

WAC 296-52-099 Definitions. Aerial blaster in charge. A person who:

- (a) Is fully qualified, by means of training and experience in explosives use;
- (b) Is adequately trained, experienced, and capable of recognizing hazardous conditions throughout the blast area;
- (c) Is in charge of:
 - (i) The blast process; and
 - (ii) All aspects of explosives and blasting agent storage, handling, and use as recommended by the manufacturer and as required by this chapter.
- (d) Is in a position of authority:
 - (i) To take prompt corrective action in all areas of the blast operation; and
 - (ii) Over all other blasters at the blast sight.
- (e) Has a minimum of five missions under the supervision of a licensed aerial blaster in charge; and
- (f) Successfully completes a written exam for aerial blaster in charge.

Alien. Any person who is not a citizen or national of the United States.

American table of distances. The *American Table of Distances for Storage of Explosives* as revised and approved by Institute of the Makers of Explosives (IME).

Approved storage facility. A facility for the storage of explosive materials which is in compliance with the following sections:

- (a) Storage license (WAC 296-52-660);
- (b) Storage of explosive materials, Part E of this chapter; and
- (c) Magazine construction (WAC 296-52-700).

ATF. The Bureau of Alcohol, Tobacco, Firearms and Explosives.

Attended, as attending explosives. The physical presence of an authorized person within the field of vision of explosives. The said attendant shall be awake, alert, and not engage in activities which may divert their attention so that in case of an emergency the attendant can get to the explosives quickly and without interference, except for brief periods of necessary absence, during which absence simple theft of explosives is not ordinarily possible.

Authorized agent. A person delegated by a licensed purchaser, who possesses a basic knowledge of explosives handling safety, to order and receive explosives on the purchaser's behalf.

Authorized agent list. A current list of agents the purchaser has authorized to order or receive explosives on their behalf.

Authorized, approved, or approval. Authorized, approved, or approval by:

- (a) The department;
- (b) Any other approving agency; and
- (c) An individual as specified in this chapter.

Authorized person. A person approved or assigned by an employer, owner, or licensee to perform a specific type of duty or be at a specific location at the job site.

Avalanche. The sliding or falling of a large amount of snow down a steep slope which has a destructive force due to its mass.

Avalanche control pack. A specially designed and constructed pack for carrying explosives.

Avalanche control route. A route or specific path which is used by an authorized person in order to control the occurrence of avalanches.

Avalauncher. A device like a cannon which is used for avalanche control blasting. It has a rotating base calibrated for pointing and the barrel is mounted on an elevating mechanism. It uses a compressed gas to propel a projectile containing an explosive charge and detonating means. The gas source is connected to the gun by high pressure hose with in-line control valves and pressure gauges ahead of the trigger mechanism.

Barricades.

(a) **Barricade.** Effectively screening a building containing explosives by means of a natural or artificial barrier from a magazine, another building, a railway, or highway;

(b) **Artificial barricade.** A 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 other building or to a point twelve feet above the center of a railway or highway shall pass through such barrier, an artificial mound or properly revetted wall of earth with a minimum thickness of three feet;

(c) **Natural barricade.** Any natural hill, mound, wall, or barrier composed of earth, rock, or other solid material at least three feet thick.

Blast area. The area of a blast that is effected by:

- (a) Flying rock missiles;
- (b) Gases; and
- (c) Concussion.

Blast pattern. The plan of the drill holes laid out and a display of the burden distance, spacing distance, and their relationship to each other.

Blast site. The area where explosive material is handled during loading and fifty feet in all directions from loaded blast holes or holes to be loaded.

Blaster. A person trained and experienced in the use of explosives and licensed by the department.

Blaster in charge. A licensed blaster who is:

- (a) Fully qualified, by means of training and experience in explosives use;
- (b) Adequately trained, experienced, and capable of recognizing hazardous conditions throughout the blast area;
- (c) In charge of:
 - (i) The blast process;
 - (ii) All aspects of explosives and blasting agent storage, handling, and use as recommended by the manufacturer and as required by this chapter.
- (d) In a position of authority:
 - (i) To take prompt corrective action in all areas of the blast operation;
 - (ii) Over all other blasters at the blast area.

Blaster's license. An individual license issued by the department under the provisions of chapter 296-52 WAC.

Blasting agent. Any material or mixture consisting of a fuel and oxidizer:

- (a) That is intended for blasting;
- (b) Not otherwise defined as an explosive;
- (c) If the finished product, as mixed for use or shipment, cannot be detonated by means of a number 8 test blasting cap when unconfined;
- (d) A number 8 test blasting cap is one containing two grams of a mixture of eighty percent mercury fulminate and twenty percent potassium chlorate, or a blasting cap of equivalent strength. An equivalent

strength cap comprises 0.40-0.45 grams of PETN base charge pressed in an aluminum shell with bottom thickness not to exceed 0.03 of an inch, to a specific gravity of not less than 1.4 g/cc., and primed with standard weights of primer depending on the manufacturer.

Blasting cap or cap. When used in connection with the subject of explosives shall mean detonator.

Blockholing. The breaking of boulders by firing a charge of explosives that has been loaded in a drill hole.

Buildings that are not inhabited. A building(s) which has no one in it while explosives are being made up in an adjacent explosives makeup room or while explosives are being held in an adjacent day box or hand charge storage facility.

Competent person. A person who:

(a) Is capable of identifying existing hazardous and the forecasting of hazards of working conditions which might be unsanitary or dangerous to personnel or property; and

(b) Has authorization to take prompt corrective action to eliminate such hazards.

Consumer fireworks.

(a) Any small firework device:

(i) Designed to produce visible effects by combustion;

(ii) That must comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Product Safety Commission (Title 16 C.F.R., Parts 1500 and 1507).

(b) A small device designed to produce audible effects which include, but are not limited to:

(i) Whistling devices;

(ii) Ground devices containing 50 mg or less of explosive materials;

(iii) Aerial devices containing 130 mg or less of explosive materials.

Note: Fused set pieces containing components, which, together, exceed 50 mg of salute powder are not included.

Conveyance. Any unit used for transporting explosives or blasting agents including, but not limited to:

(a) Trucks;

(b) Trailers;

(c) Rail cars;

(d) Barges;

(e) Vessels.

Day box. A box which:

(a) Is a temporary storage facility for storage of explosive materials;

(b) Is not approved for unattended storage of explosives;

(c) May be used at the worksite during working hours to store explosive materials, provided the day box is:

(i) Constructed as required (WAC 296-52-70065 Explosives day box);

(ii) Marked with the word "explosives";

(iii) Used in a manner that safely separates detonators from other explosives; and

(iv) Guarded at all times against theft.

Dealer. Any person who purchases explosives or blasting agents for the sole purpose of resale and not for use or consumption.

Detonating cord. A round flexible cord containing a center core of high explosive and used to initiate other explosives.

Detonator. Any device containing any initiating or primary explosive that is used for initiating detonation and includes, but is not limited to:

(a) Electric and electronic detonators of instantaneous and delay types;

(b) Detonators for use with safety fuses, detonating cord delay connectors, and nonelectric instantaneous delay detonators which use detonating cord, shock tube, or any other replacement for electric leg wires.

Discharge hose. A hose with an electrical resistance high enough to limit the flow of stray electric currents to safe levels, but not high enough to prevent drainage of static electric charges to the ground. Hose not more than 2 megohms resistance over its entire length and of not less than 5,000 ohms per foot meets the requirement.

Display fireworks. Large fireworks designed primarily to produce visible or audible effects by combustion, deflagration, or detonation, and include, but are not limited to:

(a) Salutes containing more than 2 grains (130 mg) of explosive materials;

(b) Aerial shells containing more than 40 grams of pyrotechnic compositions;

(c) Other display pieces, which exceed the limits of explosive materials for classification as "consumer fireworks";

(d) Fused set pieces containing components, which together exceed 50 mg of salute powder.

Dud. An unexploded deployed charge which still has its initiation system in place.

Electric blasting circuitry. Consists of these items:

(a) **Bus wire.** An expendable wire used in parallel or series, or in parallel circuits, which are connected to the leg wires of electric detonators;

(b) **Connecting wire.** An insulated expendable wire used between electric detonators and the leading wires or between the bus wire and the leading wires;

(c) **Leading wire.** An insulated wire used between the electric power source and the electric detonator circuit;

(d) **Permanent blasting wire.** A permanently mounted insulated wire used between the electric power source and the electric detonator circuit.

Electric delay detonators. Detonators designed to detonate at a predetermined time after energy is applied to the ignition system.

Electric detonator. A blasting detonator designed for and capable of detonation by means of electric current.

Electronic detonator. A detonator that utilizes stored electrical energy as a means of powering an electronic timing delay element/module that provides initiation energy for firing the base charge.

Emulsion. An explosive material containing:

(a) Substantial amounts of oxidizer dissolved in water droplets, surrounded by an immiscible fuel;

(b) Droplets of an immiscible fuel surrounded by water containing substantial amounts of oxidizer.

Explosive actuated power devices. Any tool or special mechanized device, which is activated by explosives and does not include propellant actuated power devices.

Explosives.

(a) Any chemical compound or mechanical mixture:

(i) Commonly intended or used for the purpose of producing an explosion;

(ii) That contains any oxidizing and combustible units or other ingredients in proportions, quantities or packing that an ignition by fire, friction, concussion, percussion, or detonation of any part of the compound or mixture may cause sudden generation of highly heated gases resulting in gaseous pressures capable of producing destructive effects on contiguous objects or of destroying life or limb.

(b) All material classified as Division 1.1, 1.2, 1.3, 1.4, 1.5, or 1.6 explosives by U.S. DOT;

(c) For the purposes of public consumer use, the following are not considered explosives unless they are possessed or used for a purpose inconsistent with small arms use or other legal purposes:

(i) Small arms ammunition;

(ii) Small arms ammunition primers;

(iii) Smokeless powder, not exceeding fifty pounds;

(iv) Black powder, not exceeding five pounds.

Explosives classifications. Explosives classifications include, but are not limited to:

(a) Division 1.1 and Division 1.2 explosives (possess mass explosion or detonating hazard):

(i) Dynamite;

(ii) Nitroglycerin;

(iii) Picric acid;

(iv) Lead azide;

(v) Fulminate of mercury;

(vi) Black powder (exceeding 5 pounds);

(vii) Detonators (in quantities of 1,001 or more);

(viii) Detonating primers.

(b) Division 1.3 explosives (possess a minor blast hazard, a minor projection hazard, or a flammable hazard):

(i) Propellant explosives;

(ii) Smokeless powder (exceeding fifty pounds).

(c) Division 1.4 explosives:

(i) Explosives that present a minor explosion hazard;

(ii) Includes detonators that will not mass detonate in quantities of 1,000 or less.

(d) Division 1.5 explosives:

(i) Explosives with a mass explosion hazard but are so insensitive that there is little probability of initiation;

(ii) ANFO and most other blasting agents are in this division.

(e) Division 1.6 explosives, which are explosives that are extremely insensitive and do not have a mass explosion hazard.

Explosives exemption. The exemption for small arms ammunition, small arms ammunition primers, smokeless powder, not exceeding fifty pounds, and black powder, not exceeding five pounds:

(a) Applies to public consumer use only;

(b) Does not apply to the employer employee relationship covered under the Washington Industrial Safety and Health Act.

Explosives international markings.

(a) The department will accept U.S. DOT and/or ATF international identification markings on explosives and/or explosives containers or packaging;

(b) This exception is under the authority of RCW 70.74.020(3) and in lieu of Washington state designated markings (as defined by RCW 70.74.010(4) (Division 1.1, 1.2, and 1.3) and required by RCW 70.74.300).

Explosives manufacturing building. Any building or structure, except magazines:

(a) Containing explosives where the manufacture of explosives, or any processing involving explosives, is conducted;

(b) Where explosives are used as a component part or ingredient in the manufacture of any article or device.

Explosives manufacturing plant. All lands with buildings used:

(a) In connection with the manufacturing or processing of explosives;

(b) For any process involving explosives;

(c) For the storage of explosives;

(d) To manufacture any article or device where explosives are used as a component part or ingredient in the article or device.

Fireworks. Any composition or device:

(a) Designed to produce a visible or an audible effect by combustion, deflagration, or detonation;

(b) Which meets the definition of "consumer fireworks" or "display fireworks."

Forbidden or not acceptable explosives. Explosives which are forbidden or not acceptable for transportation by common carriers by rail freight, rail express, highway, or water in accordance with the regulations of the Federal Department of Transportation (DOT).

Fuel. A substance, which may react with oxygen to produce combustion.

Fuse (safety). See "safety fuse."

Fuse igniter. A special pyrotechnic device intended to be used to ignite safety fuses.

Hand charge. An explosive charge with a cap and fuse assembly inserted in place.

Handler. Any individual who handles explosives or blasting agents for the purpose of transporting, moving, or assisting a licensed blaster in loading, firing, blasting, or disposal.

Note: This does not include employees of a licensed manufacturer engaged in manufacturing process, drivers of common carriers, or contract haulers.

Hand loader. Any person who engages in the noncommercial assembly of small arms ammunition for personal use; specifically, any person who installs new primers, powder, and projectiles into cartridge cases.

Highway. Roads, which are regularly and openly traveled by the general public and includes public streets, alleys, roads, or privately financed, constructed, or maintained roads.

Improvised device. A device, which is:

(a) Fabricated with explosives;

(b) Fabricated with destructive, lethal, noxious, pyrotechnic, or incendiary chemicals, and designed, or has the capacity to disfigure, destroy, distract, and harass.

Inhabited building.

(a) A building which is regularly occupied, in whole or in part, as a habitat for human beings;

(b) Any church, schoolhouse, railroad station, store, or other building where people assemble.

Note: This does not mean any building or structure occupied in connection with the manufacture, transportation, storage, or use of explosives.

Low explosives. Explosive materials, which can be caused to deflagrate when, confined. This includes black powder, safety fuses, igniters, igniter cords, fuse lighters, and display fireworks defined as Division 1.2 or Division 1.3 explosives by U.S. DOT (49 C.F.R. Part 173).

Note: This does not apply to bulk salutes.

Magazine. Any building, structure, or container approved for storage of explosive materials.

Note: This does not apply to an explosive manufacturing building.

Manufacturer. Any person engaged in the business of manufacturing explosive materials for purposes of sale or distribution or for his or her own use.

EXCEPTIONS: The following exemptions are restricted to materials and components, which are not classified (by U.S. DOT) as explosives until after they are mixed. With this restriction, the definition of manufacturer *does not* include:

- Inserting a detonator into a cast booster or a stick of high explosive product to make a primer for loading into a blast hole.
- The act of mixing on the blast site, either by hand or by mechanical apparatus, binary components, ammonium nitrate, fuel oil, and/or emulsion products to create explosives for immediate down blast hole delivery.

Misfire. The complete or partial failure of an explosive charge to explode as planned.

Mudcap (also known as bulldozing and dobying). Covering the required number of cartridges that have been placed on top of a boulder with a three- or four-inch layer of mud, which is free from rocks or other material that could cause a missile hazard.

No-light. The failure of a safety fuse to ignite.

Nonelectric delay detonator. A detonator with an integral delay element in conjunction with and capable of being detonated by a:

- (a) Detonation impulse;
- (b) Signal from miniaturized detonating cord;
- (c) Shock tube.

Oxidizer. A substance that yields oxygen readily to stimulate the combustion of organic matter or other fuel.

Permanent magazines. Magazines that:

- (a) Are fastened to a foundation;
- (b) Do not exceed permanent magazine capacity limits (RCW 70.74.040);
- (c) Are approved and licensed;
- (d) Are left unattended.

Person. Any individual, firm, partnership, corporation, company, association, person or joint stock association or trustee, receiver, assignee, or personal representative of that entity.

Person responsible. For an explosives magazine, means:

- (a) The person legally responsible for a magazine that actually uses the magazine;
- (b) The person is responsible for the proper storage, protection, and removal of explosives, and may be the owner lessee, or authorized operator.

Portable (field) magazines. Magazines that are:

- (a) Designed to be unattended;
- (b) Not permanently fastened to a foundation;
- (c) Constructed or secured to make sure they cannot be lifted, carried, or removed easily by unauthorized persons;
- (d) Limited to the capacity of explosives required for efficient blasting operation;
- (e) Approved and licensed.

Possess. The physical possession of explosives in one's hand, vehicle, magazine, or building.

Primary blasting. The blasting operation that dislodged the original rock formation from its natural location.

Primer. A unit, package, cartridge, or container of explosives inserted into or attached to a detonator or detonating cord to initiate other explosives or blasting agents.

Propellant actuated power device. Any tool, special mechanized device, or gas generator system, which is actuated by a propellant and releases and directs work through a propellant charge.

Public utility transmission systems.

(a) Any publicly owned systems regulated by:

(i) The utilities and transportation commission;

(ii) Municipalities.

(b) Other public regulatory agencies, which include:

(i) Power transmission lines over 10 kV, telephone cables, or microwave transmission systems;

(ii) Buried or exposed pipelines carrying water, natural gas, petroleum, or crude oil or refined products and chemicals.

Purchaser. Any person who buys, accepts, or receives explosives or blasting agents.

Pyrotechnics (commonly referred to as fireworks). Any combustible or explosive compositions or manufactured articles designed and prepared for the purpose of producing audible or visible effects.

Qualified person. A person who has successfully demonstrated the ability to solve or resolve problems relating to explosives, explosives work, or explosives projects by:

(a) Possession of a recognized degree or certificate;

(b) Professional standing;

(c) Extensive knowledge, training, and experience.

Railroad. Any type of railroad equipment that carries passengers for hire.

Safety fuse (for firing detonators). A flexible cord containing an internal burning medium by which fire is conveyed at a continuous and uniform rate.

Secondary blasting. Using explosives, mudcapping, or blockholing to reduce oversize material to the dimension required for handling.

Shock tube. A small diameter plastic tube:

(a) Used for initiating detonators;

(b) That contains a limited amount of reactive material so energy, transmitted through the tube by means of a detonation wave, is guided through and confined within the walls of the tube.

Small arms ammunition. Any shotgun, rifle, pistol, or revolver cartridge, and cartridges for propellant actuated power devices and industrial guns.

Note: This does not mean military type ammunition containing explosive bursting incendiary, tracer, spotting, or pyrotechnic projectiles.

Small arms ammunition primers. Small percussion sensitive explosive charges encased in a detonator or capsule used to ignite propellant power or percussion detonators used in muzzle loaders.

Smokeless powder. Solid chemicals or solid chemical mixtures that function by rapid combustion.

Special industrial explosive devices. Explosive actuated power devices and propellant-actuated power devices.

Special industrial explosives materials. Shaped materials and sheet forms and various other extrusions, pellets, and packages of high explosives, which include:

(a) Dynamite;

(b) Trinitrotoluene (TNT);

(c) Pentaerythritol tetranitrate (PETN);

(d) Hexahydro-1, 3, 5-trinitro-s-triazine (RDX);

(e) Other similar compounds used for high-energy-rate forming, expanding, and shaping in metal fabrication, and for dismemberment and quick reduction of scrap metal.

Springing. The creation of a pocket in the bottom of a drill hole by the use of a moderate quantity of explosives so that larger quantities of explosives may be inserted.

Sprung hole. A drilled hole that has been enlarged by a moderate quantity of explosives to allow for larger quantities of explosives to be inserted into the drill hole.

Stemming. A suitable inert incombustible material or device used to confine or separate explosives in a drill hole or cover explosives in mudcapping.

Trailer. Semi-trailers or full trailers, as defined by U.S. DOT, which are:

- (a) Built for explosives;
- (b) Loaded with explosives;
- (c) Operated in accordance with U.S. DOT regulations.

U.S. DOT. The United States Department of Transportation.

Vehicle. Any car, truck, tractor, semi-trailer, full trailer, or other conveyance used for the transportation of freight.

Water-gels or emulsion explosives. These explosives:

(a) Comprise a wide variety of materials used for blasting. Two broad classes of water-gels are those which:

- (i) Are sensitized by material classed as an explosive, such as TNT or smokeless powder;
- (ii) Contain no ingredient classified as an explosive which is sensitized with metals, such as aluminum, or other fuels.

(b) Contain substantial proportions of water and high proportions of ammonium nitrate, some ammonium nitrate is in the solution in the water, and may be mixed at an explosives plant, or the blast site immediately before delivery into the drill hole.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 17-16-132, § 296-52-099, filed 8/1/17, effective 9/1/17.]