upon completion of repairs, the fireworks shall be promptly returned to the storage building.

32. Miscellaneous safety precautions

a. Smoking, matches, open flames, spark-producing devices and firearms (except firearms carried by authorized guards) shall not be permitted inside of or within 25 feet of storage buildings.

b. The land surrounding storage buildings shall be kept clear of brush, dried grass, leaves and similar combustibles for a distance of at least 25 feet, unless equivalent protection is provided.

c. Smoking shall not be permitted in storage buildings or within 25 feet of the storage building. There shall be conspicuously posted signs with the words "FIREWORKS—NO SMOKING" in letters not less than four inches high.

PART IV

QUANTITY-DISTANCE SEPARATION TABLES

Table 1. Minimum Separation Distances of Fireworks Processing Buildings, Fireworks Magazines, and Fireworks Storage Buildings from Inhabited Buildings, Passenger Railways, and Public Highways.¹

Net Weight of Fireworks ²	Distance from Passenger Railways and Public Highways ^{3,4,5}		Distance from Inhabited Buildings ^{3,4,5}	
	Division 1.4G Fireworks	Division 1.3G Fireworks ⁵	Division 1.4G Fireworks	Division 1.3G Fireworks ⁵
	Pounds	Feet	Feet	Feet
100	25	200	50	200
200	30	200	60	200
400	35	200	70	200

Net Weight of Fireworks ²	Distance from Passenger Railways and Public Highways ^{3,4,5}		Distance from Inhabited Buildings ^{3,4,5}	
	Division 1.4G Fireworks	Division 1.3G Fireworks ⁵	Division 1.4G Fireworks	Division 1.3G Fireworks ⁵
	Pounds	Feet	Feet	Feet
600	40	200	80	208
800	45	200	90	252
1,000	50	200	100	292
2,000	58	230	115	459
3,000	62	296	124	592
4,000	65	352	130	704
5,000	68	400	135	800
6,000	70	441	139	882
8,000	73	509	140	1,018
10,000	75	565	150	1,129
15,000	80	668	159	1,335
20,000	83	745	165	1,490
30,000	87	863	174	1,725
40,000	90	953	180	1,906
50,000	93	1,030	185	2,060
60,000	95	1,095	189	2,190
80,000	98	1,205	195	2,410
100,000	100	1,300	200	2,600
150,000	105	1,488	209	2,975
200,000	108	1,638	215	3,275
250,000	110	1,765	220	3,530

Note 1: This table does not apply to separation distances at fireworks manufacturing buildings, and magazines for storage of Division 1.4G fireworks and storage buildings for Division 1.4G fireworks. Those separation distances are given in Table 2.

Note 2: Net weight is the weight of all pyrotechnic and explosive composition and fuse only.

Note 3: See definitions of "passenger railways," "public highways" and "inhabited buildings."

Note 4: Division 1.3G fireworks processing buildings and Division 1.3G fireworks magazines, including buildings located on the property of a fireworks plant shall be separated from passenger railways, public highways, and inhabited buildings by a minimum distance of 200 feet except that the separation from hospitals, schools and bulk storages of flammable liquids or flammable gases shall be by a minimum distance of 500 feet.

Note 5: The separation distances shall apply to all Division 1.3G fireworks except salutes. The separation distances in Table 3 shall apply for salutes. When salutes and Division 1.3G fireworks are stored in the same magazine, the net weight of salute is applied to Table 3 and the net weight of Division 1.3G fireworks, including the net weight of salutes, is applied to Table 1. Whichever distance is the greater shall determine the separation distances of the magazine.

Note 6: All distances in Table 1 are to be applied with or without barricades or screen-type barricades.

Table 2.
Minimum Separation Distances at
Fireworks Manufacturing Plants

Net Weight Fireworks ¹	Distance of Magazines and Storage Buildings from Process Buildings and Nonprocess Buildings ^{2,5}		Distance Between Process Buildings and Between Process and Nonprocess Buildings ²		Net Weight Fireworks ¹ Pounds 10,000	Distance of Magazines and Storage Buildings from Process Buildings and Nonprocess Buildings ^{2,5}		Distance Between Process Buildings and Between Process and Nonprocess Buildings ²	
	Division 1.4G ³ Fireworks ³	Division 1.3G ⁴ Fireworks ⁴	Division 1.4G ³ Fireworks ³	Division 1.3G ⁴ Fireworks ⁴		Division 1.4G ³ Fireworks ³	Division 1.3G ⁴ Fireworks ⁴	Division 1.4G ³ Fireworks ³	Division 1.3G ⁴ Fireworks ⁴
	Feet	Feet	Feet	Feet		Feet	Feet	Feet	Feet
	Feet	Feet	Feet	Feet		Feet	Feet	Feet	Feet
						54	129	82	423
100	30	30	37	57	Note 1: Net weight is the weight of all pyrotechnic and explosive compositions and fuse only. Note 2: For the purposes of applying the separation distances in Table 2 a process building includes a mixing building, any building in which pyrotechnic or explosive compositions is pressed or otherwise prepared for finishing and assembling, and any finishing and assembling building. A nonprocess building means office buildings, warehouses, and other fireworks plant buildings where no fireworks or explosive compositions are processed or stored. Note 3: Distances apply with or without barricades or screen-type barricades. Note 4: Distances apply only with barricades or screen-type barricades. Note 5: Distances include those between magazines, between storage buildings, between magazines and storage buildings, between magazines or storage buildings from process buildings and nonprocess buildings.				
200	30	35	37	69					
400	30	44	37	85					
600	30	51	37	97					
800	30	56	37	105					
1,000	30	60	37	112					
2,000	30	76	37	172					
3,000	35	87	48	222					
4,000	38	95	60	264					
5,000	42	103	67	300					
6,000	45	109	72	331					
8,000	50	120	78	382					

Table 3. Minimum Separation Distances of Magazines for Storage of Black Powder or Division 1.3G Salutes from Inhabited Buildings, Highways, and Other Magazines for Storage of Black Powder or Division 1.3G Salutes.

American Table of Distances for Storage of Explosives as Revised and Approved by The Institute of Makers of Explosives—November 5, 1971. Distances in feet.

Explosives		Inhabited Buildings		Public Highways Class A to D		Passenger Railways— Public Highways with Traffic Volume of more than 3,000 Vehicles/Day		Separation of Magazines	
Pounds Over	Pounds Not Over	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded
2	5	70	140	30	60	51	102	6	12
5	10	90	180	35	70	64	128	8	16
10	20	110	220	45	90	81	162	10	20
20	30	125	250	50	100	93	186	11	22
30	40	140	280	55	110	103	205	12	24
40	50	150	300	60	120	110	220	14	28
50	75	170	340	70	140	127	254	15	30
75	100	190	380	75	150	139	278	16	32
100	125	200	400	80	160	150	300	18	36
125	150	215	430	85	170	159	318	19	38
150	200	235	470	95	190	175	350	21	42
200	250	255	510	105	210	189	378	23	46
250	300	270	540	110	220	201	402	24	48
300	400	295	590	120	240	221	442	27	54
400	500	320	640	130	260	238	476	29	58
500	600	340	680	135	270	253	506	31	62
600	700	355	710	145	290	266	532	32	64
700	800	375	750	150	300	278	556	33	66

Fireworks

Explosives		Inhabited Buildings		Public Highways Class A to D		Passenger Railways— Public Highways with Traffic Volume of more than 3,000 Vehicles/Day		Separation of Magazines	
Pounds Over	Pounds Not Over	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded
800	900	390	780	155	310	289	578	35	70
900	1,000	400	800	160	320	300	600	36	72
1,000	1,200	425	850	165	330	318	636	39	78
1,200	1,400	450	900	170	340	336	672	41	82
1,400	1,600	470	940	175	350	351	702	43	86
1,600	1,800	490	980	180	360	366	732	44	88
1,800	2,000	505	1,010	185	370	378	756	45	90
2,000	2,500	545	1,090	190	380	408	816	49	98
2,500	3,000	580	1,160	195	390	432	864	52	104
3,000	4,000	635	1,270	210	420	474	948	58	116
4,000	5,000	685	1,370	225	450	513	1,026	61	122
5,000	6,000	730	1,460	235	470	546	1,092	65	130
6,000	7,000	770	1,540	245	490	573	1,146	68	136
7,000	8,000	800	1,600	250	500	600	1,200	72	144
8,000	9,000	835	1,670	255	510	624	1,248	75	150
9,000	10,000	865	1,730	260	520	645	1,290	78	155
10,000	12,000	875	1,750	270	540	687	1,374	82	164
12,000	14,000	885	1,770	275	550	723	1,446	87	174
14,000	16,000	900	1,800	280	560	756	1,512	90	180
16,000	18,000	940	1,880	285	570	786	1,572	94	188
18,000	20,000	975	1,950	290	580	813	1,626	98	196
20,000	25,000	1,055	2,000	315	630	876	1,752	105	210
25,000	30,000	1,130	2,000	340	680	933	1,866	112	224
30,000	35,000	1,205	2,000	360	720	981	1,962	119	238
35,000	40,000	1,275	2,000	380	760	1,026	2,000	124	248
40,000	45,000	1,340	2,000	400	800	1,068	2,000	129	258
45,000	50,000	1,400	2,000	420	840	1,104	2,000	135	270
50,000	55,000	1,460	2,000	440	880	1,140	2,000	140	280
55,000	60,000	1,515	2,000	455	910	1,173	2,000	145	290
60,000	65,000	1,565	2,000	470	940	1,206	2,000	150	300
65,000	70,000	1,610	2,000	485	970	1,236	2,000	155	310
70,000	75,000	1,655	2,000	500	1,000	1,263	2,000	160	320
75,000	80,000	1,695	2,000	510	1,020	1,293	2,000	165	330
80,000	85,000	1,730	2,000	520	1,040	1,317	2,000	170	340
85,000	90,000	1,760	2,000	530	1,050	1,344	2,000	175	350
90,000	95,000	1,790	2,000	540	1,080	1,368	2,000	180	360
95,000	100,000	1,815	2,000	545	1,090	1,392	2,000	185	370
100,000	110,000	1,835	2,000	550	1,100	1,437	2,000	195	390
110,000	120,000	1,855	2,000	555	1,110	1,479	2,000	205	410
120,000	130,000	1,875	2,000	560	1,120	1,521	2,000	215	430
130,000	140,000	1,890	2,000	565	1,130	1,557	2,000	225	450
140,000	150,000	1,900	2,000	570	1,140	1,593	2,000	235	470
150,000	160,000	1,935	2,000	580	1,160	1,629	2,000	245	490
160,000	170,000	1,965	2,000	590	1,180	1,662	2,000	255	510
170,000	180,000	1,990	2,000	600	1,200	1,695	2,000	265	530
180,000	190,000	2,010	2,010	605	1,210	1,725	2,000	275	550
190,000	200,000	2,030	2,030	610	1,220	1,755	2,000	285	570

Fireworks

212-17-900

Explosives		Inhabited Buildings		Public Highways Class A to D		Passenger Railways— Public Highways with Traffic Volume of more than 3,000 Vehicles/Day		Separation of Magazines	
Pounds Over	Pounds Not Over	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded	Barri- caded	Unbarri- caded
200,000	210,000	2,055	2,055	620	1,240	1,782	2,000	295	590
210,000	230,000	2,100	2,100	635	1,270	1,836	2,000	315	630
230,000	250,000	2,155	2,155	650	1,300	1,890	2,000	335	670
250,000	275,000	2,215	2,215	670	1,340	1,950	2,000	360	720
275,000	300,000	2,275	2,275	690	1,380	2,000	2,000	385	770

[Statutory Authority: Chapters 43.43 and 70.77 RCW. WSR 05-12-033, § 212-17-900, filed 5/24/05, effective 6/24/05. Statutory Authority: RCW 70.77.250 and chapter 48.48 RCW. WSR 82-22-068 (Order FM 82-10), § 212-17-900, filed 11/2/82.]