

WAC 173-303-693 Dangerous waste munitions and explosives storage. (1) **Applicability.** The requirements of this section apply to owners or operators who store munitions and explosive dangerous wastes, except as WAC 173-303-600(3) provides otherwise. (NOTE: Depending on explosive hazards, dangerous waste munitions and explosives may also be managed in other types of storage units, including containment buildings (WAC 173-303-695), tanks (WAC 173-303-640), or containers (WAC 173-303-630). See WAC 173-303-578(4) for storage of waste military munitions.)

(2) **Design and operating standards.**

(a) Dangerous waste munitions and explosives storage units must be designed and operated with containment systems, controls, and monitoring, that:

(i) Minimize the potential for detonation or other means of release of dangerous waste, dangerous constituents, dangerous decomposition products, or contaminated runoff, to the soil, groundwater, surface water, and atmosphere;

(ii) Provide a primary barrier, which may be a container (including a shell) or tank, designed to contain the dangerous waste;

(iii) For wastes stored outdoors, provide that the waste and containers will not be in standing precipitation;

(iv) For liquid wastes, provide a secondary containment system that assures that any released liquids are contained and promptly detected and removed from the waste area, or vapor detection system that assures that any released liquids or vapors are promptly detected and an appropriate response taken (for example, additional containment, such as overpacking, or removal from the waste area); and

(v) Provide monitoring and inspection procedures that assure the controls and containment systems are working as designed and that releases that may adversely impact human health or the environment are not escaping from the unit.

(b) Dangerous waste munitions and explosives stored in accordance with this section may be stored in one of the following:

(i) Earth-covered magazines. Earth-covered magazines must be:

(A) Constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed;

(B) Designed and constructed:

(I) To be of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;

(II) To provide working space for personnel and equipment in the unit; and

(III) To withstand movement activities that occur in the unit; and

(C) Located and designed, with walls and earthen covers that direct an explosion in the unit in a safe direction, so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(ii) Above-ground magazines. Above-ground magazines must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(iii) Outdoor or open storage areas. Outdoor or open storage areas must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.

(c) Dangerous waste munitions and explosives must be stored in accordance with a standard operating procedure specifying procedures to ensure safety, security, and environmental protection. If these procedures serve the same purpose as the security and inspection requirements of WAC 173-303-310, the preparedness and prevention procedures of WAC 173-303-340, and the contingency plan and emergency procedures requirements of WAC 173-303-350, then these procedures will be used to fulfill those requirements.

(d) Dangerous waste munitions and explosives must be packaged to ensure safety in handling and storage.

(e) Dangerous waste munitions and explosives must be inventoried at least annually.

(f) Dangerous waste munitions and explosives and their storage units must be inspected and monitored as necessary to ensure explosives safety and to ensure that there is no migration of contaminants out of the unit.

(3) Closure and post-closure care.

(a) At closure of a magazine or unit that stored dangerous waste in accordance with this section, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste, and manage them as dangerous waste. The closure plan, closure activities, cost estimates for closure, and financial responsibility for magazines or units must meet all of the requirements specified in WAC 173-303-610 and 173-303-620, except that the owner or operator may defer closure of the unit as long as it remains in service as a munitions or explosives magazine or storage unit.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he or she must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (WAC 173-303-665(6)).

[Statutory Authority: Chapters 70.105, 70.105D, 15.54 RCW and RCW 70.105.007. WSR 00-11-040 (Order 99-01), § 173-303-693, filed 5/10/00, effective 6/10/00.]