

South Carolina Department of Labor, Licensing and Regulation

Office of State Fire Marshal

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State Fire Marshal's Rules and Regulations*

*Effective June 24, 2016

SOUTH CAROLINA CODE OF REGULATIONS

CHAPTER 71 DEPARTMENT OF LABOR, LICENSING AND REGULATION

ARTICLE 8 OFFICE OF STATE FIRE MARSHAL



NOTE: This is a reformatted version of the final regulations originally published in the <u>South Carolina State Register in Vol. 40, Issue 6</u> intended to be more user friendly. If any problems (dead hyperlinks) are found, please <u>email</u> the Office of State Fire Marshal's Chief Engineer or call (803) 896-9800.

SUBARTICLE 1 FIRE PREVENTION AND LIFE SAFETY

71-8300. FIRE PREVENTION AND LIFE SAFETY.

(Statutory Authority: 1976 Code Sections 23-9-60, 39-41-260, 40-82-70)

71-8300.1. General.

A. Title. These regulations shall be known as the State Fire Marshal's Rules and Regulations.

B. Intent.

- 1. The purpose of these regulations is:
 - a. to safeguard to a reasonable degree, life and property from fire, explosion, dangerous conditions, natural disasters, acts of terrorism, and other hazards associated with the construction, alteration, repair, use, and occupancy of buildings, structures, or premises, and
 - **b.** to provide safety to fire fighters and emergency responders during emergency situations.
- 2. These regulations shall be the minimum standards required by the Office of State Fire Marshal (OSFM) for fire prevention and life safety in South Carolina for all buildings and structures and shall not be waived.

C. Applicability.

- 1. These regulations shall apply to state, county, municipal, and private buildings, structures, or premises unless excluded by these regulations or state statute.
- **2.** All buildings, structures, or premises shall be constructed, altered, or repaired in conformance with these regulations.
- **3.** All equipment or systems in a building, structure, or premise shall be constructed, installed, altered, or repaired in conformance with these regulations.
- **4.** These regulations become effective immediately upon the publication as final regulations in the <u>South Carolina State Register</u>.
- **5.** These regulations shall not conflict with any state statute, code, or ordinance adopted pursuant to *S.C.* Code Ann. Section <u>6-9-5</u> et. seq., 1976, as amended, by any municipality or political subdivision. In the event of a conflict, such statute, code, or ordinance shall apply.
- **6.** These regulations shall not apply to:
 - a. Buildings constructed, or occupied exclusively as one and two-family dwellings, unless amended by these or other state regulations. Conversion of such buildings to another use that is not regulated under the IRC but is regulated under the IBC is considered a change of occupancy, and such buildings must comply with the applicable provisions of the IBC for such a change of use.

D. Existing Buildings.

- 1. Unless addressed by requirements in these regulations, adopted codes, or state statutes that are indicated to be applicable to them, *existing buildings*, structures, or premises shall be permitted to continue in operation under the code applicable at the time when the buildings, structures, or premises were constructed.
- 2. Alterations, repairs, additions, and rehabilitation to an *existing building*, structure, or premise shall fully comply with the current codes.
- **3.** Change of use or occupancy of an *existing building* shall comply with the current code requirements for change of occupancy classification.
- **E. Acronyms and Definitions:** The following references apply throughout these regulations. Words not defined in these regulations shall have the meaning stated in the referenced codes and standards adopted by these regulations.
 - **1.** "AHJ" means Authority Having Jurisdiction, which is the SFM, or his agents, or any local fire official covered by S.C. Code Ann. Section 23-9-30, 1976, as amended.
 - **2.** "ATF" means the <u>United States Department of Justice</u>, <u>Bureau of Alcohol</u>, <u>Tobacco</u>, <u>Firearms and Explosives</u>.
 - **3.** "Bulk hydrogen compressed gas system" means an assembly of equipment that consists of, but is not limited to, storage containers, pressure regulators, pressure relief devices, compressors, manifolds, and piping with a storage capacity of more than 400 cubic feet (approximately 3000 gal.) of compressed hydrogen gas (or 5000 scf), including unconnected reserves on hand at the site, and terminates at the source valve.
 - **4.** "Bulk liquefied hydrogen gas system" means an assembly of equipment that consists of, but is not limited to, storage *containers*, pressure regulators, pressure relief devices, vaporizers, liquid pumps, compressors manifolds, and piping, with a storage capacity of more than 39.7 gal. of liquidized hydrogen, including unconnected reserves on hand at the site, and terminates at the source valve.
 - **5.** "Citation" means a summons to appear before the OSFM because of a violation of any part or all of this regulation and may carry a monetary fine of up to \$2,000 per violation.
 - 6. "Consumer Fireworks" means any small device designed to produce visible effects by combustion and which must comply with the construction, chemical composition, and labeling regulations of the <u>U.S. Consumer Product Safety Commission</u>, as set forth in Title 16, <u>Code of Federal Regulations</u>, parts <u>1500</u> and <u>1507</u>. Some small devices designed to produce audible effects are included, such as whistling devices, ground devices containing fifty (50) mg or less of explosive materials, and aerial devices containing 130 mg or less of explosive materials. Consumer fireworks are classified as fireworks UN0336 and UN0337 by the *USDOT* at <u>49 CFR 172.101</u>. This term does not include fused setpieces containing components which together exceed 50 mg of salute powder. Consumer fireworks are further defined as those classified by the *USDOT* hazard classification 1.4g. These fireworks were formerly known as "Class C Fireworks."
 - **7.** "Container" means all vessels including, but not limited to tanks, cylinders, or pressure vessels used for the storage of hydrogen.
 - 8. "Display Fireworks" means large fireworks designed primarily to produce visible or audible effects by combustion, deflagration, or detonation. This term includes, but is not limited to, salutes containing more than two (2) grains (130 mg) of explosive materials, aerial shells containing more than 40 grams of pyrotechnic compositions, and other display pieces which exceed the limits of explosive materials for classification as "Consumer Fireworks." Display fireworks are classified as fireworks UN0333, UN0334, or UN0335 by the USDOT at 49 CFR 172.101. This term also includes fused setpieces containing components which together exceed fifty (50) mg of salute powder. Display fireworks are further defined as those classified by the USDOT as hazard classification 1.3g. These fireworks were formerly known as "Class B Fireworks."
 - 9. "DOI" means the Department of Insurance.
 - **10.** "Engineered hydrogen systems" means systems or equipment that is custom designed for a particular application.

- **11.**"Existing Building" means a building, structure, or premise for which preliminary or final drawings have been approved by the appropriate agency as provided in these regulations, in buildings where construction has begun, or those occupied on or before the date of adoption of these regulations.
- **12.**" Fire Prevention" means any activity to prevent fire before fire occurs.
- **13.**" Fireworks" means any composition or device designed to produce a visible or an audible effect by combustion, deflagration, or detonation, and which meets the definition of "consumer fireworks" or "display fireworks" as defined by this section.
- 14. "Firm" means any person, partnership, corporation, association, or governmental entity.
- 15. "Fixed Fire Extinguishing System" means a pre-engineered fire extinguishing system.
- **16.** "Hydrogen" is an element of the periodic table which, at room temperature and pressure, but can be compressed and/or refrigerated into a liquefied state.
- **17.** "Hydrogen facility" is a fueling station or a fuel cell site that will store or dispense hydrogen for use as a transportation fuel, motor fuel, or in a fuel cell.
- 18. "Hydrogen generation system" means a packaged, factory matched, or site constructed hydrogen gas generation appliance or system such as (a) an electrolyzer that uses electrochemical reactions to electrolyze water to produce hydrogen gas; (b) a reformer that converts hydrocarbon fuel to a hydrogen-rich stream of composition and condition suitable for a type of device using the hydrogen. It does not include hydrogen generated as a byproduct of a waste treatment process.
- **19.**"/BC" means the International Building Code.
- 20."ICC" means the International Code Council.
- 21." IFC" means the International Fire Code.
- 22." IFGC" means the International Fuel Gas Code.
- 23."IRC" means the International Residential Code.
- 24."LP-Gas" means Liquefied Petroleum Gas as defined in 40-82-20.
- **25.** "Motion Picture" means, for the purposes of this item, any audiovisual work with a series of related images either on film, tape, or other embodiment, where the images shown in succession impart an impression of motion together with accompanying sound, if any, which is produced, adapted, or altered for exploitation as entertainment, advertising, promotional, industrial, or educational media.
- 26."MSDS(s)" means Material Safety Data Sheet(s).
- 27."NFPA" means the National Fire Protection Association.
- **28.** "OSFM" means the Office of State Fire Marshal, Division of Fire and Life Safety, Department of Labor, Licensing and Regulation.
- **29.**"*Person*" means an individual, partnership, or corporation;
- **30.** "Portable Fire Extinguisher" means a portable device containing extinguishing agent that can be expelled under pressure for the purpose of suppressing or extinguishing a fire.
- **31.** "Pre-engineered hydrogen system" means a system or device that has been designed with the intention of mass production and sales to the public, which uses or produces hydrogen in its function.
- **32.**"*Proximate Audience*" means any indoor use of *pyrotechnics* and the use of *pyrotechnics* before an audience located closer than the distances allowed by *NFPA* 1123.
- 33. "Public Firework Display" means a presentation of Display or Consumer Fireworks for a public gathering.
- **34.**"*Pyrotechnics*" means any composition or device designed to produce visible or audible effects for entertainment purposes by combustion, deflagration, or detonation.
- 35. "S.C." means South Carolina.
- **36.** "Servicing" includes maintenance, recharging, or hydrostatic testing of a Portable Fire Extinguisher or a Fixed Fire Extinguishing System.

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- 37." SFM" means the State Fire Marshal or his agent.
- **38.** "Theatrical Pyrotechnics" means pyrotechnic devices for professional use in the entertainment industry similar to *consumer fireworks* in chemical composition and construction but not intended for consumer use.
- **39.** "USDOT" means U.S. Department of Transportation.

71-8300.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions specified in the *IFC* unless otherwise stated in these regulations or adopted by state statutes.
- **B.** The requirements of the *IFC*, International Fire Code, (<u>as adopted</u> pursuant to *S.C.* Code Ann. Section <u>6-9-5</u>, et. seq., 1976, as amended) shall constitute the minimum standards for *fire prevention* and life safety protection for construction, occupancy, and use of all buildings, structures, and premises within the scope of these regulations except as modified by these regulations. In addition, to the extent to which they can be applied without conflicting with other state regulations or state statutes, the following sections of Chapter 1 of the *IFC* shall apply:
 - Scope and General Requirements (Section 101). "The State of South Carolina" shall be used for the Name of Jurisdiction.
 - 2. Applicability (Section 102)
 - 3. Liability (Section 103.4)
 - 4. General Authority and Responsibilities (Section 104)
 - 5. Maintenance (Section 107)
 - 6. Unsafe Buildings (Section 110)
- **C.** The requirements of <u>NFPA 10</u>, Standard for Portable Fire Extinguishers, shall be used as referenced within the adopted *ICC* codes for the installation, *servicing*, maintenance, recharging, repairing, and hydrostatic testing of all *portable fire extinguishers*.
- **D.** The requirements of the following <u>NFPA standards</u> shall be used as referenced within the adopted *ICC* codes for the design, installation, testing and maintenance of *fixed fire extinguishing systems* in South Carolina except as modified by these regulations.
 - 1. NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam
 - 2. NFPA 12, Standard on Carbon Dioxide Extinguishing Systems
 - 3. NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems
 - 4. NFPA 17, Standard for Dry Chemical Extinguishing Systems
 - 5. NFPA 17A, Standard for Wet Chemical Extinguishing Systems
 - 6. NFPA 750, Standard on Water Mist Fire Protection Systems
 - 7. NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems
 - 8. NFPA 2010, Standard for Fixed Aerosol Fire Extinguishing Systems
- **E.** The requirements of the following <u>NFPA standards</u> shall be used as referenced within the adopted *ICC* codes for the design, installation, testing, and maintenance of water-based extinguishing systems in South Carolina except as modified by these regulations.
 - 1. NFPA 13, Standard for the Installation of Sprinkler Systems
 - NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
 - 3. NFPA 13R, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies
 - 4. NFPA 14, Standard for the Installation of Standpipe and Hose Systems
 - 5. NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection

- 6. NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
- 7. NFPA 18, Standard on Wetting Agents
- 8. NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection
- 9. NFPA 22, Standard for Water Tanks for Private Fire Protection
- 10. NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- 11. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- 12. NFPA 214, Standard on Water-Cooling Towers
- **F.** The requirements of <u>NFPA 30</u>, Flammable and Combustible Liquids Code, shall be used as referenced within the adopted *ICC* codes for the storing and handling of flammable and combustible liquids in South Carolina except as modified by these regulations.
- **G.** The requirements of <u>NFPA 30A</u>, Code for Motor Fuel Dispensing Facilities and Repair Garages, shall be used as referenced within the adopted *ICC* codes for the storing, handling, and dispensing of flammable and combustible liquids at service stations, farms, and isolated sites in South Carolina except as modified by these regulations.
- **H.** The requirements of <u>NFPA 52</u>, Vehicular Gaseous Fuel Systems Code, shall be used as referenced within the adopted *ICC* codes for storing, handling, and dispensing vehicular alternative fuels in South Carolina except as modified by these regulations.
- I. The requirements of <u>NFPA 54</u>, National Fuel Gas Code, shall be used as referenced within the adopted *ICC* codes for design, materials, components, fabrication, assembly, installation, testing, inspection, operation, and maintenance installation of fuel gas piping systems, appliances, equipment, and related accessories, installation, combustion, and ventilation air and venting in South Carolina except as modified by these regulations.
- J. The requirements of <u>NFPA 58</u>, Liquefied Petroleum Gas Code, shall be used as referenced within the adopted *ICC* codes for the design, construction, location, installation and operation of equipment for storing, handling, transporting by tank truck or tank trailer, and use of *LP-Gas*es and the odorization of such gases in South Carolina except as modified by these regulations.
- **K.** The requirements of <u>NFPA 59</u>, Utility LP-Gas Plant Code, shall be used as referenced within the adopted *ICC* codes for the design, construction, location, installation, operation, and maintenance of refrigerated and non-refrigerated utility gas plants to the point where *LP-Gas* or an *LP-Gas* and air mixture is introduced into the utility distribution system in South Carolina except as modified by these regulations.
- **L.** The requirements of <u>NFPA 70</u>, National Electrical Code, shall be used as referenced within the adopted *ICC* codes for *fire prevention* and life safety from hazards of electricity in South Carolina except as modified by these regulations.
- **M.** The requirements of <u>NFPA 72</u>, National Fire Alarm and Signaling Code, shall be used as referenced within the adopted *ICC* codes for the design, installation, testing, and maintenance of fire alarm systems in South Carolina except as modified by these regulations.
- **N.** The requirements of <u>NFPA 96</u>, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, shall be used as referenced within the adopted *ICC* codes for ventilation control and fire protection of commercial cooking operations in South Carolina except as modified by these regulations.
- **O.** The requirements of <u>NFPA 99</u>, Health Care Facilities Code, shall be used as referenced within the adopted *ICC* codes for flammable and non-flammable medical gasses used in health care and other facilities intended for inhalation or sedation, but not limited to, analgesia systems for dentistry, podiatry, veterinary, and similar uses in South Carolina except as modified by these regulations.
- **P.** The requirements of <u>NFPA 101</u>, Life Safety Code, shall be used as referenced within the adopted *ICC* codes for *fire prevention* and life safety in South Carolina when evaluating alternative methods of fire and life safety per R. 71-8300.10 except as modified by these regulations.
- **Q.** The requirements of the <u>NFPA 102</u>, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures, shall be used as referenced within the adopted *ICC* codes for *fire prevention* and life

- safety for all tents and membrane structures normally used in South Carolina except as modified by these regulations.
- **R.** The requirements of <u>NFPA 160</u>, Standard for the Use of Flame Effects Before an Audience, including Annexes B and C, shall be used as referenced within the adopted *ICC* codes for all flame effects use in *proximate* audience pyrotechnics displays or motion picture special effects in South Carolina except as modified by these regulations.
- **S.** The requirements of <u>NFPA 407</u>, Standard for Aircraft Fuel Servicing, shall be used as referenced within the adopted *ICC* codes for the storing, handling, and dispensing of flammable and combustible liquids at private aircraft fueling facilities in South Carolina except as modified by these regulations.
- **T.** The requirements of <u>NFPA 409</u>, Standard on Aircraft Hangars, shall be used as referenced within the adopted *ICC* codes for the design construction, occupancy, and use of aircraft hangars in South Carolina except as modified by these regulations.
- U. The requirements of <u>NFPA 495</u>, Explosive Materials Code, shall be used as referenced within the adopted *ICC* codes for the manufacture, transportation, use and storage for all explosives in South Carolina, except as modified herein.
- V. The requirements of <u>NFPA 1122</u>, Code for Model Rocketry, shall be used as referenced within the adopted *ICC* codes for model rocketry associated with *public firework displays* or *proximate audience* pyrotechnic displays or *motion picture* special effects in South Carolina except as modified by these regulations.
- **W.** The requirements of <u>NFPA 1123</u>, Code for Fireworks Display, including Annex A and E, shall be used as referenced within the adopted *ICC* codes for all firework displays in South Carolina except as modified by these regulations.
- X. The requirements of <u>NFPA 1124</u>, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, shall be used as referenced within the adopted *ICC* codes for transportation, storage, and use of all *display fireworks* and pyrotechnic articles used for proximate audience pyrotechnic displays or *motion picture* special effects in South Carolina except as modified by these regulations.
- Y. The requirements of <u>NFPA 1126</u>, Standard for the Use of Pyrotechnics Before a Proximate Audience, including Annexes A, B, and D, shall be used as referenced within the adopted *ICC* codes for all *proximate audience* displays in South Carolina except as modified by these regulations.
- **Z.** The requirements of <u>NFPA 1127</u>, Code for High Power Rocketry, shall be used as referenced within the adopted *ICC* codes for all high power rockets used for *proximate audience* pyrotechnic displays or *motion picture* special effects in South Carolina except as modified by these regulations.
- **AA.** The requirements of <u>NFPA 1142</u>, Standard on Water Supplies for Suburban and Rural Fire Fighting, shall be used as referenced within the adopted *ICC* codes for water supplies for rural fire fighting in South Carolina except as modified by these regulations.
- **BB.** The *OSFM* shall post and maintain <u>a list of the currently adopted editions of the codes and standards listed above on the *OSFM* website.</u>
- **CC.** The codes and standards listed in R.71-8300.2 that are adopted by the *OSFM* shall be <u>accessible for viewing at</u> no cost to the public through the *OSFM* website.

71-8300.3. Alternate Materials and Alternate Methods of Construction.

- **A.** The requirements of these regulations are not intended to prevent the use of any material or method of construction not specifically prescribed by the regulations, adopted codes, or standards enforced by the *OSFM*. The *SFM* has the authority to accept alternative methods of compliance within the intent of these regulations, after finding that the materials and method of work offered is for the purpose intended, at least the equivalent of that prescribed in these regulations in quality, strength, effectiveness, fire resistance, durability, and safety. The *SFM* shall require submission of sufficient evidence or proof to substantiate any claim made regarding use of alternative materials and methods.
- **B.** Compliance with applicable standards of the National Fire Protection Association, or other nationally recognized fire safety standards, may be used for consideration of alternative methods if found suitable by the *SFM*.

71-8300.4. Construction Documents and Shop Drawings.

- **A.** Construction documents and/or shop drawings, as appropriate, must be submitted to the *OSFM* for the following:
 - **1.** Fire sprinkler systems per *S.C.* Code Ann. Section <u>40-10-260</u>.
 - 2. LP-Gas systems per R.71-8304.
 - 3. Hydrogen facilities per S.C. Code Ann. Section 23-9-510 et seq.
 - 4. Facilities that the OSFM is contractually obligated to review.
- **B.** Construction documents. Construction documents and shop drawings shall be in accordance with this section.
 - Submittals. Construction documents and supporting data shall be submitted in one complete set with each
 application for a review and in such form and detail as required by the OSFM reviewer to be able to
 determine compliance.
 - 2. The construction documents and shop drawings shall be prepared by the appropriate registered design professional(s) or other LLR licensee as required by statute or regulation.
 - **a.** Practice of architecture as defined in *S.C.* Code Ann. Section <u>40-3-20</u> requires a licensed architect unless exempt per *S.C.* Code Ann. Section <u>40-3-290</u>.
 - **b.** Practice of engineering as defined in S.C. Code Ann. Section <u>40-22-20</u> requires a licensed engineer unless exempt per S.C. Code Ann. Section <u>40-22-280</u>.
 - **c.** Fire sprinkler system documentation shall be prepared in accordance with the specific provisions in *S.C.* Code Ann. Sections 40-10-250 and 40-10-260.
 - 3. The OSFM is authorized to not require the submission of construction documents and supporting data if:
 - a. they are not required to be prepared by a registered design professional, and
 - **b.** it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.
 - **4. Examination of documents.** *OSFM* shall examine or cause to be examined the submitted construction documents and shall ascertain by such examinations whether the work indicated and described is in accordance with the applicable requirements.
 - 5. Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documents are allowed to be submitted when approved by the OSFM. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of these regulations and other relevant laws, rules and regulations as determined by the OSFM.
 - **a. Fire protection system shop drawings.** Shop drawings for fire protection system(s) reviewed by *OSFM* shall be submitted to indicate compliance with these regulations and the referenced codes and standards, and shall be approved prior to the start of installation. Shop drawings shall contain all information as required by the applicable statutes, regulations, adopted codes and referenced installation standards.
 - **b.** Information on construction documents shall be specific, and the technical codes shall not be cited in whole or in part, nor shall the term "legal" or its equivalent to be used as a substitute for specific information.
 - **c.** All drawings shall bear a title block with complete, legible information indicating at a minimum where applicable: project name, project address, drawing author, drawing title, drawing number, original drawing date, all subsequent drawing revision dates, sequential drawing revision numbers, company name, and company mailing address.
 - **6. Applicant responsibility.** It shall be the responsibility of the applicant to ensure that the construction documents include all of the fire protection requirements and the shop drawings are complete and in compliance with the applicable statutes, regulations, codes and standards.

- 7. **Approved documents.** Construction documents approved by the *OSFM* are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the *OSFM* shall not relieve the applicant of the responsibility of compliance with this code.
 - **a. Phased approval.** The *OSFM* is authorized to issue approval for the construction of part of a structure, system or operation before the construction documents for the whole structure, system or operation have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such approval for parts of a structure, system or operation shall proceed at the holder's own risk with the building operation and without assurance that approval for the entire structure, system or operation will be granted.
 - **b. Compliance with code.** The issuance or granting of approval shall not be construed to be an approval of any violation of any of the provisions of these regulations. Approvals presuming to give authority to violate or cancel the provisions of these regulations shall not be valid. The issuance of approval based on construction documents and other data shall not prevent an *AHJ* from requiring the correction of errors in the construction documents and other data. Any addition to or alteration of approved construction documents shall be approved in advance by the *AHJ*, as evidenced by the issuance of a new or amended approval.
- **8. Corrected documents.** Where field conditions necessitate any substantial change from the approved construction documents, the *AHJ* shall have the authority to require the corrected construction documents to be submitted for approval.
- **9. Revocation.** The *OSFM* is authorized to revoke approval issued under the provisions of these regulations when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or construction documents or shop drawings on which the permit or approval was based including, but not limited to, any one of the following:
 - a. The permit or approval is used for a location or establishment other than that for which it was issued.
 - b. The permit or approval is used for a condition or activity other than that listed in the permit.
 - c. Conditions and limitations set forth in the permit or approval have been violated.
 - **d.** There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
 - **e.** The permit or approval is used by a different *person* or *firm* than the name for which it was issued.
 - **f.** Failure, refusal, or neglect to comply with orders or notices duly served in accordance with the provisions of this regulation within the time provided therein.
 - g. The permit or approval was issued in error or in violation of a statute, regulation, code, or standard.

71-8300.5. Incident Reporting.

- **A. Purpose.** These provisions are intended to help the State and its local governmental entities to develop fire reporting and analysis capability for their own uses, to obtain data that can be used to more accurately assess and subsequently combat the fire problem at the State or local level, and to support the efforts of the <u>National Fire Data Center</u> in the <u>United States Fire Administration (USFA)</u> to gather and analyze information on the magnitude of the nation's fire problem, as well as its detailed characteristics and trends.
- **B.** The local fire chief or his designee shall furnish to the *OSFM* the following information:
 - **1.** Fire fatalities from fires occurring within the fire department's jurisdiction, shall be reported directly to the *OSFM* immediately.
 - 2. Firefighter line-of-duty deaths shall be reported directly to the OSFM immediately.
 - **3.** By the 15th day of each month, information concerning all incidents responded to by the fire department during the preceding month shall be reported. This information shall be reported by a method and in a format approved by the *OSFM*. The <u>National Fire Incident Reporting System (NFIRS)</u> shall serve as the minimum standard reporting method and format for these monthly reports.
- C. These reports are privileged against liability unless the report is made with actual malice.

71-8300.6. Fire Investigations.

A. Purpose.

- **1.** The intent of this section is to assist *OSFM* in improving its ability to provide *fire prevention* and fire education efforts and data; and, to support *OSFM* licensing and permitting functions.
- **2.** It is not the intent of this section for *OSFM* to perform criminal investigation functions which overlap the authority and responsibility of police and other enforcement agencies.
- **B.** The *OSFM* shall have the authority to investigate the cause, origin, and circumstances of any fire, explosion or other hazardous condition.
- **C.** Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

SUBARTICLE 2

FIRE PREVENTION AND LIFE SAFETY FOR SPECIAL OCCUPANCIES

71-8301, FIRE PREVENTION AND LIFE SAFETY FOR SPECIAL OCCUPANCIES.

(Statutory Authority: 1976 Code Section 23-9-60)

71-8301.1. General.

- A. The purpose of this Subarticle is to provide specific requirements for certain occupancies.
- B. This regulation shall apply to:
 - 1. New and existing foster homes.
 - 2. New and existing schools inspected by the OSFM.
- **C.** The <u>Department of Social Services</u> shall provide a list of registered in-home childcare facilities to the *OSFM* annually.

71-8301.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- **B.** The building code shall define occupancy classifications referenced in these regulations.

71-8301.3. Requirements for Special Occupancies.

A. All Foster Home Facilities

- 1. Foster homes providing care, maintenance, and supervision for no more than six (6) children, including the natural or adopted children of the foster parent; shall comply with the following:
 - **a.** Must be a facility designed and constructed with the intent to be used as a dwelling per applicable statutes and regulations.
 - **b.** At least one (1) *portable fire extinguisher* with a minimum classification of 2A:10BC shall be installed near cooking areas. The fire extinguishers shall be installed and maintained in accordance with the manufacturer's instructions.
 - **c.** Each facility housing foster children shall maintain means of egress as required by original construction.
 - **d.** All heating devices must be selected, used, and installed per the manufacturer's recommendations and the listing conditions set by an approved testing laboratory.
 - **e.** Unvented gas heaters shall have an operating oxygen depletion device, an operating safety shutoff device, and shall be located or guarded to prevent burn injuries.
 - f. Fireplaces shall be equipped with fire screens, partitions, or other means to protect clients from burns.
 - **g.** A fire escape plan describing what actions are to be taken by the family in the event of a fire must be developed and posted.
 - **h.** A fire escape drill shall be conducted every three (3) months.
 - i. Records of the drills shall be maintained on the premises for three (3) years. The records shall give the date, time, and weather conditions during the drill, number evacuated, description, and evaluation of the fire drill. Fire drills shall include complete evacuation of all *person*s from the building.
 - **j.** A fire escape drill shall be conducted within twenty-four (24) hours of the arrival of each new foster child.
 - **k.** Portable unvented fuel-fired heating equipment shall be prohibited in all foster homes.

SUBARTICLE 2 - FIRE PREVENTION AND LIFE SAFETY FOR SPECIAL OCCUPANCIES

- I. An approved carbon monoxide alarm shall be installed and maintained outside of each separate sleeping area in the immediate vicinity of the bedroom in dwelling units within which fuel fired appliances are installed and in dwelling units that have attached garages.
- **m.** Each sleeping room must have an operable door that closes and latches to provide compartmentation that protects occupants in case of a fire event.
- n. The dwelling shall be free of dangers that constitute an obvious fire hazard, such as faulty electrical cords, overloaded electrical sockets, or an accumulation of papers, paint, or other flammable material stored in the dwelling.
- o. Facilities serving as a foster home shall have approved address numbers placed in a position that is plainly legible and visible from the street. Address number shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch and shall contrast with their background.
- **p.** Listed smoke alarms shall be installed in accordance with the manufacturer's installation instructions and in the following locations:
 - On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms; and
 - (ii) In each room used for sleeping purposes; and
 - (iii) In each habitable story within a dwelling.
- **q.** Listed smoke alarms shall be powered from:
 - (i) the electrical system of the dwelling as the primary power source and a battery as a secondary power source;
 - (ii) a battery rated for a 10-year life, provided the smoke alarm is listed for use with a 10-year battery; or
 - (iii) battery power that is part of a listed wireless interconnected smoke alarm unit.
- r. All sleeping rooms below the fourth story shall have emergency escape and rescue openings that open from the inside.
- **s.** Such emergency escape and rescue openings shall be sized and configured in accordance with the applicable code requirements.
- 2. Foster homes that do not comply with Section A.1.s. above, shall have one of the following:
 - a. Listed smoke alarms required to be installed by Section A.1.p. above shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm; or
 - **b.** A residential fire sprinkler system in accordance with the applicable statutes, regulations, and adopted codes.

B. Inspection of School Facilities

1. The OSFM shall work in conjunction with local resident fire marshals to ensure regular fire and life safety inspections are conducted of all public schools that are subject to these regulations. The OSFM shall work in conjunction with the <u>Department of Education</u>'s <u>Office of School Facilities</u> to ensure a fire and life safety inspection of each new school is conducted prior to occupancy and to ensure that additions to schools and school alterations are also inspected.

SUBARTICLE 3 EXPLOSIVES

71-8302. EXPLOSIVES.

(Statutory Authority: 1976 Code Sections <u>23-9-40(b)</u>, <u>23-9-60</u>, <u>23-36-10</u> et seq.)

71-8302.1. General.

- **A.** The purpose of this regulation is to provide reasonable safety and protection to the public, public property, private property, and operators from the manufacture, transportation, handling, use, and storage of explosives in South Carolina.
- **B.** This regulation shall apply to the manufacture, transportation, handling, use, and storage of explosives in South Carolina.
- **C.** This regulation does not apply to the sale or storage of *fireworks* as regulated by the <u>Board of Pyrotechnic Safety</u>.

71-8302.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- B. The building code shall define occupancy classifications referenced in these regulations.

71-8302.3. Licensing and Permitting Fees.

- A. All applications for licenses, tests, or permits must be accompanied by the appropriate fees.
- **B.** The *OSFM* is responsible for all administrative activities of the licensing program. The *SFM* shall employ and supervise personnel necessary to effectuate the provisions of this article and shall establish fees sufficient but not excessive to cover expenses, including direct and indirect costs to the State for the operation of this licensing program. Fees may be adjusted not more than once each two years, using the method set out in *S.C.* Code Ann. Section 40-1-50(D), 1976, as amended.
- **C.** Fees shall be established for the following:
 - 1. Application
 - 2. Background Check
 - 3. Testing
 - 4. Licensing
 - 5. Permitting
 - 6. Inspection
 - 7. Renewal
- **D.** All fees are due at time of application.
- E. Submission requirements for Blasting Permit application
 - **1.** Applications for Blasting Permits shall be submitted to the *OSFM* for approval at least 48 hours before the start of blasting operations.
 - 2. Applications submitted less than 48 hours before the start of blasting operations may be subject to a \$200.00 special processing fee.
 - **3.** Blasting Permit applications shall include the properly completed form and shall be accompanied by all information listed on the Blasting Permit application form when applying to the *OSFM* for a Blasting Permit.
- **F.** All fees paid to the *OSFM* are nonrefundable.

71-8302.4. Licenses and Permits.

A. Classification of Licenses and Permits

	<u>Class</u>	<u>Category</u>	Blasting Permitted
1.	Α	Unlimited	All types of blasting
2.	В	General	All phases of blasting operations in quarries, aboveground open pit mines, and aboveground construction
3.	С	General	All phases of blasting operations in underground mines, shafts, tunnels, and drifts
4.	D	Demolition	All phases of blasting in demolition projects
5.	E	Seismic	All phases of blasting in seismic prospecting
6.	G	Special	Special blasting as described on the permit

B. Licenses

- 1. No *person* shall be granted a license who has not successfully completed a written examination administered by the *OSFM* covering the applicable codes, state laws and regulations for the license classification for which they are applying.
- 2. Any applicant who fails the written examination is allowed one (1) re-test after a minimum seven (7) day waiting period. Any applicant who fails the re-test shall wait at least six (6) months before reapplying.
- 3. Licenses are not transferable.
- **4.** The *OSFM* may accept determination of relief from disability incurred by reason of a criminal conviction that has been granted by the <u>Director</u> of the <u>Bureau of Alcohol, Tobacco, Firearms and Explosives</u>, U. S. Department of Justice, Washington, D.C., pursuant to <u>Section 555.142</u>, <u>Subpart H</u>, <u>Title 27</u>, <u>Code of Federal Regulations</u> and <u>Title 18 United States Code</u>, <u>Chapter 40</u>, <u>Section 845(b)</u>.
- **5.** New applicants for licensing shall:
 - a. Submit an application for a new license.
 - **b.** Submit a completed fingerprint card with his or her application. The *OSFM* will conduct a criminal background check as part of the licensing application process.
 - **c.** Provide the appropriate Federal licenses to handle and use explosives or explosive materials. Applicants must provide a copy of applicable Federal licenses with their application.
 - **d.** Provide proof of public liability insurance for an amount not less than one million dollars (\$1,000,000). The coverage company must be an insurer which is either licensed by the *DOI* in this State or approved by the *DOI* as a nonadmitted surplus lines carrier for risks located in this State. In the event the liability insurance is canceled, suspended, or nonrenewed, the insurer shall give immediate notice to the *OSFM*.
- 6. Each applicant for renewal shall each year:
 - a. Submit an application for renewal.
 - **b.** Submit a completed fingerprint card with his or her application. The OSFM will conduct a criminal background check as part of the licensing application process.
 - **c.** Provide a copy of their current Federal licenses for handling and using explosives or explosive material with their renewal application.
 - **d.** Attend at least four (4) hours of continuing education acceptable to the *OSFM*. Certificates of training or other proof of training attendance must be provided when requested by the *OSFM*.

- e. Provide proof of insurance. The coverage company must be an insurer which is either licensed by the DOI in this State or approved by the DOI as a nonadmitted surplus lines carrier for risks located in this State. In the event the liability insurance is canceled, suspended, or nonrenewed, the insurer shall give immediate notice to the OSFM.
- **f.** An expired license shall not be renewed. A new license shall be obtained by complying with all requirements and procedures for an original license.

C. Blasting Permits

- **1.** Blasting Permit application forms shall be available on the *OSFM* website and shall contain the information deemed appropriate by the *OSFM*. At a minimum, the application form shall include:
 - a. Applicant name and contact information;
 - **b.** Blaster name, license, and contact information;
 - **c.** Blast site information including location, purpose of blasting, and fire department responsible for responding to the site;
 - d. Anticipated date and time range of blasting operations;
 - **e.** Information on separation distances detailing the actual distances to the nearest gas lines, power transmission lines, public roads, and structures;
 - **f.** The type(s) of explosive used;
 - **g.** Information on quantities of explosive used including the estimated amount of explosives for the duration of the permit, amount per shot, and amount per charge; and,
 - **h.** Information regarding whether a seismograph will be used.
- **2.** Blasting Permit application forms shall list all information required to be submitted with the form per R.71-8302.3.E. This list shall include at least the following:
 - a. Current certificate of insurance:
 - **b.** Directions to the blast site:
 - c. Site plan of the blast site showing measured distances to adjacent buildings, streets, utilities, wells, and other facilities that have been superimposed on officially published maps, electronic satellite imagery, or another means of showing the site area and its vicinity that OSFM determines to be acceptable;
 - **d.** Blasting plan that addresses proposed blasting procedures, quantity of material to be removed by blasting, number of blasts to be detonated, quantity and type of explosives to be used, maximum amount of explosives per delay, the maximum number of holes per delay, and the proposed placement of seismographs; and
 - **e.** Safety plan that addresses on-site storage, traffic control, barricading, signage plan, and adverse weather operation plan.
- **3.** No permit will be granted without submission of a complete Blasting Permit application form and payment of application fee.
- 4. No variations from the terms of the blasting permit are allowed without authorization from the OSFM.

D. Magazine Permits

- 1. Magazine Permit Application Forms shall contain the information deemed appropriate by the OSFM.
- 2. Magazine Permit Application Forms shall be available on the OSFM website.
- 3. Magazine permits expire at 12:01 AM on January 1 of each licensing cycle. Any magazine permit not renewed by December 31 may incur a late fee of \$100.00 (each).
- **4.** Magazine permits shall be visible on the exterior of all magazines. Defaced or destroyed permits will be reported to the *OSFM* when discovered. The *OSFM* may, at their discretion, charge the administrative costs of replacing the magazine permit.
- **5.** Each magazine shall be inspected and approved by the *OSFM* before use.

71-8302.5. Records.

- A. Licensed blasters shall keep records of each blast. The Blaster's Log shall contain the following minimum data:
 - 1. Name of company or contractor;
 - 2. Location, date, and time of blast;
 - 3. Name, signature, and license number of blaster in charge of blast;
 - 4. Type of material blasted;
 - 5. Number of holes, burden and spacing;
 - 6. Diameter and depth of holes;
 - 7. Types of explosives used;
 - 8. Total amount of explosives used;
 - 9. Maximum amount of explosives per delay period of 8 milliseconds or greater;
 - 10. Method of firing and type of circuit;
 - **11.**Direction and distance in feet to nearest dwelling house, public building, school, church, commercial or institutional building neither owned nor leased by the *person* conducting the blasting;
 - 12. Weather conditions;
 - Type and height or length of stemming;
 - 14. Whether mats or other protections were used;
 - 15. Type of delay electric blasting caps used and delay periods used;
 - **16.** Exact location of seismograph, if used, and the distance of seismograph from blast as indicated accurately by the *person* taking the seismograph reading;
 - 17. Seismograph records, where required including:
 - a. Name of person and firm analyzing the seismograph record; and
 - b. Seismograph reading;
 - **18.** Maximum number of holes per delay period of eight milliseconds or greater.
- **B.** Blasters will provide a blast report on forms approved by the *OSFM* and submit these forms within three working days of the blast when deemed necessary by the *OSFM*.
- **C.** Blasting records shall be retained by the licensed blaster and available for inspection by *SFM* during normal work hours at their place of business. These blast records shall include as a minimum for each blast:
 - 1. Blasting Permit;
 - 2. Seismograph reports when used;
 - 3. Blaster's Record/log;
 - 4. Pre-Blast Survey (if applicable).
- **D.** Magazine log shall be available for inspection by *OSFM* upon request during normal work hours or hours of operation of the magazine.

71-8302.6. Blasting Safety and Operations.

- A. The contractor, operator, and the blaster are responsible for the conduct of blasting operations on any site.
- **B.** These regulations do not relieve the contractor, operator, blaster or other *person*s of their responsibility and liability under any other laws.
- **C.** The *OSFM* may require the use of a seismograph on any blasting operation where damage to personal property has or may occur.

- **D.** A Seismograph shall be used on all blasting operations: (1) within 1500 feet of a building, (2) where the scaled distances shown in *NFPA* 495 are not followed, or (3) when directed by the *OSFM*.
- **E.** Operators must notify the *OSFM* within 24 hours of any fires or thefts involving explosives. The operators shall provide the *OSFM* with a copy of the report filed with the police department or the incident report from the fire department. Operators must also provide the *OSFM* Office with a copy of *ATF* Form 5400.5.
- **F.** The operator shall have their license in their possession when handling, possessing or using explosive materials and shall show their license when asked by any *AHJ*.
- **G.** A copy of the blasting permit shall be kept at the firing station.
- **H.** This section shall be followed for firing the blast:
 - 1. A warning signal shall be given before every blast. Warning signals shall comply with the following:
 - **a.** Warning signal is a one (1) minute series of long horn or siren blasts five (5) minutes before the blast signal.
 - b. Blast signal is a series of short horn or siren blasts one (1) minute before the shot.
 - **c.** All clear signal is a prolonged horn or siren blast following the inspection of the blast area.
 - 2. The signal shall be made from an air horn, siren or other device, and must be loud enough to be clearly heard in all areas that could be affected by the blast or flyrock from the blast. The signal must be distinctive and unique so that it cannot be confused with any other signaling system that might occur on the site. A vehicle horn shall not be used as a signaling system.

71-8302.7. Explosives and Investigations.

All costs incurred by the *OSFM* for investigations involving explosives or blasting operations shall be reimbursed to the State by the individual or company involved in the investigation. Such reimbursements will only apply when the individual or company has been found in violation of the South Carolina Explosives Control Act (*S.C.* Code Ann. <u>23-36-10</u>, et seq., 1976, as amended) or these Regulations.

71-8302.8. Variances.

- A. This section provides licensees the opportunity to request variances of the regulations under specific conditions.
 - **1.** The *OSFM* may grant variances when it can be demonstrated the variance improves safety or provides an equivalent level of safety as provided in the regulations and adopted codes.
 - 2. Such a variance may be modified or revoked by the OSFM.
 - **3.** When applicable, these variances must also be approved by the U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives.

SUBARTICLE 4

PORTABLE FIRE EXTINGUISHERS AND FIXED FIRE EXTINGUISHING SYSTEMS

71-8303. PORTABLE FIRE EXTINGUISHERS AND FIXED FIRE EXTINGUISHING SYSTEMS.

(Statutory Authority: 1976 Code Sections 23-9-40, 23-9-45)

71-8303.1. General.

- **A.** The purpose of this subarticle is to regulate the leasing, renting, reselling, servicing and testing of portable fire extinguishers and the installation, testing, and servicing of fixed fire extinguishing systems in the interest of protecting lives and property.
- B. This regulation shall apply to:
 - 1. The filling, charging, and recharging of all *portable fire extinguishers* other than the initial filling by the manufacturer.
 - 2. The testing and servicing of all types of portable fire extinguishers.
 - 3. The installation, testing, and servicing of all types of fixed fire extinguishing systems.
- C. This regulation shall not apply to the following:
 - 1. The filling or charging of a *portable fire extinguisher* by the manufacturer before the initial sale;
 - 2. The installation or *servicing* of water-based extinguishing systems addressed by *S.C.* Code Ann. Section <u>40-10-240</u> et seq; and
 - 3. Firms engaged in the retailing or wholesaling of new portable fire extinguishers.

71-8303.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- B. The building code shall define occupancy classifications referenced in these regulations.

71-8303.3. Fees for Licensing, Testing, and Inspections.

- **A.** The *OSFM* is responsible for all administrative activities of the licensing program. The *OSFM* shall employ and supervise personnel necessary to effectuate the provisions of this article and shall establish fees sufficient but not excessive to cover expenses, including direct and indirect costs to the State for the operation of this licensing program. Fees may be adjusted not more than once each two years, using the method set out in *S.C.* Code Ann. Section 40-1-50(D), 1976, as amended.
- B. Fees shall be established for the following:
 - 1. Application
 - 2. Testing
 - 3. Permitting
 - 4. Licensing
 - 5. Inspection
 - 6. Renewal
- C. All fees are due at time of application for licenses, testing, permits, inspection or renewal.
- **D.** All fees paid to the *OSFM* are nonrefundable.

71-8303.4. Licensing and Permitting Requirements.

A. General Licensing Requirements.

- 1. Each firm testing and servicing portable fire extinguishers; installing, testing, and servicing fixed fire extinguishing systems; or hydrostatic testing portable fire extinguishers or portions of fixed fire extinguishing systems must have a license issued by the OSFM.
- 2. Each firm's license shall be displayed in a conspicuous location at their place of business.
- **3.** Each *firm* shall apply in writing on a form available from the *OSFM*, for the license classification the *firm* is seeking.
- **4.** Each *firm* shall furnish a certificate of insurance with their application in the amount required for their license classification. The *firm* shall list the State of South Carolina and its agents as a certificate holder. The coverage company must be an insurer which is either licensed by the *DOI* in this State or approved by the *DOI* as a nonadmitted surplus lines carrier for risks located in this State. In the event the liability insurance is canceled, suspended, or not renewed, the insurer shall give immediate notice to the *OSFM*.
- **5.** Each *firm* shall possess or have access to the equipment necessary for the class of license sought. The *OSFM* shall inspect the *firm*'s facilities, fixed or mobile, to verify the *firm* has the necessary required equipment. The *OSFM* shall not license a *firm* until deficiencies discovered by inspection are corrected.
- **6.** Licenses issued under this subarticle are not transferable.
- **7.** All licenses expire when insurance coverage lapses or is cancelled and on the day of expiration shown on the license and shall be renewed biennially.
- **8.** Expired licenses shall not be renewed. A new license shall be obtained by complying with all requirements and procedures for an original license.

B. General Permitting Requirements.

- 1. Each individual *servicing*, recharging, repairing, installing, or testing *portable fire extinguishers* or *fixed fire extinguishing systems* shall possess a valid permit issued by the *OSFM*.
- **2.** Each individual shall apply in writing on a form available from the *OSFM*, for the permit classification they are seeking.
- **3.** Applicants must provide a current color photograph in an approved electronic format as specified by OSFM on the application form.
- 4. Applicants must be at least eighteen (18) years old.
- **5.** Applicants shall pass a written examination administered by the *OSFM* before a permit is issued. The exam will cover the applicable codes, state laws, and regulations and the additional requirements for the specific class of permit for which they are applying. Completed applications must be received by OSFM prior to scheduling an examination.
- **6.** Any applicant who fails the written examination is allowed one (1) re-test after a minimum seven-day waiting period. Any applicant who fails the re-test shall wait at least six (6) months before reapplying.
- 7. Permit holders shall have their permits in their possession while working on equipment or systems covered by their permit.
- 8. Permit holders shall show their permits on the request of any AHJ.
- **9.** Permit holders shall be limited to specific type of work allowed by the class of permit they hold and the specific systems covered by their permit.
- **10.** Permits issued under this subarticle are not transferable and specifically identify the affiliated company. Upon leaving the employ of the specifically identified company, the permit immediately becomes invalid and must be surrendered to the OSFM within 15 business days.
- 11. Permits shall expire on the day of expiration shown on the permit and shall be renewed biennially.
- **12.** Expired permits shall not be renewed. A new permit shall be obtained by complying with all requirements and procedures for an original permit.

C. License and Permit Classifications.

- **1.** Class "A" may service, recharge, or repair, all types of *portable fire extinguishers*, including recharging carbon dioxide units; and to conduct hydrostatic tests on all types of fire extinguishers.
- 2. Class "B" may service, recharge, or repair all types of *portable fire extinguishers*, including recharging carbon dioxide units and conducting hydrostatic tests on water, water chemical, and dry chemical types of extinguishers only.
- Class "C" may service, recharge, or repair all types of portable fire extinguishers, except recharging carbon dioxide units; and to conduct hydrostatic tests of water, water chemical, and dry chemical types of fire extinguishers only.
- **4.** Class "D" may service, recharge, repair, or install all types of *fixed fire extinguishing systems*.
- **5.** Class "E" is an apprentice permit classification only. Permits in this classification may perform the services only under direct supervision of a *person* holding a valid permit and who works for the same *firm* as the apprentice. An apprentice permit is valid for one (1) year from the day of issuance and may not be renewed.
- **D.** *Firm*s applying for a Class "A", "B", or "C" License must meet all of the general requirements for licensing and provide proof of public liability insurance for an amount not less than one million (\$1,000,000) dollars.
- **E.** Firms applying for a Class "D" License must:
 - **1.** Designate on their application for licensing each type of *fixed fire extinguishing system* for which they want to be licensed;
 - 2. Provide proof of public liability insurance for an amount not less than one million (\$1,000,000) dollars; and
 - 3. Provide proof of manufacturer's certification for at least one type of fixed fire extinguishing system.
 - 4. For each additional type of pre-engineered fire extinguishing system, the applicant may submit proof of a manufacturer's certification or an affidavit which shall attest to the ability to obtain the proper manufacturer's installation, maintenance and service manuals and manufacturer's parts or alternative components that are listed for use with the specific extinguishing system and provide testament that all installations and maintenance shall be performed in complete compliance with the manufacturer's installation, maintenance and service manuals and NFPA standards.
- F. Individuals applying for a Class "A", "B", or "C" Permit must meet all of the general requirements.
- **G.** Individuals applying for a Class "D" Permit must:
 - 1. Designate on their application for licensing each type of *fixed fire extinguishing system* for which they want to be permitted.
 - 2. Provide proof of manufacturer's certification for at least one type of fixed fire extinguishing system.
 - 3. For each additional type of pre-engineered fire extinguishing system, the applicant may submit proof of a manufacturer's certification or an affidavit which shall attest to the ability to obtain the proper manufacturer's installation, maintenance and service manuals and manufacturer's parts or alternative components that are listed for use with the specific extinguishing system and provide testament that all installations and maintenance shall be performed in complete compliance with the manufacturer's installation, maintenance and service manuals and NFPA standards.
- **H.** Employees applying for a Class "E" Permit must file an application for a Class "E" Permit and provide a current photograph.

71-8303.5. Renewal of Licenses and Permits.

- A. To qualify for biennial renewal of a Class "A", "B" or "C" license, a firm must:
 - 1. Apply in writing on a form available from the OSFM designating the Class of license sought;
 - 2. Provide proof of public liability insurance.
- B. To qualify for biennial renewal of a Class "A", "B" or "C" permit, an individual must:
 - 1. Apply in writing on a form available from the OSFM, designating the permit classification they are seeking.
- C. To qualify for biennial renewal of a Class D license, a firm must:

- **1.** Apply in writing on a form available from the *OSFM*, designating each type of *fixed fire extinguishing system* for which they wish to be licensed to install, test, or service;
- 2. Provide proof of public liability insurance;
- 3. Provide proof of manufacturer's certification for at least one type of fixed fire extinguishing system;
- 4. For each additional type of fixed fire extinguishing system, the applicant may submit proof of a manufacturer's certification or an affidavit which shall attest to the ability to obtain the proper manufacturer's installation, maintenance and service manuals and manufacturer's parts or alternative components that are listed for use with the specific extinguishing system and provide testament that all installations and maintenance shall be performed in complete compliance with the manufacturer's installation, maintenance and service manuals and NFPA standards.
- D. To qualify for biennial renewal of a Class D permit, an individual must:
 - **1.** Apply in writing on a form available from the *OSFM*, designating each type of *fixed fire extinguishing system* for which they wish to be permitted to install, test, or service;
 - **2.** Provide an up to date manufacturers training certificate for each type *fixed fire extinguishing system* that renewal is sought;
 - 3. Provide an affidavit to attest to the applicant's ability to obtain the proper manufacturer's installation, maintenance and service manuals and manufacturer's parts or alternative components that are listed for use with the specific extinguishing system and provide testament that all installations and maintenance shall be performed in complete compliance with the manufacturer's installation, maintenance and service manuals.

71-8303.6. Restrictions for Class D Fire Equipment Licenses and Permits.

- **A.** A *firm* or *person* shall not willfully engage in the business of installing, testing or *servicing* Class D fire equipment or use in any advertisement or on a business card or letterhead, or make any other verbal or written communication that the *person* is a Class D Fire Equipment Dealer or acquiesce in such a representation, unless that *person* is licensed as a Class D Fire Equipment Dealer by the *OSFM*.
- B. No person shall install or service any type of Class D fire equipment not covered on their permit.

71-8303.7. Licensing Requirements: For Firms Performing Hydrostatic Testing.

- **A.** Each *firm* performing hydrostatic testing of fire extinguishers manufactured according to the specifications of the *USDOT* shall be required to possess a valid license issued by the *USDOT*. All hydrostatic testing of fire extinguishers shall be performed per the appropriate *USDOT* standards and *NFPA* standards.
- **B.** Each employee certified to conduct hydrostatic testing shall attend a *USDOT* certification refresher course every three years and provide a copy of the current certification to the *OSFM* upon completion.

71-8303.8. Installation and Maintenance Procedures.

- **A.** All *portable fire extinguishers* and *fixed fire extinguishing systems* covered by these regulations shall be installed, inspected, tested and serviced per the applicable *NFPA* standards and the manufacturer's installation, service and maintenance manuals.
- **B.** Any *portable fire extinguisher* or *fixed fire extinguishing system* that cannot be maintained per the manufacturer's installation, service, and maintenance manuals or the applicable *NFPA* standards shall be removed from service and replaced.
- **C.** Tamper seals on all *portable fire extinguishers* and *fixed fire extinguishing systems* shall be imprinted with the year. Handwritten dates are not acceptable. The year imprinted on the tamper seal shall match the date on the maintenance tag affixed to the *portable fire extinguisher or fixed fire extinguishing system*.

71-8303.9. Recommended Equipment and Facilities for Fire Equipment Dealer License.

					YES	NO	N/A
1	Α		D	Hydrostatic test equipment for high pressure testing and calibrated cylinder. (0-11,000 psi)			

2	А			D	Equipment for test dating high-pressure cylinders (over 900 psi). Die stamps must be a minimum of one-quarter inches.	 	
3	Α			D	Clock with sweep secondhand on or close to hydrostatic test apparatus.		
4	A	В		D	Carbon dioxide receivercascade system for proper filling of carbon dioxide extinguishers.		
5	Α	В		D	Supply of metallic labels for carbon dioxide hose conductivity test. Labels attached to the hose must include month and year of testing, name or initials of <i>person</i> performing test, and name of agency performing test.		
6	Α	В	С	D	Scales graduated in one-eighth ounce or 1 gram weight if refilling carbon dioxide cartridges. Minimum of 20 lbs.		
7	Α	В	С	D	All scales calibrated within the last 12 months. Certification date(s) Certified by		
8	Α	В	С	D	Approved drying method for high and low pressure cylinders. Listed for its use.		
9	Α	В	С	D	Proper wrenches with non-serrated jaws or valve puller (hydraulic or electric).		
10	Α	В	С	D	Inspection light.		
11	Α	В	С	D	Low-pressure test apparatus.		
12	Α	В	С	D	Low-pressure hydrostatic test labels per NFPA 10.		
13	Α	В	С	D	Scales for weighing extinguisher/system agent bottles during inspection and filling, minimum of 500 lbs. Calibrated and certified annually.		
14	A	В	С	D	Closed recovery system(s) and storage to remove and store chemicals from fire extinguishers or system cylinders during servicing.		
15	Α	В	С	D	Closed recovery system(s) and storage to remove and store chemicals from halon type fire extinguishers or system cylinders during servicing.		
16	Α	В	С		Current installation, maintenance and service manuals from the manufacturer of each make or brand of fire extinguisher or system the company installs, services, recharges, repairs, or maintains.		
17	Α	В	С		Supply of extinguisher recharge agents for the type/brands of fire extinguishers the company requests to recharge or service.		

18	Α	В	С	D	Vise 6-inch minimum (chain or bench).		
19	Α	В	С	D	Facilities for proper storage of extinguishing agents.		
20	Α	В	С	D	Facilities for leak testing of pressurized extinguishers.		
21	Α	В	С	D	Nitrogen with regulator and indicator. Regulator not to exceed 1500 psiminimum 500 psi.		
22	Α	В	С	D	Supply of "Verification of Service" collars containing month and year the service was performed.		
23	Α	В	С		Adapters, fittings, and tools and equipment for properly servicing and/or recharging all extinguishers being serviced and recharged.		
24	Α	В	С	D	Safety cage (in shop) for hydrostatic testing of low-pressure cylinders.		
25	Α	В	С	D	One-quarter pound graduated scales minimum 150 pounds for weighing chemical recharging.		
26				D	Cable crimping tool (where required).		
27				D	Cocking lever (where required).		
28				D	Pipe vise, dies, reamer, etc.		
29				D	Stock and supply of fuse links, proper elbows, and nozzles for system which is being installed.		
30				D	Parts from each manufacturer's system that the permittee is permitted to work on or service, including original service manuals and all up to-date technical bulletins.		
31				D	Listed links from each manufacturer that the permittee is permitted to service or work on.		
32				D	Current service manuals from the manufacturer for each model of <i>fixed fire extinguishing system</i> being installed, tested, or serviced by the fire equipment license holder.		
33				D	System reports - custom or generic.		
34				D	Non-compliance tags for non compliant systems.		
35	Α	В	С	D	Supply of tags with the appropriate company and other related information on them.		
36				D	Thermometer with a minimum of 2 degrees Fahrenheit or 1 degree Celsius increments.		

37		D	Agent transfer pump (for halon or clean agents).		
38		D	Torque wrench.		
39		D	Leak test device (for halon or clean agents).		
40		D	Liquid level detector ("halon scanner").		

71-8303.10. Powers and Duties of the Office of State Fire Marshal.

- **A.** Powers and duties of the OSFM are:
 - **1.** To evaluate the applications of *firms* or individuals for a license and permits to engage in the business of *servicing portable fire extinguishers* or installing, testing and *servicing fixed fire extinguishing systems*;
 - **2.** To administer written examinations to ascertain the competency of applicants for a license to service *portable fire extinguishers* or install *fixed fire extinguishing systems*;
 - 3. To issue licenses, permits, and apprentice permits required by this subarticle;
 - 4. To suspend or revoke licenses and permits for cause; and
 - 5. To administer these regulations and supervise personnel in carrying out the requirements of this regulation.
- **B.** The *OSFM*, upon request, may conduct hearings or proceedings concerning the suspension, revocation, or refusal to issue or renew licenses or permits issued under this subarticle or the application to suspend, revoke, refuse to renew, or refuse to issue the same.
- **C.** An applicant, licensee, or permit holder whose license or permit has been refused or revoked under this subarticle, except for failure to pass a required written examination, shall not file another application for a license or permit within one year from the effective date of the refusal or revocation. After one year from that date, the applicant may re-apply, and in a public hearing, show good cause why the issuance of a license or permit does not hinder public safety and health.
- **D.** The *OSFM* shall maintain a registry of all applications for licenses or permits and of all *firm*s or *person*s holding licenses or permits. The *OSFM* shall make the roster of Fire Equipment Dealers Licenses or Fire Equipment Permits available on the *OSFM* website.

71-8303.11. Fitness to Practice; Investigation of Complaints.

If the *OSFM* has reason to believe that a *person* licensed under this chapter has become unfit to practice as a Fire Equipment Dealer or if a complaint is filed with the *OSFM* alleging a violation of a provision of this chapter by a license or permit holder or if a complaint is filed with the *OSFM* alleging that an licensed *person* is fraudulently holding him or herself out as qualified to engage in business as a Fire Equipment Dealer, the *OSFM* may initiate an investigation per the procedures of <u>Title 40, Chapter 1</u>.

71-8303.12. Administrative Sanctions.

- **A.** If after an investigation it appears that the license or permit holder under this regulation has become unfit to practice or has violated these regulations, the *OSFM* may file a Petition with the <u>Administrative Law Court</u> stating the facts and the particular statutes and regulations at issue.
- **B.** The <u>Administrative Law Court</u> may, after opportunity for hearing, order that the license or permit be revoked, suspended, or otherwise disciplined on the grounds that the license or permit holder:
 - Used a false, fraudulent, or forged statement or document in obtaining a license or permit under this chapter; or
 - 2. Committed a fraudulent, deceitful, or dishonest act or omitted a material fact in obtaining a license or permit under this chapter; or
 - **3.** Has had an authorization to practice a regulated profession or occupation in another state or jurisdiction canceled, revoked or suspended, or has otherwise been disciplined by another jurisdiction; or
 - 4. Has intentionally used a fraudulent statement in a document connected with the license or permit; or
 - 5. Obtained fees or assisted in obtaining fees under fraudulent circumstances; or
 - **6.** Sustained a physical or mental disability or uses alcohol or drugs to such a degree as to render further practice as a Fire Equipment Dealer dangerous to the public; or
 - **7.** Failed to perform all installation, service, and testing in complete compliance with the manufacturer's manuals.

71-8303.13. Sanctions for Unlawful Practice.

- **A.** The Administrative Law Court may, after opportunity for hearing, order injunctive relief against a *person* who, without possessing a valid license or permit under this chapter, practices or offers to practice or uses the title or term Fire Equipment Dealer. For each violation, the administrative law judge may impose a fine of no more than ten thousand (\$10,000) dollars.
- **B.** A *person* who does not hold a license or permit as required by this Chapter, may not bring any action either at law or in equity to enforce the provisions of any contract for providing services as a Fire Equipment Dealer.

71-8303.14. Certain Acts Prohibited.

- A. No person or firm shall:
 - 1. Engage in the business of installing or servicing portable fire extinguishers without a valid and current license:
 - **2.** Engage in the business of installing or *servicing fixed fire extinguishing systems* without a valid and current license:
 - 3. Service, test, or install fixed fire extinguishing systems without a valid and current license;
 - **4.** Perform hydrostatic testing of *USDOT* cylinders for *portable fire extinguishers* or parts of a *fixed fire extinguishing systems* without a valid and current hydrostatic license;
 - 5. Obtain or attempt to obtain a license or permit by fraudulent representation;
 - **6.** Service *portable fire extinguishers* or test, service, or install *fixed fire extinguishing system*s contrary to the provisions of these regulations;
 - 7. Service or hydrostatic test a fire extinguisher that does not have the proper identifying labels;
 - 8. Sell, offer for sale, or give any make, type, or model of new or used fire extinguisher, unless extinguisher has first been tested and is currently approved or listed by <u>UL, LLC.</u>, <u>FM Approvals LLC.</u>, or other nationally recognized testing laboratory whose testing procedures used for approval in the listing of *portable fire extinguishers* are acceptable to the *OSFM*, and unless such extinguisher carries an <u>UL, LLC.</u>, or manufacturer's serial number. The serial number shall be permanently stamped on the manufacturer's identification and instruction plate;
 - **9.** Permit an individual who works for the *firm* to engage in installation, repair, recharge, maintenance or *servicing* fire extinguishers or *fixed fire extinguishing systems* without a valid permit or license.

71-8303.15. Cease and Desist Orders; Notice to Correct Hazardous Conditions.

When the *OSFM* shall have reason to believe that any *person* is or has been violating any provisions of this regulation or any rules or regulations adopted and promulgated pursuant thereto, the *OSFM* may issue and deliver to such *person* an order to cease and desist such violation or to correct such hazardous condition.

71-8303.16. Suspensions or Revocation of License or Permit.

- A. The license of any company or individual may be suspended or revoked because of failure to comply with the terms of any order to correct violations within the specified abatement period or for failure to comply with any cease and desist orders. A license may be suspended for a period not to exceed one year from the date of license suspension. A license may be revoked for a period not to exceed two years from the date of license revocation.
- B. In addition, a license may be suspended or revoked where the license or permit holder is found to have:
 - 1. Rendered inoperative a fire extinguisher or *fixed fire extinguishing system*, which is required by any rule of the *OSFM*, except during such time as the extinguisher, or *fixed fire extinguishing system* is being inspected, serviced, or tested;
 - 2. Falsified any records required to be maintained by this chapter or rules adopted thereto;
 - 3. Improperly serviced, tested, or inspected a fire extinguisher or fixed fire extinguishing system;
 - **4.** Allowed another *person* to use his permit or license number or use a license or permit number other than the license or permit holder's valid license or permit number; or
 - 5. Obliterated the serial number on a fire extinguisher for purposes of falsifying service records.

71-8303.17. Responsibility of Equipment Manufacturer.

All manufacturers of *portable fire extinguishers* and *fixed fire extinguishing systems* doing business in South Carolina shall provide the *OSFM* with all technical information as well as installation instructions that apply to their systems and equipment sold, installed, serviced or tested in South Carolina. This technical information shall include design revisions and updating information on systems sold in South Carolina.

71-8303.18. Penalties.

The *OSFM* may issue a *citation* for each offense to any *person*, *firm*, or corporation licensed under these regulations who has violated any provision of this subarticle. The *OSFM* may assess fines for each charge to both the fire equipment company and the permit holder. *Citation*s may be assessed by the *OSFM* at not more than two thousand (\$2000.00) per violation.

SUBARTICLE 5 LIQUEFIED PETROLEUM GAS

71-8304. LIQUEFIED PETROLEUM (LP) GAS.

(Statutory Authority: 1976 Code Section 23-9-20, 23-9-40, 23-9-60, 40-82-70)

71-8304.1. General.

- A. The purpose of this regulation is to provide reasonable protection of the health, welfare, and safety of the public and LP-Gas operators from the hazards associated with the handling, use, transportation, and storage of LP-Gas.
- **B.** These regulations apply to:
 - 1. LP-Gas Dealers, Installers, Gas Plants, Wholesalers, Resellers, or Cylinder Exchange operators and;
 - **2.** Any *person* handling, dispensing, transporting, or storing *LP-Gas*.
- **C.** These regulations shall not apply to:
 - 1. LP-Gas pipeline transmission.
 - 2. Gas plants after the point where LP-Gas or LP-Gas and air mixture enters a utility distribution system.
 - 3. Natural gas systems covered by the IFGC.

71-8304.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- **B.** The building code shall define occupancy classifications referenced in these regulations.

71-8304.3. Licensing and Permitting Fees.

- **A.** The *OSFM* is responsible for all administrative activities of the licensing program. The *SFM* shall employ and supervise personnel necessary to effectuate the provisions of this article and shall establish fees sufficient but not excessive to cover expenses, including direct and indirect costs to the State for the operation of this licensing program. Fees may be adjusted not more than once each two years, using the method set out in *S.C.* Code Ann. Section 40-1-50(D), 1976, as amended.
- B. Fees shall be established for the following:
 - 1. Application
 - 2. Testing
 - 3. Permitting
 - 4. Licensing
 - 5. Inspection
 - 6. Renewal
- **C.** All fees are due at time of application for licenses, testing, permits, inspection, or renewal.
- **D.** All fees paid to the *OSFM* are nonrefundable.

71-8304.4. Licensing Requirements.

A. Licenses

- 1. Each company shall possess a license issued by the OSFM.
- **2.** Licenses shall be displayed in a conspicuous location at the place of business for the *LP-Gas* Dealer, Installer, Gas Plant, Wholesaler, Reseller, or Cylinder Exchange operator.

SUBARTICLE 5 - LIQUEFIED PETROLEUM GAS

B. Permits

- 1. Each site shall have a designated *person* that has a permit issued by the *OSFM* to supervise people handling, dispensing, installing, transporting, repairing, or exchanging *LP-Gas*.
- 2. Any applicant who fails the written examination is allowed one (1) re-test after a minimum seven (7) day waiting period. Any applicant who fails the re-test shall wait at least thirty (30) days before reapplying.
- Permits shall bear the name, photograph, and any other identifying information deemed necessary by the OSFM.
- **4.** Permit holders shall have their permit in their possession when supervising the handling, dispensing, installing, manufacturing, transporting, repairing, or exchanging *LP-Gas*.
- 5. Permit holders shall exhibit their permits on request of any AHJ.
- 6. Permits shall expire on the day of expiration shown on the permit and shall be renewed biennially.
- 7. Permits issued under this subarticle are not transferable.
- **8.** Expired permits shall not be renewed. A new permit shall be obtained by complying with all requirements and procedures for an original permit.
- **71-8304.5. Plan Submittal Requirements.** Licensees that are required to obtain a site approval per *S.C.* Code Ann. Section <u>40-82-220</u>, 1976, as amended, shall comply with the plan submittal requirements of the applicable codes and standards referenced in R.71-8304.2.

SUBARTICLE 6 FIREWORKS AND PYROTECHNICS

71-8305. FIREWORKS AND PYROTECHNICS.

(Statutory Authority: 1976 Code Sections 23-9-10 et seq. and 23-35-45 et seq.)

71-8305.1. General.

- **A.** The purpose of this regulation is to provide reasonable safety and protection to the public, public property, private property, performers, display operators, and emergency responders from the hazards associated with the handling, use, transportation, and storage of *pyrotechnics* and *fireworks*.
- **B.** This regulation shall apply to:
 - 1. The handling and use of fireworks intended for public fireworks display;
 - 2. The construction, handling and use of *fireworks* equipment intended for public *fireworks* display;
 - 3. The general conduct and operation of public firework displays;
 - **4.** The transportation and storage of *fireworks* for public *fireworks* display;
 - **5.** The transportation and use of *consumer fireworks*;
 - **6.** The construction, handling, and use of *pyrotechnics* intended for *proximate audience* displays; special effects for *motion picture*, theatrical, and television productions;
 - **7.** The construction, handling, and use of flame effects intended for *proximate audience* displays, or special effects for *motion picture*, theatrical, and television productions;
 - **8.** The construction, handling, and use of rockets intended for *proximate audience* displays, or special effects for *motion picture*, theatrical, and television productions; and
 - **9.** The general conduct and operation of *proximate audience* displays.
- **C.** This regulation shall not apply to:
 - **1.** The manufacture, sale, or storage of *fireworks* as governed by the <u>SC Department of Labor Licensing and Regulation</u>, <u>State Board of Pyrotechnic Safety</u>;
 - **2.** The transportation, handling, and/or use of *fireworks* by the *SFM*, his employees, or any commissioned law enforcement officers acting within their official capacities;
 - **3.** Fireworks deregulated by the USDOT;
 - 4. Weapons used in enactments, when there is no projectile;
 - 5. Artillery field pieces used as salutes with no projectile; and
 - **6.** The outdoor use of model rockets within the scope of *NFPA* 1122.

71-8305.2. Codes and Standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- **B.** The building code shall define occupancy classifications referenced in these regulations.

71-8305.3. Licensing and Permitting Fees.

- **A.** All fees are due at time of application for licenses, tests, or permitting.
- **B.** Permit applications are due in the *OSFM* fifteen business days before the performance date. Fees may be doubled for an application received less than fifteen days before the performance date.
- **C.** The *OSFM* is responsible for all administrative activities of the licensing and permitting program. The *SFM* shall employ and supervise personnel necessary to effectuate the provisions of this article and shall establish fees

sufficient but not excessive to cover expenses, including direct and indirect costs to the State for the operation of this licensing program.

- **D.** Fees shall be established for the following:
 - 1. Application
 - 2. Background Check
 - 3. Testing
 - 4. Licensing
 - 5. Permitting
 - 6. Inspection
 - 7. Renewal
- E. All fees are due at time of application for licenses, background checks, testing, permits, inspection or renewal.
- **F.** All fees paid to the *OSFM* are nonrefundable.

71-8305.4. Qualifications of Operators.

A. All Operators.

- 1. No *person* shall be granted a license who has not successfully completed a written examination administered by the *OSFM*. The exam will cover the applicable codes, state laws, and regulations and the additional requirements listed below for the specific class of license for which they are applying.
- 2. Any applicant who fails the written examination is allowed one re-test after a minimum seven-day waiting period. Any applicant who fails the re-test shall wait at least six months before reapplying.
- **3.** Applicants shall submit a completed fingerprint card with their application. The *OSFM* will conduct a criminal background check as part of the licensing application process.
- **4.** Operators using explosives or explosive materials must have the appropriate Federal licenses. Operators shall provide a copy of applicable Federal licenses.
- 5. Licenses must be renewed biennially on the day of expiration shown on the license.
- **6.** Every two years, each licensed operator shall be required to attend training offered by the *OSFM* or attend pre-approved training providing a total of eight (8) hours of continuing education during the licensing cycle.
- 7. The OSFM may revoke, suspend, or deny a license because of, but not limited to:
 - a. Failure to comply with any order written by the OSFM;
 - **b.** Conviction of (1) a felony, (2) a crime of violence, or (3) any crime punishable by a term of imprisonment exceeding two years; or
 - **c.** Advocating or knowingly belonging to any organization or group which advocates violent overthrow of or violent action against the federal, state, local government, or its citizens; or
 - **d.** Having or contracting physical or mental illness or conditions that in the judgment of the *OSFM* would make use or possession of *fireworks*, *pyrotechnics*, or explosive materials hazardous to the licensee or the public; or
 - **e.** Violating the terms of the license or essential changes in the conditions under which the license was issued without prior approval of the *OSFM*;
 - **f.** Violating the state laws or regulations governing Public *Fireworks* Displays or *Proximate Audience Pyrotechnics*; or
 - g. Giving false information or making a misrepresentation to obtain a license.

B. Public Display Operators.

1. Applications for licensing must provide a notarized statement from a South Carolina licensed display operator that the applicant has actively participated in the set up and operation of at least six (6) *fireworks*

displays while holding a valid pyrotechnic operator trainee license, and the statement must indicate for each display the date, the site, and the name and license number of the supervising operator.

2. The person in charge of the Public Fireworks Display shall be licensed by the OSFM.

C. Proximate Audience Display Operators.

- 1. Applications for licensing must provide a notarized statement from a South Carolina licensed display operator or company that the applicant has actively participated in the set-up and operation of at least six (6) proximate audience performances while holding a valid pyrotechnic operator trainee license, and using the types of pyrotechnics for the license classification the applicant is seeking, and the statement must indicate for each display the date, the site, and the name and license number of the supervising operator. Only the OSFM may accept an alternative number of displays for this requirement based on the applicant's experience.
- 2. Licenses for pyrotechnic operators authorize and place the responsibility for the handling, supervision, and discharge of the *fireworks* or pyrotechnic device permitted by their license classification. The operator is responsible for the training of his or her assistants in the safe handling, supervision, and discharge of the *fireworks* or pyrotechnic devices permitted by their license classification.
 - a. "Pyrotechnic Operator Unrestricted" may conduct and take charge of all activity in connection with the use of explosives or explosive materials, rockets, flame effects, *Display Fireworks*, binary system pyrotechnics, Consumer Fireworks, Theatrical Pyrotechnics, Novelties, and other special effects permitted by the OSFM for a proximate audience display, commercial entertainment, or special effects in motion picture, theatrical, and television productions.
 - **b.** "Pyrotechnic Operator Commercial Outdoor" may conduct and take charge of all activity in connection with the use of flame effects, *Display Fireworks*, binary system *pyrotechnics*, *Consumer Fireworks*, *Theatrical Pyrotechnics*, and Novelties permitted by the *OSFM* for a *proximate audience* display and commercial entertainment.
 - c. "Pyrotechnic Operator Rockets" may conduct and is restricted to all activities in connection with research, experiments, production, transportation, fuel loading, and launching of all types of experimental, solid fuel, and high power rockets. Only individuals or companies holding valid import, export, or wholesale licenses may import, export, or wholesale experimental high-powered motors.
 - **d.** "Pyrotechnic Operator *Motion Picture* Special Effects" may conduct and take charge of all activity in connection with the use of explosives or explosive materials, flame effects, *Display Fireworks*, binary system *pyrotechnics*, *Consumer Fireworks*, *Theatrical Pyrotechnics*, and Novelties, and other special effects permitted by the *OSFM* for the sole purpose of *motion picture*, television, theatrical or operatic productions.
 - **e.** "Pyrotechnic Operator Commercial Indoor" may conduct and take charge of all activity in connection with the use of binary system *pyrotechnics*, *Theatrical Pyrotechnics*, and Novelties permitted by the *OSFM* in stage or theatrical productions only.
 - **f.** "Pyrotechnic Operator Trainee" must function under the direct supervision and control of a pyrotechnic operator for the license classification that he/she is seeking a license.

71-8305.5. Display Permits.

A. All Displays.

- **1.** Any *person* who desires to hold a Public *Fireworks* Display or a *Proximate Audience* Display must obtain a permit from the *OSFM* before the display.
- **2.** Permits shall be valid for up to one calendar period prescribed or until any condition of the permit application changes. The *OSFM* shall make final determination of a change of condition in the permit.
- 3. All permit forms will be made available on the OSFM website.
- 4. The OSFM may revoke, suspend, or deny a permit because of, but not limited to:
 - a. The display operator does not possess the correct license classification for the display; or
 - **b.** Not complying with any order written by the OSFM; or

- **c.** Violating the terms of the permit or essential changes in the conditions under which the permit was issued without prior approval of the *OSFM*; or
- d. Giving false information or making a misrepresentation to obtain a permit.
- **5.** The following additional information must be provided with the permit application:
 - **a.** A list of the number, type, and size of *fireworks* or effects being discharged;
 - **b.** A diagram of display site including measurements;
 - c. Directions to the site; and
 - **d.** A copy of certificate of insurance.
- **6.** The *AHJ* providing fire suppression equipment and personnel for the Public *Fireworks* Display must sign the permit form to acknowledge their awareness of the proposed display.
- 7. Permits must be posted at the display site.
- **8.** A "Request to Modify an Existing Pyrotechnic Display Permit" form must be submitted for approval of requested changes in the conditions or terms under which a permit was previously issued.

B. Public Fireworks Display Permits.

- 1. The sponsor of the display shall forward a copy of the permit to the *OSFM* along with the items required in these regulations fifteen business days before the display. The permit becomes valid when co-signed by the *OSFM*.
- 2. The validated permit will be distributed as follows:
 - a. The OSFM shall retain the original;
 - **b.** A copy to the sponsor;
 - c. A copy to the supplier, which will authorize shipment of the fireworks;
 - **d.** A copy to the *AHJ* providing the fire suppression equipment and personnel for the display;
 - **e.** A copy posted at the display site.
- All pyrotechnics shall be purchased from a pyrotechnic manufacturer or distributor licensed by the <u>Board of Pyrotechnic Safety</u>. A licensed Public Display Operator shall be present and supervise firing of all public fireworks displays.
- **4.** The *fireworks* supplier shall carry a minimum of \$1,000,000 of Public Liability Insurance. The policy must list as an additional insured the display sponsor, as well as the State of South Carolina, and its agents. The coverage company must be an insurer which is either licensed by the *DOI* in this State or approved by the *DOI* as a nonadmitted surplus lines carrier for risks located in this State. In the event the liability insurance is canceled, suspended, or nonrenewed, the insurer shall give immediate notice to the *OSFM*.

C. Proximate Audience Display Permits.

- 1. Public Liability Insurance in the amount of \$1,000,000 shall be provided by the permittee. The permittee shall furnish a certificate of insurance in this amount with their application. The permittee shall list the State of South Carolina and its agents as additional insured.
- **2.** Public Liability Insurance in the amount of \$1,000,000 shall be provided by any permittee involved with *motion picture* productions. *Motion picture* companies employing this *person*(s) shall list the State of South Carolina and its agents as additional insured.
- **3.** The coverage company must be an insurer which is either licensed by the *DOI* in this State or approved by the *DOI* as a nonadmitted surplus lines carrier for risks located in this State. In the event the liability insurance is canceled, suspended, or nonrenewed, the insurer shall give immediate notice to the *OSFM*.

71-8305.6. General Operational Requirements of Displays.

A. All Displays.

- **1.** The operator shall have their license in their possession when conducting a display and shall exhibit their license on request of any *AHJ*.
- 2. All displays must have a *person* in charge that holds the proper license issued by the *OSFM* for the type of display being conducted.
- **3.** The *SFM* or any approved *AHJ* may enforce these laws and regulations.
- **4.** Magazine log shall be available for inspection during normal work hours, 1 hour before, and 1 hour after each performance.
- **5.** Operators must notify the *OSFM* within 24 hours of any fires or thefts involving *fireworks*. The operators shall provide the *OSFM* with a copy of the report filed with the police department or the incident report from the fire department. Operators must also provide the *OSFM* with a copy of *ATF* Form 5400.5.
- **6.** Any *person* who violates any provision of these laws and regulations will purchase the appropriate permit, pay the appropriate license fee, if any are required, and be subject to the following penalty provisions:
 - a. S.C. Code Ann. Section 23-36-170, 1976, as amended.
 - **b.** S.C. Code Ann. Section <u>23-35-150</u>, 1976, as amended.
- **7.** Confiscation, storage, or disposal of *fireworks*, pyrotechnic and explosive materials used for *proximate* audience or public firework displays by the SFM shall comply with S.C. Code Ann. Section 23-36-110, 1976, as amended.
- 8. Storage of special effects pyrotechnics and other material.
 - a. All classes of explosives shall be stored in accordance with the South Carolina Explosives Control Act (S.C. Code Ann. Section <u>23-36-10</u>, et seq., 1976, as amended) or <u>Title 27 Code of Federal Regulations</u>, <u>Chapter II, Subchapter C, Part 555, Subpart K.</u>
 - **b.** All other *fireworks* or pyrotechnic materials shall be stored per the appropriate *NFPA* standard.
- 9. The AHJ may require the permittee to furnish fire support personnel other than local firefighters.

B. Public Fireworks Displays.

- **1.** Where unusual conditions exist, the *AHJ* may increase the minimum clearances as necessary before granting approval of the display site. The *AHJ* may not reduce clearances specified in *NFPA* 1123 without written approval of the *OSFM*.
- 2. A copy of the display permit shall be kept at the firing station.
- **3.** Operators shall never use damaged *fireworks*, *fireworks* that are wet, or *fireworks* damaged by moisture. Operators shall not dry wet *pyrotechnics* for reuse. Operators shall handle and dispose of wet or damaged *pyrotechnics* per the manufacturer's instructions.
- 4. The operator of the display shall keep a record of all shells that fail to ignite or function. The form shall be completed and returned to the supplier within fifteen days of the display and the operator shall retain a copy for their records. The operator and supplier shall retain Malfunction Reports for three years from the date of the display. The operator and supplier must produce these reports upon request of the OSFM. The "Malfunction Report" form shall be available on the OSFM website.
- 5. Moorings or anchors shall secure floating vessels or platforms used for firing of a Public *Fireworks* Display.
- 6. Operators shall not reload mortars during a display.
- 7. It shall be the responsibility of the permittee to arrange with the *AHJ* for the detailing of firefighters and equipment as required.

C. Proximate Audience Display.

- 1. The licensed pyrotechnic operator is responsible for the storing, handling, supervision, discharge, and removal of all pyrotechnic devices and materials based on their license classification and the terms of their permit. The licensed pyrotechnic operator is responsible for supervising and training of their assistants in the safe handling and discharge of all pyrotechnic devices.
- 2. The permit package shall contain a copy of the permit, Certificate of Insurance, and the MSDS(s) for material used.
- **3.** A copy of the permit package shall be kept at the control site used to initiate the display. An audible announcement shall be made not more than 10 minutes before the display to notify personnel of the use of *proximate audience pyrotechnics*.
- **4.** *Motion Picture* productions shall display one permit package at the production office, and maintain the second permit package on the film site through the First Assistant Director. Before the start of any effect, verbal notification of *Proximate Audience* Pyrotechnic use shall be required before each camera roll.
- **5.** The *AHJ* may inspect the *Proximate Audience* Display. As a minimum, the inspection shall cover the requirements in Annex B of *NFPA* 1126.
- **6.** The permittee shall furnish a fire watch during the times the special effects materials have been removed from storage and/or magazines and the conclusion of the performance. This *person* shall be identified by an orange shirt or vest (or other color approved by the *AHJ*) with three-inch white letters on the front and back stating FIRE WATCH. For *motion picture* productions, the method for identifying the FIRE WATCH shall be a mutually agreed means of designation between the *OSFM*, the permittee, and the First Assistant Director.
- **7.** Indoor facilities used for *Proximate Audience* Displays must be equipped with an automatic fire alarm system and a public address system.
 - **a.** The fire alarm system shall be zoned so that the areas affected by special effects smoke can be overridden during the event.
 - **b.** An override switch shall be provided at the firing point and a second switch in the control room to shut off stage sound and make the public address system available for evacuation instructions. These switches must be labeled and visible throughout the show.
 - **c.** The fire alarm system must be returned to normal operation before the fire watch and the display operator may leave the facility.

71-8305.7. Use of Consumer Fireworks in South Carolina.

- **A.** It shall be deemed a violation of these regulations to:
 - 1. Explode or ignite *fireworks* within 600 ft. of any Assembly Occupancy, Educational Occupancy, Hazardous Occupancy, Institutional Occupancy, or any facility storing or dispensing flammable liquids, combustible liquids, *LP-Gas*, or other hazardous materials;
 - 2. Explode or ignite *fireworks* within 75 ft. of where *fireworks* are stored, sold or offered for sale;
 - **3.** Ignite, discharge, and/or throw *fireworks* from any motor vehicle or to place, ignite, discharge, and/or throw *fireworks* into or at any motor vehicle; and
 - **4.** Ignite or discharge *fireworks* in a wanton or reckless manner to constitute a threat to the personal safety or property of another.
- **B.** The distances in R.71-8305.7 A (1) may be reduced if the display is permitted with the *OSFM* as a Public *Fireworks* Display or as a *Proximate Audience* Display.
- **C.** Consumer Fireworks shall not be used for a Public Fireworks Display unless permitted by the OSFM per the applicable provisions of this regulation and all permit fees are paid.

71-8305.8. Transportation of Fireworks or Pyrotechnics in South Carolina.

A. Vehicles transporting *Display Fireworks* (*pyrotechnics* classified as 1.3 explosives) in any quantity and *Consumer Fireworks* (*pyrotechnics* classified as 1.4 explosives) in quantities greater than 1000 lbs. shall be in the custody of drivers possessing an appropriate valid commercial drivers license (CDL) with a hazardous materials endorsement.

- **B.** On both sides, on the front, and on the rear, vehicles transporting *Display Fireworks* (*pyrotechnics* classified as 1.3 explosives) in any quantity and *Consumer Fireworks* (*pyrotechnics* classified as 1.4 explosives) in quantities greater than 1000 lbs. shall prominently display signs marked "EXPLOSIVES" that conform to the *USDOT* and other federal regulations.
- **C.** Appropriate fire and police authorities shall be promptly notified when a vehicle transporting *pyrotechnics* is involved in an accident, break down, or fire. Only in the event of such an emergency shall the transfer of *pyrotechnics* from one vehicle to another be allowed on highways and then only when qualified supervision is provided.
- **D.** Any vehicle used for the transportation of *pyrotechnics* covered by item A or B above shall have not less than one approved-type fire extinguisher with a minimum rating of 2A 10 B:C and shall be so located as to be readily available for use.
- **E.** Operators must notify the *OSFM* within 24 hours of any fires or thefts involving *fireworks*. The operator shall provide the *OSFM* with a copy of the report filed with the police department or the incident report from the fire department. Operators must also provide the *OSFM* with a copy of *ATF* Form 5400.5.

SUBARTICLE 7 HYDROGEN FACILITIES

71-8306. HYDROGEN FACILITIES.

(Statutory Authority: 1976 Code Section 23-9-550)

71-8306.1. General.

- **A.** The purpose of these regulations are to provide reasonable safety and protection to the public, public property, private property from the hazards associated with the handling, use, storage, transfer and dispensing at a *hydrogen facility*.
- **B.** This regulation shall apply to:
 - 1. Hydrogen dispensing stations for public or commercial use as a transportation fuel and motor vehicle fuel or in a fuel cell;
 - 2. Bulk hydrogen compressed gas systems for a hydrogen facility;
 - 3. Bulk liquefied hydrogen gas systems for a hydrogen facility:
 - 4. Commercial hydrogen generation systems connected to a hydrogen facility; and,
 - 5. Engineered and pre-engineered hydrogen fuel cell systems.
- **C.** This regulation shall not apply to:
 - The manufacture, sale, or storage of small scale hydrogen generation or consumption systems where hydrogen is held in containers of one liter or less and Maximum Allowable Quantities (MAQ) are not exceeded.
 - **2.** The transportation, handling, and/or use of *hydrogen* by the State Fire Marshal, his employees, or any commissioned law enforcement officers acting within their official capacities.
 - 3. The manufacture or transportation of bulk *hydrogen*.
 - **4.** *Hydrogen* used as an ingredient or by product in the manufacture of a product.

71-8306.2. Codes and standards.

- **A.** All references to codes and standards found in these regulations refer to the editions adopted in R.71-8300.2 and are modified by the following regulations as shown below.
- **B.** All facilities shall be designed and installed in accordance with the adopted codes and standards listed in R.71-8300.2.

71-8306.3. Engineered and pre-engineered systems

A. Engineered hydrogen systems

- 1. All installations shall be in accordance with South Carolina Laws, Regulations, and adopted Codes.
- **2.** Plans and specifications prepared by a licensed engineer or prepared under the licensee's direct supervision must be stamped with seals prior to submission and review by *OSFM*.

B. Pre-engineered hydrogen systems.

- All installations shall be in accordance with South Carolina Laws, Regulations, and adopted Codes.
- **2.** Plans and specifications are not required to be prepared by a licensed engineer nor be stamped with seals prior to submission and review by *OSFM*.

71-8306.4. Permit application requirements for hydrogen facilities.

A. The *OSFM* may issue a permit to a location when presented a completed application that contains at least the following, where applicable:

SUBARTICLE 7 – HYDROGEN FACILITIES

- 1. A site plan, drawn to scale, which shows equipment locations and point(s) of transfer with respect to property lines, nearby structures, roads & dikes, power lines, and other potential ignition sources;
- 2. An accidental release plan;
- 3. The piping layout with valves and fitting details;
- 4. Normal and emergency ventilation designs;
- 5. Container capacity (or capacities) and design standards;
- 6. Electrical plan;
- 7. Container and piping support details;
- 8. Information concerning onsite fire protection equipment;
- 9. Information concerning the project's beginning and ending points, if part of a larger system;
- **10.**Listed equipment with listing agency;
- 11. Unless exempted, design documents sealed by an engineer licensed in South Carolina; and,
- 12. All applicable fees paid in full.

71-8306.5. Licensing and permitting fees.

- A. All fees are due at time of application for licenses, tests, or permitting.
- **B.** Permit applications are due in the *OSFM* prior to construction or installation.
- **C.** Approval of plans for *hydrogen* facilities are to be obtained prior to start of construction or installation.
- **D.** The *OSFM* is responsible for all administrative activities of the licensing program. The OSFM shall employ and supervise personnel necessary to effectuate the provisions of this article and shall establish fees sufficient but not excessive to cover expenses, including direct and indirect costs to the State for the operation of this licensing program.
- E. Fees shall be established for the following:
 - 1. Application fee \$10
 - 2. Permitting fee (includes plan review and initial site inspection) \$250.
 - 3. Inspection fee (semi-annual) \$100.
 - 4. Renewal of permits (annual includes inspection) \$100.
- **F.** The application fee is due at time of application for license.
- **G.** All fees paid to the *OSFM* are nonrefundable.