WAC 296-52-720 Appendix A, sample explosives-blasting ordinance for local jurisdictions, nonmandatory.

### Explosives-blasting ordinance for local jurisdictions

	Ве	it	ordained	by	the	(jurisdiction	name)
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## Section 1: Permit required.

- (1) A current and valid blasting permit issued by \_\_\_\_\_ (jurisdiction name) is required by companies or individuals who:
- (a) Possess explosive materials (as defined by chapter 296-52 WAC, Safety standards for possessions and handling of explosives);
- (b) Conduct an operation or activity requiring the use of explosive materials; or
- (c) Perform, order, or supervise the loading and firing of high explosive materials.
- (2) Anyone in \_\_\_\_\_ (jurisdiction name) who does not have a valid blasting permit cannot transport, sell, give, deliver, or transfer explosive materials.
- (3) A blasting permit is required for every individual project requiring blasting explosives.
- (4) A permit issued to any person, company, or corporation under this ordinance is nontransferable to any other person, company, or corporation.
- (5) All blasting permits issued by \_\_\_\_\_ (jurisdiction name) must follow all federal, state, county, and city laws and regulations that apply to these activities with explosive materials:
  - (a) Obtaining;
  - (b) Owning;
  - (c) Transporting;
  - (d) Storing;
  - (e) Handling;
  - (f) Using.

## Section 2: Application contents.

- (1) The proper administrative authority (<u>name</u>) or their designee, has the power and authority to issue blasting permits and requires persons, companies, or corporations who are issued permits to file an application that includes:
- (a) A completed application form provided by (jurisdiction name) specifying the name and address of the person, company or corporation applying for the permit, and the name and address of the blast site or the person who will actually supervise the blasting.
- (b) A current and valid explosives license issued by the state of Washington department of labor and industries to one or more individuals working on the specific blasting project.
  - (c) A transportation plan according to Section 8.
  - (d) A blasting plan according to Section 10(1).
  - (e) A traffic control plan according to Section 10(2).
- (f) A preblast; notification, inspection, and monitoring plan according to Section  $10\,(3)$ .
  - (g) Proof of insurance must be provided according to Section 4.
- (2) \_\_\_\_\_\_ (jurisdiction name) will issue a permit within fourteen days of receiving an application that includes acceptable documentation of the above items 1 a through g through 7. If the

permit is denied, it must be done within fourteen days of administering authority receipt and must include a list of reasons for denial as well as instructions for reapplication.

#### Section 3: Fee.

A permit fee is required for each permit issued. It should be:

- (1) Valid for twelve months;
- (2) Follow the local fee schedule;
- (3) Renewable.

## Section 4: Liability insurance required.

- (1) If the \_\_\_\_\_\_ (jurisdiction name) design requires approval, then coverage of one million dollars or more is required or other reasonable amount depending on the circumstances as determined by \_\_\_\_\_\_ (name of the proper administrative authority).
- (2) The certificate must also state that the insurance company must give \_\_\_\_\_ (jurisdiction name) a minimum of ten days notice of cancellation of the liability insurance coverage.
- (3) The \_\_\_\_\_\_ (name of the proper administrative authority) has the power and authority to limit the level of blasting. After examining all pertinent circumstances surrounding the proposed blasting, they may refuse to issue a permit, or suspend, or revoke an existing permit.

#### Section 5: Revocation.

The \_\_\_\_\_\_ (name of the proper administrative authority) has the power to revoke any permit if the permit holder does not follow the requirements of this chapter. The permit holder has twenty-four hours to remove all explosive materials after being notified that their permit has been revoked.

#### Section 6: Denial or revocation appeal.

Any person, company, or corporation whose blasting permit application is denied, suspended, or revoked by \_\_\_\_\_\_ (name of proper authority), may file a notice of appeal within ten days to \_\_\_\_\_ (name of the legislative body with jurisdiction over the administrator).

- The legislative body must schedule an appeals hearing within fourteen days.

# Section 7: \_\_\_\_\_ (jurisdiction name) not to assume liability.

\_\_\_\_\_ (jurisdiction name) is not responsible for any damage caused by the person, company, or corporation blasting with (jurisdiction name).

## Section 8: Transportation of explosives (transportation plan).

- (1) You must include a transportation plan that addresses the transportation of explosive materials within \_\_\_\_\_ (jurisdiction name) with your application for a blasting permit.
- (2) The transportation plan must include the following information:
  - (a) Route used for deliveries and returns
  - (b) Hours of transportation
  - (c) Maximum quantities of explosives being transported

(d) Types of vehicles being used. Vehicles must be in compliance with federal and state transportation regulations for transportation of explosive material.

## Section 9: Storage of explosives.

- (1) No overnight storage of explosive material is permitted within the limits of \_\_\_\_\_\_ (jurisdiction area) without specific amendments to the permit allowing storage. Blast holes loaded with explosives are to be shot on the day they are loaded.
  - (2) The required method of handling explosives in (jurisdiction area) is as follows:
  - (a) Same day delivery
  - (b) Stand by during loading
  - (c) Return of all unused explosive materials.

## Section 10: Use of explosives.

- (1) Blasting plan. A blasting plan for each project must be submitted to \_\_\_\_\_ and approved by the \_\_\_\_\_ (name of the proper administrative authority) or their designee prior to issuing a blasting permit. The plan must include additional documentation for the proposed blasting operation. For example, maps, site plans, and excavation drawings. The plan must include:
  - (a) The location where the blast will occur
  - (b) The approximate total amount of material to be blasted
  - (c) The incremental volumes, per blast, of material to be blasted
  - (d) The types and packaging of explosive materials to be used
- (e) The drill hole diameters, depths, patterns, subdrilling depths and drill hole orientation to be used
- (f) The initiation system, the incremental delay times, and the location of the primers in the explosive column
- (g) The stemming depths and stemming material for the various estimated depths of drill holes to be blasted
  - (h) The approximate powder factors anticipated
  - (i) The flyrock control procedures and equipment to be used
  - (j) The maximum number of blasts that will be made in one day
  - (k) The blast warning sound system and equipment to be used
- (1) The scheduled start date and finish date of blasting operations
  - (m) Additional requirements as needed.
- (2) **Traffic control plan.** A traffic control plan acceptable to \_\_\_\_\_ (jurisdiction name) detailing signing, flagging, temporary road closures, and detour routes for blasting operations must be filed before the blasting permit is issued.
- (3) **Preblast notification plan.** A plan outlining preblast public notifications, structural inspections, and blast effect monitoring within a specified distance of the blasting is required before the blasting permit is issued.
- (a) **Separation distance**. The distances from the blasting where the notification, preblast structural inspection, and blast monitoring is required must be determined by the scaled distance formulas described below. Blasting will not be permitted until the notification and inspection requirements are completed.
  - (b) Scaled distance formulas.
  - (i) The distance from the blast within which:
  - (A) Notification of all occupied structures is required: Da = 90

- (B) Inspection of all occupied structures is required: Db = 75 w;
- (C) Monitoring of selected structures is required: Dc = 60 w.
- (ii) In the above formulas:
- (A) Da, Db, and Dc are the actual distances in feet from the closest point in the blast.
- (B) w is the square root of the maximum weight of the explosives in pounds detonated with a minimum  $8\ \text{millisecond}$  from another detonation event.
- (c) **Notification letter**. The preblast notification must consist of a letter advising all residents within the distance (specified in WAC 296-52-720 section 10 (3)(b)) of the blasts. The letter must include the intent of the blasting program, its anticipated impact on local residents, the proposed duration of blasting activities, and provide telephone numbers for public contact. Distribution of this notification must be made a minimum of seven days before the start of blasting. The source of the chart is 121.8507, Bureau of Mines, U.S. Department of Interior, 1980.
- Preblast inspection. A preblast inspection of resident's (d) property must be offered to all residents within the distance (specified in WAC 296-52-720 section 10 (3)(b) above) of the blasting at no cost to the resident and will be preformed by a qualified third party who is not an employee of the contractor. A copy of the individual inspection reports and a log of all photos taken are to be provided to (jurisdiction name). Where inspections are not allowed by the resident or are not possible for other reasons, a certified letter must be sent to the occupant/owner at the unsurveyed address advising them of their right to a preblast inspection and the possible consequences of denying an inspection. The preblast inspection program for residences within the specified distance must be complete two days prior to the start of blasting and (name of the proper administrative authority) should be notified.
- (4) Blast-plan compliance inspections. Blast-plan compliance inspections may be required for every blast until the operator can demonstrate an ability to safely blast according to the blast plan and control the extraneous effects of blasting such as flyrock, noise/air blast, and ground vibration. If more than two blasting inspections are required, an additional fee of \_\_\_\_\_\_ (insert dollar amount) per blast inspection will be assessed.
- (5) **Monitoring.** All blasts which require monitoring by section 10 (3) (b) are to be monitored using blast monitoring equipment designed for the purpose and carrying a certificate of calibration dated within the previous twelve months. The blast monitors must record peak particle velocity and frequency in three orthogonal directions and air over pressure. Monitored shots in which the pounds detonated per an 8-millisecond time increment is less than ten pounds, one blast monitor is required. When ten or more pounds is detonated per an 8-millisecond time interval, two or more blast monitors are required. All blast-monitoring records are to be signed and submitted to (jurisdiction name) within twenty-four hours of each blast.
- (6) Maximum peak particle velocity. The maximum peak particle velocity in any seismic trace at the dominant frequency allowed on any residential, business or public structure designed for human occupancy is to be determined by the chart in WAC 296-52-67065(1).
- (7) Air blast. The maximum air blast over pressure permitted at the closest residential, business or public structure designed for human occupancy is not to exceed 133 dBL @ 2.0 Hz hi pass system per WAC

296-52-67065(3). The source of this regulation is 121.8485, Bureau of Mines, U.S. Department of Interior, 1980.

- (8) **Utilities.** Whenever blasting is being conducted in close proximity to existing utilities, the utility owner must be notified a minimum of twenty-four hours in advance of blasting.
- (9) **Blast report.** A signed blast report, on a form approved by the \_\_\_\_\_\_ (name of the proper administrative authority) or their designee, needs to be filed with \_\_\_\_\_ (jurisdiction name) within twenty-four hours of the blast. The report must include the following blast information:
  - (a) Date, time, and location of the blast
  - (b) Number of drill holes
  - (c) Maximum, minimum and average drill hole depth
  - (d) Drill hole diameter
  - (e) Subdrill depth
  - (f) Total pounds of each type of explosive used
- (g) A drill hole section schematic showing the loading of a typical hole
  - (h) Amount and type of stemming material
  - (i) Schematic showing the drill hole pattern
  - (j) Initiated delayed sequence
- $(\dot{k})$  Maximum pounds of explosives detonated in any eight millisecond time interval
  - (1) Type and size of any flyrock protection devices used, if any
  - (m) Comment regarding the outcomes of the blast.
- (10) \_\_\_\_\_\_ (jurisdiction name) must be notified immediately of any unplanned or unusual events that resulted from the blast. The permittee must also report any incident, damage claim, or neighbor annoyance report brought to the permittee's attention within twenty-four hours.

#### Section 11:

This ordinance will be in effect to preserve the health, peace, and safety of the citizens of \_\_\_\_\_ (jurisdiction name).

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 17-16-132, § 296-52-720, filed 8/1/17, effective 9/1/17. Statutory Authority: RCW 49.17.010, [49.17].040, and [49.17].050. WSR 02-03-125, § 296-52-720, filed 1/23/02, effective 3/1/02.]