

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 [SC Department of Labor Licensing and Regulation](#), [State Board of Pyrotechnic Safety](#);
 - 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.
3. All *pyrotechnics* shall be purchased from a pyrotechnic manufacturer or distributor licensed by the [Board of Pyrotechnic Safety](#). 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 [23-35-150](#), 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 [23-36-10](#), et seq., 1976, as amended) or [Title 27 Code of Federal Regulations, Chapter II, Subchapter C, Part 555, Subpart K](#).
 - 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](#).