



# KETCHIKAN FIRE DEPARTMENT

Integrity, Professionalism, Respect, Compassion, Teamwork, and Innovation  
70 Bawden Street Ketchikan, Alaska 99901  
Phone (907) 225-9616 – Fax (907) 225-9613  
kfd@ktn-ak.us

## USE AND HANDLING OF EXPLOSIVES & BLASTING AGENTS

Permit Number: \_\_\_\_\_

Company: \_\_\_\_\_ Owner: \_\_\_\_\_

Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Email \_\_\_\_\_ Powderman  
Address: \_\_\_\_\_ Name: \_\_\_\_\_

State Certificate of Fitness No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Location of Work: \_\_\_\_\_

Type of Explosives or Blasting Agent: \_\_\_\_\_

Transported By (Company): \_\_\_\_\_

A copy of the following is required when submitting this request for Permit:

- Current Certificate of Fitness
- Current Certificate of Liability Insurance
- Current ATF Permit

I have read the information on the reverse side of this form and understand and agree to all provisions listed.

Signed: \_\_\_\_\_ Certificate No.: \_\_\_\_\_

Please call the Fire Department (907-225-9616) and Police Dispatch (907-225-6631):

- At least four (4) hours prior to blasting to notify of the scheduled blast;
- At least one (1) hour prior to the blast to confirm schedule; and
- Following the blast to indicate an all clear.

If on weekends or holidays, please notify Police Dispatch.

Other information:

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Permit Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Internal use:		
Dispatch:	Permit Log:	Other:

## USE AND HANDLING OF EXPLOSIVES:

NFPA 495 10.1.4

### 10.1 Basic Requirements.

#### 10.1.1

All federal, state, and local laws and regulations applicable to obtaining, owning, transporting, storing, handling, and using explosive materials shall be followed.

#### 10.1.2

Explosive materials shall be protected from unauthorized possession.

#### 10.1.3

Explosive materials shall not be abandoned.

#### 10.1.4

Explosive materials shall be used only by experienced persons who are familiar with the hazards involved and who hold all required permits.

##### 10.1.4.1

Loading and firing shall be performed or supervised only by a person possessing a blaster's permit.

##### 10.1.4.2

Trainees, helpers, and other persons who do not hold the required permits shall work only under the supervision of persons holding such permits.

#### 10.1.5

No explosive materials shall be located or stored where they have the potential to be exposed to flame, excessive heat, sparks, or impact.

##### 10.1.5.1

No firearms shall be discharged into or in the vicinity of a vehicle containing explosive materials, or into or in the vicinity of a location where explosive materials are being handled, used, or stored.

##### 10.1.5.2

No smoking shall be permitted within 15.25 m (50 ft) of any location where explosives are being handled or used.

##### 10.1.5.3

No person within 15.25 m (50 ft) of any location where explosives are being handled or used shall carry any matches, open light, or other fire or flame, except for approved devices for lighting safety fuses.

#### 10.1.6

No person under the influence of intoxicating beverages, narcotics, or other dangerous drugs shall be permitted to handle explosive materials.

#### 10.1.19

Precautions shall be taken to prevent accidental discharge of electric detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous electricity.

##### 10.1.19.1

These precautions shall include the following:

1. The posting of signs warning against the use of mobile radio transmitters on all roads within 107 m (350 ft) of blasting operations
2. Observance of the latest recommendations with regard to blasting in the vicinity of radio transmitters or power lines

3. The discontinuance of surface use, underground use, and all handling of explosive materials during the approach of and for the duration of an electrical storm
4. Consideration of the fact that lightning has been known to follow steel, piping, and conductive ore into underground mines

#### 10.1.19.2

During the approach of and for the duration of an electrical storm, all personnel shall move to a safe location.

#### 10.1.20

Precautions shall be taken to prevent accidental initiation of nonelectric detonators from stray currents induced by lightning or static electricity.

#### 10.1.12

Non-sparking tools shall be used for opening any package or container of frictional spark-sensitive explosive materials such as Black Powder or primary explosives, except that metal slitters shall be permitted to be used for opening fiberboard containers.

#### 10.1.13

No blasting operation shall be performed in a manner contrary to the instructions of the manufacturer of the explosive materials being used.

#### 10.1.14

Where blasting is done in a congested area or in close proximity to a structure, railway, or highway, or any other installation that could be affected, special precautions shall be taken to prevent damage and to minimize earth vibrations, air blast effects, and hazards from toxic fumes.

#### 10.1.15

Blasting mats or other protective devices shall be used when determined to be necessary by the blaster-in-charge to prevent fragments from being thrown beyond the blast area.

#### 10.1.16

Persons authorized to prepare explosive charges or to conduct blasting operations shall use every reasonable precaution including, but not limited to, warning signals, flags, barricades, mats, or other equally effective means to ensure the safety of the general public and workers.

#### 10.1.17

Surface blasting operations shall be conducted during daylight hours only, except where approved by the authority having jurisdiction.

#### 10.1.18

Where blasting is conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the representatives of the utilities at least 24 hours in advance of blasting, specifying the location and the intended time of such blasting.

### BLASTING REQUIREMENTS WITHIN THE KETCHIKAN CITY LIMITS:

IFC 5601.2 Permit required. Permits shall be required as set forth in I.F.C. Section 105.6 Operational Permits and regulated in accordance with this section.

Before a permit is issued, as required by I.F.C. Section 5601.2, the applicant shall file with the jurisdiction a (Blasting) corporate surety bond in the principal sum of \$1,000,000 or a (Blasting) public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act

authorized by the Blasting permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

**5601.4 Qualifications.** Persons in charge of magazines, blasting, fireworks display, or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs which impair sensory or motor skills, shall be at least 21 years of age, and shall demonstrate knowledge of all safety precautions related to the storage, handling or use of explosives, explosive materials or fireworks.

**5601.5 Supervision.** The fire code official is authorized to require operations permitted under the provisions of Section 5601.2 to be supervised at any time by the fire code official in order to determine compliance with all safety and fire regulations.

**5601.6 Notification.** Whenever a new explosive material storage or manufacturing site is established, including a temporary job site, the local law enforcement agency, fire department, and local emergency planning committee shall be notified 48 hours in advance, not including Saturdays, Sundays and holidays of the type, quantity and location of explosive materials at the site.

**5601.7 Seizure.** The fire code official is authorized to remove or cause to be removed or disposed of in an approved manner, at the expense of the owner, explosives, explosive materials or fireworks offered or exposed for sale, stored, possessed or used in violation of this chapter.

**5607.3 Blasting in congested areas.** When blasting is done in a congested area or in close proximity to structure, railway or highway, or any other installation, precautions shall be taken to minimize earth vibrations and air blast effects. Blasting mats or other protective means shall be used to prevent fragments from being thrown within city limits.

The police department, fire department, all occupancies within 300 feet, and the local emergency planning committee shall be notified 48 hours in advance, not including Saturdays, Sundays, and holidays.

**5607.5 Utility notification.** Whenever blasting is being conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the appropriate representatives of the utilities at least 48 hours in advance of blasting, specifying the location and intended time of such blasting, not including Saturdays, Sundays, and holidays. Verbal notices shall be confirmed with written notice.

## **TRANSPORTATION OF EXPLOSIVES:**

NFPA 495

### **8.1 Basic Requirements.**

#### **8.1.1**

In addition to all other applicable requirements of this code, the transportation of explosive materials shall comply with U.S. Department of Transportation, 49 CFR 100–179, and 49 CFR 397.

#### **8.1.2**

This chapter shall not apply to the transportation of small arms ammunition and components. (*See Chapter 14.*)

#### **8.1.3**

Explosive materials shall not be transported through any prohibited vehicular tunnel or subway or over any prohibited bridge, roadway, or elevated highway.

#### **8.1.4**

No person shall smoke or carry matches, flame-producing devices, or unauthorized firearms or cartridges while transporting explosive materials.

#### **8.1.5**

No person shall drive, load, or unload a motor vehicle transporting explosive materials in a careless or reckless manner.

#### **8.1.6**

Explosive materials shall not be carried or transported in or upon a public conveyance or vehicle carrying passengers for hire.

#### **8.1.7 Transfer of Explosives.**

##### **8.1.7.1**

Explosive materials shall not be transferred from one vehicle to another without informing the local authority having jurisdiction.

##### **8.1.7.2**

In the event of breakdown or collision, the local authority having jurisdiction shall be notified promptly to help safeguard such emergencies.

##### **8.1.7.3**

Explosive materials shall be transferred from the disabled vehicle to another vehicle, only where qualified supervision is provided.

#### **8.1.8**

Detonators shall not be transported in the same vehicle with other Class 1 materials, except as permitted by the U.S. Department of Transportation in 49 CFR 177.835(g).

### **8.2 Transportation Vehicles.**

#### **8.2.1**

Vehicles used for transporting explosive materials shall be strong enough to carry the load and in good mechanical condition.

#### **8.2.2**

Where explosive materials are transported on a vehicle with an open body, a portable magazine, securely fastened to the vehicle body, shall be used to store the explosive materials.

#### **8.2.3**

Vehicles used for transporting frictional spark-sensitive explosive materials such as Black Powder and primary explosives shall have no exposed spark-producing surface inside of the cargo body.

#### **8.2.4**

The floors of transportation vehicles shall be tight.

#### **8.2.5**

Motor vehicles used for transporting any quantity of explosive materials on public highways shall display all placards, lettering, or numbering required by the U.S. DOT.

#### **8.2.6**

Each motor vehicle used for transporting explosive materials shall be equipped with at least two fire extinguishers, each with a rating of at least 4-A:40-B:C.

##### **8.2.6.1**

Only listed fire extinguishers shall be used.

##### **8.2.6.2**

Fire extinguishers shall be designed, constructed, and maintained to allow a visual determination that extinguishers are fully charged.

##### **8.2.6.3**

Extinguishers shall be located where they are accessible for immediate use.

##### **8.2.6.4**

Extinguishers shall be examined and recharged periodically according to manufacturers' recommendations.

### **8.2.6.5**

Where motor vehicles are operated in temperatures below - 17.8°C (0°F), dry chemical extinguishers shall be pressurized with nitrogen.

### **8.2.7 Transporting Explosive Materials.**

#### **8.2.7.1**

A motor vehicle used for transporting explosive materials shall be inspected to determine that it is in proper condition.

#### **8.2.7.2**

The following items shall be verified:

1. The fire extinguisher is filled and in working order.
2. All electrical wiring is completely protected and securely fastened to prevent short-circuiting.
3. The chassis, motor, oil pan, and body undersides are reasonably clean and free of excess oil and grease.
4. The fuel tank and fuel lines are secure and free of leaks.
5. The brakes, lights, horn, windshield wipers, and steering apparatus are functioning.
6. The tires are inflated to the correct pressure and are free of defects.
7. The vehicle is in the proper condition in every other respect and is acceptable for handling explosive materials.

### **8.2.8 Tire Maintenance.**

#### **8.2.8.1**

Flat or overheated tires shall be removed from the vehicle immediately.

#### **8.2.8.2**

After removal, the tire shall be placed far enough from the vehicle so that a spontaneous ignition of the tire does not endanger the vehicle or its cargo.

#### **8.2.8.3**

The tire shall be cooled below the danger of ignition.

#### **8.2.8.4**

The problem with the tire shall be corrected before it is replaced on the vehicle.

### **8.3 Operation of Transportation Vehicles.**

#### **8.3.1**

Vehicles transporting explosive materials shall be driven by and be in the charge of only a licensed driver who is physically fit, careful, capable, reliable, and able to read and write the English language and who is not addicted to the use of, or under the influence of, intoxicants, narcotics, or other dangerous drugs.

#### **8.3.2 Drivers.**

##### **8.3.2.1**

The driver of a vehicle transporting explosive materials on public highways shall be not less than 21 years old.

##### **8.3.2.2**

The driver shall be familiar with traffic regulations, applicable federal and state regulations concerning explosive materials, and the provisions of this chapter.

##### **8.3.2.3**

The driver shall be familiar with the selection and use of available safety equipment, including the fire extinguishers required in 8.2.6.

##### **8.3.3**

No vehicle transporting explosive materials shall be parked before reaching its destination, even while attended, on any public street adjacent to or in proximity to any bridge, tunnel,

dwelling, building, or place where people work, congregate, or assemble except under emergency conditions.

#### **8.3.4**

Every motor vehicle transporting any quantity of Division 1.1, 1.2, or 1.3 materials shall, at all times, be attended by a driver or other qualified representative of the motor carrier operating the vehicle.

#### **8.3.5**

Vehicles transporting Division 1.4, 1.5, or 5.1 materials shall be attended unless its driver is performing duties that are incident and necessary to the driver's duties as the operator of the vehicle and the Division 1.4, 1.5, or 5.1 materials and vehicle are secured from unauthorized access or use.

### **8.3.6 Attended Vehicle Requirements.**

#### **8.3.6.1**

For the purpose of this chapter, a motor vehicle shall be considered "attended" only when the driver or attendant is physically on or in the vehicle or when the vehicle is within his or her field of vision and the driver can reach it quickly and without interference.

#### **8.3.6.2**

"Attended" also shall mean that the driver or attendant is awake, alert, and not engaged in other duties or activities that could divert attention from the vehicle.

##### **8.3.6.2.1**

This requirement shall not apply where communication with public officers or representatives of the shipper, carrier, or consignee who are absent from the vehicle to obtain food or provide for physical comfort is necessary.

##### **8.3.6.2.2**

A vehicle carrying explosive materials shall be permitted to be left unattended, provided it is parked in an area where such parking is permitted, such as an area meeting the requirements of NFPA 498, *Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives*.

#### **8.3.6.3**

The attendant shall have been made aware of the class of the explosive in the vehicle and its inherent dangers and been instructed in the procedures to be followed in order to protect the public from those dangers.

#### **8.3.6.4**

The attendant shall be familiar with the vehicle assigned and provided with the training, necessary means, and authorization to move the vehicle where required.

#### **8.3.7**

No spark-producing metal or tools, oils, matches, firearms, electric storage batteries, flammable materials, acids, oxidizers, or corrosives shall be carried in the cargo body of any motor vehicle transporting explosive materials, except where permitted by the U.S. DOT 49 CFR.

### **8.3.8 Vehicle Routing.**

#### **8.3.8.1**

Vehicles transporting explosive materials shall avoid congested areas and heavy traffic.

#### **8.3.8.2**

Where routes through congested areas have been designated by the authority having jurisdiction, such routes shall be followed.

#### **8.3.9**

Delivery shall be made only to authorized persons and into authorized magazines or approved temporary storage or handling areas.