

**Agency 22**  
**State Fire Marshal**  
Article 4.—Explosive Materials

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**22-4-5. Adoption by reference.** (a) The 2013 edition of NFPA 495, "explosive materials code," published by the national fire protection association (NFPA), is hereby adopted by reference, with the alterations specified in subsections (b) through (d).

(b) The following provisions shall be excluded from adoption:

- (1) All material before chapter 1 and all annexes;
- (2) chapters 2, 8, and 12;
- (3)(A) The last sentence of section 1.3.1;
- (B) sections 1.4 through 1.4.3; and
- (C) section 1.6;
- (4)(A) The last sentence of section 3.1;
- (B) section 3.2.1; and
- (C) sections 3.2.3 through 3.2.7;
- (5)(A) Section 4.1.7;
- (B) sections 4.2.3.1 through 4.2.3.3;
- (C) sections 4.7.2 through 4.7.4;
- (D) section 4.8.2; and
- (E) section 4.10.2;
- (6) section 5.2.13.2;
- (7)(A) Sections 6.3 through 6.3.5; and
- (B) sections 6.6 through 6.6.8;
- (8) sections 7.3 through 7.3.2;
- (9) section 10.3.8.1;
- (10) section 11.4.3;
- (11) section 13.1.2; and
- (12)(A) Sections 14.1 through 14.3.8;
- (B) sections 14.4.1 through 14.4.4; and
- (C) sections 14.4.8 through 14.5.9.

(c) The following modifications shall be made to NFPA 495:

(1) Section 1.3.2 shall be replaced with the following: "This code shall not apply to the transportation and use of military explosives by federal or state military agencies, nor shall this code apply to the use of explosive materials by federal, state, or municipal agencies while engaged in public safety functions, except that state and municipal agencies shall be subject to the storage, recordkeeping, and permitting requirements of this code."

(2) In section 1.3.5, the phrase "as defined in NFPA 1122, Code for Model Rocketry; NFPA 1125, Code for the Manufacture of Model Rocket and High Power Rocket Motors; and NFPA 1127, Code for High Power Rocketry" shall be deleted.

(3) The following text shall be added after section 1.3.6:

"This code shall not apply to small arms ammunition and components of small arms ammunition, but this code shall apply to the manufacture of smokeless propellants and black powder substitutes and to smokeless propellants and black powder substitutes not designed for use in small arms ammunition.

"This code shall not apply to commercially manufactured black powder in quantities not to exceed fifty pounds, percussion caps, safety and pyrotechnical fuses, quills, quick and slow matches, and friction primers, intended to be used solely for sporting, recreational, or cultural purposes in antique firearms as defined in 18 U.S.C. §921(a)(16) or in antique devices exempted from the term 'destructive device' in 18 U.S.C. §921(a)(4).

"This code shall not apply to the use, storage, or transportation of precursor chemicals used for agricultural purposes other than blasting, or to fertilizers and fertilizer materials regulated by the Kansas department of agriculture pursuant to K.S.A. 2-1201 et seq., and amendments thereto, except that thefts of ammonium nitrate shall be reported to the office of the state fire marshal and to a local law enforcement authority within 24 hours of discovering the theft."

(4) In section 3.2.2, the definition of "Authority Having Jurisdiction (AHJ)" shall be replaced with the following: "The state fire marshal or designee, except when the context indicates that the term is referring to a local fire department or law enforcement agency."

(5) In section 3.3.8, the definition of blasting agent shall be replaced with the following: "Any material or mixture, consisting of fuel and oxidizer, intended for blasting, not otherwise defined as an explosive, provided that the finished product, as mixed for use or shipment, cannot be detonated by means of a numbered 8 test blasting cap when unconfined."

(6) Section 3.3.20 shall be replaced with the following: "Explosive. Any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. The term shall also include two or more precursor chemicals sold or possessed together that if mixed or combined would constitute a binary explosive."

(7) Section 3.3.49 shall be replaced with the following: "Small arms ammunition and components of small arms ammunition. Small arms ammunition or cartridge cases, primers, or smokeless propellants designed for use in small arms, including percussion caps, and  $\frac{3}{32}$  inch and other external burning pyrotechnic hobby fuses. The term shall not include black powder, but shall include black powder substitutes provided

the propellant is a component of small arms ammunition."

(8) Section 4.2.1 shall be replaced with the following: "No person shall be in possession of explosive materials, or conduct an operation or activity requiring the use of explosive materials, or perform or supervise the loading and firing of explosive materials without first obtaining the correct permit or permits from the state fire marshal."

(9) Section 4.2.4 shall be replaced with the following: "Each permitted manufacturer, distributor, and user in the state shall maintain continuous general liability coverage that includes coverage for intentional blasting of not less than \$1,000,000 from an insurance company authorized by the Kansas insurance department to do business in Kansas and shall annually provide proof of this insurance to the state fire marshal."

(10) Section 4.3.1 shall be replaced with the following sentence: "Before a person conducts an operation or activity that uses explosive materials in the state, the person shall obtain a user permit from the state fire marshal."

(11) Section 4.3.2 shall be replaced with the following sentence: "Before an individual performs or supervises the loading and firing of explosive materials in the state, that individual shall obtain the appropriate permit to blast, as specified in Table 4.3.2, from the state fire marshal, except that this requirement shall not apply to a trainee who is acting under the direct supervision of and is being trained by the holder of a blaster permit."

(12) The following classes of blasting permits shall be added to table 4.3.2:

(A) Class P1 permit. The category name for this permit shall be "Public Safety, Bomb Technician." The permit shall allow "blasting by a bomb technician acting on behalf of the state or a political or taxing subdivision in a public safety capacity."

(B) Class P2 permit. The category name for this permit shall be "Public Safety, Explosive Breacher." The permit shall allow "explosive breaching by a person acting on behalf of the state or a political or taxing subdivision in a public safety capacity."

(13) The following text shall be added after section 4.3.2:

"Permit to Manufacture. Before a person manufactures explosive materials in the state, that person shall obtain a manufacturer permit from the state fire marshal. A holder of a manufacturer permit shall not be required to obtain a distributor or user permit.

"Permit to Distribute. Before a person engages in the business of distributing explosive materials within the state, that person shall obtain a distributor permit from the state fire marshal, except that this requirement shall not apply to common carriers or to an out-of-state person who distributes explosive materials to the holder of a manufacturer or distributor permit. 'Distributing' shall mean the selling, issuing, giving, transferring, or other disposing of. A holder of a distributor permit shall not be required to obtain a user permit.

"Handler Permit. Before an individual, other than the holder of a blaster permit, actually or constructively possesses explosive materials in the state, that individual shall obtain a handler permit from the state fire marshal, except that a handler permit shall not be required to handle explosive materials under the direct supervision of the holder of a blaster permit. 'Direct supervision' shall mean that the holder of the blaster permit is physically present and overseeing the actions of the employee. Actual possession shall include the physical handling of explosive materials. Permitted handlers may include individuals who load or unload vehicles, trainees, magazine keepers, drillers, stemmers and sales staff.

"Storage Permit. Before a person stores explosive materials in the state, that person shall obtain a site-specific storage permit. The storage permit may be temporary or permanent. A permanent storage permit shall be valid for no longer than three years. A temporary storage permit shall be valid for no longer than 90 days, but the permit holder may apply to the office of the state fire marshal to renew the permit one time for no longer than an additional 90 days. Before either storage permit will be issued, the person shall obtain a manufacturer, distributor, or user permit from the state fire marshal, any explosive permit required by the bureau of alcohol, tobacco, firearms and explosives, and a certification from the fire department with jurisdiction over the area where the storage site will be located that the proposed storage of explosive materials will not violate any local laws."

(14) Section 4.4.2.1 shall be replaced with the following: "Each applicant shall complete a blaster training program and pass a qualifying examination in the category of blasting for which application is made. The blaster training program and qualifying examination shall be approved in advance by the office of the state fire marshal. To be approved by the office of the state fire marshal, a blaster training program or blaster refresher course shall provide training on the following topics, as applicable to the category of blasting for which application is made: the requirements of this code; federal explosives law and regulations; and industry standards related to the safe use, storage, and transportation of explosive materials."

(15) Section 4.4.2.2 shall be replaced with the following: "To be approved by the office of the state fire marshal, a qualifying examination shall test the applicant's knowledge of the following topics, as applicable to the category of blasting for which application is made: the requirements of this code; federal explosives law and regulations; and industry standards related to the safe use, storage, and transportation of explosive materials."

(16) Section 4.4.5 shall be replaced with the following: "Each person whose permit to blast has been revoked shall be required to complete a blaster training program and pass a qualifying examination of a condition of reinstatement of the permit. The blaster training program and qualifying examination shall be approved in advance by the office of the state fire marshal."

(17) Section 4.4.6 shall be replaced with the following: "Each person whose permit to blast has lapsed for a period of one year or longer shall be required to complete a blaster training program and pass a qualifying examination as a condition of renewal of the permit. The blaster training program and qualifying examination shall be approved in advance by the office of the state fire marshal."

(18) The following text shall be added after section 4.4.6:

"If the holder of a blaster or handler permit ceases to be employed by a permitted manufacturer, distributor, or user, the blaster or handler shall notify the office of the state fire marshal within five business days, and the individual's permit shall be placed on inactive status. The individual shall not blast or handle explosive materials while the permit is on inactive status. Before resuming work with a permitted manufacturer, distributor, or user, the blaster or handler shall notify the office of the state fire marshal, and the permit shall be returned to active status. However, if the permit has been on inactive status for at least one year, the holder shall complete an approved blaster refresher class for a blaster permit or an approved explosive safety course for a handler permit before the permit is returned to active status.

"Requirement for a Handler Permit. Before applying for or renewing a handler permit, an individual shall complete an explosive safety course

approved by the state fire marshal. The explosive safety course shall provide training on the safe handling, storage, and transportation of explosive materials."

(19) Sections 4.5.1 and 4.5.2 shall be replaced with the following sentence: "The holder of any permit or permits issued pursuant to this code shall maintain a copy of the permit or permits at all sites where explosive materials are stored or used and in any vehicle used to transport explosive materials."

(20) Section 4.6.2 shall be replaced with the following sentence: "An individual shall be at least 18 years old before applying for a handler permit and at least 21 years old before applying for a blaster permit."

(21) In section 4.7.1(3), "is a fugitive from justice" shall be replaced with "has fled from any state to avoid prosecution for a crime or to avoid giving testimony in any criminal proceeding."

(22) Section 4.8.1.1 shall be replaced with the following sentence: "Permit holders shall keep records in accordance with 27 C.F.R. Part 555, Subpart G, as adopted by reference in K.A.R. 22-4-5."

(23) Section 4.10.1 shall be replaced with the following: "When an application for renewal is filed with the office of the state fire marshal before expiration of the current permit, the existing permit shall not expire until the state fire marshal has taken final action upon the application for renewal or, if the state fire marshal's action is unfavorable, until the last day for seeking judicial review of the state fire marshal's action or a later date fixed by the reviewing court."

(24) The following sentence shall be added after section 4.10.3: "Before applying for renewal, the holder of a blaster permit shall complete a blaster refresher course approved by the state fire marshal and the holder of a handler permit shall complete an explosive safety course approved by the state fire marshal."

(25) Section 5.4.4.1.2 shall be replaced with the following: "The integrity of the fences and gates shall be checked at least annually."

(26) In section 5.4.7, the phrase "and the IAPMO Uniform Mechanical Code" shall be deleted.

(27) Section 9.7.2 shall be replaced with the following: "All magazines containing explosive materials shall be opened and inspected at maximum intervals of seven days to determine whether there has been unauthorized or attempted entry into the magazines or whether there has been unauthorized removal of the magazines or their contents."

(28) The following sentence shall be added before section 10.1: "A holder of a user permit shall notify the office of the state fire marshal at least 48 hours before beginning blasting operations at a site and before resuming blasting operations at a site if those operations have been suspended or discontinued for more than six months."

(29) Section 10.1.19.1(2) shall be replaced with the following: "Compliance with the safe distances in safety library publication 20, 'safety guide for the prevention of radio frequency radiation hazards in the use of commercial electric detonators (blasting caps),' published by the institute of makers of explosives (IME) and dated December 2011, parts II and III of which are hereby adopted by reference, with the exception of all text before table 1 and pages 36 through 38."

(30) Section 11.1.1 shall be replaced with the following: "This chapter shall apply to buildings and other structures. As used in this chapter, 'buildings and other structures' shall mean dwellings, public buildings, schools, places of worship, and commercial or institutional buildings."

(31) In section 11.1.3, all text after "with" shall be replaced with "the international society of explosives engineers' 'ISEE performance specifications for blasting seismographs,' 2011 edition."

(32) In section 11.1.4, the phrase "2009 edition" shall be added at the end of the sentence.

(33) The following text shall be added after section 11.1.4:

"The blaster-in-charge or designee shall conduct a preblast survey of all buildings and structures within a scaled distance of 35 ft/lbs<sup>1/2</sup> from the blast site, except that a preblast survey shall not be required for a building or structure if the owner refuses permission or if the owner does not respond after three documented attempts to obtain permission.

"Where blasting seismographs are used, the permitted user shall maintain the seismograph recording and accompanying records for at least three years. These records shall include the maximum ground vibration and acoustics levels recorded, the specific location of the seismograph equipment, its distance from the detonation of the explosives, the date and time of the recording, the name of the individual responsible for operation of the seismograph equipment, the type of seismograph instrument, its sensitivity, and the calibration signal or certification date of the last calibration."

(34) Section 11.2.3 shall be replaced with the following sentence: "The ground vibration limit for underground utilities, pipelines, fiber optic lines, and similar buried engineered structures shall be five inches per second."

(35) Section 11.4.2 shall be replaced with the following: "Reasonable precautions shall be taken to prevent flyrock from being propelled from the blast site onto property not contracted by the blasting operation or onto property for which the owner has not provided a written waiver to the blasting operation."

(36) The following text shall be added at the end of chapter 11: "The blaster-in-charge shall ensure that a record of each use of explosives is made, and this record shall be retained for at least three years by the permitted user. The record shall include:

"(A) The name and permit number of the permitted user;

"(B) the location, date, and time of the detonation;

"(C) the name and permit number of the blaster-in-charge;

"(D) the type of materials blasted;

"(E) the type of explosives used;

"(F) the weight of each explosive product used and the total weight of explosives used;

"(G) the maximum weight of explosives detonated within any eight-millisecond period;

"(H) the initiation system, including the number of circuits and the timer interval, if a sequential timer is used;

"(I) the type of detonator and delay periods used, in milliseconds;

"(J) the sketch of delay pattern, including decking;

"(K) the distance and scaled distance, if applicable, to the nearest building or structure;

"(L) the location of the nearest building or structure, using the best available information; and

"(M) if bore holes are used, the number of bore holes, burden, and spacing; the diameter and depth of bore holes; and the type and length of stemming."

(37) Section 13.1.1 shall be replaced with the following sentence: "Two or more precursor chemicals that would constitute a binary explosive if mixed or combined shall be stored and used in the same manner as other explosive materials."

(38) Section 13.4.2 shall be replaced with the following: "Thefts of precursor chemicals during transportation, storage, and use shall be reported to the office of the state fire marshal, the bureau of alcohol, tobacco, firearms and explosives, and a local law enforcement agency."

(d)(1) Each citation in NFPA 495 to the following codes shall mean the edition adopted by reference in K.A.R. 22-1-3:

(A) NFPA 13, "standard for the installation of sprinkler systems"; and

(B) NFPA 70, "national electric code."

(2) Each citation in NFPA 495 to the following codes shall mean the edition adopted by reference in K.A.R. 22-6-20:

(A) NFPA 1123, "code for fireworks display";

(B) NFPA 1124, "code for the manufacture, transportation, storage, and retail sales of fireworks and pyrotechnic articles"; and

(C) NFPA 1126, "standard for the use of pyrotechnics before a proximate audience."

(3) Each citation of NFPA 1, "fire code," shall be replaced by "the international fire code (IFC) as adopted by reference in K.A.R. 22-1-3."

(4) Each citation of NFPA 5000, "building construction and safety code," shall be replaced by "the international building code (IBC) as adopted by reference in K.A.R. 22-1-3."

(e) 27 C.F.R. part 555, subpart G, as in effect on April 27, 2012, is hereby adopted by reference, with the following modifications:

(1) 27 C.F.R. 555.121(b), 555.122, 555.123(f), 555.124(f), 555.125(a), (b)(2), and (b)(6), 555.126, and 555.129 are not adopted.

(2) In 27 C.F.R. 555.121(c), the last sentence shall be deleted.

(3) In 27 C.F.R. 555.127, all text after "end of the day" shall be deleted.

(4) In 27 C.F.R. 555.128, the last sentence shall be replaced with the following sentence: "Copies of the records shall be delivered to the office of the state fire marshal within 30 days following the discontinuance of the business or operations."

(5) Wherever the term "Director, Industry Operations" appears in subpart G, this term shall be replaced with "state fire marshal."

(6) Each reference to a "licensed manufacturer" shall mean a "person with a state manufacturer permit." Each reference to a "licensed dealer" shall mean a "person with a state distributor permit."

(7) Each reference to a "limited permit" shall be deleted.

(f) Each existing user permit and each existing blaster permit issued by the state fire marshal shall be deemed valid and shall remain effective until the permit's expiration date, unless the permit is revoked or suspended before then. (Authorized by and implementing K.S.A. 2012 Supp. 31-133; effective, T-22-6-28-13, June 28, 2013; effective Oct. 18, 2013.)

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