### 7500.0100 EXPLOSIVES AND BLASTING AGENTS

# CHAPTER 7500 DEPARTMENT OF PUBLIC SAFETY BUREAU OF CRIMINAL APPREHENSION EXPLOSIVES AND BLASTING AGENTS

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### **7500.0100 DEFINITIONS.**

Subpart 1. Scope. The terms used in this chapter have the meanings given them in this part.

- Subp. 2. Approved. "Approved" means approved by the commissioner or an authorized assistant of the commissioner.
- Subp. 3. Blasting agent. "Blasting agent" means a material or mixture: that consists of a fuel and oxidizer; that is intended for blasting but is not otherwise defined as an explosive; and that, as a finished product mixed for use or shipment, cannot be detonated by means of a number 8 test blasting cap, as defined in subpart 9a, when unconfined.
- Subp. 3a. Commissioner. "Commissioner" means the commissioner of the Department of Public Safety or designee of the commissioner.

[For text of subp 4, see M.R. 1985]

- Subp. 4a. **Detonator.** "Detonator" means a device containing a detonating charge that is used for initiating detonation in an explosive. The term includes electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuses, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps.
- Subp. 5. Explosive-actuated device. "Explosive-actuated device" means a tool or special mechanized device that is actuated by explosives. Examples of explosive-actuated power devices are jet tappers and jet perforators. This term does not include propellant-actuated power devices.
- Subp. 6. Explosives. "Explosives" means a chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. The term includes dynamite and other high explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters.

For purposes of this subpart, there are three classes of explosive materials. These classes, together with the description of explosive materials comprising each class, are as follows:

A. High explosives are explosive materials that can be caused to detonate by means of a blasting cap when unconfined; for example, dynamite.

- B. Low explosives are explosive materials that can be caused to deflagrate when confined, for example: black powder, safety fuses, igniters, igniter cord, fuse lighters, and special fireworks defined as class B explosives by United States Department of Transportation regulations in Code of Federal Regulations, title 49, part 173.
- C. Blasting agents include, for example, ammonium nitrate-fuel oil and certain water gels.
- Subp. 7. Highway. "Highway" means a public street, public alley, or public road.
- Subp. 8. Inhabited building. "Inhabited building" means a building or structure regularly used in whole or part as a place of human habitation. The term "inhabited building" also means a church, school, store, railway passenger station, airport terminal for passengers, and any other building or structure where people are accustomed to congregate or assemble, but does not mean a building or structure occupied in connection with the manufacture, storage, and use of explosives.
- Subp. 8a. License. "License" refers to a license application approved and issued by the Department of Public Safety, Bureau of Criminal Apprehension.

[For text of subp 9, see MR. 1985]

- Subp. 9a. Number 8 test blasting cap. A "number 8 test blasting cap" means a cap containing two grams of a mixture of 80 percent mercury fulminate and 20 percent potassium chlorate, or a cap of equivalent strength.
- Subp. 9b. Passenger vehicle. "Passenger vehicle" means a motor vehicle designed and used to carry not more than ten persons and includes a passenger automobile, station wagon, pickup truck, and van as they are defined in Minnesota Statutes, section 168.011.
- Subp. 9c. **Permit.** "Permit" refers to an application for a user permit, approved and issued by sheriffs or chiefs of police of cities of the first, second, or third class, as defined in Minnesota Statutes, section 410.01, or other person designated by the commissioner.
- Subp. 10. **Person.** "Person" means an individual, firm, copartnership, corporation, company, association, or joint stock association, and includes a trustee, receiver, assignee, or personal representative of that individual or entity.
- Subp. 11. **Propellant-actuated device.** "Propellant-actuated device" means a tool or special mechanized device or gas generator system that is actuated by a smokeless propellant or that releases and directs work through a smokeless propellant charge.
  - Subp. 12. [Repealed, 11 SR 6]
- Subp. 13. **Pyrotechnics.** "Pyrotechnics" means a combustible or explosive composition or manufactured article designed and prepared to produce audible or visible effects and commonly referred to as fireworks.

[For text of subp 14, see M.R. 1985]

- Subp. 15. [Repealed, 11 SR 6]
- Subp. 16. Small arms ammunition. "Small arms ammunition" means a shotgun, rifle, pistol, or revolver cartridge; or cartridge for propellant-actuated power devices and industrial guns. This term does not include military-type ammunition containing explosive bursting charges and spotting or pyrotechnic projectiles.

[For text of subp 17, see M.R. 1985]

Subp. 18. Smokeless propellant. "Smokeless propellant" means a solid propellant, called a smokeless powder in the trade, used in small arms ammunition, cannons, rockets, propellant-actuated power devices, or other devices.

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Subp. 19. Special industrial explosive. "Special industrial explosive" means an explosive-actuated power device or a propellant-actuated power device consisting of shaped materials and sheet forms and various other extrusions, pellets, and packages of high explosives including dynamite, trinitrotoluene (TNT), pentaerythritoltertranitrate (PETN), cyclotrimethylene-trinitramine (RDX), and other similar compounds used for high-energy-rate forming, expanding, and shaping in metal fabrication, and for dismemberment and quick reduction of scrap metal.

Subp. 20. [Repealed, 11 SR 6] Subp. 21. [Repealed, 11 SR 6]

Subp. 21a. Table of distances for storage of explosive materials. "Table of distances for storage of explosive materials" means the table provided in Code of Federal Regulations, title 27, section 55.218 (April 1, 1985).

Subp. 21b. Table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents. "Table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents" means the table provided in Code of Federal Regulations, title 27, section 55.220 (April 1, 1985).

[For text of subp 22, see MR. 1985]

Subp. 23. Water gels or slurries. "Water gels or slurries" are explosive materials that contain substantial portions of water, oxidizers, sensitizers, fuels, thickeners, gelling agents, or cross-linking agents. They may be premixed at a manufacturing plant or mixed at the site immediately before delivery into the borehole. Sensitivity and classification are covered under part 7500.3100.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

# 7500.0200 PURPOSE.

The purpose of this chapter is to adopt safety standards for the manufacture, storage, and use of explosives and blasting agents, consistent with Minnesota Statutes, sections 299F.71 to 299F.83.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.0300 SCOPE.

Subpart 1. In general. This chapter applies to the manufacture, retention, possession, storage, sale, and use of explosives, blasting agents, and pyrotechnics.

Subp. 2. Municipal supervision. This chapter also applies to municipal supervision of compliance with federal regulations.

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

### 7500.0400 SCOPE; EXEMPTIONS.

Subpart 1. Materials transported. This chapter does not apply to the transportation of explosives or blasting agents governed by Code of Federal Regulations, title 49, parts 100 to 199 (1983), or otherwise under the jurisdiction of the Department of Transportation, United States Coast Guard, Federal Aviation Agency, or Board of Transport Commissioners for Canada.

- Subp. 2. **Military explosives.** This chapter does not apply to the shipment, transportation, and handling of military explosives by the armed forces of the United States, state militia, or the armed forces of Canada.
- Subp. 3. Other federal and Canadian agencies. This chapter does not apply to the transportation and use of explosives or blasting agents in the normal and

emergency operation of federal agencies such as the Bureau of Mines, the Federal Bureau of Investigation, the Secret Service, and equivalent Canadian governmental agencies.

- Subp. 3a. **Bomb technicians.** This chapter does not apply to recognized bomb technicians acting in an official capacity under emergency conditions.
- Subp. 4. Fireworks. This chapter does not apply to the sale, use, or public display of pyrotechnics commonly known as fireworks.
- Subp. 5. Requests for exemptions. The commissioner may grant an exemption from this chapter upon written request. The request must show that enforcement of a part of this chapter will cause unnecessary hardship to the petitioner. The commissioner shall not grant the request if the requested modification of a part of this chapter will constitute a distinct hazard to life or adjoining property.

The request must be in duplicate and must state the full particulars of the exemption requested. When the requested exemption is approved, one copy of the approval will be returned to the petitioner and one copy will be retained by the commissioner.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.0500 AUTHORITY OF COMMISSIONER.

Subpart 1. Site and records inspections. After acquiring necessary security clearance and during normal business hours, the commissioner may inspect storage sites and use sites for explosives regulated by and the records of explosives dealers required by this chapter. The purpose of an inspection is to determine whether the sites and records conform to this chapter. In addition, the commissioner or any authorized law enforcement official may conduct an inspection at any time in connection with the investigation of a crime.

Subp. 2. Restricting quantity of explosives. The commissioner may restrict the quantity of explosives or blasting agents that may be handled at a location in a city, county, state, or other area.

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

### 7500.0550 EXPLOSIVES DEALER LICENSE.

Subpart 1. **Application.** An applicant for an explosives dealer license shall apply to the commissioner according to Minnesota Statutes, section 299F.73. The commissioner shall refuse to process an incomplete application.

One copy of the approved application will be returned to the applicant and will constitute a license to manufacture, assemble, warehouse, or store explosives.

A license is valid for one year from the date of approval.

- Subp. 2. License renewal. One month before a license is due to expire the commissioner shall notify the licensee of the expiration date.
- Subp. 3. License suspension or revocation. The commissioner shall suspend or revoke a license if an applicant or a licensee:
- A. violates the provisions of Minnesota Statutes, sections 299F.71 to 299F.83 pertaining to explosives;
  - B. violates the provisions of this chapter pertaining to explosives;
  - C. uses an explosive in the commission of a crime; or
  - D. makes a false statement on a license application form.
- Subp. 4. **Person prohibited from holding license.** If an applicant or licensee becomes a person prohibited from holding a license as defined in Minnesota Statutes, section 299F.77, that person shall notify the commissioner of this fact within 48 hours.

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Subp. 5. Right to contest decision. An applicant or licensee has the right to contest a decision made by the commissioner. These proceedings must be conducted according to the Administrative Procedure Act, Minnesota Statutes, sections 14.57 to 14.69.

Statutory Authority: MS s 299F.71 to 299F 83

History: 11 SR 6

# 7500.0560 EXPLOSIVES USER PERMIT.

Subpart 1. Application. An applicant for an explosives user permit shall apply to the local issuing authority as described in part 7500.0100, subpart 9d, in accordance with Minnesota Statutes, section 299F.75. The issuing authority may be located either where the applicant resides or where the applicant intends to use the explosives.

The applicant shall notify the chief of police or sheriff of the jurisdiction where the explosives will be used or stored if the permit was not issued in that jurisdiction.

- Subp. 2. **Duties of issuing authority.** If the applicant obtains a permit from an issuing authority of a jurisdiction other than where the explosives will be used or stored, the issuing authority:
- A. before issuing the permit, shall confer with the authority where the explosives are to be used or stored;
- B. shall forward a copy of the permit, as soon as it is issued, to the sheriff or chief of police of the jurisdiction where the explosives will be used or stored;
- C. after approving an application, shall retain the yellow copy, file the green copy with the commissioner, and return to the applicant the white copy which becomes the permit; and
- D. shall refuse to process an application that is not completed according to Minnesota Statutes, section 299F.75, subdivision 2.
- Subp. 3. Permit suspension or revocation. The issuing authority shall suspend or revoke a permit if an applicant or permittee:
- A. violates the provisions of Minnesota Statutes, sections 299F.71 to 299F.83 pertaining to explosives;
  - B. violates the provisions of this chapter pertaining to explosives;
  - C. uses an explosive in the commission of a crime; or
  - D. makes a false statement on the permit application form.
- Subp. 4. Person prohibited from holding permit. If an applicant or permittee becomes a person prohibited from holding a permit as defined in Minnesota Statutes, section 299F.77, that person shall notify the commissioner of this fact within 48 hours.
- Subp. 5. Right to contest decision. An applicant or permittee has the right to a hearing before the commissioner to contest a decision made by an issuing authority. These proceedings must be conducted according to the Administrative Procedure Act, Minnesota Statutes, sections 14.47 to 14.69.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

# 7500.0600 PROHIBITIONS AGAINST EXPLOSIVES MANUFACTURING.

Subpart 1. Authorization required. The manufacture of an explosive or explosive device, including small arms ammunition and blasting agents, is prohibited unless the manufacturer is licensed by the commissioner. This prohibition does not apply to hand loading of small arms ammunition prepared for personal use and not for resale.

Subp. 2. Undue hazard. The manufacture of explosives or blasting agents is

prohibited when the manufacture presents an undue hazard to life and property as determined by the commissioner.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

# 7500.0700 PROHIBITIONS; EXCEPTIONS.

Subpart 1. Undue hazard. A person shall not store or handle explosives or blasting agents when the storage or handling of explosives or blasting agents constitutes an undue hazard to life and property.

- Subp. 2. In conflict with law or rules. A person shall not possess, keep, store, sell or offer for sale, give away, use, or otherwise dispose of an explosive or blasting agent except as provided in this chapter or by law. This limitation does not apply to small arms ammunition and components, cartridges for propellant-actuated power devices, cartridges for industrial guns intended for personal use and not for resale, or railroad fusees.
- Subp. 3. Transfer to unauthorized persons. A person shall not sell or give away an explosive or blasting agent to an unauthorized person, as defined in Minnesota Statutes, section 299F.77.
- Subp. 4. Public display. A person shall not physically sell, display, or expose for sale an explosive or blasting agent on a highway, street, sidewalk, public way, or public place.
- Subp. 5. Medicinal use permitted. This chapter does not prohibit the use of explosives in the form prescribed by the United States Pharmacopeia National Formulary, issued by the United States Pharmacopeial Convention, Inc. (Rockville, Maryland, 1985).
- Subp. 6. Laboratory use permitted. Government and industrial laboratories, laboratories of technical institutes, colleges, universities, and similar institutions may keep, store, and use explosives or blasting agents:
  - A. if they are used for scientific or technical instruction or research;
  - B. only under experienced and competent supervision;
- C. if no more than 15 pounds of explosives (exclusive of small arms ammunition, small arms ammunition primers, and smokeless propellants) or blasting agents are kept on hand at any time; and
- D. if in compliance with Code of Federal Regulations, title 27, sections 55.203 to 55.217 (1982).

When additional quantities of explosives or blasting agents are required, the institution shall apply for a special ruling by the commissioner.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.0800 STORAGE OF EXPLOSIVES IN MAGAZINES.

- Subpart 1. General requirement. High explosives, low explosives, blasting agents, special industrial explosives, and newly developed and unclassified explosives must be kept in magazines that meet the requirements of this part.
- Subp. 2. Detonators, primers, cartridges; separated storage. Detonators, detonating primers, and primed cartridges must not be stored in the same magazine with other explosives.
- Subp. 3. Magazines. The ground around magazines must slope away for drainage. The land surrounding magazines must be kept clear of brush, dried grass, leaves, and other combustible materials for a distance of at least 25 feet.

Magazines must comply with Code of Federal Regulations, title 27, sections 55.203 to 55.217 (1982).

Subp. 4. Exceptions. This part does not apply to:

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- A. stocks of small arms ammunition, propellant-actuated power cartridges, small arms ammunition primers in quantities of less than 1,000,000, and smokeless propellants in quantities of less than 750 pounds;
- B. explosive-actuated power devices when in quantities of less than 50 pounds net weight of explosive;
  - C. fuse lighters and fuse igniters; or
  - D. safety fuses, not including detonating cords.

Statutory Authority: MS s 299F 71 to 299F 83

History: 11 SR 6

7500.0900 [Repealed, 11 SR 6]

7500.1000 [Repealed, 11 SR 6]

7500.1100 [Repealed, 11 SR 6]

# 7500.1200 USE OF EXPLOSIVES; PRECAUTIONS.

Subpart 1. **Persons handling explosives.** Explosives may be handled only by a person experienced in the use of explosives or by an employee who is at least 18 years of age and is supervised by a person experienced in the use of explosives.

- Subp. 2. Smoking, fire, liquor, narcotics. While explosives are being handled or used, smoking is not permitted. A person near the explosives shall not possess matches, open light, or other fire- or flame-producing devices. A person shall not handle explosives while under the influence of intoxicating liquor or narcotics.
- Subp. 3. Containers. Original containers or authorized containers must be used for taking detonators and other explosives from storage magazines to the blasting area.
- Subp. 4. Covering blast. When the blasting is done in congested areas or in close proximity to a structure, railway, highway, or other installation that may be damaged, the blast must be covered before firing with a mat that can prevent fragments from being thrown.
- Subp. 5. General precautions. Persons authorized to prepare explosive charges or conduct blasting operations shall use every reasonable precaution, including warning signals, flags, barricades, or mats to ensure the safety of the general public and workers.
- Subp. 6. **Daylight blasting.** Blasting operations, except by special permission of the commissioner, must be conducted during daylight hours.
- Subp. 7. Notice to utilities. When blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, telegraph, and steam utilities, the blaster shall notify the appropriate representatives of these utilities at least 24 hours in advance of blasting, specifying the location and intended time of blasting. Verbal notice must be confirmed with written notice. In an emergency this time limit may be waived by the local authority issuing the original permit.
- Subp. 8. Electricity precautions; incorporation. Due precautions must be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent power lines, dust storms, or other sources of extraneous electricity. These precautions include:

[For text of subp 8, item A, see M.R. 1985]

- B. the posting of signs that warn against the use of mobile radio transmitters on roads within 1,000 feet of the blasting operation; and
- C. compliance with the Safety Guide for the Prevention of Radio Frequency Radiation Hazards in the Use of Electric Blasting Caps, publication number 20, Institute of Makers of Explosives (1981), which is incorporated by reference. This publication is not subject to frequent change and is located at the

Minnesota State Law Library, 117 University Avenue, Saint Paul, Minnesota 55155.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.1300 STORAGE AT USE SITES.

Subpart 1. Boxes and packing materials. Empty boxes and paper and fiber packing materials that previously contained high explosives must not be used again for any purpose, but must be destroyed by burning at an approved isolated location out of doors. A person shall not be nearer than 100 feet after burning has started

- Subp. 2. Opening containers. Containers of explosives must not be left opened in a magazine or within 50 feet of a magazine. In opening kegs or wooden cases, sparking metal tools must not be used; wooden wedges and either wood, fiber, or rubber mallets must be used. Nonsparking metallic slitters may be used for opening fiberboard cases.
- Subp 3. Damaged explosives. Explosives or blasting equipment that is obviously deteriorated or damaged must not be used.
  - Subp. 4. Abandonment. Explosives must not be abandoned.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.1400 LOADING EXPLOSIVES IN BLAST HOLES.

- Subpart 1. Size of drill hole. Drill holes must be sufficiently large to admit freely the insertion of a cartridge of explosives.
- Subp. 2. **Tamping.** Tamping must be done only with wood or approved plastic rods without exposed metal parts, but nonsparking metal connectors may be used for jointed poles. Violent tamping must be avoided.
- Subp. 3. Selection of holes. Only holes that will be fired in the next round of blasting may be loaded. After loading, the remaining explosives must be immediately returned to an authorized location.
- Subp. 4. Remaining butts. Drilling must not be started until the remaining butts of old holes are examined with a wooden stick for unexploded charges. If unexploded charges are found, they must be refired before work proceeds.
- Subp. 5. **Prohibition against deepening holes.** No person is allowed to deepen drill holes which contain explosives.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500,1500 INITIATION OF EXPLOSIVES CHARGES.

- Subpart 1. Electric blasting detonators. Only electric blasting detonators may be used for blasting operations in congested districts, in highways, or adjacent to highways open to traffic, except where sources of extraneous electricity make this use dangerous.
- Subp. 2. Using fuses. When a fuse is used, the blasting detonator must be securely attached to the safety fuse with a standard ring-type detonator crimper. Primers may only be assembled at least 50 feet from any magazine.
- Subp. 3. **Primers.** Primers may be made up only as required for each round of blasting.
- Subp. 4. Inserting detonator into explosive. A blasting detonator must not be inserted in the explosives unless a hole is first made in the cartridge for the detonator with an approved punch of proper size or standard detonator crimper.
  - Subp. 5. Extracting explosives from hole. Explosives must not be extracted

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from a hole that has once been charged or has misfired unless it is impossible to detonate safely the unexploded charge by inserting a fresh additional primer.

- Subp. 6. **Misfires.** If a misfire occurs while using a detonator and a fuse or an electric blasting detonator, all persons shall remain away from the charge for at least 30 minutes. A misfire may be handled only under the direction of the person in charge of the blasting, the wires must be carefully traced, and a search must be made for unexploded charges.
- Subp. 7. **Testing circuits.** When testing circuits to charged holes, blasters shall use only blasting galvanometers or other instruments approved for testing circuits.
- Subp. 8. Lead wire connections. Only the person making the lead wire connections in electrical firing shall fire the shot. Connections should be made from the bore hole back to the source of firing current. The leading wires must remain shorted and must not be connected to the blasting machine or other source of current until the charge is to be fired.

Statutory Authority: MS s 299F.71 to 299F 83

History: 11 SR 6

# 7500.1600 WARNING REQUIREMENT.

Before a blast is fired, the person m charge shall first make certain that surplus explosives are in a safe place and that persons and vehicles are at a safe distance or under sufficient cover. Then the person in charge shall give a suitable warning signal.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

7500.1700 [Repealed, 11 SR 6]

### 7500.1800 SALE AND DISPOSITION OF EXPLOSIVES.

Subpart 1. **Prohibitions; scope.** Explosives and blasting agents, special industrial explosives, and newly developed and unclassified explosives must not be sold or transferred in this state except as provided in items A to D. This part does not apply to the following commodities and items:

A. stocks of small arms ammunition, propellant-actuated power cartridges, small arms ammunition primers, and smokeless propellants;

[For text of subpart 1, items B and C, see M.R. 1985]

- D. safety fuses not including detonating cords and 3/32-inch cannon fuses or matchlock fuses (slow match).
- Subp. 2. Marking required. A vendor, transferor, buyer, or transferee of explosives within this state shall not accept or deliver dynamite or other explosive in any quantity unless each carton or other usual primary container of the explosive is plainly labeled, stamped, or marked with identification numbers and with the words "Dangerous Explosives." It is unlawful for a person to use or possess an explosive not so marked. Unmarked explosives found in the possession of any person may be confiscated, seized, or destroyed by the commissioner or a law enforcement officer.
- Subp. 3. Information required for delivery. A vendor or transferor of explosives within this state may deliver explosives to another person only after first obtaining and recording the following information:
  - A. the date of transaction;
  - B. the identity of the manufacturer of the explosives being transferred;
- C. the type of explosives and the identification numbers on the explosives being transferred;

- D. the quantity of explosives being transferred:
- E. the name and address of the purchaser or transferee:
- F. the user permit number; and
- G. the signature of the transferee.
- Subp. 4. Records of transactions required. Records of transactions must be made available to the commissioner on request. Also, the commissioner may require that each person mail a copy of the record of each transaction made during the preceding week on Monday of each week.

Subp. 5. [Repealed, 11 SR 6]

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

7500.1900 [Repealed, 11 SR 6]

### 7500,2000 REPORT OF THEFTS.

A person possessing explosives who incurs a loss or theft of explosives shall notify, within 24 hours of discovering the loss or theft, the commissioner and the county sheriff or the local chief of police of the loss or theft, the amount of missing explosives, and the approximate time of the occurrence.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.2100 JURISDICTION OF FEDERAL BUREAU OF MINES.

The commissioner may exempt a person from the requirements for storage facilities in parts 7500.0700, 7500.0800, and 7500.1300 if the person is within the jurisdiction of the Federal Bureau of Mines and the commissioner deems that parts 7500.0700, 7500.0800, and 7500.1300 are in conflict with Code of Federal Regulations, title 27, sections 55.201 to 55.220 (1982). The commissioner may revoke an exemption if a person violates the provisions of Minnesota Statutes, sections 299F.71 to 299F.83 pertaining to explosives. For granting or revoking an exemption or for any other purpose, the commissioner may inspect at any time the premises and facilities of a person seeking an exemption.

Statutory Authority: MS s 299F.71 to 299F 83

History: 11 SR 6

### 7500.2200 GENERAL PROVISIONS.

Subpart 1. Restricted scope. This section does not apply if its application in a particular instance would conflict with Code of Federal Regulations, title 49, parts 100 to 199 (1983).

- Subp. 1a. Storage in railway car; federal regulations. Except in an emergency and with permission of the local authority having jurisdiction, a person shall not have or keep explosives in a railway car unless the car and its contents and the methods of loading conform to Department of Transportation regulations in Code of Federal Regulations, title 49, parts 100 to 199 (1983) for the transportation of explosives.
- Subp. 2. Delivery to carrier. A person shall not deliver an explosive to a carrier unless the explosive conforms in all respects, including marking and packing, to the Department of Transportation regulations in Code of Federal Regulations, title 49, parts 100 to 199 (1983) for the transportation of explosives.
- Subp. 3. Placards on railway cars. A railway car containing explosives that has reached its destination or is stopped in transit and no longer is in interstate commerce, must have placards that comply with Department of Transportation regulations in Code of Federal Regulations, title 49, parts 100 to 199 (1983).
  - Subp. 4. Other safety measures required. Explosives that are to be delivered

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to a consignee or forwarded to another destination and that are located at a railway facility, truck terminal, pier, wharf, harbor facility, or airport terminal must be kept in a safe place, kept isolated as far as practicable, and kept in a manner that they can be easily and quickly removed.

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

7500.2300 [Repealed, 11 SR 6]

# 7500.2350 DUTY OF CONSIGNEE TO ACCEPT SHIPMENT.

When explosives are transported into a locality governed by this chapter and within 48 hours of notification, the consignee shall receive and remove the explosives from the carrier to a properly permitted magazine or notify the commissioner who shall ensure that the explosives are moved to a safe place.

Statutory Authority: MS s 299F.71 to 299F 83

History: 11 SR 6

### 7500.2400 DESIGNATION OF FACILITIES.

The local authority having jurisdiction may designate the location for and limit the quantity of explosives that may be loaded, unloaded, reloaded, or temporarily retained at a facility within the jurisdiction.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

## 7500.2500 BLASTING AGENTS.

Unless otherwise set forth in parts 7500.2600 to 7500.2900 blasting agents must be stored and used in the same manner as explosives.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.2600 MIXING OF BLASTING AGENTS.

Subpart 1. **Building locations; distances.** Buildings or other facilities used for mixing blasting agents must be located, with respect to inhabited buildings, passenger railroads, and public highways, in accordance with the table of distances for storage of explosive materials.

If ammonium nitrate is stored at a closer distance to the blasting agent storage area than as provided in the table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents, then the ammonium nitrate must be added to the quantity of blasting agents to calculate the total quantity involved before applying the table of distances for storage of explosive materials.

- Subp. 2. Separation in plant. Minimum intraplant separation distances between mixing units and the ammonium nitrate storage areas and blasting agent storage areas must conform to the table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents.
- Subp. 3. **Building requirements.** A building used for mixing blasting agents must conform to the following requirements unless the building is specifically approved by the commissioner:
- A. Buildings must be of noncombustible construction or sheet metal on wood studs.
- B. The layout of the mixing building must provide physical separation between the finished product storage and the mixing and packaging operation.
- C. Floors in storage areas and in the processing plant must be of concrete.

- D. Isolated fuel storage must be provided to avoid contact between molten ammonium nitrate and fuel in case of fire.
  - E. The building must be well ventilated.
- F. Heat must be provided exclusively from a unit located outside the building.
- Subp. 4. **Design of mixer.** The design of the mixer must minimize the possibility of frictional heating, compaction, and especially, confinement. Open mixers are preferable to enclosed mixers. Bearings and gears must be protected against the accumulation of oxidizer dust. Surfaces must be accessible for cleaning. Mixing and packaging equipment must be constructed of materials compatible with the composition of fuel and ammonium nitrate.
- Subp. 5. **Blasting agent compositions.** The sensitivity of a blasting agent must be determined by using a number 8 test blasting cap at regular intervals and after every change in formulation, or as requested by the commissioner.

Ammonium nitrate of small particle size, such as crushed prills or fines, may be more sensitive and hazardous than ordinary prills and must be handled with greater care.

Liquid fuel with a flash point lower than that of number 2 diesel fuel oil, 125 degrees Fahrenheit minimum or legal, must not be used.

Crude oil and crankcase oil must not be used because they may contain light ends that offer increased vapor-explosion hazards or gritty particles that tend to sensitize the resulting blasting agent.

If solid fuels are used, they must be chosen so as to minimize dust-explosion hazard.

Metal dusts, such as aluminum powder, peroxides; or chlorates must not be used unless the operations are conducted in a manner approved by the commissioner.

Unusual compositions may be attempted only under the supervision of competent personnel equipped to determine the overall hazard of the resulting compositions.

- Subp. 6. Equipment requirements. If electrical switches, controls, motors, and lights are located m the mixing room, they must conform to the requirements of class II, division 2 of standard 70, of the National Electrical Code, and found in the National Fire Codes, 1982, volume 6, issued by the National Fire Protection Association, (Quincy, Massachusetts, 1982), which is incorporated by reference, is not subject to frequent change, and is located at the Minnesota State Law Library, 117 University Avenue, Saint Paul, Minnesota 55155; otherwise they must be located outside the mixing room. The frame of the mixer and other equipment that may be used must be electrically bonded and provided with a continuous path to the ground.
- Subp. 7. Washdown facilities. Washdown facilities must be provided. An automatic water-deluge system with adequate capacity is recommended to protect mixers and the finished-explosives storage area in the plant. Floors must 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 must be thoroughly cleaned daily to prevent accumulation of oxidizers, fuels, or other sensitizers. The entire mixing and packaging plant must be washed down periodically to prevent excessive accumulation of dust.
- Subp. 8. Smoking or open flame. Smoking or open flame is not permitted in or within 50 feet of a building or facility used for mixing blasting agents.
- Subp. 9. **Disposal of oxidizer bags.** Empty oxidizer bags must be disposed of daily in a safe manner.
  - Subp. 10. Storage, location of blasting agents. Not more than one day's

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production of blasting agents or the limit determined by the table of distances for storage of explosive materials, whichever is less, is permitted in or near the mixing and packaging plant or area. Larger quantities must be stored in separate warehouses or magazines.

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

# 7500.2700 STORAGE OF BLASTING AGENTS AND SUPPLIES.

- Subpart 1. Storage with explosives. When blasting agents are stored with explosives, the storage must conform to part 7500.0800 governing the storage of explosives. The mass of blasting agents and one-half the mass of oxidizers must be included when computing the total quantity of explosives for determining distance requirements.
- Subp. 1a. Storage apart from explosives. When blasting agents are stored entirely apart from explosives, they must be stored as provided in part 7500.0800, governing the storage of explosives.
- Subp. 2. Trailers. Semitrailer or full-trailer vans used for highway or on-site transportation of the blasting agents are satisfactory for temporarily storing these materials, provided they are located in accordance with the table of distances for storage of explosive materials, with respect to inhabited buildings, passenger railways, and public highways, and in accordance with the table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents, with respect to one another. Trailers should be provided with substantial locks. The trailer doors must be kept locked, except when placing and removing stocks of blasting agents.
- Subp. 3. Location of warehouses. Warehouses used to store blasting agents apart from explosives must be located as follows:
- A. The location must comply with the table of distances for storage of explosive materials, with respect to inhabited buildings, passenger railways, and public highways, and must comply with the table of separation distances of ammonium nitrate and blasting agents from explosives or blasting agents, with respect to one another
- B. If both blasting agents and ammonium nitrate are handled or stored within the distance limitations prescribed in part 7500.2600, subpart 1, one-half the mass of the ammonium nitrate must be added to the mass of the blasting agent when computing the total quantity of explosives for determining the proper distance for compliance with the table of distances for storage of explosive materials.
- Subp. 4. Fire hazards. Smoking, matches, open flames, spark-producing devices, and firearms are prohibited inside of or within 50 feet of a warehouse used for the storage of blasting agents. Combustible materials must not be stored within 50 feet of warehouses used for storing blasting agents.
- Subp. 5. Interior of warehouse. The interior of warehouses used for the storage of blasting agents must be kept clean and free from debris and empty containers. Spilled materials must be cleaned up promptly and safely removed. Combustible materials, flammable liquids, corrosive acids, chlorates, or nitrates must not be stored in a warehouse used for blasting agents unless separated from the blasting agents by a fire-resistive separation of not less than one-hour resistance. This subpart does not prohibit the storage of blasting agents together with nonexplosive blasting supplies.
- Subp. 6. Ammonium nitrate. Piles of ammonium nitrate and warehouses containing ammonium nitrate must be adequately separated from readily combustible fuels.

Caked ammonium nitrate, either in bags or in bulk, must not be loosened by blasting.

- Subp. 7. Supervisor. A warehouse used to store blasting agents must be under the supervision of a competent person who is at least 18 years of age.
- Subp. 8. Local authority. The local authority having jurisdiction may designate the location for and limit the quantity of blasting agents that may be loaded, unloaded, reloaded, or temporarily retained at a facility within the jurisdiction.

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

**7500.2800** [Repealed, 11 SR 6]

### 7500,2900 USE OF BLASTING AGENTS.

A person who uses blasting agents shall comply with parts 7500 1200 to 7500.1600.

Statutory Authority: MS s 299F.71 to 299F 83

History: 11 SR 6

### 7500.3000 GENERAL PROVISIONS FOR WATER GELS.

Unless otherwise set forth in parts 7500.3100 and 7500.3200, water gels must be stored and used in the same manner as explosives or blasting agents in accordance with the classification of the product in United States Code, title 18, chapter 40, section 841(c) (1984).

Statutory Authority: MS s 299F 71 to 299F.83

History: 11 SR 6

# 7500.3100 PREMIXED WATER GELS.

Premixed water gels that are cap-sensitive as defined in part 7500.0100, subpart 3, must be classified as an explosive and manufactured, stored, and used as specified for explosives.

Premixed water gels that are not cap-sensitive as defined m part 7500.0100, subpart 3, must be classified as blasting agents and manufactured, stored, and used as specified for blasting agents.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500.3200 ON-SITE-MIXED WATER GELS.

Subpart 1. [Repealed, 11 SR 6]

- Subp. 2. Classified and nonclassified ingredients. Ingredients classified as high explosives, low explosives, or blasting agents must be stored in conformity with part 7500.0800. Ingredients, other than ammonium nitrate, not themselves classified as explosives, must be stored in noncombustible or fire-resistive warehouses.
- Subp. 3. Ammonium nitrate. Prilled, grained, or granulated ammonium nitrate must be stored in accordance with standard 490 of the Code for the Storage of Ammonium Nitrate, found in National Fire Codes, 1982, Volume 3, issued by the National Fire Protection Association (Quincy, Massachusetts, 1982), which is incorporated by reference, is not subject to frequent change, and is located at the Minnesota State Law Library, 117 University Avenue, Saint Paul, Minnesota 55155. If ammonium nitrate is stored in the vicinity of explosives or blasting agents, the separation distances specified in part 7500.0800 apply.

Liquid ammonium nitrate solutions must be stored m tank cars, tank trucks, or permanent tanks in a location approved by the commissioner Spills or leaks which may contaminate combustible materials must be cleaned up immediately.

Subp. 4. Electric power. If electric power is used, it must be furnished by

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cable from an outside source or by a self-contained motor generator. A self-contained power source must be located at the end of the storage container opposite the end where the blasting agent is discharged, must have adequate capacity for the loads expected, and must be equipped with suitable overload protection devices.

Subp. 4a. Electric wiring. Electric wiring carrying voltages greater than 12 volts must be in armored cable or in conduit and, if dry ingredients are employed, the wiring must conform to the requirements of class II, division 2 of standard 70 of the National Electrical Code, found in the National Fire Codes, 1982, issued by the National Fire Protection Association (Quincy, Massachusetts, 1982), and incorporated by reference in part 7500.2600, subpart 6. The materials protecting the electric wiring must be of such composition that they will not chemically attach to the ingredients being processed.

Subp. 5. Mixing equipment. Electric motors, electrically operated proportioning devices, and other similar devices must be electrically bonded. If they are used for dry ingredients they must also conform to the requirements of class II, division 2 of standard 70 of the National Electrical Code, found in the National Fire Codes, 1982, volume 6, issued by the National Fire Protection Association (Quincy, Massachusetts, 1982), and incorporated by reference in part 7500.2600, subpart 6.

The entire loading and mixing equipment must be cleaned daily to prevent accumulations of ingredients.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

7500.3300 [Repealed, 11 SR 6]

### 7500.3400 SMALL ARMS AMMUNITION.

Subpart 1. **Restricted scope.** Parts 7500.3400 to 7500.3600 do not apply to in-process storage and intraplant transportation during manufacture of small arms ammunition, small arms primers, and smokeless propellants.

This part does not apply to the transportation of small arms ammunition governed by Code of Federal Regulations, title 49, parts 100 to 199 (1983).

- Subp. 2. Quantity limitations. No quantity limitations are imposed on the storage of small arms ammunition m warehouses, retail stores, and other general occupancies, except those imposed by limitation of storage facilities and consistency with public safety.
- Subp. 3. Separate storage. Small arms ammunition must be separated from flammable liquids, flammable solids as classified by the Department of Transportation in Code of Federal Regulations, title 49, parts 100 to 199 (1983), and oxidizing materials by a fire-resistive wall of one-hour rating or by a distance of 25 feet.

Small arms ammunition must not be stored together with explosives or blasting agents, unless the storage facility is adequate as described in Code of Federal Regulations, title 27, sections 55.201 to 55.220 (1982).

Statutory Authority: MS s 299F 71 to 299F 83

History: 11 SR 6

### 7500.3500 SMOKELESS PROPELLANTS.

Subpart 1. **Restricted scope.** This part does not apply to the transportation of smokeless propellants governed by Code of Federal Regulations, title 49, parts 100 to 199 (1983).

Subp. 1a. Approved container required. Smokeless propellants must be stored in shipping containers approved by the Department of Transportation in Code of Federal Regulations, title 49, parts 100 to 199 (1983).

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Subp. 1b. Transportation of certain quantities. Quantities of smokeless propellants of 25 pounds or less in shipping containers approved by the Department of Transportation in Code of Federal Regulations, title 49, parts 100 to 199 (1983), may be transported in a passenger vehicle.

Quantities in excess of 25 pounds but not exceeding 50 pounds that are transported in a passenger vehicle must be in a portable magazine having wooden walls of at least one-inch nominal thickness.

Transportation of quantities in excess of 50 pounds is prohibited in vehicles transporting passengers.

Transportation of quantities in excess of 50 pounds in other than passenger vehicles must comply with Department of Transportation regulations in Code of Federal Regulations, title 49, parts 100 to 199 (1983). In addition, warning placards must be prominently displayed when more than 250 pounds are being transported.

- Subp. 2. Storage of propellants intended for personal use. Smokeless propellants intended for personal use in quantities not to exceed 20 pounds may be stored in residences. Quantities m excess of 20 but not exceeding 50 pounds must be stored in a wooden box or cabinet having walls of at least one-mch nominal thickness.
- Subp. 3. Commercial displays and stocks. Not more than 20 pounds of smokeless propellants, in containers of one-pound maximum capacity, may be displayed m commercial establishments. Commercial stocks of smokeless propellants greater than 20 pounds but not more than 100 pounds must be stored in approved wooden boxes having walls of at least one-mch nominal thickness. Not more than 50 pounds are permitted in any one box.

Commercial stocks in quantities not to exceed 750 pounds must be stored in storage cabinets having wooden walls of at least one-inch nominal thickness. Not more than 400 pounds are permitted in any one cabinet.

Subp. 4. Quantities over 750 pounds. Quantities in excess of 750 pounds must be stored in magazines constructed and located as specified in part 7500.0800.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

### 7500,3600 SMALL ARMS AMMUNITION PRIMERS.

Subpart 1. Restricted scope. This section does not apply to the transportation of small arms ammunition primers governed by Code of Federal Regulations, title 49, parts 100 to 199 (1983)

- Subp. 2. Transportation and storage. Small arms ammunition primers must not be transported or stored except in the original shipping container approved by the Department of Transportation in Code of Federal Regulations, title 49, parts 100 to 199 (1983).
- Subp. 3. Truck or rail transportation. Truck or rail transportation of small arms ammunition primers must comply with the Department of Transportation regulations in Code of Federal Regulations, title 49, parts 100 to 199 (1983).
- Subp. 4 Quantity limitations. Not more than 25,000 small arms ammunition primers may be transported in a passenger vehicle.

Not more than 10,000 small arms ammunition primers may be stored in residences.

Not more than 10,000 small arms ammunition primers may be displayed in commercial establishments.

Subp. 5. Separate storage. Small arms ammunition primers must be separated from flammable liquids, flammable solids as classified by the Department of Transportation in Code of Federal Regulations, title 49, parts 100 to 199 (1983), and oxidizing materials by a fire-resistive wall of one-hour rating or by a distance of 25 feet.

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Subp. 6. Storage of large quantities. Quantities of small arms ammunition primers in excess of 1,000,000 must be stored in magazines in accordance with part 7500.0800.

Statutory Authority: MS s 299F.71 to 299F.83

History: 11 SR 6

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