

CHAPTER 69A-2 EXPLOSIVES

| | |
|------------|---|
| 69A-2.001 | Scope of Rules and Regulations. |
| 69A-2.002 | Definitions. |
| 69A-2.003 | General Requirements. |
| 69A-2.005 | Manufacture; Blasting Agents. |
| 69A-2.006 | Storage; General. |
| 69A-2.007 | Storage; Magazine Construction Requirements. |
| 69A-2.008 | Storage; Within Magazines. |
| 69A-2.009 | Storage; Smokeless Propellant. |
| 69A-2.0091 | Storage; Black Powder. |
| 69A-2.010 | Storage; Blasting Agents. |
| 69A-2.011 | Storage; Inventory Required. |
| 69A-2.013 | Transportation; General. |
| 69A-2.014 | Transportation; Vehicles; Safety Requirements. |
| 69A-2.015 | Transportation; Operation of Vehicles. |
| 69A-2.016 | Transportation; Explosives at Piers, Railway Stations, Etc. |
| 69A-2.017 | Transportation; Smokeless Propellants; Small Arms Ammunition Primers. |
| 69A-2.018 | Transportation; Blasting Agents. |
| 69A-2.020 | Use; Loading of Explosives in Blast Holes. |
| 69A-2.021 | Use; Initiation of Explosive Charges. |
| 69A-2.023 | Conflicts. |
| 69A-2.024 | Construction Materials Mining Activities. |

69A-2.001 Scope of Rules and Regulations.

(1) Pursuant to Chapter 552, Florida Statutes, the following Rules and Regulations are adopted as required thereunder, covering the Manufacture, Storage, Transportation, Sale, Use and Handling of explosives and blasting agents in the State of Florida.

(2) These Rules and Regulations shall not apply to the transportation of explosives or blasting agents when under the jurisdiction of and in compliance with the regulations of the Interstate Commerce Commission, the regulations of the United States Coast Guard, and the regulations of the Civil Aeronautical Board.

(3) Nothing contained in these Rules and Regulations shall apply to the regular Armed Forces of the United States, or to the duly organized military force of any state or territory thereof, or to police or fire departments in this state, provided they are acting within their respective official capacities and in the proper performance of their duties.

(4) These Rules and Regulations shall not apply to the transportation and use of explosives or blasting agents in the normal and emergency operations of federal agencies such as the Bureau of Mines, The Federal Bureau of Investigation and The Secret Service.

Specific Authority 552.13 FS. Law Implemented 552.091, 552.12, 552.13, 552.24 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.01, 4A-2.001.

69A-2.002 Definitions.

(1) “Approved” means approved by the Division of State Fire Marshal of the Department of Financial Services.

(2) “Factory building” means any building or other structure (except magazines) containing explosives, in which the manufacture of explosives, or any processing involving explosives is carried on, and any building where explosives are used as a component part or ingredient in the manufacture of any article or device. This definition does not include private residences or shop buildings where the handloading of small arms ammunition is being carried on.

(3) “Class 1 magazine” means any building or structure, except a factory building used for the permanent storage of explosives, as set forth in Rule 69A-2.006, F.A.C., paragraph (4)(a).

(4) “Class 2 and 3 magazines” means any container used for the temporary storage of small quantities of blasting caps and electric blasting caps, as set forth in Rule 69A-2.006, F.A.C., paragraphs (4)(b) and (c).

(5) “Inhabited building” means any building or structure regularly used in whole or part as a place of human habitation, and also any church, school, store, railway passenger station, airport terminal for passengers, and any other building or structure where people assemble, but excluding any building or structure occupied in connection with the manufacture, transportation, storage and use of explosives.

(6) “Railroad” means any steam, electric, diesel, electric, or other railroad or railway which carries passengers for hire.

(7) “Natural barricade” means natural features of the ground such as hills, or timber of sufficient density that the surrounding exposures which require protection cannot be seen when the trees are bare of leaves.

(8) “Artificial barricade” means an artificial mound or revetted wall of earth of a minimum thickness of three (3) feet.

(9) "Barricade" means that a building containing explosives is effectually screened from a magazine, building, railway or highway, either by a natural barricade, or by an artificial barricade of such height that a straight line from the top of any sidewall of the building containing explosives to the eave line of any magazine, or building, or to a point twelve (12) feet above the center of a railway or highway, will pass through such intervening natural or artificial barricade.

(10) Words used in singular number shall include the plural, and the singular.

Specific Authority 552.13 FS. Law Implemented 552.081, 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Amended 2-1-79, Formerly 4A-2.02, Amended 7-19-01, Formerly 4A-2.002.

69A-2.003 General Requirements.

(1) No person shall store, handle, or transport explosives or blasting agents when such storage, handling and transportation of explosives or blasting agents constitutes an undue hazard to life and property.

(2) No person shall possess, keep, store, sell, or offer for sale, give away, use, transport, or dispose of in any manner any explosive or blasting agent except in conformity with the provisions of Chapter 552, Florida Statutes, and these Rules and Regulations. Nothing in this rule shall be so construed as to prevent handloaders of ammunition from giving small quantities of black powder and smokeless propellant to authorized persons.

(3) Nothing in these Rules and Regulations shall be construed to prohibit the use of explosives in the form prescribed by the official United States Pharmacopeia.

(4) The State Fire Marshal may restrict the quantity of explosives or blasting agents that may be handled at any location within the state.

Specific Authority 552.13 FS. Law Implemented 552.091, 552.094, 552.101, 552.13, 552.211, 552.241 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Amended 9-28-78, Formerly 4A-2.03, Amended 8-25-98, Formerly 4A-2.003.

69A-2.005 Manufacture; Blasting Agents.

(1) Buildings or other facilities used for mixing blasting agents, including mobile equipment, shall be located, with respect to inhabited buildings, passenger railroads and public highways, in accordance with the American Table of Distances as set forth in Rule 69A-2.006, F.A.C., paragraph (5)(a).

(a) Minimum intra-plant separation distances between mixing units and the oxidizer storage areas and blasting agent storage areas shall be determined by competent persons, and these distances shall be approved by the State Fire Marshal.

(b) Any oxidizer stored at a closer distance to the blasting agent storage area than as provided in subsection (a) above shall be added to the quantity of blasting agents to calculate the total quantity involved for application of the aforementioned Table.

(2) Buildings used for the mixing of blasting agents shall conform to the requirements of these Rules and Regulations, unless otherwise specifically approved by the State Fire Marshal.

(a) Buildings shall be of noncombustible construction or sheet metal on wood studs.

(b) The layout of the mixing building shall be such as to provide physical separation between the finished product storage, and the mixing and packaging operations.

(c) Floors in storage areas and in the processing plant shall be of concrete. Isolated fuel storage shall be provided to avoid contact between molten oxidizer and fuel in case of fire.

(d) The building shall be well ventilated.

(e) Heat shall be provided exclusively from a unit outside the building.

(3) The design of the mixer shall minimize the possibility of frictional heating, compaction, and especially, confinement. Bearings and gears shall be protected against the accumulation of oxidizer dust. All surfaces shall be accessible for cleaning. Mixing and packaging equipment shall be constructed of materials compatible with the fuel-oxidizer composition.

(4) The sensitivity of the blasting agent shall be determined by means of a No. 8 test blasting cap at regular intervals and after every change in ingredients, composition or packaging, or as may be requested by the State Fire Marshal.

(a) No liquid fuel with flash point lower than that of No. 2 Diesel fuel oil (125 degrees minimum or legal) shall be used.

(b) If solid fuels are used, they shall be chosen so as to minimize dust explosion hazards.

(c) Metal dusts (aluminum powder, etc.), peroxides, chlorates or perchlorates shall not be used unless such operations are conducted in a manner approved by the State Fire Marshal.

(d) Unusual compositions shall not be attempted except under the supervision of competent personnel equipped to determine the over-all hazards of the resulting compositions.

(5) All electrical switches, controls, motors, and lights, if located in the mixing room, shall conform to the requirements of Class II, Division 2 of the National Electrical Code, otherwise, they shall be located outside the mixing room. The frame of the mixer and all other equipment that may be used shall be electrically bonded and be provided with a continuous path to the ground.

(6) Washdown facilities shall be provided. Floors shall be constructed so as to eliminate open floor drains and piping into which molten materials could flow and be confined in case of fire. The floors and equipment of the mixing and packaging room shall be washed down frequently to prevent accumulation of oxidizers or fuels and other sensitizers. The entire mixing and packaging plant shall be washed down periodically to prevent excessive accumulation of dust.

(7) Smoking or open flames shall not be permitted in or within 50 feet of any building or facility used for the mixing of blasting agents.

(8) Empty oxidizer bags shall be disposed of daily in a safe manner.

(9) Not more than one day's production of blasting agents shall be permitted in or near the mixing and packaging plant or area. Larger quantities shall be stored in separate warehouses or magazines in accordance with Rule 69A-2.006, F.A.C.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.05, 4A-2.005.

69A-2.006 Storage; General.

(1) All explosives, except when being transported, shall be kept in magazines which meet the requirements of these rules and regulations, except smokeless propellant shall be stored in accordance with the requirements set forth in Rule 69A-2.009, F.A.C., black powder shall be stored in accordance with the requirements set forth in Rule 69A-2.0091, F.A.C., and blasting agents shall be stored in accordance with the requirements set forth in Rule 69A-2.010, F.A.C.

(2) Blasting caps, electric blasting caps, and primed cartridges shall not be stored in the same magazines with other explosives.

(3) Ground around magazines shall slope away for drainage. The land surrounding magazines shall be kept clear of brush, dried grass, leaves, and other combustible materials for a distance of at least 25 feet in each direction.

(4) Magazines, as required by these Rules and Regulations, shall be used for the storage of explosive supplies ONLY and shall be of three classes, namely, Class I magazines, Class 2 magazines, and Class 3 magazines.

(a) Class I magazines shall be required for the permanent storage of explosives where the amount involved shall exceed 3,000 pounds.

(b) Class 2 magazines shall be required for the storage of explosives for immediate use or distribution or for temporary storage in the proximity of blasting operations, or when the limited quantity to be stored does not warrant the construction of a Class I magazine. Class 2 magazines shall not contain more than 3,000 pounds of explosives at any one time.

(c) Class 3 magazines shall be required for the temporary storage of limited amounts of explosives. Class 3 magazines shall not contain more than 50 pounds of explosives or 5,000 caps at any one time.

(5) All factory buildings and permanent or portable field magazines in which more than 50 pounds of explosives are kept or stored must be located at distances from inhabited buildings, passenger railways, and public highways, in conformity with the following American Table of Distances, as revised and approved by the Institute of Makers of Explosives, September 30, 1955.

(a) American Table of Distances for storage of Explosives:

| Explosives: | | Distances In Feet Where Storage Is Barricaded | | | |
|-------------|-----------------|---|--------------------|-----------------|-------------------------|
| Pounds Over | Pounds Not Over | Inhabited Buildings | Passenger Railways | Public Highways | Separation of Magazines |
| 2 | 5 | 70 | 30 | 30 | 6 |
| 5 | 10 | 90 | 35 | 35 | 8 |
| 10 | 20 | 110 | 45 | 45 | 10 |
| 20 | 30 | 125 | 50 | 50 | 11 |
| 30 | 40 | 140 | 55 | 55 | 12 |
| 40 | 50 | 150 | 60 | 60 | 14 |
| 50 | 75 | 170 | 70 | 70 | 15 |
| 75 | 100 | 190 | 75 | 75 | 16 |
| 100 | 125 | 200 | 80 | 80 | 18 |
| 125 | 150 | 215 | 85 | 85 | 19 |
| 150 | 200 | 235 | 95 | 95 | 21 |
| 200 | 250 | 255 | 105 | 105 | 23 |
| 250 | 300 | 270 | 110 | 110 | 24 |
| 300 | 400 | 295 | 120 | 120 | 27 |
| 400 | 500 | 320 | 130 | 130 | 29 |
| 500 | 600 | 340 | 135 | 135 | 31 |
| 600 | 700 | 355 | 145 | 145 | 32 |
| 700 | 800 | 375 | 150 | 150 | 33 |
| 800 | 900 | 390 | 155 | 155 | 35 |
| 900 | 1,000 | 400 | 160 | 160 | 36 |
| 1,000 | 1,200 | 425 | 170 | 165 | 39 |
| 1,200 | 1,400 | 450 | 180 | 170 | 41 |
| 1,400 | 1,600 | 470 | 190 | 175 | 43 |
| 1,600 | 1,800 | 490 | 195 | 180 | 44 |

| | | | | | |
|---------|---------|-------|-------|-----|-----|
| 1,800 | 2,000 | 505 | 205 | 185 | 45 |
| 2,000 | 2,500 | 545 | 220 | 190 | 49 |
| 2,500 | 3,000 | 580 | 235 | 195 | 52 |
| 3,000 | 4,000 | 635 | 255 | 210 | 58 |
| 4,000 | 5,000 | 685 | 275 | 225 | 61 |
| 5,000 | 6,000 | 730 | 295 | 235 | 65 |
| 6,000 | 7,000 | 770 | 310 | 245 | 68 |
| 7,000 | 8,000 | 800 | 320 | 250 | 72 |
| 8,000 | 9,000 | 835 | 335 | 255 | 75 |
| 9,000 | 10,000 | 865 | 345 | 260 | 78 |
| 10,000 | 12,000 | 875 | 370 | 270 | 82 |
| 12,000 | 14,000 | 885 | 390 | 275 | 87 |
| 14,000 | 16,000 | 900 | 405 | 280 | 90 |
| 16,000 | 18,000 | 940 | 420 | 285 | 91 |
| 18,000 | 20,000 | 975 | 435 | 290 | 98 |
| 20,000 | 25,000 | 1,055 | 470 | 315 | 105 |
| 25,000 | 30,000 | 1,130 | 500 | 340 | 112 |
| 30,000 | 35,000 | 1,205 | 525 | 360 | 119 |
| 35,000 | 40,000 | 1,275 | 550 | 380 | 124 |
| 40,000 | 45,000 | 1,340 | 570 | 400 | 129 |
| 45,000 | 50,000 | 1,400 | 590 | 420 | 135 |
| 50,000 | 55,000 | 1,460 | 610 | 440 | 140 |
| 55,000 | 60,000 | 1,515 | 630 | 455 | 145 |
| 60,000 | 65,000 | 1,565 | 645 | 470 | 150 |
| 65,000 | 70,000 | 1,610 | 660 | 485 | 155 |
| 70,000 | 75,000 | 1,655 | 675 | 500 | 160 |
| 75,000 | 80,000 | 1,695 | 690 | 510 | 165 |
| 80,000 | 85,000 | 1,730 | 705 | 520 | 170 |
| 85,000 | 90,000 | 1,760 | 720 | 530 | 175 |
| 90,000 | 95,000 | 1,790 | 730 | 540 | 180 |
| 95,000 | 100,000 | 1,815 | 745 | 545 | 185 |
| 100,000 | 110,000 | 1,835 | 770 | 550 | 195 |
| 110,000 | 120,000 | 1,855 | 790 | 555 | 205 |
| 120,000 | 130,000 | 1,875 | 810 | 560 | 215 |
| 130,000 | 140,000 | 1,890 | 835 | 565 | 225 |
| 140,000 | 150,000 | 1,900 | 850 | 570 | 235 |
| 150,000 | 160,000 | 1,935 | 870 | 580 | 245 |
| 160,000 | 170,000 | 1,965 | 890 | 590 | 255 |
| 170,000 | 180,000 | 1,990 | 905 | 600 | 265 |
| 180,000 | 190,000 | 2,010 | 920 | 605 | 275 |
| 190,000 | 200,000 | 2,030 | 935 | 610 | 285 |
| 200,000 | 210,000 | 2,055 | 955 | 620 | 295 |
| 210,000 | 230,000 | 2,100 | 980 | 635 | 315 |
| 230,000 | 250,000 | 2,155 | 1,010 | 650 | 335 |
| 250,000 | 275,000 | 2,215 | 1,040 | 670 | 360 |
| 275,000 | 300,000 | 2,275 | 1,075 | 690 | 385 |

(b) When a building or magazine containing explosives is not barricaded, the distances shown in the Table shall be doubled.

(c) When two or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways, and highways, and in addition, they shall be separated from each other by not less than the distances shown for "Separation of Magazines," except that the quantity of explosives contained in cap magazines shall govern in regard to the spacing of said cap magazines from magazines containing other explosives. All types of blasting caps in strengths through No. 8 cap shall be rated at 1 1/2 pounds of explosives per 1,000 caps. If any two or more magazines are separated from each other by less than the specified "Separation of Magazines" distances, then such two or more magazines, as a

group, must be considered as one magazine, and the total quantity of explosives stored in such group must be treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum of distances specified from other magazines, inhabited buildings, railways, and highways. Seismographic operations carried out on shipboard shall be required to comply with the distances shown for "Separation of Magazines" only as nearly as the physical limitation on the vessel will permit.

(d) The storage of more than 300,000 pounds of explosives in one magazine or in a group of magazines which is considered as one magazine will not be approved.

(e) This Table applies only to the manufacture and permanent or portable storage of explosives. It is not applicable to the transportation of explosives, or any handling or temporary storage necessary or incident thereto. It is not intended to apply to bombs, projectiles, or other heavily encased explosives.

(6) All factory buildings and magazines in which explosives are had, kept or stored, must be located beyond the corporate limits of any city or town, except with the consent of the proper authorities and the State Fire Marshal. In no instance shall storage of explosives within buildings located within the corporate limits of any city or town exceed 50 pounds or more than 5,000 caps. Smokeless propellants shall not be included in these quantity limitations. Two magazines may be located in the same building when one is used for the storage of caps provided that a distance of ten feet is maintained between magazines. Where such storage is permitted, it shall be located on the ground floor and at street level.

(7) A distance of at least 300 feet shall be maintained between Class 2 magazines and the work in progress, 150 feet between Class 3 magazines and the work in progress, and at least 50 feet when the quantity of explosives involved is 25 pounds or less. The State Fire Marshal may require a greater separation between magazines and the work in progress where conditions warrant. Publicly owned electric distribution, public utilities, and privately owned electric distribution public utilities and the communications systems are excepted.

(8) No matches, flame producing devices or fire of any kind shall at any time be permitted inside of or within 50 feet of a magazine.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.06, 4A-2.006.

69A-2.007 Storage; Magazine Construction Requirements.

(1) Magazines shall be constructed in conformity with the provisions of these Rules and Regulations, or may be of substantially equivalent construction satisfactory to the State Fire Marshal.

(2) Magazines for the storage of explosives, other than black powder or smokeless propellant shall be bullet-resistant, weather resistant, fire resistant, theft resistant, and ventilated sufficiently to protect the explosive in the specific locality. Magazines used only for the storage of black powder or smokeless propellant shall be weather resistant, fire resistant, theft resistant, and have ventilation. Magazines for storage of blasting caps and electric blasting caps shall be weather resistant, fire resistant, theft resistant, and ventilated.

(3) Property upon which Class I or Class 2 magazines are located shall be posted with signs reading "EXPLOSIVES – KEEP OFF," legibly printed thereon in letters not less than 3 inches high. Such signs shall be located so as to minimize the possibility of a bullet traveling in the direction of the magazine if anyone should shoot at the sign.

(4) Magazines shall not be provided with heat or lights, except that if lights are necessary, an electric safety flashlight or safety lantern shall be used. The State Fire Marshal may waive the requirements of this paragraph if adequate safety is assured.

(5) No nail or screwheads, bolts, or other sparking metal shall be exposed below the tops of walls inside Class I, Class 2, or Class 3 magazines.

(6) Class I magazines shall be constructed in accordance with the recommendations of the Institute of Makers of Explosives as shown in their Pamphlet No. 1, Standard Storage Magazines or equivalent.

(7) Class 2 magazines shall be constructed of not less than 12 gauge sheet steel lined with smooth wood, or of 4 inches of hardwood covered on the outside with not less than 16 gauge sheet metal or equivalent.

(8) Construction of Class 3 magazines:

(a) Class 3 magazines shall be of wood or metal construction, or a combination thereof.

(b) Wood magazines of this class shall have sides, bottom and cover constructed of at least two-inch hardwood boards well braced at corners and protected by being entirely covered with sheet metal of not less than No. 20 gauge. All nails exposed to interior of the magazine shall be well counter-sunk and filled with a non-conductive material.

(c) All metal magazines of this class shall have sides, bottom and cover constructed of 12 gauge metal, and shall be lined with at least 3/8-inch plywood or the equivalent. Edges of metal covers shall overlap sides at least one inch.

(d) Covers for both wood and metal constructed magazines of this class shall be provided with substantial means for locking. Covers shall be kept locked except during the placement or removal of explosives.

(e) Magazines of this class shall be painted red and shall bear lettering in white, on all sides and top, at least one and one-half inches high, "EXPLOSIVES – KEEP FIRE AWAY."

(f) Class 3 magazines when located in warehouses, and in wholesale and retail establishments shall be provided with handles and substantial wheels or casters to facilitate easy removal in the case of fire.

(g) Where necessary due to climatic conditions, Class 3 magazines shall be ventilated.

(9) All magazines shall be provided with substantial means for locking; locks shall be provided and magazine doors shall be kept locked, except during the time of placement and removal of stocks of explosives.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.07, 4A-2.007.

69A-2.008 Storage; Within Magazines.

(1) Packages of explosives shall be laid flat with the top side up. Black powder, when stored in magazines with other explosives shall be stored separately. Black powder stored in kegs shall be stored on ends, bungs down, or on side, seams down. Corresponding grades and brands shall be stored together in such a manner that brands and grade marks show. All stocks shall be stored so as to be easily counted and checked. Packages of explosives shall be piled in a stable manner. When any kind of explosive is removed from a magazine for use, the oldest explosive of that particular kind shall always be taken first.

(2) Packages of explosives shall not be unpacked or repacked within a Class I or Class 2 magazine nor within 50 feet of such magazines or in close proximity to other explosives. Tools used for opening packages of explosives shall be constructed of nonsparking materials, except that metal slitters may be used for opening fiberboard boxes. A wood wedge and a fiber, rubber or wood mallet shall be used for opening or closing wood packages of explosives. Opened packages of explosives shall be securely closed before being returned to a magazine.

(3) Magazine floors shall be regularly swept, kept clean, dry, free of grit, paper, empty used packages and rubbish. Brooms and other cleaning utensils shall not have any spark-producing metal parts. Sweepings from floors of magazines shall be properly disposed of. Magazine floors stained with nitroglycerin shall be cleaned according to the instructions of the explosives manufacturer.

(4) When any explosive has deteriorated to an extent that it is in an unstable or dangerous condition, or if nitroglycerin leaks from any explosive, then the person in possession of such explosive shall immediately report the fact to the State Fire Marshal and upon his authorization shall proceed to destroy such explosive in accordance with the instructions of the explosives manufacturer. Only experienced persons shall do the work of destroying explosives.

(5) When magazines need inside repairs, all explosives shall be removed therefrom and the floors cleaned. In making outside repairs, if there is a possibility of causing sparks or fire, the explosives shall be removed from the magazine. Explosives removed from a magazine under repair shall either be placed in another magazine or placed a safe distance from the magazine where they shall be properly guarded and protected until repairs have been completed, when they shall be returned to the magazine.

(6) Smoking, matches, open flames, spark producing devices and firearms shall be prohibited inside of or within 50 feet of magazines. Combustible materials shall not be stored within 50 feet of magazines.

(7) Magazines shall be in the charge of a competent person at all times, and who shall be held responsible for the enforcement of all safety precautions.

(8) Magazine doors and covers must be kept closed and locked with approved locking devices except when opened for transacting business.

(9) The keys to a "USER'S" magazine doors and covers must be available only to the "USER" or one of his "BLASTERS." It is the "USER'S" responsibility to keep his magazine locked from all unauthorized persons. Publicly owned electric distribution, public utilities, privately owned electric distribution public utilities and communications systems may, at their discretion, designate certain employees who will be responsible for the inspection of stored explosives. It is permissible for these persons to have keys to the USER'S magazine.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.08, 4A-2.008.

69A-2.009 Storage; Smokeless Propellant.

(1) All smokeless propellants shall be stored in ICC-approved shipping containers.

(2) Smokeless propellants intended for personal use in quantities not to exceed 20 pounds may be stored in residences; quantities over 20 pounds but not to exceed 100 pounds shall be stored in a wooden box or cabinet having walls of at least 1 inch nominal thickness.

(3) Not more than 20 pounds of smokeless propellants, in containers of 1-pound maximum capacity, shall be displayed in commercial establishments. Commercial stocks of smokeless propellants over 20 pounds and not more than 100 pounds shall be stored in approved wooden boxes having walls of at least 1 inch nominal thickness. Not more than 100 pounds shall be permitted in any one box.

(4) Commercial stocks in quantities not to exceed 750 pounds shall be stored in storage cabinets having wooden walls of at least 1 inch nominal thickness. Not more than 400 pounds shall be permitted in any one cabinet.

(5) Quantities of smokeless propellants in excess of 750 pounds shall be stored in magazines constructed in accordance with Rule 69A-2.007, F.A.C., and located in accordance with Rule 69A-2.006, F.A.C.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.09, 4A-2.009.

69A-2.0091 Storage; Black Powder.

(1) Black powder shall be stored in ICC-approved shipping containers.

(2) Black powder stored in a secured building in quantities not to exceed fifty pounds shall be kept in a wood box or cabinet having walls at least one inch nominal thickness. Said boxes or cabinets shall be kept securely locked except when necessarily opened for use by authorized persons. Such boxes or cabinets shall be provided with substantial handles to facilitate easy removal from building in event of an emergency, and shall be marked in accordance with paragraph 69A-2.007(8)(e), F.A.C.

(3) Black powder in excess of fifty pounds shall be stored in magazines constructed in accordance with Rule 69A-2.007, F.A.C., and located in accordance with Rule 69A-2.006, F.A.C.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—New 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.091, 4A-2.0091.

69A-2.010 Storage; Blasting Agents.

(1) Blasting agents and oxidizers used for mixing of blasting agents shall be stored in the manner set forth in this section.

(a) Blasting agents or oxidizers when stored in conjunction with explosives shall be stored in the manner set forth in Rules 69A-2.006, 69A-2.007 and 69A-2.008, F.A.C. The quantity of blasting agents or oxidizers shall be included when computing the total quantity of explosives for determining distance requirements.

(b) Blasting agents, when stored entirely separate from other explosives, shall be stored in one-story warehouses without basements. These warehouses shall be:

1. Non-combustible or fire resistive,
2. Constructed so as to eliminate open floor drains and piping into which molten materials could flow and be confined in case of fire,
3. Weather resistant,
4. Well ventilated, and
5. Equipped with a strong door kept securely locked except when open for business.

(c) Semi-trailer or full trailer vans used for highway or on-site transportation of blasting agents are satisfactory for temporarily storing these materials, provided they are located according to the American Table of Distances with respect to inhabited buildings, passenger railroads and public highways. Trailers shall be provided with approved locking devices, and the trailer doors shall be kept locked, except during the time of placement and removal of stocks of blasting agents.

(2) Warehouses used for the storage of blasting agents separate from other explosives shall be located as follows:

(a) Warehouses used for the storage of blasting agents shall be located in accordance with the provisions of the American Table of Distances with respect to inhabited buildings, passenger railroads and public highways.

(b) If both blasting agents and oxidizers are handled or stored within the distance limitations prescribed in Rule 69A-2.005, F.A.C., the weight of the oxidizer shall be added to the weight of the blasting agent to determine the proper distance for compliance with the American Table of Distances.

(3) Smoking, matches, open flames, spark producing devices and firearms shall be prohibited inside of or within 50 feet of any warehouse used for the storage of blasting agents. Combustible materials shall not be stored within 50 feet of warehouses used for the storage of blasting agents.

(4) The interior of warehouses used for the storage of blasting agents shall be kept clean and free from debris and empty containers. Spilled materials shall be cleaned up promptly and safely removed. Combustible materials, flammable liquids, corrosive acids, chlorates, nitrites or similar materials shall not be stored in any warehouse used for blasting agents unless separated therefrom by a fire resistive separation of not less than one hour resistance.

(5) Floors in storage warehouses shall be of concrete.

(6) Bags of blasting agents, when stored in other than magazines or lined trailers, shall not be piled less than 30 inches from the building walls in piles not more than 12 feet in width, with aisles not less than 30 inches between piles. If the storage building foundation and roof ventilation and has an air space between the floor perimeter and the walls, the 30 inch spacing from walls may be disregarded. Piles of blasting agents shall not be higher than within 36 inches of the eave line of the roof or the supporting and spreader beams overhead.

(7) Piles of oxidizers and warehouses containing oxidizers shall be adequately separated from readily combustible fuels.

(8) Caked oxidizers, either in bags or in bulk, shall not be loosened by blasting.

(9) Every warehouse used for the storage of blasting agents shall be under the supervision of a competent person.

(10) The local authority having jurisdiction has the authority to and may designate the location for, and limit the quantity of blasting agents which may be loaded, unloaded, reloaded, or temporarily retained at any facility within the jurisdiction.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.10, 4A-2.010.

69A-2.011 Storage; Inventory Required.

(1) "MANUFACTURER – DISTRIBUTORS" and "DEALERS" must keep accurate accounts of all inventories and sales of explosives. Invoices or sales tickets that are delivered to the purchaser shall bear the name of the "MANUFACTURER – DISTRIBUTOR" or "DEALER," the name of the "USER," the name of the purchaser, the address of the purchaser, the "USER'S"

license number (except handloaders of ammunition for sporting use who are exempt from the licensing requirement by Section 552.241, Florida Statutes), date of sale, identification of the type of explosives sold, quantity sold and the use for which the explosives are purchased.

(2) An accurate inventory of the stock of explosives and caps in magazines must be maintained by each "USER." The inventory must record the date, pounds on hand, pounds received, pounds issued, pounds returned and balance on hand at all times of each brand and grade. Persons using black powder or smokeless propellants for the sole purpose of hand-loading ammunition for sporting use shall be exempt from the requirements of this rule.

(3) Similar inventories of blasting caps and electric blasting caps must be maintained for all cap magazines.

Specific Authority 552.13 FS. Law Implemented 552.111, 552.112, 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.11, 4A-2.011.

69A-2.013 Transportation; General.

(1) In addition to all other applicable requirements set forth in these Rules and Regulations, the transportation of explosives over all highways shall be in accordance with Interstate Commerce Commission regulations.

(2) Explosives shall not be transported through any prohibited vehicular tunnel, or subway, or over any prohibited bridge, roadway, or elevated highway.

(3) No person shall smoke, carry matches or any other flame-producing device, or carry firearms or loaded cartridges while in or near a motor vehicle transporting explosives. Nothing in this subsection shall be so construed as to prevent the presence of a duly authorized and legally constituted armed guard on such vehicles where security considerations dictate their necessity.

(4) Explosives shall not be carried or transported in or upon a public conveyance or vehicle carrying passengers for hire.

(5) Explosives may be loaded into and transported in the following: truck, truck with semi-trailer, truck with full trailer, truck tractor with semi-trailer, truck tractor with semi-trailer and full trailer. Publicly owned electric distribution public utilities, privately owned electric distribution public utilities and communications systems which shall have first obtained the express approval of the State Fire Marshal in respect to their particular methods of handling explosives in trailer-hauling trucks shall be exempt from the provisions of this paragraph.

(6) Explosives shall not be transferred from one vehicle to another within the corporate limits of any city or town without informing the local fire and police departments thereof. In the event of breakdown or collision, the local fire and police departments shall be promptly notified to help safeguard such emergencies. Explosives shall be transferred from the disabled vehicle to another only when proper and qualified supervision is provided.

(7) Blasting caps or electric blasting caps may be transported in the same motor vehicle with explosives if they are packed in authorized I.C.C. Specification outside shipping containers, or in prescribed inside I.C.C. packages in an outside box made of not less than 12 gauge non-sparking metal lined with plywood or other suitable material not less than 3/8 inch thick so that no metal is exposed to the interior of the box. This paragraph shall not apply to the transportation of 6 pounds or less of explosives and/or 12 or less electric blasting caps in special carrying cases whose design and construction have been expressly approved by the State Fire Marshal as meeting appropriate standards of safety.

Specific Authority 552.13 FS. Law Implemented 552.12, 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.13, 4A-2.013.

69A-2.014 Transportation; Vehicles; Safety Requirements.

(1) Vehicles used for transporting explosives shall be strong enough to carry the load without difficulty and be in good mechanical condition. If vehicles do not have a closed body, the body shall be covered with a flameproof and moisture-proof tarpaulin or other effective protection against moisture and sparks. All vehicles used for the transportation of explosives shall have tight floors, and any exposed spark-producing metal on the inside of the body shall be covered with wood or other non-sparking materials to prevent contact with packages of explosives. Packages of explosives shall not be loaded above the sides of an open-body vehicle.

(2) Every vehicle used for transporting explosives shall be marked or placarded on both sides, front and rear with the word "EXPLOSIVES" in letters not less than 3 inches in height in contrasting colors, or in lieu thereof, shall conspicuously display upon an erect pole, in such a manner that it will be readily visible from all directions, a red flag of not less than 540 square inches in area with the word "EXPLOSIVES" painted, stamped or sewed thereon in white letters at least 6 inches in height. This paragraph shall not apply to vehicles carrying 6 pounds or less of explosive and/or 12 or less electric blasting caps. Note: See Rule 69A-2.017, F.A.C., for the transportation of smokeless propellants.)

(3) Every motor vehicle used for transporting explosives shall be equipped with a minimum of two fire extinguishers, each having a rating of at least 5-BC, completely filled and in working condition. This paragraph shall not apply to vehicles carrying 100 pounds or less of smokeless propellant, 6 pounds or less of explosives and/or 12 or less electric blasting caps.

(a) Only extinguishers listed or approved by Underwriters' Laboratories, Inc., Factory Mutual Laboratories, or by some other nationally recognized fire equipment testing laboratory, shall be deemed suitable for use on explosives-carrying vehicles.

(b) Extinguishers shall be filled and ready for immediate use and located near the driver's seat. Extinguishers shall be examined periodically as to condition by a competent person.

(4) Motor vehicles used for transporting explosives shall be given the following inspection before each trip to determine that they are in the proper condition for safe transportation of explosives:

- (a) Fire extinguishers shall be filled and in working order,
- (b) All electrical wiring shall be completely protected and securely fastened to prevent short circuiting,
- (c) Chassis, motor, pan and underside of body shall be reasonably clean and free of excess oil and grease,
- (d) Fuel tank and feed line shall be secure and have no leaks,
- (e) Brakes, lights, horns, windshield wipers, and steering apparatus shall function properly,
- (f) Tires shall be checked for proper inflation and defects,
- (g) The vehicle shall be in proper condition in every other respect and acceptable for handling explosives.

Specific Authority 552.13 FS. Law Implemented 552.12, 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.14, 4A-2.014.

69A-2.015 Transportation; Operation of Vehicles.

(1) Vehicles transporting explosives shall only be driven by and be in charge of a driver who is physically fit, careful, capable, reliable, able to read and write the English language, and not addicted to the use, or under the influence of intoxicants or narcotics. He shall be familiar with the traffic regulations, state laws, and the provisions of these Rules and Regulations. The driver shall always have his vehicle under complete control. Violation of this paragraph shall be based upon an official report of any public official.

(2) Unauthorized persons or passengers shall not ride on a motor vehicle transporting explosives.

(3) Motor vehicles transporting more than 6 pounds of explosives must come to a full stop before crossing any railroad track or main highway, and must not proceed until it is known that the way is clear.

(4) While transporting explosives, motor vehicles shall not be driven at a speed in excess of 50 miles per hour.

(5) The fuel tank of a motor vehicle transporting explosives shall not be filled except in an emergency or when necessary to complete a trip, and then only when the motor is stopped and the brakes set.

(6) The operator of a motor vehicle transporting explosives shall not leave such vehicle unattended except while actually making deliveries.

(7) Except under emergency conditions, no vehicle transporting explosives shall be parked before reaching its destination, even though attended, on any public street adjacent to or in proximity to any bridge, tunnel, dwelling, building or place where people work, congregate or assemble.

(8) No spark-producing metal, spark-producing metal tools, oils, matches, carbides, firearms, electric storage batteries, flammable substances, acids, oxidizing materials or corrosive compounds shall be carried in the body of any motor truck and/or vehicle transporting explosives, provided, however, that this paragraph shall not apply to the transportation of 6 pounds or less of explosives, and/or 12 or less electric blasting caps in special carrying cases whose design and construction have been expressly approved by the State Fire Marshal as meeting appropriate standards of safety. Nothing in this subsection shall be so construed as to prevent the presence of a duly authorized and legally constituted armed guard on such vehicles where security considerations dictate their necessity.

(9) Vehicles transporting explosives shall avoid congested areas and heavy traffic. Where routes through congested areas have been designated by local authorities, such routes shall be followed.

(10) Delivery of explosives shall be made only to authorized persons and into authorized magazines or approved temporary storage or handling areas.

Specific Authority 552.13 FS. Law Implemented 552.094, 552.12, 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.15, Amended 11-14-99, Formerly 4A-2.015.

69A-2.016 Transportation; Explosives at Piers, Railway Stations, Etc.

(1) Except in an emergency and with the permission of the local authority having jurisdiction, no person shall have or keep explosives in a railway car unless said car and contents and methods of loading are in accordance with the Interstate Commerce Commission Regulations for the Transportation of Explosives.

(2) No person shall deliver any explosive to any carrier unless such explosive conforms in all respects, including marking and packing, to the Interstate Commerce Commission Regulations for the Transportation of Explosives.

(3) Every railway car containing explosives which has reached its destination, or is stopped in transit so as no longer to be in interstate commerce, shall have attached to both sides and ends of the car, cards with the words "EXPLOSIVES – HANDLE – CAREFULLY KEEP FIRE AWAY" in red letters at least one and one-half inches high on a white background.

(4) Any explosives at a railway facility, truck terminal, pier, wharf, harbor facility, or airport terminal, within the jurisdiction of these Rules and Regulations, whether for delivery to a consignee, or forwarded to some other destination, shall be kept in a safe place, isolated as far as practicable and in such manner that they can be easily and quickly removed.

(5) Explosives shall not be delivered to or received from any railway station, truck terminal, pier, wharf, harbor facility, or airport terminal within the jurisdiction of these Rules and Regulations between the hours of sunset and sunrise, except by special permission from the State Fire Marshal. Shipboard seismographic operations and industries handling explosives directly related to national defense are excepted from the provisions of this section.

(6) When explosives are brought into the locality under the jurisdiction of these Rules and Regulations, by any means of transportation, for delivery to an intermediate receiver, consignee's agent or consignee, or to be forwarded to some other destination, the carrier performing the shipment shall immediately notify the consignee, local fire chief, local port authorities, and such other authorities as may be designated, of the arrival of the explosives, and if said consignee does not receive and remove the said explosives from the possession of the carrier within 48 hours, Sundays and holidays excluded, after such notification, then the railway, trucking firm, vessel agent or airline shall remove the said explosives from the jurisdiction or to a properly permitted magazine or make a report to the State Fire Marshal who shall see that the said explosives are moved to a place of safety.

(7) Any person having been notified, as consignee, of a shipment of explosives being in the hands of any carrier, and within the jurisdiction, shall remove the said explosives within 48 hours, Sundays and holidays excluded, after receiving such notification, to some place meeting the requirements of these Rules and Regulations.

(8) The local authority having jurisdiction has the authority to and may designate the location for, and limit the quantity of, explosives which may be loaded, unloaded, reloaded, or temporarily retained at any facility within the jurisdiction.

Specific Authority 552.13 FS. Law Implemented 552.12, 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.16, 4A-2.016.

69A-2.017 Transportation; Smokeless Propellants; Small Arms Ammunition Primers.

(1) Quantities of smokeless propellants in shipping containers approved by the Interstate Commerce Commission not in excess of 25 pounds may be transported in a passenger vehicle.

(2) Quantities of smokeless propellants in excess of 25 pounds but not exceeding 100 pounds in a passenger vehicle shall be transported in a portable box having wooden walls of at least 1 inch nominal thickness.

(3) Transportation of smokeless propellants in quantities in excess of 100 pounds is prohibited in passenger vehicles.

(4) Transportation of quantities of smokeless propellants in excess of 50 pounds in other than passenger vehicles shall be in accordance with Interstate Commerce Commission regulations, except that when more than 250 pounds are being transported, the vehicle shall be marked and placarded in accordance with subsection 69A-2.014(2), F.A.C.

(5) Small Arms Ammunition Primers.

(a) Small arms ammunition primers shall not be transported or stored except in the original shipping container approved by the U.S. Department of Transportation (Formerly ICC Regulations).

(b) Truck or rail transportation of small arms ammunition primers shall be in accordance with the regulations of the U.S. Department of Transportation (Formerly ICC Regulations).

(c) Not more than 25,000 small arms ammunition primers shall be transported in a passenger vehicle.

Specific Authority 552.13 FS. Law Implemented 552.12, 552.13, 552.241, 633.01(2) FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Formerly 4A-2.17, 4A-2.017.

69A-2.018 Transportation; Blasting Agents.

(1) When blasting agents are transported in the same vehicle with other explosives, all of the requirements of Rules 69A-2.013, 69A-2.014, 69A-2.015, and 69A-2.016, F.A.C., shall be complied with.

(2) Vehicles transporting blasting agents shall only be driven by and be in charge of a driver who is capable, careful, reliable and in possession of a valid motor vehicle operator's license. Such a person shall also be familiar with the State vehicle and traffic laws.

(3) No sparking metal, sparking metal tools, oils, matches, firearms, acids or other corrosive liquids shall be carried in the bed or body of any vehicle containing blasting agents.

(4) No person shall be permitted to ride upon, drive, load or unload a vehicle containing blasting agents while smoking or under the influence of intoxicants or narcotics.

(5) It is prohibited for any person to transport or carry any blasting agents upon any public vehicle carrying passengers for hire.

(6) Vehicles transporting blasting agents shall be in safe operating condition at all times.

(7) When offering blasting agents for transportation on public highways the packaging, marking and labeling of containers of blasting agents shall comply with the requirements of the Interstate Commerce Commission regulations.

(8) Vehicles used for transporting blasting agents on public highways shall be marked and placarded in accordance with subsection 69A-2.014(2), F.A.C.

Specific Authority 552.13 FS. Law Implemented 552.12, 552.13, 552.094 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.18, Amended 11-14-99, Formerly 4A-2.018.

69A-2.020 Use; Loading of Explosives in Blast Holes.

(1) All drill holes shall be sufficiently large to admit freely the insertion of the cartridges of explosives.

(2) Tamping shall be done only with wood rods without exposed metal parts. Non-sparking metal connectors may be used for jointed poles. Plastic tamping poles may be used provided they have been approved by the State Fire Marshal. Violent tamping shall be avoided.

(3) No holes shall be loaded except those to be fired in the next round of blasting. Seismographic operations shall follow this procedure wherever possible for maximum safety, but where practicality will not permit, they are excepted from the provisions of this subsection.

(4) Drilling shall not be started until all remaining butts of old holes are examined with a wooden stick for unexploded charges, and if any are found they shall be refired or washed out by the blaster before work proceeds.

(5) No person shall be allowed to deepen drill holes which have contained explosives.

(6) After loading for a blast is completed, all excess blasting caps or electric blasting caps and other explosives shall immediately be returned to their separate storage magazines.

Specific Authority 552.13 FS. Law Implemented 552.091, 552.101, 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Amended 9-28-78, Formerly 4A-2.20, 4A-2.020.

69A-2.021 Use; Initiation of Explosive Charges.

(1) When fuse is used, the blasting cap shall be securely attached to the safety fuse with a standard ring-type cap crimper. All primers shall be assembled at least 50 feet from any magazine.

(2) Primers shall be made up only as required for each round of blasting.

(3) No blasting cap shall be inserted in the explosives without first making a hole in the cartridge for the cap with a wooden punch of proper size or with a standard cap crimper.

(4) Explosives shall not be extracted from a hole that has once been charged or has misfired unless it is impossible to detonate the unexploded charge by the insertion of a fresh additional primer. This work shall be done by the blaster.

(5) If there are any misfires while using cap and fuse, all persons shall remain away from the charge for at least 1 hour. If electric blasting caps are used and a misfire occurs, this waiting period may be reduced to 30 minutes. Misfires shall be handled by the blaster and all wires shall be carefully traced and a search made for unexploded charges. Seismographic operations will comply with the requirements of the paragraph wherever possible where practicality permits but are otherwise excepted from the provisions of the subsection.

(6) Blasters, when testing circuits to charged holes, shall use only blasting galvanometers designed for this purpose.

(7) The blaster making leading wire connections in electrical firing shall fire the shot. All connections shall be made from bore hole back to the source of firing current, and the leading wires shall remain shorted and not be connected to the blasting machine or other source of current until the charge is to be fired.

Approved blasting machines should be used as a source of electric current for initiating electrically fired charges of explosives.

(8) Before a blast is fired, a loud warning signal shall be given by the blaster, who has made certain that all surplus explosives are in a place, all persons and vehicles are at a safe distance or under sufficient cover, and that an adequate warning has been given.

Specific Authority 552.13 FS. Law Implemented 552.091, 552.101, 552.13 FS. History—Amended 6-25-66, 10-18-67, Repromulgated 12-24-74, Amended 9-28-78, Formerly 4A-2.21, 4A-2.021.

69A-2.023 Conflicts.

Nothing contained in these Rules and Regulations shall be in conflict with provisions of the National Security Act of 1947, as amended, or the Espionage and Sabotage Act of 1954, as amended.

Specific Authority 552.13 FS. Law Implemented 552.13 FS. History—Amended 6-25-66, Repromulgated 12-24-74, Formerly 4A-2.23, 4A-2.023.

69A-2.024 Construction Materials Mining Activities.

(1) Scope.

(a) This section implements Section 552.30, Florida Statutes, which gives the State Fire Marshal sole and exclusive authority to promulgate standards, limits, and regulations regarding the use of explosives in conjunction with the extraction of limestone and sand by any person or company primarily engaged in commercial mining of limestone and sand suitable for production of construction aggregates, sand, cement, and road base materials and Section 552.211, Florida Statutes, which allows the State Fire Marshal to restrict the quantity and use of explosives at any location within the state where such explosive is likely to cause injury to life or property.

(b) Any person or company not primarily engaged in commercial mining of limestone and sand suitable for production of construction aggregates, sand, cement, and road base materials remains subject to the provisions of Section 552.25, Florida Statutes.

(c) Nothing in this section is intended to supercede the requirements of Chapter 552, Florida Statutes, or other sections in this rule chapter.

(2) Definitions. As used in this rule:

(a) "Blasting site" is a location within a mining area at which explosive charges are set.

(b) "Independent seismologist" is an individual whose function includes vibration and air overpressure measurement and the analysis and evaluation of their effects upon structures.

1. A seismologist under this subsection will not be considered "independent" if the seismologist is an employee of:

- a. The mining permit holder, blaster, or user; or
- b. Any entity subject to regulation under Section 552.30, Florida Statutes.

2. A seismologist shall be ineligible to serve as an "independent seismologist" if the seismologist:

a. Has within 2 years from the written notice referenced below been retained by or otherwise served as an expert witness, investigator, or consultant for the mining permit holder, blaster, or user or for an aggrieved party in connection with any anticipated or threatened claim, legal action, or other proceedings in which the mining permit holder, blaster, or user is alleged in a written notice to have caused damages or adversely affected personal property allegedly due to the operation or performance of the activities regulated under this rule chapter; or

b. Does not meet the criteria of paragraph (4)(c) of this rule.

3. The Fire Marshal's office shall provide a list of qualified independent seismologists approved for use pursuant to this paragraph. The requirement to use an independent seismologist shall not be effective until the list is compiled.

(c) "Limestone" as used in Section 552.30(1), Florida Statutes, means any extracted material composed principally of calcium or magnesium carbonate. Coquina is a form of limestone composed of shell fragments.

(d) "Mining area" as used in this rule section is the area of land in which construction materials mining activity is to occur.

(e) "Urban development" is defined as a residential subdivision containing 25 or more occupied residences within the local urban development boundary.

(3) Mining Permit.

(a) Applicability.

1. Any construction materials mining activity which is in operation upon the effective date of this rule shall be allowed to continue such mining operations, including blasting, provided that the applicant submits an application in accordance with this rule within 90 days of the effective date of this rule.

2. All construction materials mines which are not in active operation on the effective date of this rule must have a blasting permit issued pursuant to these rules prior to commencing blasting activities.

(b) A mining permit shall be issued only after:

1. Payment of a fee established in subsection (10) below or by the county or municipality to cover costs.

2.a. Approval of an application, signed by the applicant showing the applicant's name and address, on Form DI4-1498 Rev. 3/02, Construction Mining Activity Application, which is hereby adopted and incorporated by reference and is available from Safety Program Manager, Bureau of Fire Prevention, Division of State Fire Marshal, 200 East Gaines Street, Tallahassee, Florida 32399-0342.

b. Within 30 days of receipt of the application, the State Fire Marshal shall request additional information if necessary to evaluate the application.

c. The State Fire Marshal shall inform the permittee by fax or otherwise in writing when the application is complete.

d. Within 90 days of the completion of the application, the application shall be approved or denied.

(c) The permit holder shall report all complaints to the authority issuing the permit.

(d) Standards for Mining Permit Approval. A mining permit shall be approved unless any item listed on Form DI4-1498 in subsection (b) above is not provided.

(e) License period. Each mining permit shall be issued for a period of 10 years.

(f) Annual Report and Annual Permit Fee Procedure.

1. The mining activity covered by the mining permit will be reviewed on an annual basis for compliance with Chapter 552, Florida Statutes, including but not limited to compliance with the record keeping requirements.

2. The mining permit holder shall annually pay a permitting fee specified in subsection (10) below.

(g) Transfer of permits.

1. Within 60 days after the sale or legal transfer of a mining operation, the permittee shall inform the State Fire Marshal or delegatee in writing of the sale or legal transfer, identify the proposed new permittee, and request transfer of the permit.

2. At the option of the permittee request for transfer may be made prior to the sale or transfer of the mining operation, with approval being effective upon closing of the sale or transfer of the operation.

3. Requests for transfer shall be accompanied by the fee specified in paragraph (10)(e).

4. The State Fire Marshal or delegatee shall approve the transfer of the permit unless it determines that the proposed new permittee does not meet the requirements of this rule. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of the permit conditions.

5. Within 30 days of receipt of the request for a transfer, the State Fire Marshal or delegatee shall request additional information if necessary to evaluate the request. The State Fire Marshal or delegatee shall inform the permittee by fax or otherwise in writing when the request is complete.

6. Within 90 days of the completion of the request, the request shall be approved or denied subject to Section 120.60, Florida Statutes.

7. The transferee is allowed to continue to operate under the existing permit until the request for transfer has been approved or denied.

(h) Renewal of Permits.

1. At least 60 days prior to the expiration of a mining permit issued pursuant to this rule, the permittee wishing to continue activities subject to this rule shall apply for renewal of the permit using Form DI4-1498, Construction Mining Activity Application.

2. If the request is submitted at least 60 days prior to the expiration of the mining permit, the existing permit shall remain in effect until final agency action, or later as required by Section 120.60, Florida Statutes.

(i) Modification of Permits.

1. A permittee may request a modification of the permit by applying to the State Fire Marshal or delegatee. The request shall identify the proposed modification.

2. Requests for modification shall be accompanied by the fee specified in paragraph (10)(d).

3. Within 30 days of receipt of the request, the State Fire Marshal or delegatee shall request additional information if necessary to evaluate the request.

4. The State Fire Marshal or delegatee shall inform the permittee by fax or otherwise in writing when the request is complete.

5. Within 30 days of the completion of the request, the request shall be approved or denied subject to Section 120.60, Florida Statutes.

(4) Ground Vibration Limits. Ground vibration shall not exceed the limits of particle velocity and frequencies established by the U.S. Bureau of Mines Report of Investigations, No. 8507 Ground Vibration, Frequency Limits.

(a)1. The maximum, Appendix B – Alternative Blasting Level Criteria (Figure B-1). A blasting operation shall use a seismograph, as identified in subsection (c) below, to monitor each blast to ensure compliance with the ground vibration limits established in Section 552.30, Florida Statutes.

2. The U.S. Bureau of Mines Report of Investigations No. 8507, Appendix B – Alternative Blasting Level Criteria (Figure B-1) and Table 8-1.3, established in Section 8-1 of the National Fire Protection Association Standard 495, 1996 Edition are hereby adopted and incorporated by reference. Copies may be obtained from the Bureau of Fire Prevention, 200 East Gaines Street, Tallahassee, FL 32399-0342.

(b) 1. Ground vibration shall be measured for every blast at the location of the nearest building that is not owned, leased, or contracted by the blasting or mining operation, or on property for which the owner has not provided a written waiver to the blasting operations, up to a maximum of one mile.

2. If there are no such buildings within one mile, measurement shall be made at one mile in the direction of the nearest such building.

3. If there is a building that is not owned, leased, or contracted by the blasting or mining operation, or on property for which the owner has not provided a written waiver to the blasting operations in a direction 90 to 270 degrees from the direction of the nearest building specified in subparagraph (b)1. above, and that building is no more than 500 feet farther than the nearest building, measurement shall also be made at the nearest of those buildings.

4. If a measurement location determined pursuant to subparagraphs (b)1.-3. above is not practicable, such as in a wet swamp, measurement shall be made at a point nearer to but in the same direction from the blast site.

(c)1. All measurements shall be made by a seismologist meeting the following criteria:

a. Five years continuous experience measuring and evaluating levels of ground vibration and air overpressure produced by blasting;

b. Demonstrable expertise in the use, location, and operation of seismographic equipment and analysis of seismographic data; and

c. Prior experience in monitoring side effects produced by blasting used in construction materials mining activity.

d. The State Fire Marshal has not found that the seismologist has engaged in dishonest practices relating to the collection or analysis of data or information regarding the use of explosives in construction materials mining. Such a finding will be subject to Section 120.57, Florida Statutes.

e. The seismologist is not an employee of the mining permit holder, blaster, or user.

2. Measurements shall be taken and equipment shall meet specifications of and be installed in accordance with the International Society of Explosives Engineers Blaster's Handbook, 17th Edition, Copyright 1998.

3. The International Society of Explosives Engineers Blaster's Handbook, 17th Edition, Copyright 1998, is hereby adopted and incorporated by reference and may be obtained from the International Society of Explosives Engineers, 29100 AVRA Road, Cleveland, Ohio 44131.

4. When the use of explosives occurs within 2 miles of an urban development, measurements shall be collected and reported by an independent seismologist.

(d)1. All seismographic equipment used within the boundaries of the State of Florida shall be calibrated according to the manufacturer's specifications and shall be certified as accurate by the manufacturer on an annual basis or as needed.

2. If the manufacturer is unavailable for such certification, the certification shall be performed by a person approved by the State Fire Marshal. Such approval shall be granted if the certifying person is known to be independent and reliable. "Independent" means not an employee or affiliate of a company engaged in construction materials mining activity, and "reliable" means never having been found to have willfully or negligently miscalibrated seismographic equipment.

3. Units not meeting current calibration guidelines shall be removed from service until calibration has been completed.

4. Calibration records shall be made available to the Division upon request.

(5) Airblast.

(a) Airblast limits shall conform with the limits established in Section 8-2 of National Fire Protection Association Standard Number 495, 1996 Edition, which is hereby adopted and incorporated by reference.

1. The codes and standards published by the National Fire Protection Association may be obtained by writing to the NFPA at: 1 Batterymarch Park, Quincy, Massachusetts 02269-9101.

2. All standards adopted and incorporated by reference in this rule are also available for public inspection during regular business hours at the Bureau of Fire Prevention, Division of State Fire Marshal, Department of Financial Services, 325 John Knox Road, The Atrium, Third Floor, Tallahassee, Florida 32303.

(b)1. Measurements made by a seismologist and any measurements made by an independent seismologist shall be made using seismographic equipment meeting the specifications of the International Society of Explosives Engineers Blasters' Handbook, 17th Edition, Copyright 1998.

2. Measurements shall be taken and equipment shall be installed in accordance with the International Society of Explosives Engineers Blasters' Handbook, 17th Edition, Copyright 1998.

(6) Time and Date of Explosives Use.

(a) The use of explosives shall be conducted during daylight hours between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday.

(b) No explosive blasting shall occur on Saturdays, Sundays, official holidays recognized by the State of Florida pursuant to Section 110.117, Florida Statutes, or hours other than specified in the prior sentence unless consent is granted by the State Fire Marshal. Such consent shall be granted if the consent is in the interest of public safety.

(7) Blasting Activities Reporting. Each person engaged in construction materials mining activity shall submit to the Division or its delegatee, upon request, the results of ground vibration and airblast measurements. This report shall be maintained in accordance with Section 552.112, Florida Statutes. The report shall contain, at a minimum, for each blast:

(a) Date and time of blast;

(b) Number of holes;

(c) Depth;

(d) Number of wet holes, water depth;

(e) Hole diameter;

(f) Spacing;

(g) Amount of explosives;

(h) Number of primers;

(i) Type of caps (i.e., electric or nonelectric);

(j) Number of caps;

(k) Stemming feet;

(l) Maximum pounds delay;

(m) Maximum hole delay;

(n) Weather;

(o) Wind direction;

(p) Type and make of blasting machine;

(q) Global positioning system direction and distance in feet to the nearest building;

(r) Decking feet;

(s) Location of each seismograph;

(t) Peak particle velocity inches per second;

(u) Sound decibels;

(v) Name, address, and license number of user of explosives; and

(w) Name, address, and permit number of blaster.

(8) Local Government Notice.

(a) Each person engaged in construction materials mining activity shall submit written notification to the county and or municipality in which construction materials mining activity is to be conducted at least 20 days prior to the initial blast for any blasting.

(b) As soon as practical, but no later than one hour prior to the time when a blast is scheduled to take place, the person or firm engaged in construction materials mining activity shall, if requested, notify the county or municipality of any revisions to the notice.

(9) Delegation of Authority.

(a) The delegation by the State Fire Marshal described in Section 552.30(2), Florida Statutes, shall be accomplished by written agreement.

(b) Fees charged by the delegatee for activities specified in the agreement shall not exceed an amount calculated to cover the reasonable costs of the activities performed under the agreement.

(10) Fees. The fees established pursuant to Section 552.30, Florida Statutes, shall be used exclusively to fund the monitoring and enforcement activities pursuant to Section 552.30, Florida Statutes, unless otherwise approved by the Florida Legislature, and shall be as follows:

- (a) Initial permit: \$4000.
- (b) Renewal: \$4000 after 10 years.
- (c) Annual mining permit fee: \$1500.
- (d) Permit transfer fee: \$100.
- (e) Permit modification fee:
 - 1. \$1500 for a modification including a change in the boundaries of the blasting site or mining area;
 - 2. \$500 for any other modification.

(11) Disciplinary Action; Mining Permit; Grounds for Denial; Nonrenewal, Suspension, or Revocation of a Mining Permit.

(a) The State Fire Marshal shall investigate any alleged violation of Chapter 552, Florida Statutes, or this rule.

(b) The following acts constitute cause for disciplinary action:

- 1. Violation of any provision of Chapter 552, Florida Statutes, or any rule adopted pursuant thereto.
- 2. Violation of the ground vibration, frequency limits set forth in Section 552.30, Florida Statutes.
- 3. Failing to obtain, retain or maintain one or more of the qualifications for a mining permit as specified in this chapter.
- 4. Making a material misstatement, misrepresentation, or committing fraud in obtaining or attempting to obtain a mining permit.
- 5. Failing to maintain any record required pursuant to Chapter 552, Florida Statutes, and any rule or code adopted pursuant thereto.
- 6. Falsifying any record required to be maintained by Chapter 552, Florida Statutes, or rules adopted pursuant thereto.

(c) The lapse or suspension of a mining permit by operation of law or by order of the State Fire Marshal or a court or its voluntary surrender by a mining permit holder does not deprive the State Fire Marshal of jurisdiction to investigate or act in disciplinary proceedings against the mining permit holder.

(d) In addition, the State Fire Marshal shall not issue a new mining permit if it finds that the circumstance or circumstances for which the mining permit was previously revoked or suspended still exist or are likely to recur.

(12) Nothing in this rule shall impact a county's or municipality's authority to exercise whatever powers are not prohibited by Section 552.30, Florida Statutes.

(13)(a) Notwithstanding the standards in this rule, the Division shall, pursuant to Section 552.211(3), Florida Statutes, restrict the quantity and use of explosives at any location within the state when the Division determines, subject to protections provided by Chapter 120, Florida Statutes, the use of such explosives is likely to cause injury to life or property.

(b) Such restrictions shall be to the extent necessary to render the use of such explosives unlikely to cause injury to life or property.

(c) In determining that the use of explosives is likely to cause injury to life or property in a given location, the Division shall consider the following factors:

- 1. Distance of blasting activity to structures;
- 2. Use and occupancy of structures near blasting activity;
- 3. Geology of area near blasting activity; and
- 4. Type of construction use in structures near blasting activity.

5. Any credible evidence relevant to the risk of injury to life or property, not excluding evidence that existing damage resulted from causes other than the use of explosives.

(14)(a) Based upon the safe level of blasting vibrations for houses as shown in Figure B-1, United States Bureau of Mines, Report of Investigations 8507, notwithstanding the limits in subsection (4) above, the use of explosives within two miles of an urban development, as defined in paragraph (2)(e) above, shall not exceed a peak particle velocity of more than 0.5 inches per second due to the potential existence of plaster on lath construction.

(b) Measurement of such ground vibration levels shall be made consistent with subparagraph (4)(c)2. above at the nearest occupied residential structure within the urban development, which structure is not owned, leased, or contracted with the blasting or mining operation.

Specific Authority 552.30 FS. Law Implemented 552.161, 552.211, 552.30 FS. History—New 11-25-01, Amended 6-24-02, Formerly 4A-2.024.