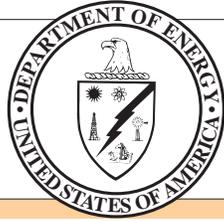




Environmental



Guidance

RCRA Permitting Guide
for
Hazardous & Radioactive Mixed Waste
Management Facilities

Military Munitions Rule
Supplement

October 1997

U.S. Department of Energy
Office of Environmental Policy and Assistance
RCRA/CERCLA Division, EH-413
Washington, D.C.



*RCRA Permitting Guide
for
Hazardous & Radioactive Mixed Waste
Management Facilities*

*Military Munitions Rule
Supplement*



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List of Abbreviations and Acronyms

CFR	<i>Code of Federal Regulations</i>
DDESB	Department of Defense Explosives Safety Board
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
EH	Office of Environment, Safety, and Health
EPA	U.S. Environmental Protection Agency
FFCAct	Federal Facility Compliance Act
FR	<i>Federal Register</i>
HSWA	Hazardous and Solid Waste Amendments of 1984
P.L.	Public Law
RCRA	Resource Conservation and Recovery Act
SOP	Standard Operating Procedure
Stat.	<i>Statutes at Large</i>
TSD	treatment, storage, or disposal
U.S.C.	<i>United States Code</i>

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Glossary of Terms

explosives or munitions emergency -- a situation involving the suspected or detected presence of unexploded ordnance, damaged or deteriorated explosives or munitions, an improvised explosive device, other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

explosives or munitions emergency response -- all immediate response activities by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. Such activities may include in-place render-safe procedures, treatment or destruction of the explosives or munitions, and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives or munitions emergency responses can occur on public or private lands and are not limited to responses at RCRA facilities.

explosives or munitions emergency response specialist -- an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Such persons include U.S. Department of Defense (DOD) emergency explosive ordnance disposal personnel, DOD technical escort unit personnel, DOD-certified civilian or contractor personnel, and other federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

military munitions -- all ammunition products and components produced or used by or for the U.S. Department of Defense (DOD) or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. Included are confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot-control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small-arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices



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and components thereof. Wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof are excluded. However, the term does include nonnuclear components of nuclear devices, which are managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.



Introduction

Federal Facility Compliance Act compelled EPA to identify when military munitions become hazardous waste .

Background

The Federal Facility Compliance Act (FFCAct)¹ subjects the U.S. Department of Energy (DOE) and other federal entities to penalties for noncompliance with applicable requirements of the Resource Conservation and Recovery Act (RCRA). Also, section 107 of the FFCAct requires the U.S. Environmental Protection Agency (EPA) to issue a rule identifying when conventional and chemical military munitions become hazardous waste under the RCRA and to provide for safe storage and transportation of such waste. Pursuant to this requirement, the EPA promulgated the *Military Munitions Rule* on February 12, 1997.² This final rule made several changes to the RCRA hazardous waste regulations in 40 CFR parts 260 through 266 and 40 CFR part 270 that could create or eliminate the need for some DOE facilities to obtain or modify RCRA permits.

The provisions of the *Military Munitions Rule* accomplish the following:

Provisions of the final *Military Munitions Rule*

(a) define military munitions (62 FR 6651 codifying 40 CFR 260.10) and establish the criteria listed below for determining when a military munition is a solid waste (62 FR 6654 codifying 40 CFR 266.202);

- A military munition *is not a solid waste* as long as it is used for its intended purpose [see 40 CFR 266.202(a)(1)] or, if unused, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities that

¹ P.L. 102-386 (October 6, 1992) amending the Resource Conservation and Recovery Act of 1976, P.L. 94-580 (October 31, 1976), 90 Stat. 2795, 42 U.S.C. 6901 et seq.

² *Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties; Final Rule*, 62 FR 6622 - 6657 (February 12, 1997).



are neither uses constituting disposal nor burning for energy recovery [40 CFR 266.202(a)(2)].

- An *unused* military munition *is a solid waste* when any of the following occurs [40 CFR 266.202(b)]:
 - (1) The munition is abandoned by being disposed of, burned, detonated (except during use for its intended purpose) incinerated, or treated prior to disposal; or
 - (2) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal; or
 - (3) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or
 - (4) The munition has been declared a solid waste by an authorized military official.
- A *used or fired* military munition *is a solid waste* [40 CFR 266.202(c)]:
 - (1) When transported off-range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
 - (2) If recovered, collected, and then disposed of by burial or by landfilling either on- or off-range.
- A *used or fired* military munition *is a solid waste* as defined by RCRA section 1004(27) if the munition lands off-range and is not promptly rendered safe or retrieved (or both) [40 CFR 266.202(d)]. Such a statutory solid waste would be potentially subject to RCRA corrective



action requirements or to requirements for cleanup as an imminent and substantial endangerment pursuant to RCRA section 7003.

(b) consolidate management standards applicable solely to military munitions in a new subpart M (Military Munitions) under 40 CFR part 266 (Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities) (62 FR 6654 - 6656 codifying 40 CFR 266.200 through 266.206);

(c) exempt nonchemical, in-transport, hazardous waste military munitions from RCRA hazardous waste requirements as long as specified conditions are met (62 FR 6655 codifying 40 CFR 266.203);

(d) exempt non-chemical, in-storage, hazardous waste military munitions from RCRA hazardous waste requirements as long as specified conditions are met, including a condition that the waste military munitions be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB) (62 FR 6655 - 6656 codifying 40 CFR 266.205);

(e) add design and operating standards in 40 CFR part 264, subpart EE, and 40 CFR part 265, subpart EE, for storage of hazardous waste munitions and explosives (both military and nonmilitary) in hazardous waste munitions and explosives storage units [62 FR 6652 - 6654 codifying 40 CFR 264.1200 through 264.1202 and 40 CFR 265.1200 through 265.1202];

(f) exempt from RCRA hazardous waste generator requirements, transporter requirements, and treatment, storage and disposal (TSD) facility requirements, the activities initiated in response to an immediate threat from the known or suspected presence of military munitions or other explosive devices or materials [62 FR 6651 - 6652 codifying 40 CFR 262.10(i), 263.10(e), 264.1(g)(8)(i)(D), and 264.1(g)(8)(iv); 62 FR 6653 codifying 40 CFR 265.1(c)(11)(i)(D) and 265.1(c)(11)(iv); 62 FR 6655 codifying 40 CFR 266.204; and 62 FR 6656 codifying 40 CFR 270.1(c)(3)(i)(D) and 270.1(c)(3)(iii)];



(g) authorize existing RCRA permit holders to continue accepting military munitions that are newly designated hazardous waste munitions, notwithstanding any permit condition barring acceptance of off-site wastes, provided that specified conditions are met [62 FR 6656 codifying 40 CFR 270.42(h)]; and

(h) exempt from RCRA manifesting requirements, the transport of any hazardous waste (not just hazardous waste munitions) on public or private rights-of-way along or within the borders of contiguous properties under the ownership or control of a single person [62 FR 6651 codifying 40 CFR 262.20(f)].

DOE hazardous waste military munitions do not qualify for the in-storage conditional exemption because they are not subject to DDESB jurisdiction.

DOE personnel should be aware that because DOE waste military munitions are not subject to the authority of the DDESB, the conditional exemption from RCRA regulation for nonchemical, in-storage, hazardous waste military munitions (item 4, above) is **not** available to such DOE hazardous waste military munitions. Therefore DOE's hazardous waste military munitions, chemical or otherwise, are governed by RCRA hazardous waste requirements, including the requirement to obtain a RCRA permit for storage units, whether such units are tanks, containers, or containment buildings for which 40 CFR part 264 or 265 previously established design and operating standards or are hazardous waste munitions and explosives storage units for which design and operating standards are established in 40 CFR part 264, subpart EE, or part 265, subpart EE, by the *Military Munitions Rule* (see p. 20, below).

DOE was active in development of the *Military Munitions Rule*.

The EPA consulted with the U.S. Department of Defense (DOD), the States, and various environmental interest groups during the development of the *Military Munitions Rule*. DOE also played an active role because the Department manages the nation's nuclear arsenal, maintains security forces to protect it, and conducts development and testing of conventional weapons for DOD.

Purpose

This document supplements DOE's *RCRA Permitting Guide*.

The purpose of this guidance document is to supplement the *RCRA Permitting Guide for Hazardous & Radioactive Mixed*



Waste Management Facilities (“RCRA Permitting Guide”)³ by addressing those provisions of the *Military Munitions Rule* that would have been covered by the *RCRA Permitting Guide* if they had existed when it was issued. Such provisions may affect RCRA permitting activities at some DOE hazardous and mixed waste management facilities.

Scope

This document addresses only the permitting aspects of the *Military Munitions Rule*.

Because of its focus on RCRA permitting requirements, which are applicable only after a material has been characterized as a hazardous waste, this document does not address every aspect of the *Military Munitions Rule*. For example, this document does not provide guidance on making a determination of whether or not a munition is a military munition (as defined by 40 CFR 260.10). Also, this document does not provide guidance on how to evaluate whether, at a given time, a military munition is a solid waste (as defined by 40 CFR 266.202) and, hence, potentially a hazardous waste subject to RCRA permitting requirements. Notwithstanding, as is the case for all materials managed at DOE facilities, DOE must properly characterize and manage military munitions that may be solid wastes or hazardous wastes.

This document also provides no guidance on other nonpermitting aspects of the *Military Munitions Rule*, including

- (1) the conditions established by the *Military Munitions Rule* that, if met, would exempt in-transport, hazardous waste military munitions from RCRA hazardous waste requirements (see 40 CFR 266.203); and
- (2) the exemption from RCRA manifesting requirements for transport of any hazardous waste (not just hazardous waste munitions) on public or private rights-of-way along or within

³ U.S. Department of Energy, *RCRA Permitting Guide for Hazardous & Radioactive Mixed Waste Management Facilities*, DOE/EH [RCRA] 9705 (April 1997). [Available on the Internet at <http://tis-nt.eh.gov/oepa>. From this site, choose “Policy & Guidance,” followed by “Resource Conservation and Recovery Act.” Then scroll down to “Permits” and locate “Guide.”]



the borders of contiguous properties under the ownership or control of a single person [see 40 CFR 262.20(f)].

Information on *Military Munitions Rule* topics on which guidance is not provided in this document is presented in Appendices A and B, which contain the *Federal Register* notice announcing the final *Military Munitions Rule* and the DOE RCRA Information Brief entitled *Military Munitions Rule* (EH-411-097/002; April 1997), respectively.

Other references that may assist DOE personnel responsible for managing hazardous waste military munitions include:

- *Manifest Requirements*, DOE/EH-231-038/0394, March 1994 (revised August 1997);
- *Transportation of RCRA Hazardous Wastes*, DOE/EH-231-013/0394, March 1994 (revised August 1997); and
- *Hazardous Waste Generator Requirements*, DOE/EH-231-055/1194, November 1994 (revised August 1997).

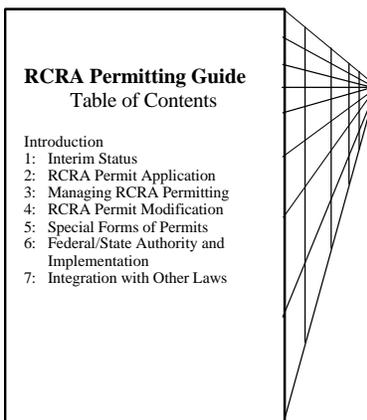
Structure and Overview of This Supplement

This document discusses RCRA permitting implications of the *Military Munitions Rule* in relation to DOE's *RCRA Permitting Guide*.

DOE's *RCRA Permitting Guide* already presents information on the RCRA permitting process and on implementation of the RCRA hazardous waste permitting program. Specifically, the *RCRA Permitting Guide* discusses interim status requirements, the format and content of permit applications, management of the permitting process, permit modifications, special forms of permits (such as emergency permits), the effects of State authorization on implementation of the RCRA permitting program, and integration of RCRA permitting with other laws. In this supplement, the provisions of the *Military Munitions Rule* that affect RCRA permitting activities are presented and discussed in relation to the broad federal RCRA hazardous waste permitting program presented in the *RCRA Permitting Guide*.



To clearly identify the relationship between this supplement and the *RCRA Permitting Guide*, a graphic like the one below is



displayed, when appropriate, next to text in this supplement. When the graphic appears, it depicts a portion of the table of contents of the *RCRA Permitting Guide*. The title of the chapter, module, or submodule in the *RCRA Permitting Guide* that is relevant to the corresponding discussion in this supplement is highlighted in larger bold letters.

Section-by-section overview

Section 1 of this document discusses the requirements for obtaining interim status that are applicable to existing facilities managing waste military munitions that, for the first time, have become subject to RCRA hazardous waste regulations as a result of the *Military Munitions Rule*. Section 2 presents the RCRA Part B permit application information requirements for hazardous waste munitions and explosives storage units, including earth-covered magazines, aboveground magazines, and outdoor or open storage areas. Such units comprise a new type of hazardous waste management unit for which the *Military Munitions Rule* establishes design and operating standards (see 40 CFR part 264, subpart EE, and part 265, subpart EE). Section 3 examines the *Military Munitions Rule*'s clarification that, under the RCRA, immediate responses to explosives or munitions emergencies are treated like immediate responses to the discharge, or the imminent or substantial threat of discharge, of hazardous waste. In section 4, situations are described in which, as a result of the *Military*



Munitions Rule, the need for a RCRA permit modification could be triggered. Finally, section 5 explains implementation of the *Military Munitions Rule* by the EPA and authorized States. The appendices include the *Federal Register* notice promulgating the final *Military Munitions Rule* (Appendix A), a DOE RCRA Information Brief on the *Military Munitions Rule* (Appendix B), a list of exemptions from the requirement to obtain a RCRA permit (Appendix C), and an excerpt from chapter 6 of the *RCRA Permitting Guide* that explains the process of State authorization under RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (Appendix D).



1: Interim Status

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Section 3005(a) of the RCRA requires owners or operators of hazardous waste management facilities to obtain a RCRA permit. Section 3005(e) of the RCRA provides that a hazardous waste management facility that meets certain requirements will be treated as having been issued a permit. Such authorization to operate pending issuance or denial of a permit is known as “interim status.” While operating under interim status, owners and operators of hazardous waste management facilities must comply with applicable sections of 40 CFR part 265.

A waste management unit is eligible for interim status if it is in existence on the effective date of statutory or regulatory amendments that render the unit subject to RCRA permitting for the first time [40 CFR 270.70(a)]. The *Military Munitions Rule* causes certain military munitions to be designated as hazardous waste for the first time either on August 12, 1997 (i.e., the effective date of the federal rule) in States without RCRA base authorization⁴ or on the effective date of State regulatory provisions listing or designating waste military munitions as hazardous in States with RCRA base authorization; because of this fact, units at DOE facilities that are managing such newly designated hazardous waste munitions on the trigger date and that are not otherwise exempt from RCRA permitting requirements, are eligible for interim status. (A list of otherwise exempt TSD units and facilities is provided in Appendix C.)

Obtaining first-time interim status for hazardous waste munitions management units (no RCRA Part A or Part B permit applications previously filed)

A DOE facility that has not previously obtained interim status or a RCRA permit can obtain interim status for the first time for an eligible munitions management unit by completing the following steps:

- a notice of hazardous waste activity must be filed pursuant to RCRA section 3010 within 90 days after promulgation of the regulation rendering the facility subject to RCRA Subtitle C (i.e., by May 12, 1997, for facilities located in

1. File notice of hazardous waste activity.

⁴ See section 5 (Federal/State Authority and Implementation), below (p. 27).



- States without RCRA base authorization) [40 CFR 270.70(a)(1)];
- Part A of the RCRA permit application must be filed [40 CFR 270.70(a)(2)] by the date that is six months from publication of the regulatory amendment first requiring the unit to comply with 40 CFR part 265 or 266 standards (i.e., by August 12, 1997, for facilities located in States without RCRA authorization) [40 CFR 270.10(e)(1)(i)]; and
 - operations and design of the unit must comply with the applicable standards in 40 CFR 265 [e.g., tanks (subpart J), containers (subpart I), containment buildings (subpart DD), or hazardous waste munitions and explosives storage units (subpart EE)].
2. File Part A permit application.
3. Comply with 40 CFR part 265.

For purposes of determining the filing deadline for the notice of hazardous waste activity and the RCRA Part A permit application in States with RCRA base authorization, the calculation should be made beginning with the date on which authorized State regulations implementing the *Military Munitions Rule* are effective.

4. File Part B permit application.
- A DOE facility that obtains interim status for the first time by successfully completing the steps listed above can continue to operate affected units (except land disposal units) without filing a Part B permit application until six months after the responsible regulatory agency requests submission of such an application. Failure to file a requested Part B permit application on time is grounds for termination of interim status [40 CFR 270.10(e)(5)].

In the unlikely event that an affected unit is a land disposal unit not previously subject to RCRA permitting regulations, the RCRA Part B permit application for that unit would be due within 12 months after the unit becomes subject to RCRA permitting (i.e., by August 12, 1998) [40 CFR 270.73(d)].

Obtaining interim status for a munitions management unit at a DOE facility already operating under interim status

A DOE facility already under interim status for other hazardous waste management activities at the time when the *Military Munitions Rule* was promulgated or at the time when authorized State regulations implementing the *Military Munitions Rule* are



1. File updated Part A permit application.

promulgated that has not yet filed a RCRA Part B permit application could expand its interim status to cover existing units that already manage newly designated hazardous waste munitions or to cover added units that will manage such waste munitions in the future. Interim status for the affected unit or units, would be obtained by filing a revised RCRA Part A permit application. Interim status does not extend to newly listed or identified hazardous waste munitions at the facility unless the amended Part A permit application is filed with the appropriate regulatory agency by the applicable deadline [40 CFR 270.10(g)(2)]. Applicable deadlines [40 CFR 270.10(g)(1)] are as follows:

(1) on or before August 12, 1997, for existing units at a facility located in a State without RCRA base authorization;

(2) no later than the effective date of State regulations listing or designating waste military munitions as hazardous for existing units at a facility located in a State with RCRA base authorization; or

(3) prior to treating, storing, or disposing of newly designated hazardous waste munitions in any added units.

2. File updated Part B permit application.

If a DOE facility that already has interim status (1) intends to continue operating units that manage newly designated hazardous wastes and (2) has previously filed both RCRA Part A and RCRA Part B permit applications for other ongoing hazardous waste activities but has not yet received a RCRA permit, both the Part A and the Part B applications would require updating, as appropriate. The Part B application should be updated according to a case-specific schedule negotiated by DOE with the responsible regulatory agency.

Facilities with existing RCRA permits must file a permit modification request.

If a DOE facility with an existing RCRA permit is managing newly designated hazardous waste munitions, a revised Part A application must be filed, as previously discussed, in order to qualify affected units for interim status. Further, a RCRA permit modification request must be filed as discussed in section 4, “RCRA Permit Modifications,” below (p. 25); or closure of the affected units must be initiated.



2: RCRA Permit Application

Part A Permit Application

The RCRA permit application consists of two parts: Part A and Part B. The Part A permit application is a standard form (EPA Form 8700-23 or State equivalent) that requests general information about the facility and its operations. As discussed in section 1 (Interim Status) above (p. 10, 11), a DOE facility that is managing newly designated hazardous waste munitions would be required to submit a new Part A permit application or to amend a previously filed Part A permit application, in order to obtain interim status for units whose status as hazardous waste management units is affected by the *Military Munitions Rule*.

Submodule 2-2-1 of the *RCRA Permitting Guide* describes the Part A permit application and includes explanations of the regulations governing when to file, when to amend, the appropriate form to use, waste codes and numbers, and other information. Except for filing deadlines, the *Military Munitions Rule* does not modify Part A permit application information or filing requirements.

Part B Permit Application

The Part B permit application provides comprehensive information about the facility and has no standard format. As previously mentioned (p. 10), a DOE facility that is managing hazardous waste munitions and obtains interim status for such management will be required either to file a first-time Part B permit application or to amend its previously filed Part B permit application unless closure of the affected unit or units is initiated. If the facility already has a RCRA permit, a Part B permit application to amend the permit may be required. Some of the information required in a Part B permit application is general, applying to all types of units at a facility, and other items of information are specific to the type of unit for which a permit is sought.

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Submodule 2-2-2 (Completing the Part B Permit Application) of the *RCRA Permitting Guide* explains the regulations governing both the general and the unit-specific contents of the Part B permit application. Included are discussions of the information requirements for facility description, waste characterization, process information, groundwater monitoring, hazard prevention procedures, a contingency plan, personnel training, closure and post-closure plans, corrective action, documentation of public participation, and Part B certification.

The *Military Munitions Rule* changes or creates new Part B permit application information requirements for hazardous waste munitions management units in the areas of process information, hazard prevention procedures, a contingency plan, and closure and post-closure plans. These new or modified information requirements are explored below as supplements to the discussions previously provided by submodules 2-2-2-3 (Process Information), 2-2-2-5 (Procedures to Prevent Hazards), 2-2-2-6 (Contingency Plan), and 2-2-2-8 (Closure and Post-Closure Plans) of the *RCRA Permitting Guide*.

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Depending on explosive hazards, hazardous waste munitions and explosives may be managed in tanks, containers, or containment buildings, which are types of units for which 40 CFR part 264 previously established design and operating standards.⁵ Submodule 2-2-2-3 of the *RCRA Permitting Guide* summarizes the process information that must be included in a RCRA Part B permit application for hazardous wastes managed in each of these types of hazardous waste management units. Therefore, if a DOE facility is managing hazardous waste munitions in one or more such unit types, submodule 2-2-2-3 of the *RCRA Permitting Guide* and the appropriate subparts of 40 CFR part 264 should be consulted regarding RCRA Part B permit application information requirements. If, however, a DOE facility opts to store hazardous waste munitions in a hazardous waste munitions and explosives

⁵ Tank standards are located in 40 CFR part 264, subpart J; container standards are located in subpart I; and containment building standards are located in subpart DD.



storage unit [i.e., the new type of hazardous waste management unit for which the *Military Munitions Rule* establishes design and operating standards (see 40 CFR part 264, subpart EE, and part 265, subpart EE)], then the Part B permit application information requirements are as summarized in Exhibit 1 (p. 15, 16).

The subpart EE standards were developed for units storing hazardous waste munitions (both military and nonmilitary) and explosives that are not subject to DDESB standards. The EPA believed such hazardous waste munitions should be governed by RCRA regulatory controls when in storage, but previously existing RCRA design and operating standards applicable to hazardous waste storage units that might be used for managing hazardous waste munitions and explosives (e.g., the containment building, container, and tank standards) were thought to not reflect well the nature of waste munitions and explosives (62 FR 6622, 6639). As a result, the previously existing regulatory requirements could in some circumstances interfere with the safe handling of waste munitions and explosives in tanks, containers, or containment buildings. Therefore, the subpart EE standards are specifically tailored to ensure against that result by combining the environmental features of the existing RCRA storage unit standards with performance standards based on the DDESB munitions storage standards.



EXHIBIT 1: Information Requirements for Storage of Hazardous Waste Munitions and Explosives

Unit Configuration	Information Requirements	Citations (40 CFR)
All Configurations	<p>Provide a description of containment systems, controls, and monitoring sufficient to demonstrate that the unit has been designed and will be operated such that:</p> <ul style="list-style-type: none"> • The potential for detonation or other means of release of hazardous waste, hazardous constituents, hazardous decomposition products, or contaminated runoff to the soil, groundwater, surface water, and atmosphere will be minimized; • A primary barrier, which may be a container (including a shell) or tank, designed to contain the hazardous waste will be provided; • Wastes and waste containers stored outdoors will not be in standing precipitation; • Any liquids released from stored liquid-waste vessels will either (1) enter a secondary containment system where they will be promptly detected and removed from the waste area or (2) be detected by a vapor detection system that will trigger an appropriate response action (e.g., implementation of additional containment, such as overpacking, or removal from the waste area); and • Monitoring and inspection procedures that ensure that (1) the controls and containment systems are working as designed and (2) releases that may adversely impact human health or the environment are not escaping from the unit. 	<p>264.1201(a)(1)</p> <p>264.1201(a)(2)</p> <p>264.1201(a)(3)</p> <p>264.1201(a)(4)</p> <p>264.1201(a)(5)</p>
Earth-Covered Magazines	<p>Provide information sufficient to demonstrate that the unit will be:</p> <ul style="list-style-type: none"> • Constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed; • Designed and constructed: <ul style="list-style-type: none"> - of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit; - to provide working space for personnel and equipment in the unit; and 	<p>264.1201(b)(1)(i)</p> <p>264.1201(b)(1)(ii)(A)</p> <p>264.1201(b)(1)(ii)(B)</p>



EXHIBIT 1: Information Requirements for Storage of Hazardous Waste Munitions and Explosives

Unit Configuration	Information Requirements	Citations (40 CFR)
Earth-Covered Magazines (continued)	<ul style="list-style-type: none">- to withstand movement activities that occur in the unit; and• 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.	264.1201(b)(1)(ii)(C) 264.1201(b)(1)(iii)
Above-Ground Magazines	<p>Provide information sufficient to demonstrate that the unit will be located and designed so as to:</p> <ul style="list-style-type: none">• minimize the propagation of an explosion to adjacent units; and• minimize other effects of any explosion.	264.1201(b)(2)
Outdoor or Open Storage Areas	<p>Provide information sufficient to demonstrate that the unit will be located and designed so as to:</p> <ul style="list-style-type: none">• Minimize the propagation of an explosion to adjacent units; and• Minimize other effects of any explosion.	264.1201(b)(3)



Hazard Prevention Procedures and Contingency Plan

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...	

The contents of a Standard Operating Procedure applicable to a hazardous waste munitions and explosives storage unit may be provided in the Part B permit application in lieu of hazard prevention and contingency plan procedures that would be required for other types of units.

All RCRA Part B permit applications must include information concerning procedures that will be implemented at the permitted waste management units to prevent hazards. As indicated in submodule 2-2-2-5 of the *RCRA Permitting Guide*, such information must describe: security procedures and equipment; inspection schedules; general hazard-prevention procedures, structures, and equipment; and precautions to prevent the reaction of ignitable, reactive, and incompatible wastes. Also, a contingency plan must be provided, as discussed in submodule 2-2-2-6 of the *RCRA Permitting Guide*. The *Military Munitions Rule* does not alter these information requirements for units managing hazardous waste munitions and explosives. However, 40 CFR 264.1201(c) indicates that hazardous waste munitions and explosives stored in a hazardous waste munitions and explosives storage unit must be stored in accordance with a Standard Operating Procedure (SOP) specifying procedures that ensure safety, security, and environmental protection; 40 CFR 264.1201(c) further states that if such SOP procedures would serve the same purpose as procedures that would otherwise be developed to meet the RCRA security and equipment requirements, general hazard prevention requirements, requirements to prevent waste reactions, and contingency plan requirements, then the SOP procedures may replace the RCRA procedures. Therefore, in a RCRA Part B permit application for a hazardous waste munitions and explosives storage unit, information describing the content of the SOP procedures may be substituted, as appropriate, for the information that would otherwise be presented to meet the requirements listed in the following exhibits in the *RCRA Permitting Guide*:

- Exhibit 2-20: Information Requirements for Security Procedures and Equipment
- Exhibit 2-22: Information Requirements for Preparedness and Prevention
- Exhibit 2-23: Information Requirements for General Hazard Prevention
- Exhibit 2-24: Information Requirements for Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes
- Exhibit 2-25: Contingency Plan Information Requirements.



In addition, information must be provided to demonstrate that hazardous waste munitions and explosives in a hazardous waste munitions and explosives storage unit will be packaged to ensure safety in handling and storage [40 CFR 264.1201(d)].

Inspection Schedules

Regarding inspection schedules, the RCRA Part B permit application for a hazardous waste munitions and explosives storage unit must present the information listed in Exhibit 2.

EXHIBIT 2: Inspection Schedule Requirements for Hazardous Waste Munitions and Explosive Storage Units

Information Requirements	Citations (40 CFR)
Provide a copy of the general inspection schedule.	270.14(b)(5) and 264.15(b)
The schedule must identify the types of problems that are to be looked for during the inspection.	264.15(b)(3)
The frequency of inspection for each item on the schedule should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if a problem goes undetected between inspections.	265.15(b)(4)
Areas subject to spills must be inspected daily when in use.	265.15(b)(4)
Hazardous waste munitions and explosives must be inventoried at least annually.	264.1201(e)
Hazardous waste munitions and explosives and their storage units must be inspected and monitored as necessary to ensure explosives safety and to ensure that no contaminants migrate out of the unit.	264.1201(f)



Closure Plan

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•••	

All RCRA Part B permit applications must include information concerning closure plans for the waste management units being permitted. Such information requirements, which were previously established in 40 CFR part 264 for tanks, containers, and containment buildings, are discussed in submodule 2-2-2-8 of the *RCRA Permitting Guide*. Exhibit 3 summarizes the closure plan information that must be provided in a RCRA Part B permit application for hazardous waste munitions and explosives storage units.

EXHIBIT 3: Closure Plan Information Requirements for Hazardous Waste Munitions and Explosive Storage Units

Information Requirements	Citations (40 CFR)
The closure plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life.	264.112(b)
The closure plan must include the following: <ul style="list-style-type: none"> • A description of how each hazardous waste management unit will be closed • A description of how final closure of the facility will be conducted, and identify the maximum extent of operations that will be unclosed [sic] during the active life of the facility • An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a description of the methods used to remove, transport, treat, store, or dispose of all hazardous wastes • A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils • A detailed description of other activities necessary during the closure period • A schedule for closure of each hazardous waste management unit and for final closure of the facility 	264.112(b)(1) and 264.111 264.112(b)(2) and 264.111 264.112(b)(3) 264.112(b)(4) 264.112(b)(5) 264.112(b)(6)
The closure plan must describe how all waste residues, contaminated containment system components, contaminated subsoils, and structure and equipment contaminated with waste will be removed from magazines or units, or will be decontaminated and managed as hazardous waste [unless 40 CFR 261.3(d) applies (see Note 1)].	264.1202(a)

NOTE:

1. 40 CFR 261.3(d) provides criteria for excluding hazardous waste treatment residues and other derived-from hazardous wastes from the definition of hazardous waste.



No post-closure care information is required for hazardous waste munitions and explosives storage units.

Because hazardous waste munitions and explosives storage units covered by the new subpart EE to 40 CFR part 264 are not normally disposal units, no information on post-closure care would be required in the RCRA Part B permit application for such units. Notwithstanding, 40 CFR 264.1202(b) provides that a hazardous waste munitions and explosives storage unit must be closed as a landfill and that post-closure care must be initiated if, after removing or decontaminating all residues and making all reasonable efforts to remove or decontaminate contaminated components, subsoils, structures, and equipment, it is discovered that all contaminated subsoils cannot be practicably removed.

Conditional Exemption for Certain In-Storage Hazardous Waste Military Munitions

Conditional exemption for certain in-storage hazardous waste military munitions is **not** available to DOE hazardous waste munitions.

The *Military Munitions Rule* amended 40 CFR part 266 by, among other things, adding 40 CFR 266.205, which provides a conditional exemption from RCRA hazardous waste regulations for certain in-storage, hazardous waste military munitions. In order to qualify for the exemption, the waste military munitions *must not be* chemical agents or chemical munitions *and must be* subject to DDESB storage requirements and stored in accordance with those requirements, regardless of the type of unit used for the storage. Because DOE is not subject to the jurisdiction of the DDESB, the conditional exemption is **not** available to any DOE hazardous waste military munitions. Therefore DOE's hazardous waste military munitions, chemical or otherwise, are governed by RCRA hazardous waste requirements, including the requirement to obtain a RCRA permit for storage units, whether such units are tanks, containers, or containment buildings for which 40 CFR part 264 or 265 previously established design and operating standards or are hazardous waste munitions and explosives storage units for which design and operating standards are established in 40 CFR part 264, subpart EE, or part 265, subpart EE, by the *Military Munitions Rule*. Nevertheless, the existing *DOE Explosives Safety Manual*⁶ incorporates by reference portions of the DDESB standards that

⁶ DOE M 440.1-1 (formerly DOE/EV/06914), Rev. 8 (March 29, 1996)



were the basis for the new subpart EE standards. Therefore, major changes in the way the DOE manages munitions waste at its facilities are not expected to be necessary in order to comply with RCRA hazardous waste regulations and obtain RCRA permits.



3: Emergency Permitting

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- 3: Managing RCRA Permitting**
- 4: RCRA Permit Modification
- 5: Special Forms of Permits**
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Immediate responses to explosives or munitions emergencies are exempt from RCRA permitting requirements and substantive TSD facility design and operating standards.

The applicability of emergency permitting is covered in chapter 3, “Managing RCRA Permitting” (submodule 3-1-1: Does the TSD unit require a RCRA permit?) and chapter 5, “Special Forms of Permits” (Module 5-1: Emergency Permits), of the *RCRA Permitting Guide*.

The RCRA requires permits for hazardous waste TSD units. As stated in submodule 3-1-1 of the *RCRA Permitting Guide*, however, even if DOE determines that a new or modified waste management unit will be a hazardous waste TSD unit, a RCRA permit may not be required if the proposed unit is exempt. For ease of reference, Appendix C presents a list of exempt units.

Prior to issuance of the *Military Munitions Rule*, 40 CFR 270.1(c)(3)(i) already exempted from RCRA permitting requirements those treatment or containment activities conducted during immediate response to the discharge of hazardous waste, the imminent and substantial threat of a discharge of hazardous waste, or the discharge of a material that became a hazardous waste upon discharge. Existing regulations also exempted treatment or containment activities during emergency responses from the TSD facility design and operating standards in 40 CFR parts 264 (applicable to permitted facilities) and 265 (applicable to interim status facilities). Under regulations enacted by the *Military Munitions Rule*, the EPA codified and clarified its long-standing policy that immediate responses to explosives or munitions emergencies are treated like other immediate responses to a discharge or imminent and substantial threat of discharge of a hazardous waste, provided that the threat was determined to exist by an explosives or munitions emergency response specialist [40 CFR 264.1(g)(8)(i)(D), 265.1(c)(11)(i)(D), and 270.1(c)(3)(i)(D)]. Therefore, explosives or munitions emergency response activities, including those involving military munitions, are exempt from RCRA permitting requirements and from substantive design and operating requirements. Examples of explosives or munitions emergency response activities include in-place, render-safe procedures; treatment or destruction of explosives or munitions;



and/or transporting explosives or munitions to another location to be rendered safe, treated, or destroyed.

If time permits, personnel responding to an explosives or munitions emergency should consult the responsible regulatory agency before acting without a RCRA permit.

Notwithstanding the RCRA permitting exemption granted to explosives or munitions emergency response activities, according to the preamble of the *Military Munitions Rule*, if an immediate response is clearly not necessary to address the situation and if a response can be delayed without compromising safety or increasing the risks posed to life, property, health, or the environment, the responding personnel, if time permits, should consult with the responsible regulatory agency regarding the appropriate course of action (e.g., whether or not to seek a RCRA emergency permit under 40 CFR 270.61 or a regular facility permit under 40 CFR part 270) (62 FR 6622, 6643, column 1; February 12, 1997). Situations where an immediate response is needed would include instances where either the public or property is potentially threatened by an explosion. Situations where an immediate response is clearly not necessary would include instances where neither the public nor property is threatened by a potential explosion (e.g., in remote areas such as some former ranges or where immediate action is not necessary to prevent explosion or exposure). In these cases, the EPA believes there is time to consult with the responsible regulatory agency on how to proceed (62 FR 6622, 6643; February 12, 1997).

Other emergency response provisions

Other provisions related to emergency responses that the *Military Munitions Rule* adopts include the following:

- (1) a requirement that, in the case of emergency responses involving military munitions, the organizational unit to which the responding military emergency response specialist belongs must maintain records of the response for three years [40 CFR 264.1(g)(8)(iv); 40 CFR 265.1(c)(11)(iv); 40 CFR 270.1(c)(3)(iii)];
- (2) an exemption from requirements applicable to generators of hazardous waste, including the requirement to prepare shipping manifests, for persons responding to an explosives or munitions emergency [40 CFR 262.10(i)]; and



(3) an exemption from requirements applicable to transporters of hazardous waste, including the requirement to have a RCRA identification number, for transportation during an explosives or munitions emergency response [40 CFR 263.10(e)].



4: RCRA Permit Modifications

The RCRA permit modification process was not changed by the *Military Munitions Rule*.

Because previously nonhazardous waste munitions may now be regulated as hazardous wastes, RCRA permit modifications could be necessary at some DOE facilities that already hold RCRA permits. The *Military Munitions Rule* did not change the process by which existing RCRA permits are modified when previously nonhazardous materials become regulated hazardous wastes [see 40 CFR 270.41(a)(3) and 40 CFR 124.5].

Situations likely to trigger RCRA permit modifications at DOE facilities

The most likely situations resulting from the *Military Munitions Rule* that would trigger the need for a RCRA permit modification at an already-permitted DOE facility would involve the addition of one or more hazardous waste munitions management units or the designation of one or more existing, previously unregulated, munitions management units (e.g., tanks, containers, containment buildings or storage units) as hazardous waste munitions management units. The type of DOE-initiated permit modification necessary to support these actions would be a Class 2 or Class 3 permit modification (see chapter 4, submodules 4-1-2 and 4-1-3, of the *RCRA Permitting Guide*).

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7: Integration with Other Laws	

Other situations that would trigger RCRA permit modifications

A less likely situation that could trigger the need for a RCRA permit modification at a DOE facility involves management of waste military munitions received from off-site. Under the *Military Munitions Rule*, the holder of a RCRA permit that prohibits receipt of off-site hazardous waste who wants to continue accepting previously nonhazardous waste military munitions from off-site must submit a Class 1 permit modification request on or before the date that such off-site waste military munitions become subject to hazardous waste regulatory requirements. The Class 1 permit modification request would propose to amend or remove the permit provision restricting receipt of off-site hazardous waste munitions. As long as the Class 1 permit modification request is filed in a timely manner the facility would have 180 days from the effective date of regulations subjecting the waste military munitions being received to hazardous waste regulatory requirements to submit a complete Class 2 permit modification request (i.e., until February 12, 1998 in States without RCRA base authorization or until 180 days from the effective date of authorized State regulations



implementing the *Military Munitions Rule* in States with RCRA base authorization). Provided the Class 2 permit modification request is filed in a timely manner the facility would be allowed to continue accepting off-site hazardous waste military munitions until a final decision is made on the Class 2 permit modification request [40 CFR 270.42(h)].

New 40 CFR 270.42(h) applies only to modification of an existing permit condition.

The new section 270.42(h) applies only to the modification of an existing RCRA permit condition that prohibits receipt of off-site hazardous wastes. The primary purpose of the new section is to minimize disruption of DOD munitions management by allowing RCRA-permitted facilities to continue accepting waste military munitions that are newly designated as hazardous wastes, in spite of prior permit conditions that would otherwise prohibit such activity, until the prior conditions can be changed. The new section 270.42(h) does not apply to permit modifications that would allow a facility with a RCRA permit to begin accepting waste military munitions if the facility had not been doing so before the effective date of the *Military Munitions Rule*.



5: Federal/State Authority and Implementation

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Module 6-1 of the *RCRA Permitting Guide* explains the statutory structure whereby the EPA grants States and Territories authorization to implement the RCRA Subtitle C hazardous waste program within their boundaries. For ease of reference, module 6-1 is reproduced in this document as Appendix D. As is more fully explained there, when the EPA finalizes federal RCRA hazardous waste regulations under authority not granted by the HSWA, the EPA implements such regulations in States without RCRA base authorization.⁷ However, in a State with RCRA base authorization, the regulations are not implemented unless and until the State adopts them as State law. States with RCRA base authorization are required to change their programs to be consistent with federal regulations when the EPA promulgates non-HSWA, federal RCRA standards that are more stringent or broader in scope than existing federal standards (see 40 CFR 271.21). However, States with base authorization are not required to make changes when the EPA promulgates non-HSWA, federal RCRA standards that are less stringent than existing requirements or that are neither more nor less stringent.

Military Munitions Rule regulations are not enforceable in authorized States unless and until the State adopts new regulations.

The *Military Munitions Rule* was promulgated pursuant to the Solid Waste Disposal Act of 1965, as amended by the RCRA and the FFCAct. There was no reliance on the legal authority granted by the HSWA. Therefore, the regulations finalized by the *Military Munitions Rule* are not federally enforceable in any State with RCRA base authorization unless and until the State adopts implementing legislation and/or regulations, and the EPA approves them.

The provisions of the *Military Munitions Rule* that the EPA has determined to be more stringent than existing federal requirements, thus making State adoption mandatory, are the following:

⁷ Under RCRA section 3006, a State that applies and is found qualified by the EPA to do so can take over administration and enforcement within the State’s boundaries of the RCRA Subtitle C program. When the EPA authorizes a State in this manner to administer and enforce the portion of the RCRA Subtitle C program that is sanctioned by RCRA provisions predating HSWA, such authorization is referred to as “RCRA base authorization.”



(1) the requirement that military personnel responding to immediate threats involving military munitions maintain records of the response [40 CFR 264.1(g)(8)(iv); 40 CFR 265.1(c)(11)(iv); and 40 CFR 270.1(c)(3)(iii)] (see 62 FR 6648, column 3); and

(2) the requirement that military installations promptly render safe and/or retrieve munitions fired off-range, or keep a record of the event [40 CFR 266.202(d)].

The remainder of the provisions adopted by the *Military Munitions Rule* have been determined by the EPA to be either less stringent or neither more stringent nor less stringent than current regulatory requirements. Therefore, States with RCRA base authorization have the option to ignore them. Notwithstanding, the preamble of the *Military Munitions Rule* strongly urged States to adopt all aspects of the *Rule* (including both clarifying and less stringent sections) (see 62 FR 6649, column 1).

APPENDIX A: *Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties; Final Rule*
(62 FR 6622 - 6657; February 12, 1997)

Federal Register

Wednesday
February 12, 1997

Part II

**Environmental
Protection Agency**

40 CFR Part 260, et al.
**Military Munitions Rule: Hazardous Waste
Identification and Management;
Explosives Emergencies; Manifest
Exemption for Transport of Hazardous
Waste on Right-of-Ways on Contiguous
Properties; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 260, 261, 262, 263, 264, 265, 266, and 270****[EPA 530-Z-95-013; FRL-5686-4]****RIN 2050-AD90****Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties****AGENCY:** Environmental Protection Agency.**ACTION:** Final rule.

SUMMARY: In response to section 107 of the Federal Facility Compliance Act (FFCA) of 1992, EPA is today finalizing a rule that identifies when conventional and chemical military munitions become a hazardous waste under the Resource Conservation and Recovery Act (RCRA), and that provides for the safe storage and transport of such waste. Today's final rule also amends existing regulations regarding emergency responses involving both military and non-military munitions and explosives. This rule also exempts all generators and transporters of hazardous waste, not just the military, from the RCRA manifest for the transportation of hazardous waste on public or private right-of-ways on or along the border of contiguous properties, under the control of the same person, regardless of whether the contiguous properties are divided by right-of-ways. This revision is expected to reduce the paperwork burden, for hazardous waste generators whose property is divided by right-of-ways without loss in protection of public health.

EFFECTIVE DATE: This rule is effective on August 12, 1997.

ADDRESSES: The public docket for this rulemaking is available for public inspection at EPA's RCRA Docket, located at Crystal Gateway, First Floor, 1235 Jefferson Davis Highway, Arlington, Virginia. The regulatory docket for this final rule contains a number of background materials. To obtain a list of these items, contact the RCRA Docket at 703-603-9230 and request the list of references in EPA Docket #F-97-MMF-FFFFF.

FOR FURTHER INFORMATION CONTACT: The RCRA Hotline between 9:00a.m.-6:00 p.m. EST, toll-free, at 800-424-9346; 703-412-9810 from Government phones or if in the Washington, D.C. local calling area; or 800-553-7672 for the

hearing impaired. For more detailed information on specific aspects of the rulemaking, contact Ken Shuster by calling 703-308-8759 or by writing, to U.S. Environmental Protection Agency, Office of Solid Waste, Permits and State Programs Division, 401 M St., S.W. (Mailcode 5303W), Washington, D.C. 20460.

SUPPLEMENTARY INFORMATION: This rule is available on the Internet. Please follow these instructions to access the rule electronically:

From the World Wide Web (WWW), type <http://www.epa.gov/epaoswer>, then select option for Rules and Regulations.

This report can also be accessed from the main EPA Gopher menu in the directory: EPA Offices and Regions/Office of Solid Waste and Emergency Response (OSWER)/Office of Solid Waste (RCRA)/Hazardous Waste Gopher: gopher.epa.gov
Dial-up: 919-558-0335
FTP: [ftp.epa.gov](ftp://ftp.epa.gov)
Login: name
Password: Your Internet address
Files are located in /pub/gopher/OSWRCRA/hazwaste

The official record for this action is kept in a paper format. Accordingly, EPA has transferred all comments received into paper form and placed them into the official record, with all the comments received in writing. The official record is maintained at the address in the "ADDRESSES" section at the beginning of this document.

EPA's responses to comments have been incorporated in a "Response to Comments" document, which has been placed into the official record for this rulemaking. The major comments and responses are discussed in the Response to Comment sections of this preamble.

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- IV. Description of the Final Rule and Responses to Comments
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- H. Military Munitions On Closed and Transferred Ranges
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I. Legal Authority

These regulations are being finalized under the authority of sections 2002, 3001-3007 (including 3004(y)), 3010, 7003, and 7004 of the Solid Waste Disposal Act of 1965, as amended, including amendments by RCRA and the FFCA (42 U.S.C. 6912, 6921-7, 6930, and 6973-4).

II. Background

Section 107 of the Federal Facility Compliance Act (FFCA) of 1992

amended the Resource Conservation and Recovery Act (RCRA) by adding a new section 3004(y) that requires the U.S. Environmental Protection Agency (EPA) to propose, after consulting with the Department of Defense (DOD) and appropriate State officials, and then to finalize regulations that identify when conventional and chemical military munitions become hazardous waste subject to Subtitle C of RCRA, and that provide for the safe storage and transportation of such waste. Such regulations are to assure the protection of human health and the environment. This final rule responds to this Congressional mandate. The Agency consulted with DOD and appropriate State representatives prior to the promulgation of this rule, as the statute requires. Records of these meetings and information provided to EPA have been included in the official docket of this final action.

EPA proposed the rule on November 8, 1995 (60 FR 56468). The public comment period ended on February 2, 1996. As mentioned in the proposal, the Agency focused on several key issues that have arisen in the application of RCRA to military munitions, or that have been raised by DOD, States, or citizen groups. The six major issues raised during the development of the proposed rule and addressed in today's final rule are the following: (1) At what point does an unused munition become a RCRA "hazardous waste," potentially subject to RCRA permitting and technical management standards? Specifically, at what point in the process do unused munitions slated for destruction first become subject to RCRA? (2) Should RCRA hazardous waste management standards apply to the use of munitions in weapons testing or military training exercises? (3) How do RCRA hazardous waste regulations apply to emergencies involving military munitions and explosives and non-military explosives? (4) In what way (if any) do RCRA requirements apply to unexploded ordnance and environmental contamination at military ranges, especially ranges that are closed or transferred? (5) Once it has been determined that a munition is a hazardous waste for regulatory purposes, what management standards are needed to ensure safe transportation and storage, while protecting human health and the environment? (6) Should the definition of "on-site" be revised to simplify compliance with RCRA manifest standards at contiguous facilities cut by right-of-ways?

In developing the final rule, EPA reviewed the comments received from 124 organizations and individuals on

the proposed rule, including DOD, other Federal agencies, States, universities, associations, corporations, and citizen groups. These comments can be found in the official docket for this final rule. Responses to significant comments can be found in the preamble of today's rule.

In addressing each of the above six issues, EPA proposed (in the November 8, 1995 Federal Register) an option followed in some cases by a discussion of "alternative options" on which the Agency requested comment. Because of the length and complexity of the issues and options proposed, the Agency is not revisiting or summarizing these in this final rule preamble to any great extent. The reader may refer to the proposed notice for a detailed account of the original proposal. Instead, this final rule preamble expands on the discussion of the selected alternative, which appeared in the proposal, in order to provide additional discussion of the finally selected option. Following that discussion is a response to comments section for each topic. Together, the purpose of these discussions is to explain and clarify the Agency's final direction.

III. Summary of Significant Changes From Proposed Rule

Following is a summary of the significant changes to the proposed rule in today's final rule. Where the Agency proposed multiple options, this summary identifies those alternatives that EPA has incorporated into today's final rule.

The final rule consolidates the requirements applicable solely to military munitions in a new subpart M under 40 CFR Part 266.

The applicability of proposed 40 CFR 264 and 265 subparts EE for storage of waste munitions and explosives is being expanded to be available to owners and operators of all units storing such wastes, not just the military. In addition, EPA has decided to finalize the second alternative discussed in the storage section of the proposed preamble. This is the conditional exemption alternative, under which non-chemical waste military munitions that otherwise meet the definition of "hazardous waste" are not regulated under RCRA as a hazardous waste so long as they meet all of the conditions set forth in § 266.205. Today's rule also finalizes the conditional exemption approach for transportation of waste munitions when shipped between military installations in accordance with DOD standards.

The Agency is today postponing final action on the status of military munitions left on closed or transferred ranges. This will enable the Agency to

thoroughly evaluate the numerous public comments as well as the DOD Range Rule which is currently under development.

Instead of modifying the definition of "on-site," as proposed, the final rule revises 40 CFR Part 262 to exempt from the RCRA manifest requirements shipments on right-of-ways on (or bordering) contiguous properties under the control of the same person, where the property is cut by right-of-ways. The title for today's rule also reflects this change.

IV. Description of the Final Rule and Responses to Comments

This rule finalizes the proposed "Military Munitions Rule: Hazardous Waste Identification and Management; Explosive Emergencies; Redefinition of On-Site" (60 FR 56468, November 8, 1995). This section explains the Agency's final action, based on the rationale presented in the proposal and the Agency's review of the public comments and further examination of the proposed options.

To facilitate the reader's review of this final rule and to streamline the overall structure, this section also contains the Agency's responses to the most significant comments after each of the topics discussed. If a particular section does not contain a response to comment section, then either the Agency did not receive comment on this topic or it has chosen to place its response in the background document entitled Military Munitions Rule Response to Comments Background Document. This background document contains a complete discussion of the Agency's responses to comments and can be found in the docket for this rulemaking. This document provides a complete record of the public comments followed by the Agency's responses. To obtain a copy, please refer to the "ADDRESSES" section of this preamble.

A. Description of Major Affected Parties

Since the primary focus of this final rule is military munitions, the major regulated parties are the U.S. Departments of Defense, Energy, and Transportation (U.S. Coast Guard) and the National Guard (the inclusion of these is discussed below in section B). Even so, various sections of the rule are expected to impact a number of other groups, as well. The emergency response portions of this rule apply to non-military munitions and explosives and non-military personnel as well as military. In addition, the 40 CFR 264 and 265 subpart EE standards for waste munitions and explosives are also available for use by non-military

entities. The exemption from manifest requirements for transportation along public roads on contiguous properties owned by the same person that are divided by a public right-of-way, applies to non-military as well as military wastes and properties. The rest of the proposed rule was developed primarily for the military, based, in part, on the EPA's review of RCRA and current military munitions management standards and practices.

Response to Comments

In response to commenter inquiries and suggestions regarding the applicability of the proposed provisions (primarily storage standards and range standards), EPA is clarifying and modifying certain provisions to accommodate some non-military situations. For example, one commenter suggested that munitions or explosives controlled by other government agencies, e.g., NASA, should be included within the scope of the rulemaking if those agencies have comparable storage standards. Other commenters suggested that EPA clarify that the final rule applies to military contractors to the extent that they comply with the appropriate DOD requirements. Further, for military contractors, where the distinction between military munitions and munitions produced for the private sector or other public sector organizations is unclear (e.g., the same production lines and storage units are used), the final rule should clarify that it also applies to waste materials associated with munitions produced for the private or public sector to the extent the management of these wastes also complies with the appropriate DOD requirements. Several commenters suggested that subpart EE should be made available for non-military and private concerns.

In response to these comments, EPA has retained the subpart EE standards in 40 CFR Parts 264 and 265, and has expanded their availability to all munitions and explosives, not just military, in order to make subpart EE available to facilities that store non-military munitions or explosives and facilities that are not subject to Department of Defense Explosive Safety Board (DDESB) jurisdiction. Thus, commercial/private ventures that operate in compliance with DDESB storage requirements and that also produce munitions for the private sector that are stored in the same manner, as well as all commercial and private ventures that store non-military munitions or explosives, regardless of compliance with the DDESB standards,

may avail themselves of subpart EE for all such munitions/explosives wastes. Similarly, other Federal agencies (e.g., National Aeronautical and Space Administration (NASA), Federal Bureau of Investigations (FBI), and the Bureau of Alcohol, Tobacco, and Firearms (BATF)) that store waste munitions and explosives may also apply for a storage permit under subpart EE. In those cases where the owner/operator's practices are comparable or identical to the DDESB-prescribed practices, they could expect to satisfy the subpart EE standards.

B. Scope, Applicability, and Definition of Military Munitions

The definition of "military munitions," finalized in 40 CFR 260.10, establishes the scope for much of today's rule. In 40 CFR part 266, subpart M, today's rule establishes special procedures and management standards for waste military munitions. The term "military munitions" is defined to include all types of both conventional and chemical ammunition products and their components, produced by or for the military for national defense and security (including munitions produced by other parties under contract to or acting as an agent for DOD—in the case of Government Owned/Contractor Operated [GOCO] operations). This definition clarifies, as it did in the proposal, that military munitions may be under the control of the Department of Energy (DOE), even though DOE is not usually considered to be within the "military." DOE maintains the nation's nuclear arsenal for the military, and maintains munitions and personnel to protect the arsenal. The definition clarifies that military munitions may also be under the control of the U.S. Coast Guard (Department of Transportation), and the National Guard (which includes the State National Guard), as well as the Department of Defense and its various components. The U.S. Coast Guard and National Guard are generally considered to be within the military. Chemical agents and munitions are given the same definition as in 50 U.S.C. section 1521(j)(1).

For purposes of today's rule, the term "military" is also meant to include DOE and the other organizations listed above, as well as other parties under contract or acting as an agent for DOD, as long as they are managing "military munitions." Because the term "military" appears in the rule without the term "munition," the term "military" has been defined in section 266.201 to make it clear that these parties are included with the other

organizations listed above in the scope of the various provisions of today's rule.

The definition of "military munitions" lists a number of examples of military munitions components, including propellants, explosives, pyrotechnics, bulk chemical warfare and riot control agents, smokes, incendiaries, warheads, cluster munitions and dispensers, and depth and demolition charges; and product examples, including rockets, guided and ballistic missiles, bombs, mines, grenades, mortar rounds, artillery and small arms ammunition, torpedoes, and chemical munitions. The definition excludes wholly inert items and improvised explosive devices, for example, home made bombs (which are non-military)¹. The definition also excludes nuclear weapons, nuclear devices, and non-nuclear components thereof (including subparts of components) managed under DOE's nuclear weapons program, which still must have necessary sanitization² operations completed thereon under the requirements of the Atomic Energy Act (AEA) of 1954. The phrase regarding "sanitization" has been added to the definition of "military munitions" to make it clear that any non-nuclear components of nuclear weapons or devices that do not require sanitization under the AEA are "military munitions" under today's rule. A phrase has also been added to the end of the definition of "military munitions" to clarify that upon completion of the sanitization of non-nuclear components (or component subparts) of nuclear weapons or devices, the remaining materials are considered "military munitions" that, thereafter, are covered by subpart M of Part 266 of today's rule. Any component of a nuclear weapon or device that is source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended, would not be included in this definition, nor would they otherwise be subject to RCRA requirements, since these materials are excluded from the statutory definition of solid waste under section 1004(27).

EPA considered including in this rule all of the non-nuclear components of

¹ Improvised explosive devices, or IEDs, are non-standard explosive devices made from either military or non-military materials by non-military personnel.

² Sanitization means the irreversible modification or destruction of a component or part of a component of a nuclear weapon, device, trainer, or test assembly as necessary to prevent revealing classified or otherwise controlled information (e.g., unclassified information that is restricted from the standpoint of export control because of its significance for nuclear explosive's research, development, fabrication, or proliferation purposes) as required by the Atomic Energy Act of 1954, as amended.

nuclear weapons which are managed by DOE under its responsibilities for the Nation's nuclear weapons program as provided in the AEA of 1954 (U.S.C. section 2011 *et seq.*). As the Agency stated in its proposal, an analysis of the legislative history associated with section 107 resulted in the conclusion that the FFCA does not contemplate the inclusion of nuclear weapons within the scope of this rule. The statutory language and legislative history of section 107 clearly demonstrate the intent of Congress that EPA develop regulations that address conventional and chemical munitions with no mention being made of nuclear weapons or their components. Furthermore, EPA recognizes that DOE's practices and procedures for the management of nuclear weapons under the AEA, as well as the potential impacts on DOE operations, are significantly different from those of DOD pertaining to conventional and chemical munitions that are addressed in this rule. As a consequence, EPA has concluded that non-nuclear components of nuclear weapons are excluded from the definition of "military munition" until all necessary AEA required sanitization has been completed. After sanitization, EPA believes these materials are no different from other munitions managed for national defense, and, therefore, are included within the scope of this rule. Under today's rule, however, conventional or chemical munitions that DOE produces or manages for the military, or maintains and uses (including for training purposes) to protect the nuclear arsenal, are "military munitions" under this final rule.

Response to Comments

The Agency received a number of comments regarding the extent to which this rule should or should not apply to other government agencies and to the private sector, as well as the military. In addition to military munitions under the control of DOD, DOE, the U.S. Coast Guard, and the National Guard, the rule also applies to other parties (e.g., a private company) producing or managing military munitions under contract to, or as an agent for, DOD or these other agencies. Since it is clear in the definition of "military munitions" that the definition applies to all military munitions regardless of who is managing them, no change has been made to the rule.

Comments were also received on specific terms in the definition or the need for further clarifications to the proposed definition of "military munitions." Some of these comments are reflected in the final definition of

"military munitions" at 40 CFR part 260.10. For example, the final definition reflects the comments that "mortar rounds" and "artillery ammunition" are more accurate than "mortar" and "artillery," which are the weapons, not the ammunition. On the other hand, "napalm" was not added to the definition because it is covered by the term "incendiaries."

C. Separate CFR Part for Military Munitions

In the proposed preamble, EPA solicited comment on DOD's request that EPA create a separate part or subpart for military munitions in order to consolidate and simplify the regulations for the military, based on the argument that this would increase understanding and thereby enhance compliance. In today's rule, EPA has consolidated all the requirements solely applicable to military munitions in 40 CFR Part 266 subpart M, with appropriate cross references. Requirements applicable but not unique to military munitions (e.g., treatment and disposal standards) are retained elsewhere and referenced in § 266.200(b) of subpart M. EPA recognizes that some of the cross-references in subpart M are redundant with § 266.200(b), but has included them for clarity.

Response to Comments

The creation of a separate part for military munitions was supported by several commenters, in addition to DOD. EPA agrees with the commenters that there is a benefit to placing all requirements pertaining to military munitions in the same CFR part, given DOD's nationwide presence, and logistical and operational needs. The Agency also agrees that consolidation of the standards for waste military munitions could simplify integration by DOD of these rules with the DDESB and the Service-specific requirements for the management of all military munitions (including waste munitions). This consolidation should facilitate DOD's compliance as well as State implementation and oversight activities. In proposing this option, DOD recommended that the standards be placed in 40 CFR Part 269 (which has already been taken by another rulemaking proposal). In supporting this option, EPA has decided to place it in 40 CFR Part 266, which is being used to address special types of waste and waste management facilities.

D. Uniform National Standards

In the proposed preamble, EPA asked for comment on an alternative that

would have prohibited States from enforcing broader or more stringent requirements with respect to military munitions. EPA has not adopted this approach in today's rule.

Response to Comments

The Agency received an overwhelming response to this proposed alternative. While EPA recognizes DOD's need for national consistency in managing its munitions, including waste munitions, given DOD's national defense mission, nation-wide presence, and logistical and operational needs, the Agency has decided not to depart from the standard RCRA approach in today's rulemaking. Therefore, today's rule maintains the standard Federal-State relationship embodied in other parts of the RCRA program. While EPA strongly encourages States to adopt the terms of today's rule, it acknowledges that States may adopt requirements with respect to military munitions that are more stringent or broader in scope than the Federal requirements. See RCRA section 3006 and 3009.

E. When Military Munitions Become a Solid Waste

RCRA section 3004(y) requires EPA to identify when military munitions become hazardous waste for purposes of Subtitle C of RCRA. Under the RCRA regulations, materials are considered to be "hazardous waste," for regulatory purposes, if the following criteria are met: (1) the material is a "solid waste," as defined in 40 CFR 261.2, and (2) the material meets the definition of "hazardous waste" in 40 CFR 261.3. Today's final action, in keeping with the original proposal, focuses on the first point—clarifying when munitions become a solid waste.

Under the existing provisions of 40 CFR 261.2 of the RCRA regulations, "solid waste" is defined as "discarded material." Section 261.2 (a) through (f) provides a detailed regulatory definition of this term. In particular, § 261.2(b) defines "discarded material" as materials that are abandoned by being disposed of; burned or incinerated; or accumulated, stored, or treated (but not recycled) before or in lieu of being disposed of, burned or incinerated. Section 261.2(c) then describes under which circumstances recycled materials are solid wastes (e.g., used in a manner constituting disposal or accumulated speculatively). Today's final action adds a new provision in § 261.2(a)(2) for military munitions that refers to § 266.202, which specifies how the regulatory term "discarded material" applies to unused and used military munitions. The following sections of the

preamble discuss the regulatory definition of solid waste in the context of three specific categories of military munitions: (1) unused munitions, (2) munitions being used for their intended purpose, and (3) used or fired munitions.

F. When Unused Military Munitions Become a Solid Waste

This rule finalizes proposed 40 CFR 261.2(g)(1)(i)–(iv) in 40 CFR Part 266, subpart M, § 266.202(b)(1)–(4). These paragraphs identify the specific circumstances under which an unused munition is considered to be solid waste for regulatory purposes. An unused military munition becomes a solid waste when: (1) the unused munition is “abandoned by being disposed of, burned, or incinerated, or treated prior to disposal”; (2) the unused munition is removed from storage for purposes of disposal or treatment prior to disposal; (3) the unused munition is deteriorated, leaking, or damaged to the point that it can no longer be returned to serviceable condition, and cannot be reasonably recycled or used for other purposes (except, of course, recycling that is like “discard,” i.e., placement on the ground, unless such placement is the result of use as a munition, or burning for energy recovery); or (4) the munition has been determined by an authorized military official to be a solid waste.

1. Section 266.202(b)(1)—Munitions That Have Been or Are Abandoned by Being Disposed of, Burned, or Otherwise Treated Prior to Disposal

Section 266.202(b)(1), proposed as § 261.2(g)(1)(i), specifies that an unused munition becomes discarded, and, therefore, a solid waste for regulatory purposes when it is or has been abandoned by being disposed of (e.g., buried or landfilled), burned or incinerated, or otherwise treated prior to disposal. Thus, open burning/open detonation or incineration of unused munitions (except when done during an emergency response or during training in use of a product) is regulated under the RCRA Subtitle C standards for hazardous waste, including the 40 CFR Part 270 permit requirements (assuming the waste munitions meet the § 261.3 definition of “hazardous waste”). Similarly, unused munitions that were buried or landfilled in the past are considered abandoned, and, therefore, are solid waste, and, if hazardous, they would become subject to applicable Subtitle C regulation when unearthed and further managed. EPA emphasizes, as it did in the proposed rule, that this provision will not bring use of military munitions for their intended purposes—

e.g., the firing of military rounds—within the regulatory scope of RCRA. The use of a product for its intended purpose (in this case a military munition), in EPA’s view, is not a waste management activity and does not constitute abandonment or disposal for the purposes of § 266.202(b)(1).

2. Section 266.202(b)(2)—Munitions Removed From Storage for the Purposes of Treatment or Disposal

Section 266.202(b)(2), proposed as § 261.2(g)(1)(ii), specifies that a military munition becomes a solid waste for regulatory purposes when it is removed from storage in a military magazine or other storage area³ for the purposes of disposal, burning, incineration, or other treatment prior to disposal. Unused military munitions, in EPA’s view, are unused “products” comparable to unused commercial products stored by manufacturers or their customers. Under RCRA, *unused* products do not become “waste” until they become “discarded material.” EPA believes that an unused product becomes “discarded” when an intent to discard the material is demonstrated. However, “intent,” in many cases, is difficult to discern; therefore, in this rule, EPA has identified a clear test to determine the military’s “intent” in the case of unused munitions. Indeed, this issue is at the heart of the purpose behind RCRA section 3004(y). Congress instructed EPA to develop a “fair and coherent approach” to identify when military munitions become a solid waste for Subtitle C purposes, in order to avoid creating a situation where the courts must constantly interpret unclear rules. [H.R. Conf. Rep. No. 886, 102d Cong., 2d Sess. 29 (1992)]. The Agency believes it has chosen a clear, simple, enforceable test that is similar to the approach the Agency has taken toward commercial chemical products and fits the unique context of military munitions.

DOD’s complex system of accounting and management controls and the numerous options available to DOD for reconditioning, reuse, and sale, etc., make it difficult to determine at what point there is an “intent to discard” a particular unused munition. DOD’s classification of a munition in one of the various DOD “demilitarization” accounts does not, in EPA’s view, constitute a decision to discard the

³The term “military magazine or other storage area” refers to all types of military munitions storage units allowed under the DOD Explosives Safety Board (DDES) standards (DOD 6055.9–STD), which are mandatory for use by all DOD components, including outdoor or open storage areas, sheds, bunkers, and earth-covered and above-ground magazines.

material because, pursuant to DOD’s practices, such a classification does not necessarily evidence an intent to discard that munition. Ammunition classified as “Condition Code H” or as “unserviceable,” or in a demilitarization account (such as the Army’s Resource Recovery and Disposition Account) for example, may be either returned to service after further review, or in some cases after reprocessing; sold for non-military purposes or to nations that maintain weapons that utilize these munitions; or otherwise reused, reclaimed, or recycled. Even usable munitions scheduled for disposal may be called back into service, if needed, and thus may still also serve a deterrent purpose. Therefore, in EPA’s view, inclusion of a munition in a “demilitarization” account or a military determination that a munition is “unusable” for its intended purpose does not, by itself, constitute an intent to discard that munition.

For these reasons, today’s rule does not define stored, unused military munitions as “solid waste” subject to Subtitle C, except as provided in paragraphs 266.202(b) (3) and (4). In EPA’s view, the appropriate point at which to consider most unused military munitions to be a solid waste is when the material is finally removed from storage for the purpose of disposal or treatment prior to disposal. In practical terms, this provision means that storage of unused munitions is, for the most part, not subject to RCRA regulation; however, once a munition is removed from a magazine for the purpose of disposal or treatment prior to disposal, it is a solid waste and is potentially regulated under Subtitle C of RCRA.

EPA emphasizes that this provision will trigger RCRA coverage only where a decision to treat or dispose of the munition has clearly been made. In many cases, munitions classified as “unserviceable” are removed from storage and sent to central arsenals for evaluation to determine whether they are, in fact, unusable; whether they can be sold for use; whether they can be reconditioned for use; whether they can be recycled or processed for other uses; or whether they should be disposed of. In these cases, the munition is not being shipped for the purposes of treatment or disposal, but rather for evaluation. The munition is to be handled as a waste only if no further evaluation would take place and the decision to destroy has already been made.⁴ Similarly, a

⁴EPA has taken a similar position in the case of pharmaceuticals returned to the manufacturer. See letter from Sylvia K. Lowrance, Director, EPA Office of Solid Waste, to Mark J. Schulz, Pharmaceutical

munition may be removed from storage for the purpose of reconditioning, recycling or materials recovery without triggering RCRA.

EPA's approach, as supported by many of the public comments, is also based on the recognition that DOD has in place extensive storage and transportation standards that, in providing for explosives safety and security, are also protective of human health and the environment; and that the military Services' safety record in storing and transporting all munitions, including waste munitions, has been good. EPA further believes that there is no compelling environmental or legal reason to establish an earlier point at which unused munitions are a solid waste, except in the case of the following: munitions that are abandoned or disposed of in the past; munitions that are leaking, deteriorated or damaged to the point they cannot be put into serviceable condition, recycled, or put to other uses; or that have been declared a waste by an authorized military official. Also, it is clearer and, therefore, easier to implement an intent-based test where a component of the determinant of DOD's intent is when the munition is physically removed from storage for treatment or disposal rather than solely trying to figure out when a decision by an appropriate authority has been made. Even so, § 266.202(b)(4), discussed in section 4 below, retains the more intent-based test for situations where a decision by an authorized DOD official has clearly been made. More importantly, however, to move away from the proposed point (when a munition leaves storage) would significantly, and needlessly, increase the regulatory burden not only on DOD, but also on regulators (for enforcement and for permitting), and it could potentially disrupt DOD's program for the management of military munitions. The Agency has selected this final approach, in part, because it involves a minimum of interference with the military's established and proven system for managing unused munitions, and it will not conflict with the Services' logistical needs or constraints. Munitions in the active, demilitarization, and waste accounts are all managed under the same storage and transportation standards, and they are often stored together in the same magazines. Thus, the hazards posed by a stored munition do not change when it is classified as "unserviceable" or placed into a demilitarization account,

or when it is scheduled for treatment or disposal.

EPA has determined that the military's storage standards and practices for munitions provide a degree of protection that is comparable to, or better than, what RCRA regulation would provide. The storage of military munitions is regulated under standards developed and overseen by the Department of Defense Explosives Safety Board (DDESB), as well as Service-specific standards, which must be at least as stringent as the DDESB standards. As mentioned in the proposal, EPA has reviewed the DDESB standards in detail and concluded that the technical design and operating standards of the DDESB meet or exceed RCRA standards in virtually all significant respects. A more detailed discussion on the differences between the RCRA and DDESB standards may be found in the preamble of the proposed rule (60 FR 56474), and in the docket for this rule (A Comparison of RCRA Storage Requirements With DOD Requirements for Storage of Military Munitions, EPA, October 31, 1995). Again, the DOD safety record for the management of all military munitions, including waste munitions, has been good.

3. Section 266.202(b)(3)—Leaking or Deteriorated Munitions

Section 266.202(b)(2), discussed above, defines the most common circumstances under which an unused military munition becomes a solid waste—that is, when a decision has been made to dispose of or treat it and it is removed from storage for transportation to a disposal site, to a treatment unit, or to a storage unit at another facility prior to treatment or disposal. EPA, however, recognizes (and States and citizen's groups have pointed out) that under certain circumstances military munitions in storage may deteriorate to a point where they are no longer "products" in any meaningful sense and indeed may present a potential safety hazard or environmental threat. To address these circumstances, § 266.202(b)(3), which finalizes proposed § 261.2(g)(1)(iii), defines an unused military munition as a solid waste if it is "deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes." For example, if the stabilizers in a propellant have deteriorated to the point at which there is such a significant hazard of auto-ignition that the only options available

to DOD are treatment or disposal, that propellant would be a solid waste. If, however, the propellant had not deteriorated to this point and could reasonably be reclaimed, it would not be a solid waste.

Similarly, leaking chemical munitions that cannot be put into serviceable condition, and that cannot be reasonably recycled or used for other purposes would also be a solid waste. A leaking chemical munition that has been overpacked is so unlikely to ever be used, repaired, or recycled, that EPA views such a munition as a solid waste unless DOD already has in place an established repair or recycling plan. Munitions in these situations are defined in today's rule as solid waste. A leaking chemical munition or agent container (e.g., a one ton chemical container), however, may be repaired and the material still considered to be a product, not a solid waste, unless DOD determines it is a solid waste under § 266.202(b)(4).

4. Section 266.202(b)(4)—Munitions Determined by an Authorized Military Official To Be a Solid Waste

Finally, proposed § 261.2(g)(1)(iv) is finalized in § 266.202(b)(4) to make it clear that an authorized military official may identify an unused military munition as a RCRA "solid waste." In this case, the designated waste munition (if "hazardous" or if designated by the generator as hazardous under § 262.11) would be subject to the hazardous waste regulations unless it is a non-chemical munition that meets the terms of the conditional exemptions in § 266.203 or § 266.205. For example, in 1984, the Department of the Army determined that M55 rockets are hazardous waste. DOD made this decision because the rockets' delivery system no longer existed, and because DOD decided, for operational reasons, that the rockets would not be used in military operations, and that they would not be sold or reclaimed. These rockets are now being regulated as hazardous waste under RCRA interim status or permit requirements. This final action does not affect the waste status of these materials previously declared "solid waste," and provides for similar future classification of military munitions as solid or hazardous waste.

EPA emphasizes that § 266.202(b)(4) requires a specific declaration by an authorized military official that a munition is a solid or hazardous waste. EPA expects that the declaration would be in writing. As explained earlier, a decision under DOD's classification systems that a munition is "unserviceable," or the transfer of a

munition into a "demilitarization" account would not, by itself, constitute a decision that a munition is a solid waste.

Response to Comments

DOD commented that EPA should designate unused military munitions as solid wastes when certified for treatment or disposal and received at the treatment or disposal unit. This would avoid the need for compliance with RCRA storage and transportation requirements, and permit modifications for off-site wastes (discussed below in section M). For the reasons stated in the preamble for the proposed rule, EPA continues to believe unused military munitions slated for treatment or disposal should be classified as solid waste when they leave storage.

Some commenters suggested that munitions identified as "unserviceable" or "Condition Code H" or placed in a "demilitarization account" should be included as solid waste, because, in the commenter's view, the designations express an intent to discard these munitions. Other commenters took the opposite view, that such designations do not express an intent to discard. Some commenters further stated that EPA should develop a scheme, including possibly a schedule, that would force DOD to evaluate and make determinations in a timely manner that materials in the various "unserviceable," "Condition Code H," "demilitarization," or "resource recovery and disposition" accounts are or are not "solid waste," arguing that there are tremendous volumes of materials in these accounts that DOD should be compelled to act upon to reduce the amount in storage and, thereby, reduce storage risks.

For the reasons discussed above and in the preamble to the proposed rule, EPA does not agree that such materials should be classified as solid waste (except those that are leaking, damaged, or deteriorated as addressed in § 266.202(b)(3)) nor that EPA should develop a scheme to force DOD to make such determinations, especially given the DOD storage standards, practices and record.

G. When Military Munitions Are Not a Solid Waste

Military munitions, under today's final rule, are not a solid waste for regulatory purposes: (1) when a munition is used for its intended purpose, which includes when a munition is used for the training of military personnel and of explosives and emergency response specialists; when a munition is used for research,

development, testing, and evaluation; and when a munition is destroyed during certain range clearance operations; and (2) when an unused munition, including components thereof, is repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities.

1. Intended Use

Under RCRA, the use of products for their intended purpose, even when the use of the product results in deposit on the land, does not necessarily constitute "discard," is not waste management, and is not subject to regulation. For example, RCRA does not regulate the use of pesticides by farmers, even though pesticides are discharged to the environment during use (see 40 CFR 262.10(d) and 262.70). By the same logic, RCRA does not regulate the use of dynamite or other explosives during quarrying or construction activities. Similarly, EPA has consistently held that the use of munitions (military or otherwise) for their intended purpose does not constitute "discard," and therefore is not a waste management activity. Section 266.202(a)(1)(i)-(iii), in finalizing proposed § 261.2 (g)(3)(i)-(iii), clarifies this point and provides specific examples of military activities that are excluded from RCRA regulation.

a. *Section 266.202(a)(1)(i)—Military training exercises.* Section 266.202(a)(1)(i) clarifies that munitions used in the training of military personnel and explosive ordnance disposal (EOD) personnel are not regulated under RCRA. As discussed in the proposal (60 FR 56475), EPA views such training, which could include training military personnel in the destruction of unused propellant and other munitions, to constitute the normal use of a product, rather than waste disposal. For example, to ensure that military personnel can safely and efficiently destroy propellant during wartime, military training exercises involving artillery and mortar rounds typically include training in the safe burning of unused propellant. In EPA's view, the training of military personnel in the wartime use of munitions is a legitimate use that lies outside the scope of RCRA. Such training exercises typically follow detailed protocols for training military personnel in the handling and burning of unused propellants.

b. *Section 266.202(a)(1)(ii)—Weapons testing.* Today's final rule also clarifies that munitions used in weapons research, development, testing, and evaluation programs are not regulated under RCRA. Testing munitions, or

using munitions to test a weapon system, to determine their performance capabilities, clearly falls within the definition of use of a material/product for its intended purposes. EPA also considers the removal of a used or fired munition from a testing or training firing range for further testing and evaluation to be within the definition of use of a material for its intended purpose.

c. *Section 266.202(a)(1)(iii)—Range clearance operations.* The military Services often conduct range clearance exercises as a result of weapons testing or training at firing ranges. During these exercises, military Explosive Ordnance Disposal (EOD) specialists clear ranges of debris and unexploded ordnance, which are generally destroyed on-site but may also be shipped off-range for treatment or disposal. The frequency of these range clearance activities differs according to the nature of the area within the range. For example, range areas known as maneuver zones, where tanks, other vehicles, and personnel are present are generally cleared more frequently than range impact areas. EPA considers range management to be a necessary part of the safe use of munitions for their intended purpose; thus, the range clearance activity is an intrinsic part of training or testing. EPA also considers this provision to be consistent with Congress' intent that EPA take DOD safety requirements into account in developing regulations under RCRA section 3004(y). [H. R. Conf. Rep. No. 886, 102d Cong., 2d Sess. 29 (1992)]. Furthermore, from an environmental perspective, it makes no difference whether ordnance explodes on impact or is subsequently detonated by an EOD specialist. Therefore, this final rule excludes range clearance exercises (i.e., the recovery, collection, and on-range treatment or destruction of unexploded ordnance) at active or inactive ranges from RCRA Subtitle C regulation.

Under today's rule, any debris or unexploded ordnance (UXO) shipped off-range for treatment or disposal is a solid waste, and if a hazardous waste, it would potentially be subject to the RCRA Subtitle C requirements. However, it would not be a solid waste if shipped off-range for further evaluation, unless the evaluation is related to treatment and disposal.

Finally, today's rule clarifies that on-range disposal (e.g., the recovery, collection, and subsequent burial or placement in a landfill) of UXO is a RCRA-regulated activity under Subtitle C.

2. Section 266.202(a)(2)—Disassembly Operations

Proposed § 261.2(g)(5) is being finalized in § 266.202(a)(2). Unused military munitions that are being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities are not solid waste. Therefore these activities are not subject to RCRA, “unless such activities involve use constituting disposal, as defined in § 261.2(c)(1) or burning for energy recovery as defined in § 261.2(c)(2)” [these exceptions have been added to today’s rule for consistency with the proposed preamble at 60 FR 56472 and 56477 and existing section 261.2(c)]. Of course, the subtitle C regulations do apply if the munition is already classified as a waste and the disassembly is carried out to prepare for waste disposal. Materials recovery operations constitute a large part of DOD’s Resource Recovery and Recycling Program, which EPA strongly supports and encourages. As discussed in the proposal preamble (60 FR 56472), this section is analogous to §§ 261.2 (c) and (e) and 261.33 for “commercial chemical products.” Thus, the position EPA is taking in today’s rule on military munitions recycling or materials recovery operations is similar to the position the Agency has taken with regard to the management of commercial chemical products. Examples of munitions recycling activities performed by DOD that would not be regulated under RCRA can be found in the proposed notice to this final action.

In the proposed rule, the Agency requested comment on one particular type of munitions recycling activity: the processing of an unused propellant or explosive for use as fertilizer. In the preamble to the proposed rule, the Agency noted that this form of recycling involves application of propellant or explosives to the land in lieu of its originally intended use. This use as a fertilizer is regulated as a waste management activity unless it meets the terms of an exemption. In reviewing this issue, the Agency has determined the recycling of propellants or explosives into fertilizer may be a permissible activity under RCRA.

Specifically, the Agency notes that in this scenario, the unused propellant or explosive would become a solid waste because it is being recycled by being used in a manner constituting disposal. See 40 CFR 261.2(c)(1). Use constituting disposal is defined as application or placement on the land in a manner that constitutes disposal, or use in

production of products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land. In the specific case in point, the propellant or explosive is recycled by being used to produce a product (i.e., fertilizer) that is applied to the land.

Since explosives or propellants exhibit the hazardous waste characteristic of reactivity (see 40 CFR 261.23), those that become solid wastes when recycled would also be a reactive hazardous waste (hazardous waste code D003). In some limited cases, a propellant might also exhibit the characteristic of toxicity (see 40 CFR 261.24), primarily due to the presence of metals such as lead. In either case, since the propellant or explosive is a “recyclable material,” the recycling would be subject to 40 CFR 261.6—Requirements for recyclable materials. See 40 CFR 261.6(a)(1). Under 40 CFR 261.6(a)(2)(i), recyclable materials used in a manner constituting disposal are subject to the requirements of 40 CFR Part 266, subpart C—Recyclable Materials Used in a Manner Constituting Disposal.

Under 40 CFR 266.20(b) commercial fertilizers that are produced for the general public’s use that contain recyclable materials are not presently subject to regulation provided they meet the treatment standard under 40 CFR Part 268, subpart D, for each recyclable material that they contain. In the case of propellants or explosives that exhibit the characteristic of reactivity (i.e., D003 wastes), the treatment standard under 40 CFR 268.40(e), as set forth in the table, “Treatment Standards for Hazardous Wastes,” is deactivation (i.e., rendering the propellant no longer reactive as defined under 40 CFR 261.23), plus treatment of all underlying hazardous constituents (as defined in 40 CFR 268.2(i)) to meet the universal treatment standards (UTS), found in 40 CFR 268.48. In the case of a propellant or explosive that also exhibits the toxicity characteristic (TC), in addition to meeting the requirements for the D003 waste code, the waste would also have to meet the appropriate treatment standard for the TC waste code as set out in 40 CFR Part 268, subpart D.

Thus, the use of an unused explosive or propellant as an ingredient to produce commercial fertilizer would be exempt from regulation under RCRA, provided that the fertilizer: no longer exhibits the characteristic of reactivity; has had all underlying hazardous constituents treated to meet the UTS; and has met the treatment standards for other applicable hazardous waste codes.

EPA notes that § 266.202(a)(2) codifies EPA’s interpretation of how its current recycling requirements apply to disassembly and recycling of unused military munitions. The same principles apply to the recycling of commercial ammunition.

It is important to note, however, that once the materials recovery activities are completed, any remaining residuals requiring disposal or treatment prior to disposal are solid wastes which, if hazardous, would be subject to the subtitle C regulations.

Response to Comments

The Agency received numerous comments regarding the proposed rule provisions identifying when unused munitions are not a solid waste. The major comments focused on the following topics: munitions used for their intended purpose, in particular, munitions that remain on the ground at firing ranges and munitions used for training in the destruction of munitions; the scope of military personnel training regarding minimization of the quantity of unused propellant resulting from military training; potential health effects of open burning; minimum open burning standards; the potential for “sham” training exercises for purposes of disposal; regulation of residue/ash from open burning/open detonation (OB/OD) activities; regulation of the destruction and cleanup of munitions during range clearance activities; disassembly of rockets, missiles, or torpedoes (which carry the munitions as propellant or warhead) as it pertains to treatment; applicability of scrap metal exemptions to munitions; and reuse of explosives as fertilizers (discussed above).

Intended Use. With respect to the use of munitions “for their intended purpose,” the Agency received comments that disagreed with various aspects of the Agency’s interpretation; in particular, that the use of munitions at firing ranges and training in the destruction of unused propellants are “intended use” activities. Commenters stated that munitions that impact the ground have ceased to be used for their intended purpose, and that their use cannot be compared to the use of pesticides since these products continue their intended purpose after they are applied to the ground.

Commenters also suggested that, because of the potential impact of munitions on the environment, EPA should consider designating munitions on the ground as solid waste. But even the proponents of this view felt the full current RCRA regulatory scheme (i.e., normal RCRA permitting) is

inappropriate for military ranges, suggesting that EPA could use a streamlined permit-by-rule approach with limited provisions, especially at active ranges. Commenters suggested the following limited standards for ranges (at least for active ranges) so as not to interrupt range activities related to the military mission: location standards (i.e., for wetlands, surface waters, and proximity to populations); off-range monitoring (at least surface and ground waters), remedial responses to off-range migration, and range closure plans.

Several commenters stated that field sampling had indicated contamination on ranges. The bulk of the reports that EPA has reviewed, including those cited by commenters, do not provide enough information to conclude that ground or surface water contamination does or does not result from fired munitions on ranges. This is partly because the studies or reports do not adequately document, for example, increases in contaminant concentrations over ambient concentrations (i.e., background); or that the source was, indeed, fired munitions; or whether it might be some other source on or off range, such as spills or landfills. There are two exceptions: lead and white phosphorous from fired munitions on ranges have been adequately documented to conclude that these materials may contaminate surface water and affect fish and fowl. Although the lead contamination cases involved non-military ranges, the potential for contamination at military ranges where lead munitions are fired clearly exists. The white phosphorous case was a military range.

In response to these comments, EPA continues to interpret the RCRA Subtitle C regulations as not extending to products whose use involves application to the land, or where use necessarily entails land application, when those products are used in their normal manner. In EPA's opinion, the use of munitions does not constitute a waste management activity because the munitions are not "discarded." Rather, the firing of munitions is within the normal and expected use of the product. This is the same position EPA took regarding the discharge of ammunition and expended cartridges in an interpretive letter by Sylvia Lowrance, Director of EPA's Office of Solid Waste, to Jane Magee, Assistant Commissioner for Solid and Hazardous Waste Management, Indiana Department of Environmental Management, Sept. 6, 1988, addressing the issue of the "applicability of * * * RCRA * * * regulations to shooting ranges." This

position was also repeated in the proposed rule for Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities, 55 Fed. Reg. 30798, 30809 (1990). At the request of the United States Court of Appeals for the Second Circuit, EPA filed a brief as *Amicus Curiae* in *Connecticut Coastal Fishermen's Assoc. v. Remington Arms Co., et al.* (August 28, 1992) discussing the Agency's views on whether lead shot and clay target debris deposited on land and in water in the normal course of skeet and trap shooting is "solid waste" under RCRA. In that brief, EPA repeated its position that regulatory jurisdiction does not apply to products that are deposited onto the land in their ordinary manner of use.

EPA sees no compelling reason to alter this longstanding interpretation of its regulatory definition of the term "solid waste." Nothing in the language or legislative history of RCRA section 3004(y) suggests that Congress intended or desired that EPA adopt a different interpretation of "solid waste" with respect to military munitions.

Moreover, EPA disagrees with one commenter's proposition that munitions are a "solid waste" when they hit the ground because they have no further function, unlike pesticides, which continue to have a function on the ground. EPA's interpretation focuses on whether a product was used as it was intended to be used, not on whether the purpose of the product is to perform some function once on the ground. For example, the use of explosives (e.g., dynamite) for road clearing, construction, or mining does not trigger RCRA regulation, even though any residuals on the ground serve no further function.

Therefore, the Agency is maintaining its position that munitions that are fired are products used for their intended purpose, even when they hit the ground since hitting the ground is a normal expectation for their use. However, today's rule specifies that fired military munitions that land off-range become a statutory solid waste at a certain point, potentially subject to RCRA remedial authorities. This point is discussed further in section H which addresses military munitions at ranges.

Training. The Agency received a number of comments regarding EPA's view that military munitions used in the training of military personnel are not a solid waste. A number of commenters raised concerns regarding the training of military personnel in the burning of unused propellant increments resulting from artillery and mortar training. Commenters pointed out that the

amount of unused propellant destroyed may equal or exceed the propellant actually used in firing the weapons, and that this is contrary to the Agency's and RCRA's waste minimization goals. EPA agrees that the quantities of unused propellant that is burned may equal or be more than that used in firing weapons since such propellants are generally packaged in either five or seven bags per canister, and often the size of a training ranges prohibits the use of all the bags. EPA has concluded, however, that there is merit to DOD's argument that to minimize the chances for confusion and error, military training should duplicate to the maximum extent possible the conditions encountered by military personnel in combat. Using the actual canisters and bags (which are of different sizes) that would be used in time of war, and training the personnel in the safe management and expedient destruction of unused propellant is a legitimate part of training in the use of munitions.

Commenters also raised concerns regarding the RCRA status of sites used for training in the burning of unused propellant bags. Specifically, the commenters cited elevated incidences of lung and other cancers that they argued were possibly due, in part, to military burning practices. The Agency has included in the docket for this rule a number of studies and reports on the potential impacts from open burning emissions. A number of commenters expressed concern that open burning of unused propellant, as it pertains to military personnel training, contaminates the environment. Concerns of the public particularly focused on air emissions, although they also mentioned the burning of propellant directly on the ground could lead to soil (and possibly groundwater) contamination. On the other hand, studies and reports provided to the Agency offer contradictory conclusions. These reports are included in the Docket.

In any case, as a precaution, and in response to these concerns, the Services often conduct the burning in lined trenches. Also, in some cases, this precaution has been required by State regulators. In other cases, local opposition to burning of unused propellant has led individual installations to abandon the practice (and in at least one case to abandon training altogether), or to reduce the number of increments taken into the field. Commenters suggested that EPA require such lined units and perhaps monitoring and closure plans for these training units to ensure environmental

protection, perhaps through a permit-by-rule. Because EPA has determined that these are product use activities, EPA does not believe that RCRA should be used to restrict unit locations or compel unit designs.

Some States and citizens groups argued that such burning could lead to "sham" training, when the primary purpose is really waste disposal. Commenters suggested that EPA establish criteria for training in the destruction of unused propellant bags to assure against "sham" training exercises, including documentation of the training exercises and a minimum three year record retention time for all such training documentation. The Agency has retained the proposed approach regarding the training of military personnel in the safe burning of unused propellants because, as mentioned above, EPA has determined that (given the unique military activities and the need for training) this is an aspect of product usage and, therefore, should not be regulated under RCRA. On the other hand, the Agency reaffirms here what was said in the preamble of the proposed rule and earlier in today's rule, that, to assure against sham training, regulators may look for the existence and use of training manuals, the presence of military trainees, and documentation of training activities as evidence of legitimate training. Records showing evidence of training could include, for example, the number of personnel trained, the date and time of training, military personnel attendance lists, and the amount of propellant used in training. EPA believes that, should activities in a specific training exercise be suspect, such procedures and documentation would provide evidence that the activity is for training purposes rather than waste disposal.

One commenter requested that the Agency provide a definition of "troop" to include DOE security personnel, and DOE and DOD contractors. The Agency has decided not to add a definition of "troop," but to clarify that the terms "troop" and "personnel" as used in today's rule refer not only to DOD personnel, but also to DOE, Coast Guard, National Guard, and contractor personnel who are being trained in the use of munitions or explosives. In response, the Agency has deleted reference to "troops" in preference to the term "military personnel," and has added a definition for "military" to the § 266.201 definitions.

Other comments received regarding unused propellant bag training expressed concern over the lack of a regulatory regime over the ash or residue left behind after the training,

and that this ash could present an environmental hazard. These commenters asserted that this ash would not be listed as hazardous waste, but might exhibit a characteristic or contain hazardous constituents, although no data were submitted. As mentioned previously, the military often conducts these propellant burning exercises within a structure that would contain residual ash, which is then disposed of according to RCRA requirements, if hazardous. The Agency emphasizes that RCRA 7003 authority could be applied to this ash when the OB/OD training site or area is closed or at any time that it might present an imminent and substantial endangerment.

A commenter suggested that these OB/OD training areas be regulated under the same guidelines as fire fighting training pits that require permits to operate. The Agency wants to make clear that the use of fuel in fire training does *not* require a RCRA permit, unless the fire training were to use waste fuel. Then the burning would be considered RCRA disposal rather than the use of a product for its intended purpose. The training of military personnel in the use of military munitions, such as training in the proper techniques to burn propellant, uses standard, unused propellant. The Agency believes it is a reasonable interpretation in the context of military training to view training in how to burn unused propellant safely as not training in waste disposal, but rather as part of necessary training in product usage.

Range Clearance. With respect to on-range clearance exercises, the Agency received a broad range of comments. Some commenters requested a clarification of certain range management activities. In response, the Agency has reviewed a host of activities. In particular, the collection of fired bullets, including those that contain lead, at indoor firing ranges, is considered by EPA to be range maintenance and not hazardous waste management activities within the scope of today's rule. EPA cautions, however, that although on-range collection may not be a waste management activity, the removal of such materials from the range may result in the generation of a solid waste, and the off-range storage and subsequent treatment or disposal of such waste may be subject to RCRA regulation. EPA notes, however, that lead may be recycled under the scrap metal exemption of 40 CFR 261.6(a)(3)(ii).

Commenters asked if range clearance activities at transferring, closed, or transferred ranges were also considered

within the scope of proposed § 261.2(g)(3)(iii) since only active, inactive, and closing ranges were listed. EPA did not generally intend to include these range clearance activities within the scope of this proposed section. Under the proposal, such range clearance activities would not be considered within the scope of "intended use." EPA has modified the proposal slightly in the final rule, at the request of one State, by dropping the term "closing." EPA made this change because, in its view, ranges fall into one of three categories: active, inactive, and closed. A closing range is merely an "inactive" range in the process of becoming a "closed" range. Similarly, the rule does not include references to "transferring" or "transferred" range since these are all either "active," "inactive," or "closed." To help clarify this provision, EPA has defined, in § 266.201, the terms "military range," "active range," and "inactive range."

A commenter raised the concern that the inclusion of the word "contaminants" with UXO in the context of "intended use" in range clearance operations in the proposed rule could lead to a broadening of scope to cover many remediation activities not directly associated with unexploded ordnance and munitions debris. The commenter requested that the Agency clarify whether range clearance activities may encompass a variety of range remediation activities related to munitions contamination and media cleanup (not limited to UXO and debris). It was not, and is not, the Agency's intention to broaden the interpretation of the term "intended use" as it applies to range clearance or management activities by the inclusion of the term "contaminants" in the regulatory language. In fact, the proposed preamble clarified the original intent by using the terms "UXO" and "debris" when discussing the range clearance activity. However, in today's rule, the Agency has used the term "munitions fragments" instead of either "contaminants" or "debris" to more closely reflect the Agency's intent to limit this provision to the recovery of munitions fragments (in addition to the recovery and treatment of UXO). This provision does not apply to the remediation of other contaminants (besides munitions fragments or debris), including non-munitions related contaminants, or media (e.g., soil, surface water, or ground water). Also, the rule clarifies that this range clearance provision does not apply to the management of UXO or munitions that were buried on a range when the

burial was not a result of product use, nor to the burial (i.e., landfill) of recovered UXO or debris/fragments on a range.

Disassembly. A few commenters requested the Agency clarify the distinction between the terms "destruction" and "disassembly," especially in the context of RCRA permitting and "rendering a munition safe." The term destruction in the military munitions context generally means thermal treatment processes such as incineration, open burning, and open detonation, but could also include chemical treatment processes. Such destructive processes usually require a RCRA permit, unless exempted under the emergency response, range clearance, or intended use provisions in today's rule. The term "disassembly," in the context of military munitions, generally refers to a mechanical or physical process associated with dismantling unused munitions (i.e., products). The Agency generally does not consider disassembly to be a waste treatment process requiring a RCRA permit, especially when the disassembly is used in materials recovery activities, which is often the case. EPA views both "destruction" and "disassembly" as ways to "render a munition safe," making both eligible for exemption from RCRA permitting in the emergency response context.

A commenter questioned whether the Department of Energy disassembly procedures are covered by § 266.202(b)(5). Since this section applies to military munitions, it also applies to DOE when DOE manages military munitions.

H. Military Munitions on Closed and Transferred Ranges

EPA has decided to postpone final action on proposed 40 CFR 261.2(g)(4)(i). This proposed provision would have identified a military munition left on a closed range or a range transferred from military control as meeting the statutory definition of solid waste in RCRA section 1004(27), potentially subject to RCRA corrective action or section 7003 authorities, until DOD regulations were promulgated governing the cleanup of munitions on closed or transferred ranges.

EPA's decision to postpone action on this section of the proposal is based in part on comments the Agency received on this issue and in part on the fact that DOD has not yet issued the range cleanup rule currently under development (the "DOD Range Rule"). Many commenters questioned EPA's legal authority to defer RCRA coverage in favor of DOD regulations governing

the cleanup of closed and transferred ranges. EPA will conduct further analyses of the comments and of the final DOD regulation governing the cleanup of munitions on closed and transferred ranges (including an assessment of whether the DOD Range Rule is adequately protective); based on these analyses, the Agency will reach a final decision on this issue. If either DOD fails to proceed with the range rule or EPA finds that the range rule does not adequately protect human health and the environment, EPA will be prepared to address this issue under Federal environmental laws.

EPA believes that this interpretative provision identifying when a discharged munition on a range becomes a solid waste under RCRA section 1004(27) is not a required part of the rulemaking mandated in RCRA section 3004(y) and, therefore, is not subject to that section's statutory deadlines. EPA interprets RCRA 3004(y) as only requiring the Agency to identify the circumstances under which military munitions become subject to the regulatory scheme for identified or listed hazardous waste promulgated under Subtitle C. The language of RCRA section 3004(y) fully supports EPA's interpretation. Section 3004(y) specifically requires EPA to identify "when military munitions become hazardous waste for purposes of this Subtitle." Proposed § 261.2(g)(4)(i) would have identified when a discharged munition becomes a statutory solid waste, but would not identify when that discharged munition becomes subject to Subtitle C regulation.

Response to Comments

EPA received numerous comments on the proposed regulations for closed and transferred ranges. Since this part of the rule is not being finalized in today's rule, these comments will be addressed at the time EPA takes final action.

I. When Used or Fired Military Munitions Become Solid Waste, Including Military Munitions That Land Off-Range

Proposed § 261.2(g)(2) has been revised and finalized in § 266.202(c). This section clarifies that used or fired munitions are solid wastes when they are removed from their landing spot and then either (1) managed off-range—i.e., when transported off-range and stored, reclaimed, treated, or disposed of, or (2) disposed of (i.e., buried or landfilled) on-range. In both cases, once the used or fired munition is a solid waste, it is potentially subject to regulation as a hazardous waste. For example, former defense installations no longer under military control (i.e., Formerly Used

Defense Sites or FUDS) sometimes contain unexploded ordnance or munitions fragments. Used or fired munitions removed from their landing spot and transported off-range would have to be handled under RCRA Subtitle C (if they are "hazardous"), except in emergency situations. Similarly, used or fired munitions resulting from military research or training exercises at locations other than ranges (e.g., in testing laboratories) would be considered solid waste when removed from the site of use and sent to treatment or disposal. Section 266.202(c) does not finalize one aspect contained in proposed § 261.2(g)(2): that used or fired munitions that are recovered and then treated on range at a closed or transferred range (unless the transferred range is still in active use as a range) would be a solid waste potentially subject to RCRA subtitle C regulations. This aspect of the rule is being postponed along with the closed and transferred range aspect discussed in section H of this preamble, because these aspects are so inter-related and they are both being addressed under DOD's range rule.

Today's rule finalizes proposed § 261.2(g)(4)(ii) in § 266.202(d), which provides that munitions that land off range that are not promptly rendered safe (if necessary) and/or retrieved, are statutory solid wastes under RCRA section 1004(27), potentially subject to RCRA corrective action or section 7003 authorities. Today's final action is based on the view that a failure to render safe and retrieve a munition that lands off range would be evidence of an intent to discard the munition, just as the failure to respond to a spill of a hazardous material could be evidence of an intent to discard. "Rendering safe" might include disarming action to prevent an explosion as well as destruction of the ordnance. If remedial action were infeasible—for example, the off-range munition wastes could not be removed because the munition was deeply buried, located in inaccessible terrain or could not be located—the operator of the range would be required to maintain a record of the event, including the type of munition that was fired off range and its location (if known), for as long as any threat remains.

Response to Comments

Munitions Landing Off-Range. Several commenters expressed concern over the relative merits of not addressing munitions on an active range while addressing munitions that land off a range. The Agency views these as distinctly different situations. As discussed previously, the Agency views

the firing of munitions that land on active ranges as product use. On the other hand, munitions that land off range that are not promptly rendered safe and/or retrieved, are more like a spill that is not promptly remediated. EPA would consider these munitions to be discarded or abandoned, or disposed of (i.e., statutory solid waste potentially subject to RCRA corrective action or section 7003 authorities, and if removed for subsequent management, potentially subject to the Subtitle C regulatory requirements). A munition on an active range is where it is intended and expected to be, and it is in a controlled environment. As such, it is more effectively controlled or managed than a munition that has landed off-range where it normally wouldn't be expected to be.

J. Waste Materials Derived From Munitions Manufacture

As stated in the proposed preamble, EPA does not believe that military munitions manufacture raises any new special regulatory issues that need to be addressed by this final rule. One issue was raised in the public comments pertaining to recycling of secondary materials, but this issue is not unique to the military. As a result, the Agency has decided that any rule changes to facilitate recycling of secondary materials will be considered in the context of a broader, separate rulemaking. Therefore, this final rule makes no changes to the existing rules regarding waste materials derived from munitions manufacture.

K. Chemical Munitions

In the proposal, EPA solicited comment on whether munitions scheduled for destruction by international treaty or Congressional action should be classified as solid waste. The Agency continues to believe, for reasons discussed in the proposal (60 CFR 56485), that these actions should not, as a general matter, be interpreted as a decision to discard a munition. Among other considerations, the proposed disarmament conventions and Congressional directives do not declare these items to be waste, nor do they totally prohibit their use or require their total destruction.

Response to Comments

Regarding chemical agents and munitions, some commenters supported the proposal stating that any action that would delay the destruction of chemical agents and munitions is contrary to the protection of human health and the environment, and that in their view the proposal would not cause such a delay.

These commenters stated they would oppose alternatives that would cause delays. Other commenters, however, suggested that EPA should complete a thorough review of alternative treatment/destruction technologies before allowing DOD to proceed with the current incineration approach. EPA notes that Congress has addressed the issue of developing alternative treatment or destruction technologies through legislation. For a more detailed discussion of this issue, see section M.2.b below. A few commenters supported the proposed position that chemical agents and munitions do not become solid waste solely by being slated for destruction by an Act of Congress or treaty. Some commenters took the opposite view.

In developing today's rule, EPA continues to believe the position discussed in the proposed rule. Disarmament conventions and Congressional directives to demilitarize a weapons system should not be interpreted as a decision to discard a munition. In many cases, the provisions in the treaties or conventions do not equate to a decision to discard a specific munition in that they allow, for example, for implementation schedules, retaliatory use, and very specific verification procedures that do not equate to the process established under RCRA.

In the context of chemical agents and munitions, some commenters objected to any alternative that would prohibit States from being more stringent. As discussed elsewhere in this preamble, EPA agrees and has not adopted this State pre-emption approach.

A few commenters identified the need for listing chemical agents as hazardous waste, stating that these are some of the most lethal materials in existence, yet they are not listed nor (in the commenter's view) are they characteristic hazardous wastes under EPA's RCRA regulations. One commenter stated that the Army has taken the position that the explosives (e.g., the explosive component of the M55 rockets) are a hazardous waste, but the agent itself is not. This becomes a potential regulatory problem (1) when in the demilitarization process the agent is separated from the explosives, or (2) for any bulk agents.

In response, EPA notes that five of the eight chemical stockpile States have listed the various chemical agents as hazardous, and a sixth has done so through a consent order with DOD regarding the stockpile facility in that State. Moreover, based on EPA's technical review associated with this rule, the Agency believes that the

chemical agents and munitions in the military stockpile subject to the requirement for destruction contained in 50 U.S.C. 1521 exhibit at least one of the characteristics identified in 40 CFR Part 261, subpart C. In addition, DOD has publicly committed to the destruction of these chemical munitions and their agents at RCRA permitted facilities, and is seeking RCRA permits for all their chemical demilitarization facilities. Based on these facts, it is not the Agency's current intent to list, as hazardous waste, these chemical agents when they become a solid waste.

A few commenters felt that emergency responses involving chemical munitions, especially those involving non-stockpiled chemical munitions, should not be exempted from the RCRA emergency permit requirements. The Agency agrees that chemical munitions should receive close oversight. EPA has evaluated DOD's statutory requirements and standard operating procedures (SOPs) and has determined that the emergency response procedures spelled out in today's final rule, in conjunction with the DOD statutory requirements and SOPs, are sufficiently protective for chemical munitions responses. For example, the transport and destruction of a lethal chemical agent are regulated by 50 U.S.C. 1512 and 1512a, requiring special approvals by the Secretary of Defense and the Secretary of Health and Human Services prior to either transport or destruction. Further, Congress and affected State governors must be notified prior to any such destruction or transportation. Thus, the standards for emergency responses in today's rule—including the exemption for immediate responses and the requirements for emergency permits—would apply in the same way to conventional and chemical munitions. (See discussion in section P, emergency responses.)

Regarding comments received on the storage of chemical munitions, see the Response to Comments portion of section M of this preamble.

L. Generator and Transporter Standards

This final action makes two changes to the RCRA generator and transportation requirements as they pertain to emergency responses to munitions or explosives emergencies and to waste military munitions.

First, §§ 262.10(i) and 263.10(e) clarify that persons responding to emergencies (immediate threats from explosives and munitions) are not subject to RCRA generator and transportation requirements. This provision codifies a long standing EPA policy that applies to all explosives and munitions emergency responses

(military and non-military) as well as to all conventional and chemical military munitions emergency responses. This is discussed further in section P entitled "Emergency Responses."

Second, proposed §§ 262.10(i) and 263.10(d) are being finalized in § 266.203 to conditionally exempt from RCRA hazardous waste generator and transporter requirements (including RCRA manifest requirements and the container marking requirements of § 262.32(b)) waste non-chemical military munitions that are shipped from a military-owned or -operated facility to a military-owned or operated TSDF in accordance with the DOD shipping controls for military munitions (i.e., tracking procedures). This provision applies to waste munitions that are not chemical munitions or chemical agents and that are transported by commercial carriers who are under contract with the military and have signed a contractual compliance agreement with the Military Traffic Management Command, and who operate under the DOD system of shipping controls for military munitions. EPA is not extending the conditional exemption in § 266.203 to persons transporting "military munitions" who are not required to comply with the DOD military munitions shipping controls (e.g., DOE or other non-DOD Federal agencies or their contractors). This provision also does not apply to the transport of waste military munitions to a commercial treatment, storage, or disposal facility. Finally, this provision would not apply to waste munitions shipped by the military but not under DOD's shipping controls designed for its munitions inventory.

This aspect of the conditional exemption does not apply to treatment, storage or disposal regulation, and is available only so long as all conditions in § 266.203(a)(1) are met. EPA's decision to adopt the conditional exemption approach for identifying when waste military munitions that are transported become subject to RCRA's transportation requirements for hazardous waste is based on EPA's conclusion that it is not necessary to regulate a waste as hazardous where the wastes are already adequately regulated, and reasonable mismanagement scenarios have thereby been controlled.

The conditional exemption approach and the legal basis supporting it is explained in greater detail below in section M.1, entitled Conditional Exemption For Waste Military Munitions In Storage.

In deciding to finalize the conditional exemption approach for the

transportation of waste military munitions, EPA primarily considered the existing DOD shipping controls as well as DOD's munitions transportation safety record. The DOD shipping standards and controls provide a "closed-loop" system similar to the RCRA manifest. These controls include the following forms: Government Bill of Lading (GBL) (GSA Standard Form 1109); requisition tracking form DD Form 1348; the Signature and Talley Record (DD Form 1907); Special Instructions for Motor Vehicle Drivers (DD Form 836); and the Motor Vehicle Inspection Report (DD Form 626). The DOD Standards, giving instructions on the use of these forms are DOD Regulation 4500.9-R—Defense Transportation Regulation, Part II, Cargo Movement and DOD Directive 6055.13—Transportation Accident Prevention and Emergency Response Involving Conventional DOD Munitions and Explosives. "A Report to Congress On the Adequacy of Department of Defense Safety Standards for Transportation of Hazardous Materials" (1989) provides a summary of these controls. These documents are available in the public docket for today's rule.

Features of the DOD transportation system include pre-trip routing plans, safe havens and secure holding areas for vehicles experiencing difficulties or for overnight storage, safe haven hotline, satellite motor surveillance and tracking, shipper seals, dual driver protective and escort services, firefighting instructions, and electronic notifications/communications between shipper, carrier, and receiver.

DOD munitions shipments also comply with the DOT hazardous materials transportation standards, which address packaging, labeling, marking, placarding, emergency response, training, and shipping documentation [49 CFR 100-179, 350-399]. DOD has made the DOT standards mandatory for the transportation of military munitions (e.g., DOD 4500.9-R Defense Transportation Regulation Part II, Cargo Movement, April 1996). EPA has reviewed these DOD documents and concludes that the resulting procedures, in conjunction with the applicable DOT standards, provide an equivalent level of protection of human health and the environment as the requirements of the RCRA manifest system.

As a result of these and other controls, DOD's munitions transportation safety record is good. DOD makes approximately 45,000 shipments of military munitions and explosives annually, including shipments for demilitarization (of these shipments, only a very small percentage would

involve waste munitions, as defined in today's rule). According to the U.S. Army Technical Center for Explosives Safety's Explosives Safety Information Database and the DDESB's Historical Accident Database, in the past 20 years, there have been 18 mishaps involving commercial carriers of military munitions in the continental U.S. Of these, only six accidents resulted in fires or detonations that affected all or part of the munitions cargo itself. In each case, the accident was attributed to a vehicular malfunction or accident, and not to the munitions cargo.

The DOD shipping controls that make up the § 266.203 conditions are those adopted by DOD as of November 8, 1995. EPA understands that DOD may change its shipping controls from time to time based on new information. However, in light of the fact that DOD has a statutory obligation to ensure proper transportation of munitions, and to prevent hazardous conditions from arising that would endanger life and property (see 10 U.S.C. § 172), EPA does not believe that DOD would pursue any amendments that would lessen protection of human health and the environment. In fact, DOD continues to develop stricter shipping controls to assure their weapons and components thereof do not come under the control of unauthorized individuals. For example, DOD is developing a new satellite tracking system due to be fully operational, worldwide, in the next several years. Moreover, DOD also has long had experience regulating explosive safety hazards, which directly affect DOD's own personnel. Further, today's rule provides that DOD will publish notice of any amendments to the DOD shipping controls in the Federal Register. DOD will also provide EPA with DOD's determination of whether the amended shipping controls are less protective than the current standards. If EPA in its discretion determines that revisions to the conditional exemption in today's rule are necessary to protect human health and the environment, the Agency will propose such revisions. Citizens may also petition for rulemaking under RCRA section 7004, 42 U.S.C. section 6974, using the procedures set forth in 40 CFR Part 260, subpart C, to request EPA to revise the RCRA conditional exemption in light of any amendments to the DOD shipping controls. Under today's final rule, DOD amendments to its shipping controls rules become effective for purposes of the conditional exemption only when DOD publishes a notice in the Federal Register that its shipping controls have been amended.

In summary, given the protective nature of the DOD shipping controls, and the Services' record in providing for the safe transportation of military munitions, the Agency concludes that RCRA hazardous waste regulation is unnecessary when waste military munitions are transported in compliance with DOD shipping controls. The regulatory oversight created by today's rule provides further assurance that the DOD shipping controls are followed and protectiveness is maintained.

In enacting RCRA section 3004(y), Congress instructed EPA to identify when military munitions become hazardous waste subject to Subtitle C regulation. Congress also instructed EPA, after consultation with the Department of Defense and the States, to develop storage and transportation requirements for such waste military munitions that are both protective of human health and the environment and ensure that they are safely managed. Following EPA's consultation with DOD and the States, EPA concludes that the most reasonable manner of accomplishing Congress' goal is to allow DOD to continue to transport waste military munitions under DOD shipping controls, which—when followed—provide adequate protection, rather than impose a second regulatory scheme that adds little in the way of protectiveness. Thus, RCRA section 3004(y) further supports the approach taken in this rulemaking.

EPA also concludes that specifically identifying the conditions under which waste military munitions become subject to RCRA Subtitle C and providing for independent regulatory oversight of those conditions adds significantly to the reliability and protectiveness of the system of DOD shipping controls.

EPA emphasizes, however, that if a transporter of waste military munitions claims the exemption, but fails to transport waste military munitions in compliance with the provisions of the conditional exemption, the non-compliant waste would no longer be exempt, so the transporter would be subject to additional regulatory requirements and could be subject to enforcement action (or citizen suit) for violations of hazardous waste requirements. For example, where waste military munitions lose their conditional exemption due to a violation of a condition, the transporter of the waste could face penalties for transportation of hazardous waste without a manifest. As a mechanism to assist in the determination of whether the transportation of waste military

munitions is compliant with the terms of the exemption, the Agency is imposing (in § 266.203(a)(iv)) a self-reporting requirement. Under this self-reporting requirement, the transporter must provide oral notice to EPA within 24 hours, when becoming aware of: (a) any theft or loss of the waste military munitions, or (b) any failure to meet a condition of § 266.203(a)(1) that may endanger human health or the environment. The transporter must also provide a written report describing the conditions of the violation or theft within 5 days of learning of it. In addition, if any waste military munitions shipped under subsection (a)(1) are not received by the receiving facility within 45 days of the day the waste was shipped, the owner or operator of the receiving facility must report this non-receipt to the EPA within 5 days.

Under § 266.203(c), where the conditional exemption has been lost, the transporter may apply to EPA to reestablish the conditional exemption. Once the waste returns to compliance with all conditions of the exemption, an application for reinstatement of the conditional exemption with respect to such waste may be filed with EPA. If EPA finds that reinstating the conditional exemption for that waste is appropriate, based on factors like those described in § 266.203(c), EPA may reinstate the exemption. Reinstatement is not automatic, but if EPA does not respond to an application within 60 days, the conditional exemption would be deemed reinstated. However EPA may terminate the reinstatement at any time—even after the 60 period—if it finds that the reinstatement is inappropriate based on factors like those described in § 266.203(c).

EPA emphasizes, however, that the generator of waste military munitions or explosives must still make the determinations identified in 40 CFR 262.11 in order to comply with the provisions of §§ 266.203 and 266.205 (discussed below), notably in order to know which materials are subject to exception reporting and notification requirements.

Response to Comments

The Agency received numerous comments on the proposed exemptions from transporter standards for shipments between military facilities under the DOD materials transportation standards. Some commenters objected to the Agency's reliance on the current DOD standards for the transport of unused military munitions as environmentally protective. The Agency is convinced that exempting DOD from

the manifesting requirements is protective based primarily on the existing and comprehensive internal controls that exist and are used within the Services to track shipments of waste munitions. In addition, DOD's safety record provides evidence of the effectiveness of the DOD shipping requirements and DOD's commitment to safe transportation and management. Thus, the Agency feels confident that reliance on these DOD safeguards and practices is protective. Given this, the Agency feels the additional burden of RCRA manifesting is duplicative and unnecessary. Some commenters expressed concern that the usual RCRA protections implied in the "cradle to grave" tracking of hazardous waste would not be applicable under this approach since manifests (which provide this link from cradle to grave) are not required. Again, EPA is confident that the DOD tracking and security system is at least as effective as the RCRA manifest in assuring that waste munitions are tracked from "cradle to grave."

Some commenters requested clarification as to the applicability of these exemptions to DOE, Coast Guard, and to commercial transportation of military munitions. As discussed above, the Agency has decided to provide the manifest exemption, as proposed, to DOD, DOE, the Coast Guard, the National Guard, commercial transporters and other parties under contract to or acting as an agent for DOD, who are obligated to operate under the DOD shipping requirements. The Agency has not provided a similar exemption to commercial or other Federal transporters who are not subject to the DOD transportation standards, even if they voluntarily follow the DOD standards.

M. Storage Standards

1. Conditional Exemption for Waste Military Munitions in Storage

a. Conditional Exemption for Waste Non-chemical Munitions. In addition to promulgating RCRA storage standards for munitions that become regulated hazardous waste, EPA is also finalizing a "conditional exemption" approach to identify when waste non-chemical military munitions become subject to RCRA subtitle C storage regulation. Through today's rulemaking, EPA is endeavoring to ensure the safe storage of waste munitions while at the same time, not unnecessarily duplicating or impeding existing regulation and handling of such wastes. While the Agency believes that the subpart EE controls, discussed below, are necessary

for the storage of waste munitions that are not already regulated and for waste military munitions that are not managed in compliance with existing controls, EPA does not believe that subpart EE regulations are needed where waste military munitions are being properly handled in compliance with the extensive DDESB standards (and other conditions set out in today's rule).

Accordingly, today's rule provides that waste non-chemical military munitions that exhibit a hazardous characteristic or are listed as a hazardous waste are subject to hazardous waste storage regulation at the point they become solid waste under 266.202, except when they meet all of the conditions set forth in 40 C.F.R. 266.205(a)(1).

The conditional exemption in § 266.205 applies only to waste military non-chemical munitions that are subject to the jurisdiction of DDESB (which could include military-owned munitions at contractor-operated facilities), including products that DoD determines are solid wastes under today's § 266.202(b)(4) and unexploded ordnance recovered from ranges and moved into storage prior to treatment or disposal. EPA is not extending the conditional exemption option in today's rule to owners or operators of storage facilities storing non-military waste munitions and explosives, nor to persons storing "military munitions" who are not subject to the jurisdiction of the DDESB (e.g., DOE or other non-DoD Federal agencies or contractor facilities not directly or by contract subject to DDESB controls). EPA has provided an exemption for "military" waste munitions based largely upon the fact that DDESB standards apply to and are binding on the military, and there is an institutional oversight process within the military. A similar structure of management controls is not present for non-military munitions.

The conditional exemption from RCRA storage requirements does not apply to transportation, treatment, and disposal regulation, and is available only so long as all conditions in § 266.205(a)(1) are met.

1. **Legal Basis for Conditional Exemption Approach.** EPA's approach is based on its view that RCRA § 3001(a) provides the Agency with flexibility, in deciding whether to list or identify a waste as hazardous, to consider the need for regulation. Specifically, RCRA § 3001 requires that EPA, in determining whether to list a waste as hazardous waste, or to otherwise identify a waste as hazardous waste, decide whether a waste "should be subject to the requirements of Subtitle C." Hence,

RCRA § 3001 authorizes EPA to determine when Subtitle C regulation is appropriate. The statute directs EPA to regulate hazardous waste generators (section 3002(a)), hazardous waste transporters (section 3003(a)), and hazardous waste treatment, storage and disposal facilities (section 3004(a)) "as necessary to protect human health and the environment." By extension, the decision of when a waste should be subject to the regulatory requirements of Subtitle C is essentially a question of whether regulatory controls promulgated under sections 3002-3004 are necessary to protect human health and the environment.

EPA has consistently interpreted section 3001 to give it broad flexibility in fashioning criteria for hazardous wastes to enter or exit the Subtitle C regulatory system. EPA's longstanding regulatory criteria for determining whether wastes pose hazards that require regulatory control incorporate the idea that a waste that is otherwise hazardous may not present a hazard if already subject to adequate regulation. (See, e.g., 40 CFR 261.11(a)(3)(x), which requires EPA to consider action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste.) Thus, where a waste might pose a hazard only under limited management scenarios, and other regulatory programs already address such scenarios, EPA is not required to classify a waste as hazardous waste subject to regulation under Subtitle C.

At least two decisions by the U.S. Court of Appeals for the D.C. Circuit provide support for this approach to regulating wastes as hazardous waste only where necessary to protect human health and the environment. In *Edison Electric Institute v. EPA*, 2 F.3d 438 (D.C. Cir. 1993), the court upheld a temporary exemption from Subtitle C for petroleum-contaminated media based on the fact that the potential hazards of such materials are already controlled under the underground storage tank regulations under RCRA Subtitle I. In reaching its decision, the court considered the fact that the Subtitle I standards could prevent threats to human health and the environment to be an important factor supporting the exemption. *Id.* at 466. Similarly, in *NRDC v. EPA*, 25 F.3d 1063 (D.C. Cir. 1994), the court upheld EPA's finding that alternative management standards for used oil promulgated under RCRA section 3014 reduced the risks of mismanagement and eliminated the need to list as a hazardous waste used oil destined for recycling.

This approach is fully consistent with RCRA section 3004(y), which directs EPA to identify when military munitions become hazardous waste subject to Subtitle C regulation. The section specifically calls upon EPA—in consultation with the Department of Defense and the States—to develop storage and transportation requirements for waste military munitions that are both protective of human health and the environment and ensure that they are safely managed. Following EPA's consultation with DOD and the States, EPA concludes today that the most reasonable manner of accomplishing Congress' goal is to allow DOD to continue to store waste military munitions under DDESB standards, which—when followed—provide adequate protection, rather than impose a second regulatory scheme.

Thus, RCRA section 3004(y) further supports the approach taken in this rulemaking.

EPA's belief that RCRA section 3001(a) provides the Agency with the flexibility to consider good management practice in determining the need to regulate waste as hazardous, is also informed by the statutory definition of hazardous waste (section 1004(5)(B), see also 40 CFR 261.10(a)). EPA has interpreted the statutory definition as incorporating the idea that a waste that is otherwise hazardous does not require regulation (if properly managed). For example, EPA's regulatory standards for listing hazardous wastes allow consideration of a waste's potential for mismanagement (see 40 CFR 261.11(a)(3), which incorporates the language of RCRA section 1004(5)(B), and 40 CFR 261.11(c)(3)(vii), which requires EPA to consider plausible types of mismanagement).

The legislative history of RCRA Subtitle C supports this interpretation, stating that "the basic thrust of this hazardous waste title is to identify what wastes are hazardous in what quantities, qualities, and concentrations, and the methods of disposal which may make such wastes hazardous." H. Rep. No. 94-1491, 94th Cong., 2d Sess. 6 (1976), reprinted in *A Legislative History of the Solid Waste Disposal Act, as Amended*, Congressional Research Service, Vol. 1, 567 (1991) (emphasis added). This approach also finds support in the D.C. Circuit's decision in *Edison Electric Institute v. EPA*, 2 F.3d 438 (D.C. Cir. 1993). In that case, the court remanded EPA's RCRA Toxicity Characteristic ("TC") as applied to certain mineral processing wastes because the TC was based on modeling the mismanagement scenario of disposal in a municipal solid waste landfill, yet EPA provided

inadequate evidence that such wastes were ever placed in municipal landfills or similar units. Accordingly, if EPA were to find that the mismanagement scenarios of concern for a particular waste were implausible, the Agency may find that it is not necessary to subject that waste to Subtitle C regulation.

EPA recognizes that in the early 1980's its interpretation of RCRA's definition of hazardous waste focused on the inherent chemical composition of the waste, and assumed that mismanagement of such waste would occur and would result in threats to human health or the environment (see 45 FR 33113, May 19, 1980). However, after more than 15 years of experience with the management of hazardous wastes, EPA believes that it is no longer required—nor is it accurate and fair—to assume that all inherently hazardous wastes will be mismanaged, thus creating the necessity to regulate them under subtitle C.

Indeed, in several recent hazardous waste listing decisions, EPA identified potential "mismanagement" scenarios for both wastewater and non-wastewater sources, and then looked at available data to determine if these mismanagement scenarios were plausible given available information about current waste management practices.

In deciding to finalize the conditional exemption from RCRA regulation for the storage of waste military munitions, EPA considered several factors. First, and primarily, EPA relies on the fact that the storage of all military munitions (including waste munitions) by the military services is subject to the specific requirements of existing DDESB standards for the management of military munitions. While these standards have safety as the primary concern, EPA and one interested party, representing certain members of the waste treatment industry, have reviewed the DDESB standards in detail. Both concluded that the technical design and operating standards of the DDESB meet or exceed RCRA standards in virtually all respects, though there were gaps in certain procedural requirements and in areas unrelated to risks from explosive materials (e.g., in requirements to coordinate with local authorities or in unit closure requirements). Based on its review (which has been placed in the docket), EPA does not believe these gaps undermine protection of human health and the environment in any significant way, or that the superimposition of RCRA specific standards would significantly increase protection. The DDESB standards ("DOD Ammunition

and Explosives Safety Standards," DOD 6055.9-STD) are in the docket for today's rulemaking, and may also be obtained by contacting the DOD Explosives Safety Board, 2461 Eisenhower Ave, Room 856-C, Alexandria, VA 22331-0600. These DDESB standards provide design and operating standards that, in part, minimize the potential for explosions and minimize the impact should an explosion occur, based on four factors that relate to the physical and chemical characteristics of these materials: (1) compatibility groupings, (2) hazardous class, (3) net explosive weight (NEW), and (4) quantity distance formulae. The EPA analysis "A Comparison of RCRA Storage Requirements with DOD Requirements for Storage of Military Munitions," EPA, October 31, 1995, is in the docket for this rulemaking (and was available for public comment during the comment period for this rule).

The applicability of these standards to waste military munitions in storage is the major reason for EPA's belief that—in specified circumstances—it is not necessary to subject these wastes to RCRA storage regulation.

Second, EPA believes that specifically identifying the conditions under which waste military munitions become subject to RCRA Subtitle C, and providing for independent regulatory oversight of those conditions, adds significantly to the reliability and protectiveness of the system of DDESB standards.

Third, EPA believes that the fact that the DDESB standards generally apply to military munitions and, if violated, can have significant consequences, provides further assurance that the conditions for exemption will be met. For instance, if a member of the military is found to have violated the DDESB standards, that person is subject to military disciplinary actions. Safety Standards for Storage of Explosives and Ammunition, 41 Op. Att'y Gen. 38 (1949).

Finally, EPA has reviewed documentation concerning incidents involving the handling of DOD munitions, and continues to believe that DOD has a good safety record in storing all military munitions (including "waste" munitions, which constitute a tiny fraction of the overall quantity of munitions managed by DOD). Certainly, there have been incidents over the years that involved munitions detonation, in some cases leading to injury or property damage. However, few if any of these incidents involved waste munitions. Moreover, given the vast quantity of munitions managed by DOD and the dangerous nature of the material, EPA

concludes that the safety record has been good, and furthermore, that regulation under RCRA subtitle C is unlikely to significantly improve that record.

In summary, given the protective nature of the DDESB standards, and the Services' record in providing for the safe storage of military munitions, the Agency believes that RCRA subtitle C regulation is not necessary for waste military munitions managed in compliance with these standards. The regulatory oversight created by today's rule provides further assurance that the standards are followed and protectiveness is maintained.

2. Implementation and Enforcement Issues. It is important to emphasize that if a military facility claims the conditional exemption in § 266.205(a)(1), but fails to store waste military munitions in compliance with the provisions of that exemption, that facility's mismanaged waste, and any unit in which that waste was mismanaged, would no longer be exempt. Accordingly, the facility would be subject to additional regulatory requirements (e.g., a RCRA storage permit) and could be subject to enforcement action (or citizen suit) for violations of hazardous waste requirements.

As a mechanism to determine if the units used to store waste munitions are in compliance with the terms of the exemption, the Agency is imposing (in § 266.205(c)) as a condition for the exemption a self-reporting requirement. Under this self-reporting requirement, the owner or operator must provide oral notice to EPA within 24 hours, when the owner or operator becomes aware of: (a) any loss or theft of the waste military munitions, or (b) any failure to meet a condition of § 266.205(a)(1) that may endanger human health or the environment. The owner/operator must also provide a written report describing any failure to comply with any condition for the exemption, or a loss or theft, within 5 days of learning of it.

When a violation of 266.205(a) occurs, the waste in question automatically loses its exemption. Under 266.205(c), the owner or operator may apply to EPA to reestablish the conditional exemption once the waste returns to compliance with all conditions of the exemption. Depending on the circumstances, EPA may, in its discretion and considering factors such as those described in § 266.205(c), reinstate the exemption. Reinstatement is not automatic, but if EPA does not act on an application within 60 days, the conditional exemption would be deemed to be granted. However, EPA may, after

considering appropriate factors such as those provided in § 266.205(c), revoke an exemption reinstated by default at any time, even after the 60 period. Reinstatement decisions will be made by the Director (as defined in 40 CFR 270.2). Any owner or operator who claims that EPA reinstated the owner/operator's conditional exemption must be able to demonstrate that the reinstatement has been approved by the Director.

Further, as a mechanism to enable the regulatory agency to know which wastes and which storage units are subject to oversight under this approach, EPA has established a requirement for a notification within 90 days of when a storage unit is first used to store waste military munitions for which the conditional exemption is claimed.

In order for the regulatory agency to know when a storage unit will no longer be used to store waste military munitions subject to § 266.205(a), § 266.205(b) requires DoD to notify the appropriate regulatory authority of that fact.

3. Amendments to DDESB Standards. The DDESB storage standards that make up the § 266.205(a)(1) conditions are those adopted by the DDESB as of November 8, 1995. EPA understands that the DDESB may change its storage standards from time to time. However, in light of the fact that DDESB has a statutory obligation to ensure proper storage of munitions, and to prevent hazardous conditions arising from storage of munitions that would endanger life and property (see 10 U.S.C. § 172), EPA does not consider it likely that DDESB would pursue any amendments that would lessen protection of human health and the environment. DDESB also has a long experience regulating explosive safety hazards, which directly affect DOD's own personnel. Further, today's rule provides that DOD will publish notice of any amendments to the DDESB storage standards in the Federal Register. DOD will also provide EPA a preliminary determination of whether the amended standards are less protective than the current standards. If EPA in its discretion determines that revisions to the conditional exemption in today's rule are necessary to protect human health and the environment, the Agency will propose such revisions. Citizens may also petition for rulemaking to request EPA to revise the RCRA conditional exemption in light of any amendments to the DDESB standards (see RCRA section 7004(a), and 40 CFR 260.20).

EPA understands that DOD officials have authority, in some circumstances,

to grant waivers or exemptions from DDESB standards for military munitions, where necessitated by strategic or other compelling reasons. However, EPA believes that a waiver for waste military munitions could be inconsistent with the basis for the conditional exemption established by today's rule. Therefore, a waiver from otherwise applicable DDESB storage standards will terminate the eligibility of affected waste munitions for the conditional exemption, subject to reinstatement by EPA pursuant to § 266.205(c). The existence of a waiver will not preclude the owner or operator from storing waste military munitions in compliance with the requirements of 40 CFR Parts 264 or 265, subpart EE.

b. *Waste Chemical Munitions* 1. Applicability of RCRA Requirements to Waste Chemical Munitions. "Chemical agents and munitions" are defined as in the Department of Defense Authorization Act of 1986, 50 U.S.C. 1521(j)(1); this statute is the comprehensive congressional scheme for the management and ultimate destruction of chemical agents and munitions.

Under the original 1980 RCRA regulations, and under today's federal RCRA regulations, a waste is hazardous if it is specifically listed as a hazardous waste, or if it exhibits a hazardous characteristic such as reactivity. See 40 CFR Part 261, subparts B and C. Chemical agents and munitions become hazardous wastes if (a) they become a solid waste under 40 CFR 266.202, and (b) they are listed as a hazardous waste or exhibit a hazardous waste characteristic; chemical agents and munitions that are hazardous wastes must be managed in accordance with all applicable requirements of RCRA.

Based on EPA's technical review associated with this rule, the Agency believes that the waste chemical agents and munitions in the military stockpile exhibit at least one of the characteristics identified in 40 CFR 261 subpart C. These chemical waste agents and munitions would be hazardous wastes, required to comply with RCRA requirements. (Note that even though the characteristic nature of waste chemical agents and munitions may not have been well understood in the past, the Department of Defense has, as a matter of policy and/or State law, been managing these waste chemical agents and munitions in compliance with RCRA requirements, and subject to RCRA permits.)

2. Inapplicability of Conditional Exemption. EPA is not extending the conditional exemption in § 266.205(a)(1) to waste chemical agents and munitions.

This decision should not be construed as a negative assessment of DOD's standards or management of chemical agents and munitions. Indeed, DOD has a sound record for the safe storage of chemical munitions and agents. This decision is based on the Agency's belief that chemical agents and munitions are more akin to other types of chemical waste that RCRA typically regulates than are waste conventional weapons. In addition, as noted above, waste chemical agents and munitions are, either because of State law or DOD policy, already stored in RCRA regulated units and the public has come to expect that. EPA sees no reason to disrupt the current situation.

3. Inapplicability of RCRA Storage Prohibition. EPA is today codifying its interpretation that RCRA section 3004(j) does not apply to waste chemical agents and munitions. (See § 266.205(d)(2) of today's rule.)

By way of background, RCRA section 3004(j) prohibits the storage of hazardous waste for which one or more methods of land disposal are prohibited, unless such storage is for the sole purpose of accumulating quantities needed for proper recovery, treatment, or disposal. *Edison Electric Institute v. EPA*, 996 F.2d 326 (D.C. Cir. 1993). Land disposal restrictions have been set for waste exhibiting any of the hazardous waste characteristics, and thus the storage prohibition would, on its face, appear to apply to waste chemical agents and munitions that exhibit a characteristic. Congress enacted section 3004(j) in 1984 because it "believed that permitting storage of large quantities of waste as a means of forestalling required treatment would involve health threats equally serious to those posed by land disposal, and therefore, opted in large part for a 'treat as you go' regulatory regime." *Id.* at 329 (quoting *Hazardous Waste Treatment Council v. EPA*, 886 F.2d. 355, 357 (D.C. Cir. 1989)). The fact that treatment or disposal capacity for a waste does not exist or is inadequate is not enough, by itself, to overcome the storage prohibition. *Id.* at 336.

However, in the case of chemical agents and munitions, Congress has—subsequent to enactment of section 3004(j)—statutorily limited DOD's ability to move waste chemical agents and munitions from storage to treatment and disposal; EPA believes that this demonstrates Congress' intention that the storage prohibition should not apply to waste chemical agents and munitions.

Specifically, in 1985, one year after enacting RCRA section 3004(j), Congress established a comprehensive scheme for the management and ultimate

destruction of waste chemical agents and munitions. See 50 U.S.C. section 1521. That scheme, which Congress has updated and amended repeatedly in intervening years, requires detailed study of destruction options for the chemical agents and munitions, and provides for destruction of the chemical agents and munitions to be completed by a set date. See, e.g., 50 U.S.C. section 1521 (a), (b), and (d). As originally enacted, Congress required destruction of the chemical agents and munitions by September 30, 1994, but Congress has extended that deadline recently to December 31, 2004. 50 U.S.C. section 1521(b)(5). Congress has further required that certain studies be completed prior to destruction (see, e.g., 50 U.S.C. section 1521(d)); Pub. L. No. 180, 100th Cong., 1st Sess., section 125(b), (c), (d) (Dec. 4, 1987), 101 Stat. 1019, 1043, 1044). During this mandated study phase, during construction of the destruction facilities (see 50 U.S.C. section 1521(c)(1)(B),(2)), and while destruction is ongoing, Congress necessarily envisioned that these waste chemical agents and munitions would be stored. Indeed, Congress specifically required DOD annually to assess and report "how much longer the stockpile can continue to be stored safely." 50 U.S.C. section 1521(g)(3)(C)(1).

Highlighting that Congress did not intend these agents and munitions to be destroyed until completion of a process to ensure environmentally safe destruction, Congress last year specifically prohibited construction of chemical weapons incinerators at two of eight storage sites, pending study of other destruction alternatives. See Omnibus Consolidated Appropriations for 1997, Pub. L. 208, 104th Cong., 2d Sess., section 8065, *reprinted in* 9A U.S.C.C.A.N. 396, 397 (Nov. 1996). Congress also has restricted transportation of chemical agents and munitions, so that chemical agents and munitions cannot be transported from a storage facility that lacks disposal capacity to a storage facility that might have such capacity. See *id.* at 397-98; see also 50 U.S.C. section 1512, 1521a.

In light of the detailed Congressional plan for destruction of the chemical agents and munitions, and their necessary storage pending destruction, EPA believes that Congress could not intend the prohibition on storage in RCRA section 3004(j) to apply to chemical agents and munitions. EPA believes that the issuance of this interpretation is necessary to reconcile the otherwise conflicting provisions of two federal statutes, and is within EPA's mandate under RCRA section 3004(y) to issue regulations that provide for safe

storage of waste chemical agents and munitions.

This interpretation is an interpretative rule that reconciles specific, existing statutory provisions; under 5 U.S.C. section 553(b)(3)(A), it is not subject to formal public notice and comment rulemaking procedures.

2. *Subpart EE.* As noted above, EPA believes that RCRA regulatory controls are necessary for waste munitions not already regulated, and for waste military munitions that are not being managed in compliance with the comprehensive DDESB standards. At the same time, however (and as discussed in the proposed rule on waste munitions), EPA's view is that the specific RCRA regulations currently applicable to hazardous waste storage units (e.g., the container and tank standards) are not the best fit for waste munitions and explosives. Rather, the Agency has developed a tailored version of the RCRA storage standards to better reflect the nature of waste munitions and explosives, and to ensure that the regulatory requirements do not interfere with the safe handling of these materials. See 60 FR 56479 (November 8, 1995).

The Agency has clear authority under section 3004(a) to establish storage standards "as necessary to protect human health and the environment"; the storage standards presently in 40 CFR Part 264 were designed to cover conventional waste management units such as tanks and containers; today's subpart EE standards are focused on the storage of hazardous waste munitions and explosives in magazines designed for explosive materials. Accordingly, EPA is finalizing proposed subpart EE in 40 CFR Parts 264 and 265 for waste military munitions and commercial munitions and explosives that have become hazardous waste subject to subtitle C.

EPA has modified proposed subpart EE in one substantive respect. In response to suggestions by some commenters, the Agency is extending subpart EE applicability to hazardous waste non-military munitions and explosives, as well as to hazardous waste military munitions and explosives. EPA believes this change is reasonable because the subpart EE performance standards are equally appropriate for non-military munitions and explosives, which closely resemble certain military munitions (e.g., small arms ammunition). As noted in the proposed rule, this subpart combines the environmental features of the existing RCRA storage unit standards with performance standards based on the DOD Explosives Safety Board

(DDESB) munitions storage standards (which are contained in DOD 6055.9-STD—DOD Ammunition and Explosives Safety Standards) to minimize potential inconsistencies or conflicts between RCRA regulatory requirements and DOD's explosives safety standards. (This is consistent with the mandate in RCRA section 3004(y) to address both protectiveness and safety.) It is equally important to ensure that owners and operators of storage facilities for non-military waste munitions and explosives have a unit standard that considers both the traditional RCRA concerns and the need to assure explosives safety.

Subpart EE is not the exclusive manner for storing hazardous waste munitions or explosives, but rather, provides an alternative for the storage of hazardous waste munitions and explosives under RCRA. Depending on the explosive hazards, a facility owner or operator may still seek a storage permit for waste munitions and explosives under the already existing 40 CFR parts 264 and 265 standards for other types of storage units, including containers (subpart I), tanks (subpart J), and containment buildings (subpart DD). An owner or operator would apply for a permit under the most appropriate of these standards.

In developing the subpart EE standards, the Agency carefully examined the DDESB standards, which have been developed to protect against explosions and to minimize the impact if one should occur, and in doing so EPA concluded that the DDESB standards are generally protective of human health and the environment. The subpart EE standards include the three basic designs of magazines that are found in the DDESB storage standards: (1) earth-covered magazines (ECMs) (which are frequently used for shock sensitive and other munitions), (2) above ground magazines (AGMs) (which might be used for munitions that do not pose a mass detonation or fragment producing hazards), and (3) outdoor or open storage areas (typically for munitions that do not pose a significant potential for explosion).

Today's rule also establishes design, operation, monitoring, inspection, closure, and post-closure care standards consistent with the standards for other RCRA storage units. These standards set containment and control performance standards to prevent contamination of soil, ground-water, surface waters, and the air. The standards require a primary barrier or containment system, which may be a bomb shell, a protective casing, a storage container, or a tank. For non-liquid wastes stored outdoors or in open storage areas, the unit design

and operation must provide that the waste will not be in standing precipitation. This may be accomplished by a number of design and operating features, including a sloped impervious base, a pervious base, and/or waste elevation.

For those few waste munitions that are liquids, in addition to the primary barrier or container, the subpart EE rules require units to be equipped with a secondary containment or vapor detection system. The secondary containment or vapor detection system design, operation, controls, and monitoring features may include a combination of sumps, pumps, drains, slope, double-walled containers or tanks, overpacks, and/or elevated waste or other features that provide that any released liquids are contained or promptly detected so that an appropriate response may be taken (e.g., additional containment, such as a container overpack, or removal from the waste area). For liquid and liquid-filled waste munitions (e.g., the stored waste chemical munitions), the Agency considers the storage of the munition inside a sealed storage casing as a means of achieving secondary containment.

Monitoring and inspections are required to assure that the containment systems and controls are working as designed, that the wastes are stable, and that no contaminants that might adversely affect human health or the environment are being released from the magazine. In addition, all hazardous waste munitions under subpart EE would have to be inventoried at least annually, which is consistent with current DOD requirements.

The closure standards mirror the other RCRA storage unit closure standards, requiring waste and contaminant removal and containment system decontamination (where practicable). When "clean closure" cannot be accomplished, the landfill closure and post-closure standards apply.

Response to Comments

EPA received numerous comments on proposed subpart EE and the three alternatives that EPA proposed in the preamble to the proposed rule. Regarding subpart EE, some commenters said it is too general to be effective, whereas others supported it, some saying it should be expanded to be available for all munitions and explosives storage, not just military and not just munitions since the other existing storage standards under RCRA are not as tailored or specific to explosives. Regarding the former comments, EPA believes the advantage

of general performance standards is that they allow flexibility in establishing site specific design and operating standards. 40 CFR part 264, subpart X, is an example of a RCRA Subtitle C performance standard. The disadvantage of performance standards as pointed out by the commenters is the lack of specificity. In the case of subpart EE, however, EPA has included some specificity (e.g., secondary containment). Also, the DDESB standards or other applicable standards (e.g., DOE, Coast Guard, NASA, BATF) and Standard Operating Procedures (SOPs) may be incorporated as appropriate to add specificity in the development of permit standards. Since there are so many standards and SOPs for munitions and explosives, both in the private and public sectors, this approach provides the flexibility to incorporate these without having restrictive or conflicting RCRA standards. Commenters asked if military or other SOPs would be subject to regulator review. To the extent that they are used in the subpart EE permit, they would be subject to regulator and public review during the permitting process, and when incorporated into a RCRA permit, they become regulatory requirements. Regarding the comments supporting expanding the coverage of the proposed subpart EE, EPA concurs and has expanded the applicability of subpart EE in the final rule to make it an available option for the storage of all waste munitions and explosives. For this reason, subpart EE has been retained in parts 264 and 265 rather than in the new part 266, subpart M.

Several commenters felt that EPA should require storage permits for all chemical munitions, not only because they felt these should be classified as wastes (this comment was discussed in section K of this preamble), but because extra precautions are needed for these particularly hazardous chemicals. In response, EPA has decided not to allow the storage of waste chemical agents and munitions to be eligible for the conditional exemption from storage permits under today's rule. Instead, a subpart EE or other waste management permit is required for these wastes. EPA notes, however, that DOD has in place strict procedures for the storage of all chemical munitions, including waste chemical munitions. For example, all chemical munitions and bulk agent storage is currently maintained within a special high security area at each installation. Extensive precautions are used to control entry to these storage areas. Munitions containing explosives are stored in earth-covered magazines

(ECMs) designed to protect their contents from blast and shrapnel effects of the potential detonation of a neighboring magazine. Most munitions without explosive components, and bulk containers containing isopropyl methylphosphonoflouridate (referred to as GB) and phosphonothioic acid, methyl-S-(2-(bis(1-methylethyl)-amino)ethyl-O-ethyl ester (referred to as VX), are also stored in ECMs. The exceptions include VX ton containers and spray tanks, both of which are stored in above ground magazines (AGMs). One ton containers of mustard agent are stored in either ECMs, AGMs, or outdoor storage areas. Chemical munitions other than 1-ton containers are stored in configurations generally suitable for transport during wartime. These configurations include boxes, protective tubes, or metal overpacks, and all are on pallets. The stacking arrangements and aisles inside the storage facilities are generally designed and maintained so that units in each stack can be inspected, inventoried, and removed for shipment or maintenance, as necessary. Periodic surveillance monitoring, safety inspections, indoor air monitoring, maintenance of munitions for safety-in-storage, and inventory activities are routinely carried out on these stored munitions.

Also, there have been no catastrophic accidents associated with the storage of chemical munitions, and the risk of release to the public has been reduced due to the 1969 cessation of live firing and the implementation of close restrictions on the disposal and movement of chemical munitions. There are, however, cases where deterioration of the containers has resulted in leaking of agent from a munition. When this occurs, the munitions are over packed in hermetically sealed containers and placed in specially designated and monitored magazines. Even with such incidents, in the past 40 years there have been no known cases of exposure to personnel not directly engaged in agent operations.

Some commenters suggested that subpart EE be expanded for waste gaseous chemical warfare agents to require secondary containment and to prohibit outdoor storage. EPA notes that chemical warfare agents are stored as liquids, not gases, and therefore the secondary containment or vapor detection system requirements in today's rule apply.

EPA does not see the need to prohibit outdoor storage of any waste munitions in subpart EE so long as those waste munitions will not be left in standing precipitation, and, if liquid, have secondary containment or vapor

detection system, as is required by subpart EE.

DOD commented that EPA should allow a vapor detection and response system as an alternative to secondary containment for liquid waste chemical munitions and agents since these materials leak as vapors before they leak as liquids and such early detection and response provides for protection that is comparable to secondary containment. EPA agrees, and as discussed in the section on subpart EE above, EPA has provided for the use of a vapor detection and response system in finalizing subpart EE. In addition to the subpart EE standards, chemical waste military munitions are also subject to additional procedures and requirements regarding monitoring or secondary containment. At facilities that manage chemical weapons, DOD has both a monitoring and a visual inspection protocol that is designed to allow early detection of any leakage from a chemical munition. The monitoring includes both regularly scheduled sampling of the air in all units storing chemical munitions, as well as monitoring of the air within the storage unit whenever personnel are to enter the unit. Should there be a release of agent, these monitoring protocols will detect minute amounts of vapor release (which typically occurs before any liquids are released). Should a release be detected, the munitions within the storage units are inspected to locate the leak and the release is contained. If the source cannot be located immediately, the ammunition storage unit is sealed and the air filtered and monitored until the source is located. Once a leaking chemical munition is isolated, it is overpacked in a specially designed container that re-establishes an intact barrier between the agent and the environment. If a container with liquids (e.g., an M55 rocket) leaks inside its sealed shipping tube, and if the primary barrier (e.g., the rocket casing) has been permanently compromised, but the shipping tube is intact, DOD typically overpacks the rocket in order to place two intact barriers between the liquid and the environment, an action consistent with the secondary containment requirements found in other unit standards under RCRA. Upon completion of the overpacking activities and associated decontamination procedures, the storage area is monitored to assure complete decontamination.

Commenters sought further clarification of the status of shipping containers and overpacks as secondary containment for liquid-filled waste munitions. It is EPA's view that the secondary containment requirement for

waste munitions may be met by a shipping or storage container or overpack around a non-leaking munition or container since it places a second barrier between the liquid and the environment. Multiple overpacks (a current DOD practice) are permissible to meet this requirement.

Some commenters (mostly the regulated community) favored the first proposed alternative or the "deferral" option under which munitions would not under any circumstances be considered a RCRA hazardous waste based on the current storage practices of DOD, which are protective of human health and the environment. Other commenters questioned this alternative's legal basis and opposed this approach because it would remove all non-DOD oversight. EPA agrees with the latter commenters on both counts and has not adopted this approach.

The Agency received comments raising concerns about a contingent management approach. The Agency's thinking on this issue is set out in today's preamble and a detailed response can be found in the docket.

N. Permit Modifications to Receive Off-Site Waste Munitions

Some RCRA permits at military installations have conditions prohibiting the receipt of "off-site" waste. Under these permit restrictions, if the point of generation of a waste munition is any place other than the permitted installation, then the waste munition could not be accepted at the facility for treatment, storage, or disposal without the installation first having received a RCRA permit modification.

Under today's rule, a number of formerly unregulated munitions might now be deemed to be wastes, and thus potentially subject to these off-site permit restrictions (see discussion in the preamble to proposed rule). Under the existing regulations (40 CFR 270.42(d)(1)), this modification would arguably have to follow the procedures for a Class 3 modification, requiring approval before implementation. Alternatively, the permittee might request that the modification be reviewed by the regulatory agency as a Class 1 or Class 2 modification. DOD maintains that this situation would cause a serious disruption of its munitions management program.

To address this concern, this final rule allows permitted facilities with off-site prohibitions to continue to receive from off-site sources munitions that have been newly defined as solid waste, provided there is timely notification to the permitting authority (in the form of

a Class 1 permit modification request), followed by a Class 2 permit modification request. Under this procedure, the facility may continue to accept waste munitions from off-site sources until the permitting authority makes a final decision on the Class 2 permit modification request. This approach is consistent with the permit modification rules for newly regulated wastes (40 CFR 270.42(g)).

There are three specific requirements that are attached to this provision and are codified today at 40 CFR 270.42(h). First, to be covered under this provision, the facility must be in existence on the date today's rule goes into effect and must already have a permit to handle the waste munitions. Second, the facility must submit a request for a Class 1 permit modification that seeks an amendment or removal of the permit restriction on off-site waste. The Class 1 permit modification request must be submitted on or before the date when the waste munitions become subject to hazardous waste regulatory requirements. (Today's rule becomes effective in unauthorized States six months from the date of publication; in authorized States, State law would determine the effective date.) This timely Class 1 submittal would allow the facility to continue to receive off-site waste munitions after the effective date without the need for prior approval by the permitting authority. Third, following submission of a Class 1 permit modification request, the facility would have an additional six months following the effective date of this rule to submit a Class 2 permit modification request for the removal of the off-site waste prohibition. Following submission of the Class 2 modification, the facility would be allowed to continue to accept waste munitions from off-site sources until such time as a final decision to grant or deny the modification is made.

EPA's two-step approach recognizes that military munitions that were previously handled at certain stages as non-waste might, under today's rule, be considered waste. This two-step process allows DOD to continue managing its munitions with a minimum of disruption, while recognizing the need for the modification of those permits that restrict the acceptance of waste munitions from off-site sources.

The proposed rule provided an opportunity for DOD, before the 180-day deadline to submit a Class 2 permit modification application, to request the permitting agency to allow an extension for a specified period. In today's final rule, EPA has decided not to provide for such an opportunity for two reasons. First, this is inconsistent with

§ 270.42(g) which addresses permit modifications for all newly regulated wastes and units to which this situation is analogous. Second, this Class 2 permit modification request is, perhaps, the simplest and most straightforward of all types of requests likely to be submitted under this section, so to provide an opportunity for extension is unnecessary.

Today's final action does not affect activities at interim status facilities. In some cases, however, the facility's part B permit application might include an off-site waste prohibition. In this case, the facility owner should amend the permit application.

Response To Comments

A number of commenters said it would be inappropriate for EPA to adopt DOD's alternative approach as described in the proposed notice (whereby a material is not deemed to be a waste until received at the treatment/destruction unit) because this approach would undo by national rule provisions that currently exist in a number of permits that prohibit the receipt of off-site waste, and because this would ignore or circumvent the right and duty of State regulatory agencies to issue site-specific permits based on public participation. Furthermore, a number of commenters maintained that the modification of a permit restriction regarding off-site wastes should be processed as a Class 3 modification requiring full public participation rather than as a Class 1 or 2 permit modification. These commenters argued that permit modifications to remove off-site waste restrictions could create the need for additional modifications regarding changes in waste streams or quantity limitations. Commenters specifically expressed concern that no waste should be allowed to be received from off-site unless the receiving facility is "prepared and equipped" to comply with the standards for off-site facilities.

In adopting the approach in today's rule, the Agency's main concern is that any modification of existing permit conditions restricting off-site waste be done in a way that provides for public participation. Thus, the Agency concurs with the comments opposing the "alternative proposal" of declaring the transported material as a waste when it reaches the "front door" of the treatment or disposal unit.

In response to commenters recommending the Class 3 permit modification procedures, expressing concern that other permit conditions might change, or that facilities might not be prepared to receive the "new" waste munitions, EPA is clarifying the

applicability of the off-site permit modification provisions in today's rule. The procedures of new § 270.42(h), allowing a Class 1 modification followed by a Class 2 modification request, apply only to changing a permit condition that prohibits receipt of off-site wastes. Section 270.42(h) of today's rule does not allow facilities to receive munitions that they were not already receiving at the time of the rule's effective date. It only allows facilities to continue to receive munitions newly classified as hazardous waste. Today's rule also does not affect the classification of, or process for, other types of permit modifications (such as acceptance of different wastes or changes in permitted quantity limits) that might occur at a facility. Those other types of modifications will continue to be evaluated in accordance with 40 CFR § 270.42 and Appendix I to 40 CFR § 270.42.—i.e., the facility must follow the appropriate procedures for whichever class of modification—Class 1, 2, or 3—applies.

In conclusion, given the very narrow scope of the changes allowed under § 270.42(h), EPA believes that it is not necessary to require Class 3 permit modifications in this rule. In situations of high public concern, Class 2 procedures already allow the regulating agency to elevate the process to a Class 3.

O. Environmental Justice

Today's rule addresses environmental justice concerns by providing standards, while not specific to environmental justice, that are protective of human health and the environment regardless of the population potentially impacted. In addition, DOD as well as all Federal agencies, is subject to the President's Executive Order No. 12898 on Environmental Justice.

Response To Comments

Several commenters raised environmental justice concerns. The comments focused primarily on military contamination caused by ordnance landing on ranges formerly owned by Native Americans or Hawaiians, or landing off-range on Native American or Hawaiian lands. The commenters stated that these lands should be cleaned up and, as appropriate, returned, citing cultural, economic, safety, justice, and social reasons, observing that indigenous peoples have a special relationship to their land and that relocation is not an option. Seven environmental justice examples were mentioned in the public comments. These examples are located in Alaska,

California (2), Hawaii, Nevada, Oregon, and South Dakota. A brief description of each of these was provided in the comments.

In response, EPA has prepared a report summarizing these comments and cases, and referred it to DOD. A copy of this report is available in the Docket for this rule-making. DOD has created an environmental justice program to evaluate and respond to these concerns and has appropriated \$8 million in each of the past three fiscal years to support this effort.

In addition, in developing this final rule and in helping DOD develop its range cleanup rule, EPA feels the environmental justice concerns raised by the commenters for munitions and contaminants landing or migrating off-range, and on closed and transferred ranges, will now be addressed, resulting in an increased protection of human health and the environment. For example, some commenters referred specifically to munitions that land off range. Today's rule retains, in § 266.202(c)(3), the "off-range" response provision of the proposed rule. This is expected to help communities, including Native American communities, which are located adjacent to ranges. In addition, EPA is working with DOD in the development of DOD's Range Rule, which will establish a process for taking inventory, accessing, and cleaning up closed, transferring, and transferred ranges.

P. Emergency Responses

Today's final rule also clarifies that RCRA generator, transporter, and permit requirements do not apply to immediate responses to threats involving munitions or other explosives. EPA is now codifying a long standing Agency policy to address concerns of DOD and other emergency response officials that RCRA requirements may impede emergency responses, especially by causing delays or confusion. As stated in the preamble to the proposed rule, the current RCRA rules exempt emergency responses from full permit requirements in two ways. First, permits (including emergency permits) are not required for immediate responses to a discharge of hazardous waste or to an imminent and substantial threat of a discharge (§§ 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3)). After the emergency is determined to be over, however, any additional waste management may be subject to RCRA regulation. Second, in cases of imminent and substantial endangerment to human health or the environment, a temporary emergency permit may be issued to a facility to treat, store, or dispose of hazardous

waste. This permit may be issued orally, if followed by a written emergency permit within five days, and may not exceed 90 days in duration. See 40 CFR 270.61.

Today's rule clarifies that EPA considers immediate or time-critical responses to explosives or munitions emergency responses to be an immediate response to a discharge or imminent and substantial threat of a discharge of a hazardous waste under 40 CFR 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3). Such responses are, therefore, exempt from RCRA permitting, and other substantive requirements, including emergency permits, conducting risk assessments for OB/OD permits under 40 CFR part 264, subpart X, and interim status requirements under 40 CFR part 265, subpart P. If an immediate response, however, is clearly not necessary to address the situation, and a response can be delayed without compromising safety or increasing the risks posed to life, property, health, or the environment, the responding personnel, if time permits, should consult with the regulatory agency regarding the appropriate course of action (e.g., whether or not to seek a RCRA emergency permit under § 270.61, or regular facility permit under 40 CFR Part 270). Situations where an immediate response is needed would include instances where the public or property is potentially threatened by an explosion. Situations where an immediate response is clearly not necessary would include instances where the public or property are not threatened by a potential explosion (e.g., in remote areas such as some former ranges or where immediate action is not necessary to prevent explosion or exposure). In these cases, there is time to consult with the EPA or State regulatory agency on how to proceed.

Sections 264.1(g)(8)(i)(D), 265.1(c)(11)(i)(D), 266.204, and 270.1(c)(3)(i)(D) make it clear that explosives or munitions emergencies, including those involving military munitions, are exempt from RCRA permitting (including emergency permitting). This final action also clarifies, in §§ 262.10(i) and 263.10(e), that, if an emergency response specialist at the site determines it to be appropriate, the explosive material may be removed and transported to a safer location to be defused, detonated, or otherwise rendered safe without a RCRA manifest, and the transporter is not required to have a RCRA identification number. Such transport could be to an open space or an EOD range at a military installation. Transportation

onto a military base is, however, subject to the requirements of 10 USC section 2692. Transporters shall consult with appropriate military authorities regarding 10 USC section 2692 requirements. This final action, which EPA believes is necessary to allow prompt response to explosives emergencies, is consistent with current EPA policy.⁵

Today's rule also finalizes three new definitions in § 260.10 to help clarify the scope of this exemption. The definition of "explosives or munitions emergency" describes in detail what constitutes an emergency, and clarifies that an emergency situation includes suspect situations with significant uncertainties, including improvised explosive devices (IEDs, e.g., home made bombs). The definition of explosives or munitions emergency also states that the "explosives or munitions emergency response specialist" is responsible for determining whether an emergency exists.

An "explosives or munitions emergency response specialist" is defined to include all military and non-military personnel trained in the identification, handling, treatment, transport, and destruction of explosives or conventional and chemical military munitions. Explosives and munitions emergency response specialists include DOD Explosives Ordnance Disposal (EOD) personnel, who are trained to respond to emergency situations involving military munitions and explosives, DOD Technical Escort Unit (TEU) personnel, who are trained to respond to chemical munitions emergencies, and DOE, National Guard, and Coast Guard specialists who are trained to respond to emergency situations involving chemical munitions. EOD and TEU personnel respond to on-installation and off-installation incidents involving military munitions. They also respond to requests by other Federal agencies or local civil authorities for assistance with incidents involving non-military explosives. Non-military explosives or munitions emergency response specialists include trained personnel in the Bureau of Alcohol, Tobacco, and Firearms (BATF), Federal Bureau of Investigation (FBI), Central Intelligence Agency (CIA), Drug Enforcement Administration (DEA), U.S. Postal Service (USPS), Federal Aviation Administration (FAA), other parts of the Department of Transportation (DOT), and the Department of Interior (DOI).

⁵ Interpretive letter from EPA (Director, Office of Solid Waste) to the Bureau of Alcohol, Tobacco, and Firearms, August 11, 1988, p.4.

State and local enforcement and emergency response personnel and private sector explosive specialists also qualify.

Finally, an "explosives or munitions emergency response" is defined as all immediate response activities identified and carried out by the emergency response specialist to eliminate the threat, including all handling, render-safe (e.g., methods to defuse or separate the initiator from the explosive), transportation, treatment (e.g., by placing the explosive in water), and destruction activities. These emergency actions might involve defusing, detonation, or other treatment of ordnance "in-place," or transportation to a safer location, including to an EOD range, to defuse, detonate, or otherwise to abate the immediate threat.

Response to Comments

DOD requested that EPA exempt the object of an explosive or munitions emergency response from the regulatory definition of solid waste. EPA disagrees since such material is often clearly a RCRA solid waste (e.g., a buried munition). DOD questioned whether temporary storage for extenuating circumstances (e.g., adverse weather, nightfall, or safety considerations) would be allowed under the emergency response. EPA concurs that temporary storage for such extenuating circumstances are within the emergency response exemption from a RCRA permit.

A number of commenters questioned the status of any residuals in the soil from emergency responses. EPA believes the responsibility for any hazardous residuals is a factual determination dependent upon the circumstances surrounding the emergency event. Responsibility could rest with the person who left or abandoned the munition or explosive, the landowner, or, possibly, the local authorities. For purposes of this regulation, EPA does not consider emergency response personnel to be generators of residuals resulting from immediate responses, and, therefore, emergency response personnel are not subject to the regulations governing such generators, unless they are also the owner of the object. In the case of an EOD unit responding to an incident involving a military munition, the EOD units are not typically the "owner" of the munition nor are they typically the responsible organization for a military installation. Thus, in those cases that involve military munitions, the EOD unit would not be responsible for addressing any residual contamination; however, DOD, the military Service, or

other organization (e.g., DOE) would be potentially liable for any remediation of residual contamination. In EPA's view, it would be counterproductive to the public safety and the compelling need for immediate action to require that emergency response personnel contemplate the environmental liability that might result from their response to an explosives or munitions emergency. However, after the emergency response is concluded, any residuals are subject to 40 CFR 262.11 (hazardous waste determination), and if hazardous, to the rest of 40 CFR parts 260 through 270. The owner of the object of an emergency response; the owner of the property on which the object of an emergency response rests or where the emergency response initiates; or the requestor for an emergency response is responsible for addressing any residual contamination that results from an emergency response. For example, if the residuals are hazardous and resulted from an emergency response involving a military munition, then the military would be responsible for such residuals. Also, it is not the intent of today's regulation to impose liability on response personnel to clean up residuals associated with donor explosives used to destroy the object in an emergency response.

On a broader scale, DOD raised three concerns regarding the regulation of emergency responses involving munitions or explosives under RCRA: (1) the effect of the RCRA land disposal restrictions on response actions; (2) possible RCRA corrective action liabilities; and (3) the possibility that treatment permits would be required for areas "routinely" used to handle emergencies. To the extent that any of these issues would delay or complicate responses to emergencies involving explosive material, EPA shares DOD's concerns. EPA's objective in issuing today's rule, and in clarifying the applicability of RCRA to emergency responses, is to remove regulatory impediments to emergency responses and to promote the safe and prompt management of explosives and munitions emergencies. EPA agrees with DOD that any regulatory impediments to prompt responses should be removed. DOD's three concerns are specifically discussed below.

Concerning the first issue—the application of the RCRA land disposal restrictions (LDRs) to explosives emergencies—EPA has limited the applicability of LDR treatment standards for reactive wastes with respect to unexploded ordnance and other explosive devices that are the object of

an emergency response. While the reactive waste must be deactivated, treatment of underlying constituents is not required. (See the table, Treatment Standards for Hazardous Wastes, 40 CFR part 268, subpart D, which identifies deactivation as the sole treatment requirement for "unexploded ordnance and other explosive devices which have been the subject of an emergency response.") Thus, an emergency response specialist does not need to be concerned with the LDR requirements requiring treatment of underlying hazardous constituents when determining the course of action in an emergency response. EPA notes, however, that emergency responses present issues that are different from routine management of reactive wastes, where there is no competing consideration of need for immediate action to prevent an imminent threat. Thus, in non-emergency response situations, the LDRs do apply. See 61 *FR* 15568–15569, April 8, 1996. EPA also notes, however, that DOD is still responsible for any residues that remain after an emergency response that involves military munitions.

EPA continues to regard open burning/open detonation as treatment, not constituting land disposal. See 51 *FR* 40580 (November 7, 1986) and 52 *FR* 21011 (June 4, 1987). With regard to emergency responses to explosives involving deactivation or destruction methods other than open burn/open detonation, EPA notes that the treatment standard for reactive wastes is deactivation (i.e., removal of the hazardous waste characteristic of reactivity). See 40 CFR 268.42, Table 1. These standards are consistent with typical responses of an EOD team to an explosives emergency, and therefore the RCRA treatment requirements would not present a problem.

The responding agencies' primary concern on the second issue—the applicability of RCRA corrective action requirements—is the possibility that they might incur an obligation to clean up unrelated contamination elsewhere within the facility boundaries when they conduct an emergency response. In response to this concern, EPA emphasizes that emergency response actions are exempt from RCRA permitting regulations, and, therefore, do not trigger RCRA corrective action requirements. The RCRA corrective action authorities in sections 3004(u), 3004(v), and 3008(h) apply only to RCRA permitted or interim status facilities. Thus, these requirements would apply only if the emergency response took place at a RCRA permitted or interim status treatment,

storage, or disposal facility, and in this case, any responsibilities for corrective action would fall on the facility owner, rather than on the responding authority. Furthermore, RCRA corrective action requirements do not apply to actions taken under the immediate response provisions of 40 CFR 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3). Finally, in the case of a response conducted under a RCRA emergency permit (40 CFR 270.61), RCRA corrective action requirements would be excluded under 40 CFR 270.61(b)(6). This provision requires that emergency permits exclude conditions that would be inconsistent with the emergency situation that the permit was addressing. EPA discussed this point in its RCRA corrective action proposal of July 27, 1990, 55 *FR* 30806. Finally, if a response action is taken under CERCLA authority, CERCLA section 107(d)(1) provides that no person "shall be liable under this title for costs or damages as a result of actions taken or omitted in the course of rendering care, assistance, or advice in accordance with the National Contingency Plan ('NCP') or at the direction of an onscene coordinator appointed under such plan, with respect to an incident creating a danger to public health or welfare or the environment as a result of any releases of a hazardous substance or the threat thereof."

DOD's concern on the third issue is that, if the responding agency repetitively transported explosive devices to a particular off-site treatment area, a regulator might decide that such a routinely used area should be subject to RCRA permitting requirements. In emergency situations, DOD EOD teams and other responding agencies often find it safer to move explosive material away from the site where it was found—where it may threaten people or property—and transport it to an EOD range. In such cases, the fact that the material can be transported to another location does not necessarily mean that the dangerous situation is under control or that the emergency is over. Rather, it indicates a need to find an area where site access is controlled and the site conditions are known (e.g., the distance to nearby structures is adequate and there are no subsurface utilities), so that the material can be disarmed, defused, deactivated, or destroyed with confidence that an explosion will not cause injury or collateral damage. In previous guidance, EPA has stated that off-site treatment of explosives during emergency responses is not subject to permit requirements, as long as the

treatment is legitimately part of the emergency response.

Because of this need for safe treatment sites, some EOD ranges may be regularly used to destroy explosives during emergency responses. The issue has been raised (and previous EPA guidance suggests) that some level of "routine" use of a particular range should trigger RCRA permit requirements. In EPA's view, however, the question of whether a permit is necessary hinges on the nature of each individual response (i.e., whether or not it involves an emergency), rather than on the number of times a given area is used for emergency responses. As long as the response to each individual incident was an emergency response, a RCRA permit would not be required.

Q. Manifest Exemption for Transport of Hazardous Waste in Lieu of "On-Site" Redefinition

In the November 8, 1995 proposal, EPA proposed to reduce the burden on generators and TSDFs situated on contiguous properties that are split by public or private right-of-ways (e.g., roads) by proposing that the definition of "on-site" found at 40 CFR 260.10 be modified.⁶ Based on the comments received and the complex issues raised related to the definition of "on-site," the Agency has determined that an alternative approach is warranted to reduce the burden associated with shipments of hazardous waste to contiguous properties under the same ownership.

Under the current RCRA Subtitle C regulations, if a waste movement remains "on-site," the waste is not required to be accompanied by a manifest during transportation, and the 40 CFR part 263 transporter requirements do not apply to the waste. See 40 CFR 262.20(a), and 263.10 (a) and (b). However, under the current regulations, waste generated at one location and transported along a publicly accessible road for temporary consolidated storage or treatment on a contiguous property also owned by the same person is not considered "on-site" transport and would require a Uniform Hazardous Waste Manifest (form 8700-22A) and must be transported by a transporter with an EPA Identification number. These requirements for

manifesting and transporting hazardous waste do not apply if the wastes are transported directly across, rather than along, the public road. The proposed modifications would have expanded the definition of "on-site" to include contiguous properties divided by public or private right-of-ways even if access to the properties is by traveling along (as opposed to across) the right-of-way to gain entry.

The proposed change to the definition of "on-site" arose in the context of military munitions because many military installations are on properties that are, under the DOD "open" base policy, split by "public" roads. Because many other facilities (e.g., universities or industrial complexes) are also located on large parcels of land divided by public or private right-of-ways, the proposed change was extended to hazardous waste generators and TSDFs in general.

EPA received extensive comment on the proposed modification to the definition of "on-site." These comments are discussed in more detail in the response to comments section below. While almost all commenters were supportive of the concept of allowing transportation without a manifest between contiguous properties controlled by the same person, a number of commenters raised questions related to the effect changing the definition of "on-site" would have on other issues such as the assigning of EPA Identification Numbers to generators, generator status, and other RCRA regulations and definitions. As stated in the proposal, the Agency did not intend to affect requirements other than those directly related to the manifest and transportation. See 60 FR 56483-56484 (November 8, 1995). In considering the original purpose of the proposed change to the definition of "on-site" and the complexity of the questions that were raised by commenters, the Agency has identified an alternative method of finalizing the requirements for transportation without a manifest between contiguous properties controlled by the same person, that avoids the concerns raised by commenters.

Therefore, the Agency is not finalizing the proposed modification to the definition of "on-site." Instead, the Agency is adding new § 262.20(f) to 40 CFR Part 262, subpart B to exempt from the manifest requirements shipments of hazardous waste on right-of-ways on or between contiguous properties and along the perimeter of contiguous properties controlled by the same person. This manifest exemption is applicable to all generators, both

military and non-military. Section 262.20(f) also restates the exemption found in the current definition of "on-site," i.e., manifests are also not required for transport between non-contiguous property when the properties are owned and controlled by the same person, and connected by a right-of-way to which the public does not have access. The Agency is not changing regulations regarding transport on public roads between non-contiguous properties.

40 CFR Part 262, subpart B lays out the general manifesting requirements that apply to generators who transport, or offer for transportation, hazardous waste for off-site treatment, storage, or disposal. (Subpart B also contains an exemption for generators of 100-1000 kilograms of hazardous waste per month from all of the requirements of subpart B of Part 262 with respect to the Uniform Hazardous Waste Manifest, provided the waste is reclaimed under certain conditions. See 40 CFR 262.20(e).

New 40 CFR § 262.20(f) adds another exemption from the manifesting requirements, for the movement of hazardous waste on public roads within or along the border of contiguous property that is divided by a public or private right-of-way. Additionally, under 40 CFR 263.10(a), use of a transporter with a Hazardous Waste Identification number is not required for the movement of hazardous waste because of this manifest exemption. At the same time, the Agency recognizes that generators and TSDFs taking advantage of this exemption must be able to respond to an emergency should one occur during the movement of hazardous waste on public roads within, between, or bordering contiguous properties. As a result, under § 262.20(f), the Agency is specifying that the transporter requirements found at § 263.30 and § 263.31 concerning responding to discharges of hazardous waste on a public right-of-way will continue to apply to any discharge of hazardous waste on a public right-of-way.

Further, the Agency has established contingency and emergency response protocols that require facilities to be prepared for emergencies that occur on-site. 40 CFR 262.34(a)(4) requires large quantity generators to comply with the requirements for owners or operators found at 40 CFR part 265 subparts C (Preparedness and Prevention) and D (Contingency Plan and Emergency Procedures), with the requirements at § 265.16 for personnel training, and with the waste analysis plan requirements at 40 CFR 268.7(a)(4).

⁶The current definition is: "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property."

Similarly, small quantity generators are subject to reduced emergency preparedness, response, and reporting requirements that are laid out in § 262.34(d)(5) and are also subject to the preparedness and prevention requirements found at 40 CFR part 265, subpart C.

These contingency and emergency response protocols include measures that are designed to ensure that emergencies that take place are handled efficiently and effectively. They include the designation of an emergency coordinator who is accessible and who is knowledgeable about the operations and activities at the location and who can coordinate emergency response measures. These provisions also require that all employees at a site are familiar with the proper waste handling and emergency response procedures relevant to their responsibilities during normal facility operations and emergencies. Large quantity generators are responsible for developing a contingency plan that, among other things, must contain a description of emergency arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services. This plan must be reviewed and immediately amended under certain circumstances as specified in 40 CFR 265.54, including when the applicable regulations are revised and when the facility changes in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or changes the response necessary in an emergency. Additionally, should an emergency occur, the emergency coordinator must be able to assess any hazards from the release, and help appropriate officials decide whether local areas should be evacuated.

Generators taking advantage of the manifest exemption being finalized today must, therefore, consider how the emergency coordinator is to be kept informed of waste movement activities under the new circumstances involving shipments on public roads without a manifest, and how an emergency on a public road within, between, or on the perimeter of contiguous properties is to be managed so that it minimizes exposure to local areas surrounding the property.

Whether waste no longer subject to the manifest and transportation requirements described above is subject to Department of Transportation (DOT) hazardous material shipping requirements will depend on whether that material is regulated under any DOT hazard class other than materials

classified by DOT as "hazardous waste." As mentioned in the proposed rule, the Hazardous Materials Regulations (HMR, 49 CFR parts 171-180) define a hazardous waste as any material that is subject to the Uniform Hazardous Waste Manifest Requirements of the EPA specified in 40 CFR part 262 [49 CFR 171.8]. If a material is not subject to EPA's RCRA manifest requirements, it is not considered a "hazardous waste" by DOT. However, such material is still regulated as a "hazardous material" and is subject to the HMR if it meets the defining criteria for one or more of the DOT hazard classes. Therefore, for these shipments on public right-of-ways, generators and/or TSDFs must decide if the waste falls under any of the other DOT hazard classes in order to determine if compliance with the DOT requirements under CFR parts 171-180 is required.

EPA believes that this exemption from the Uniform Hazardous Waste Manifest will result, on balance, in an increase in protection of human health and the environment. EPA believes that the current requirement that a manifest be completed and that a hazardous waste transporter be used to transport shipments between contiguous properties may be discouraging consolidation within a generator's or TSDF's site, resulting in more locations where potential exposure to hazardous waste exists and more expense by the generator or TSDF. Removing barriers to consolidation of waste in one central area should reduce the possibility that the public and the environment could come into contact with hazardous waste because one area is easier to control and can be better located than numerous smaller areas.

EPA also believes that facilitating central consolidation will allow generators and TSDFs to locate such consolidation sites in more remotely located areas or in areas allowing faster emergency response than they would if confined to the boundaries within right-of-ways, thereby increasing public safety should an accident occur. The new exemption at 40 CFR 262.20(f) gives generators and TSDFs such as military bases and universities more flexibility to determine where consolidation areas are situated. In addition, EPA believes, along with numerous commenters, that this exemption will have the added benefit of facilitating the building of safer accumulation areas because generators and TSDFs may be more likely with limited resources to exceed regulatory requirements for consolidation areas if they are responsible for fewer consolidation sites overall.

Since 40 CFR part 263, under § 263.10(a), only applies to transporters subject to a manifest under part 262, the persons transporting wastes under today's § 262.20(f) are exempt from part 263 (most notably from the § 263.11 requirement for a transporter identification number), except as discussed above, § 262.20(f) requires compliance with §§ 263.30 and 263.31 for immediate action in response to a discharge.

Today's rule also exempts the generator from § 262.32(b) for certain container marking requirements, but not from the DOT packaging, labeling, marking, or placarding requirements of §§ 262.30, 262.31, 262.32, and 262.33 because these public roads are still considered by EPA to be "off-site"; nor from the § 262.34(a)(2) and (3), (c)(1)(ii) and (2), (d)(4), and (e) container and tank labeling requirements. Section 262.34 regarding accumulation time is not affected by today's rule because the definition of "on-site" is not being changed. Section 262.40 regarding requirements to keep copies of manifests is not included in the rule because it is not applicable since the manifest is not required. The biennial report requirements in § 262.41 are likewise unchanged by today's rule.

EPA believes the totality of these changes regarding the applicability of the "manifest system" (when considered with the existing emergency prevention and response, etc. requirements, the continued applicability of §§ 263.30 and 263.31, the facilitated storage consolidations, the marking requirements in § 262.34, the continued applicability of the DOT hazardous materials standards, in most cases, and the fact that this transportation is on or along contiguous property controlled by the same person, as discussed above), are consistent with the directives in RCRA sections 3002(a) and 3003(a) that EPA establish regulations "as may be necessary" to protect human health and the environment.

Response to Comments

The Agency received numerous comments on the proposed redefinition of "on-site" in two main areas: (1) The proposed change to the basic definition of "on-site" and its impact on current hazardous waste management practices and (2) issues associated with Department of Transportation (DOT) and CERCLA protectiveness on public access roads separating a larger facility. EPA also requested comments on whether other requirements of the RCRA program would be affected by a redefinition of "on-site."

With respect to the proposed changes to the definition of "on-site," almost all the commenters supported the concept behind the proposed redefinition—the manifest exemption. (Many of these, however, suggested simplified language for redefining "on-site.") Only one commenter (associated with the transporters) opposed the proposal, although three commenters suggested postponing the final rule until a more thorough analysis could be done. Even so, the Agency received many comments raising issues about other requirements unrelated to the manifest that might be affected by changing the definition of "on-site." For example, many of the commenters who supported the idea of changing the definition of "on-site" raised questions about how the change would affect EPA Identification Numbers, Land Disposal Restrictions paper work requirements, corrective action, and generator status. One of the most common questions was whether the proposed change to the definition of "on-site" would cause a change in generator status due to the merging of several individual locations into one larger location under the new definition.

One commenter who questioned the proposed change to the definition of "on-site" expressed concerns about the redesignation of sites based on the new definition and specifically asked whether adjacent military facilities (e.g., Army and Air Force) would be considered "on-site" under the new definition. The commenter also expressed concern over the effect such a redefinition would have on sites currently on the National Priorities List (NPL) that are contiguous to properties not on the NPL. Another commenter who questioned the proposed change argued that some universities wanting a permit to store hazardous waste for more than 90 days may find that the entire campus is subject to corrective action because of a change in the definition of "on-site." Several commenters argued for a more thorough evaluation of the impacts on the related terms "site" and "off-site," the effects of the proposed definitional change on definitions such as "facility," the relationship to the term "designated facility" found at § 260.10, the impact on accumulation provisions found at § 262.34 and the impact on the current definition of "transfer facility" found at § 260.10.

The Agency agrees with these commenters that a change to the definition of "on-site" could cause a great deal of confusion in many areas of RCRA and CERCLA that are based on the concept of "site" and "facility." In

addition to causing confusion, such a change might also inadvertently make substantive changes to a number of parts of the RCRA program other than manifesting and transportation. As stated in the proposal, EPA did not intend to affect requirements other than the requirement that a manifest accompany hazardous waste shipments and whether part 263 transportation requirements apply. Therefore, after reviewing the comments received on this issue, EPA has decided to avoid the potential for unforeseen, adverse consequences and is not changing the definition of "on-site."

The Agency does, however, continue to believe that it is appropriate to revise the regulations to allow transport along public and private right-of-ways that divide contiguous properties without manifests and the need to use hazardous waste transporters. Thus, the Agency has identified an alternative way to make this change to the regulations without causing potentially unintended consequences of changing the definition of "on-site." This alternative modifies 40 CFR Part 262, subpart B, to exempt shipments of hazardous waste on and along the perimeter of contiguous properties controlled by the same person from the manifest requirements. This change avoids any revision to the definition of "on-site." The Agency reiterates that this revision is a change only to the applicability of manifesting and 40 CFR 263 requirements and does not make any changes to the existing concepts of "on-site," "site," "facility" or related terms for any other purpose in the RCRA or CERCLA programs. Also, it does not affect the definition of "contiguous" or EPA's interpretations as to whether "contiguous properties" are owned or under the control of the same person. For example, EPA considers different agencies within the Federal government and different services to be different "persons." Therefore, in the example cited by one commenter, wastes could not be transported between adjacent Army and Air Force bases without a manifest.

EPA received numerous comments requesting clarification on how generator identification numbers would be affected and the related effect on generator status a change in the definition of on-site would create. The Agency understands that the policy regarding issuing generator identification numbers is not explicit in Federal regulations, and thus flexibility exercised by authorized States may result in differing interpretations of this policy by State implementers. However, the Agency only intended to address the applicability of the manifest and related

transportation requirements and did not intend to address the issue of generator identification numbers as part of this rulemaking. Eliminating State flexibility could have significant impacts on particular facilities, and those impacts could be viewed as either positive or negative. Examples of all kinds were cited by commenters. Though EPA acknowledges the potential for confusion and different application of identification number assignments, the Agency has not analyzed the potential impacts fully and is not changing either Federal regulation or policy on this issue.

The definition of "on-site" historically has been used in many States to determine when a manifest should accompany a shipment of hazardous waste and when part 263 transporter requirements apply. While the Agency establishes this relationship in several preamble discussions (see 45 FR 12723, February, 26, 1980 and 45 FR 33069, May 19, 1980), no similar preamble discussion exists on the nature of the relationship of the term "on-site" to generator identification numbers.

EPA's past policy interpretations have tended to associate generator identification numbers with sites for which an effective connecting right-of-way exists. In many cases the Agency has used the definition of "on-site" as the delimiting tool for determining when an identification number is needed. However, exceptions exist where there may be, for example, more than one independent business operating on a contiguous property and where a cogenerator relationship exists.

EPA has relied on each State implementing agency to establish its own method of issuing generator identification numbers and to make site specific determinations where appropriate. The Agency understands that variations may exist in the method used to issue generator identification numbers and therefore recommends that a generator contact the state in which the site is located when obtaining an identification number and with any questions regarding an individual location.

Some commenters requested more detailed information on travel distances. For example, a commenter questioned what was meant by a "short" stretch of road (public right-of-way) in the proposed preamble discussion, contrasting the benefits of consolidation to the transportation without a manifest along a short stretch of road to which the public has access. Another argued that a limit should be placed on how far a shipment could travel along a road,

and suggested that waste be allowed to be moved only two miles. The Agency sees no reason to limit the length of movement along roads on (or on the boundary of) property owned by the same person since many generators taking advantage of the new exemptions are located on very large properties that routinely require them to travel for more than two miles. One purpose of the manifest requirement is to assure receipt of the waste, an object that is independent of shipping distance, but enhanced in this case because the shipper and the receiver are the same, and the material remains within, or on the border of, the properties owned or operated by the shipper/receiver.

Commenters asked for clarification about the transportation routes allowed under the proposed rule. Five commenters suggested that EPA clarify that waste can be transported along the perimeter of the property. The Agency is finalizing this exemption for movement on roads along the perimeter as well as within the contiguous properties because, as discussed above, it is persuaded that there are adequate safeguards related to emergency response and cleanup provided by today's final rule. Further, if a discharge of hazardous waste should occur on a perimeter public road, the generator and/or TSD property still borders the right-of-way, which would lead to better control of the remediation process. Also, the purpose of the manifest is to assure that waste gets to the receiving unit, an object that is independent of whether the road is on the perimeter or within the property, and that is enhanced when the contiguous property is controlled by the same person.

Three commenters suggested EPA specifically include contiguous properties "touching corners" or "diagonally across" from each other. EPA considers such examples to be contiguous properties separated by a right-of-way and, therefore, included in today's rule. Also, access would generally be gained by travel along the perimeter of the properties so the inclusion of the "along the border" language enables the diagonal corners situation to benefit by today's rule.

Four commenters expressed a desire for the Agency to expand the scope of "on-site" to include nearby non-contiguous areas owned or under the control of the same person, suggesting that EPA limit the distance to two miles, several miles, or some other distance. The Agency did not intend to change the regulations regarding the transportation of hazardous waste along public roads to non-contiguous properties. The current definition of

"on-site" already allows for the movement of waste to non-contiguous areas without a manifest as long as the public does not have access to the right-of-way that joins the two properties. Beyond this, the Agency does not agree that movement of wastes between non-contiguous properties along right-of-ways to which the public has access is warranted given the increased possibility that the public could come in contact with the waste should a discharge occur under this scenario and the generator would no longer have control over bordering property.

The proposal also requested comment on whether or not the authorities under CERCLA and/or DOT are sufficient to protect human health and the environment as they relate to the management of potential spills of waste that, as a result of this new exemption, would not be manifested under RCRA as previously required and would not be subject to the requirements of Part 263. The Agency requested comments on whether or not the RCRA requirements in 40 CFR 263.30 and 263.31 should continue to apply to any discharge of hazardous waste during transportation of hazardous waste on a public right-of-way when the waste is transported within a contiguous property without a manifest. Sections 263.30 and 263.31 require that immediate action be taken in the event of a discharge including notifying local authorities and the National Response Center and cleaning up the discharge. Most of the commenters believed that the alternate authorities of CERCLA and DOT are protective enough and that the pressure of public awareness and corporate liability concerning spills would help ensure that spills are prevented, and if they occur are contained and cleaned up quickly. However, the Agency also received comments supporting the suggested alternative approach of requiring the "on-site" hauler using a public right-of-way to follow 40 CFR 263.30 and 263.31. One commenter cited that response times for cleanup actions under CERCLA do not promote an expeditious cleanup and that DOT regulations are inadequate. DOT and CERCLA reporting requirements would apply to such releases, but those authorities do not necessarily require an actual cleanup of the release.

In reviewing the options and the comments received, the Agency has decided that the requirements found at §§ 263.30 and 263.31 will continue to apply to any discharge of hazardous waste on a public right-of-way even if it is not accompanied by a manifest and is not subject to the other transport requirements found at 40 CFR part 262,

subparts B and C and 40 CFR part 263. The Agency is concerned here not with overall RCRA requirements to clean up a spill, since RCRA does apply when hazardous waste is disposed of or discharged onto the ground, but with the timeliness of response action needed to contain and remediate a spill which will be enhanced by the clarity of responsibility such references afford.

V. State Authority

Under RCRA section 3006, EPA may authorize a State to administer and enforce the RCRA hazardous waste program. See 40 CFR part 271. After receiving authorization, the State administers the program in lieu of the Federal government, although EPA retains enforcement authority under RCRA sections 3008, 3013, and 7003. Because the new Federal requirements in today's final rule are non-HSWA, they are not Federally enforceable in an authorized State until the necessary changes to a States' authorization have been approved by EPA.⁷ See RCRA section 3006, 42 U.S.C. 6926.

Under RCRA, authorized States are required to review and, if necessary, to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than existing Federal standards. This is because under RCRA section 3009, States are barred from implementing requirements that are less stringent than the Federal program. See also 40 CFR 271.21.

In two respects, EPA considers today's final rule to be more stringent than current Federal requirements: (1) the requirement that military installations retrieve munitions fired off-range or keep a record of the event (§ 266.202(d)), and (2) the requirement that military personnel responding to immediate threats involving military munitions maintain records of the response (§§ 264.1(g)(8)(iv), 265.1(c)(11)(iv), and 270.1(c)(3)(iii)). Authorized States must adopt these requirements as part of their State programs and apply to EPA for approval of their program revisions. Section 271.21 sets forth the procedures and deadlines for State program revisions.

RCRA section 3009, however, allows States to impose standards that are more

⁷ Under section 3006(g) of RCRA, enacted as part of the Hazardous and Solid Waste Amendments (HSWA) of 1984, new requirements imposed by HSWA take effect in authorized States at the same time as they do in unauthorized States—as long as the new requirements are more stringent than the previous requirements. EPA implements these new requirements until the State is authorized for them. Since today's proposal is not issued under HSWA authority, however, section 3006(g) does not come into play.

stringent or more extensive (i.e., broader) in scope than those in the Federal program (see also 40 CFR 271.1(i)(1)). Thus, for those Federal changes that are less stringent, or reduce the scope of the Federal program, States are not required to modify their programs. The less stringent portions of today's rule are the following: (1) the manifest exemption for transport on right-of-ways on contiguous properties (§ 262.20(f)), (2) the RCRA manifest exemption for the off-site shipment of unused waste munitions from one military installation to another (§ 266.203), and (3) the conditional exemption for waste munitions storage (§ 266.205).

The rest of the requirements in today's rule, in EPA's view, are neither more nor less stringent than current regulatory requirements; they are either reiterations or clarifications of the existing EPA regulations or policies.

Although States are only required to adopt requirements that are more stringent, in recognition of Congress' intent in passing RCRA section 3004(y), DOD's mission to provide for National defense, and the Department's nationwide presence, EPA strongly urges States to adopt all aspects of today's final rule (including the clarifying as well as less stringent sections) so as to ensure clear, consistent guidelines for handlers of waste military munitions, State regulators, and the public. EPA believes that the standards promulgated today properly implement the goals of RCRA section 3004(y) to ensure the safe and proper management of military munitions, and add clarity regarding the identification and management of military munitions as hazardous wastes. Therefore, EPA encourages States to adopt these regulations as quickly as their legislative and regulatory processes will allow.

VI. Administrative Requirements/ Compliance With Executive Order

A. Regulatory Impact Analysis Under Executive Order 12866

Under Executive Order No. 12866 [58 FR 51735 (October 4, 1993)], the Agency must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and to the requirements of the Executive Order, which include assessing the costs and benefits anticipated as a result of the proposed regulatory action. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the

economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

EPA has determined that today's final rule is a significant rule under Executive Order 12866 due to the nature of the policy issues raised. EPA estimates that today's rule results in national annual costs of \$100,000 per year, and national annual savings of approximately \$1,200,000 to \$2,200,000 per year, for a net savings of \$1,100,000 to 2,100,000 per year. For more information on the cost impacts of today's final rule, see the Economic Impact Analysis of the Final Munitions Rule which is part of the docket for this rule.

1. Cost Analysis

Today's rule focuses on several significant issues: (1) identification of munitions as waste; (2) transportation of munitions identified as wastes; (3) emergency response actions; and (4) storage standards for waste munitions. In many instances, EPA has concluded that current Department of Defense standards meet RCRA standards and imposition of RCRA standards would result in regulations that are redundant.

Over the next ten years, EPA estimates that the proposed regulation will result in annual costs of approximately \$100,000 per year to the Department of Defense. The most significant costs are related to the need for permit modifications for treatment and disposal facilities receiving off-site wastes. However, today's final notice results in avoided costs on the order of \$1,200,000 to \$2,200,000 per year over baseline. Baseline is based on an analysis of current RCRA/CERCLA and DOD's current operations.

The principal sources of annual savings include avoided costs for new permits, contingency plans, manifests, and retrofitted storage units.

EPA did not develop specific costs for range closure and clean up (e.g., prior to property transfer) under RCRA sections 7003, 3004(u) or (v), 3008(h), CERCLA, the Defense Environmental Restoration Program, or Base Realignment and Closure. Such costs are site-specific, and in general, the Agency assumed that these costs would be similar under each

authority or program. Furthermore, these costs would not be relevant to today's rule, since EPA is postponing action on defining how RCRA applies to closed ranges.

EPA also did not develop specific costs for other Federal agencies that may be affected by this rulemaking: Coast Guard, National Guard, DOE, NASA, FBI, and BTAF. This rule would apply in the same manner as it does for the Department of Defense and the relative savings that would be realized by the Military is similar to the savings that would be realized by these other affected agencies.

2. Benefits Analysis

EPA is finalizing the concept that unused munitions generally do not become hazardous waste subject to regulation until they are removed from storage for transportation to a disposal unit. This approach recognizes that current DOD storage regulations have been successful in protecting human health and the environment, and that additional requirements would be redundant and disruptive. (See section IV.B.1.f of the proposed rule preamble). EPA is also exempting waste military munitions from RCRA manifest and other requirements when transported because DOD standards provide comparable protection. The benefit of today's rule is an annual cost savings of approximately \$1,200,000 to \$2,200,000, due to avoided retrofits, permits, contingency plans, and manifest costs.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980 requires Federal agencies to consider "small entities" throughout the regulatory process. Section 603 of the RFA requires an initial screening analysis to be performed to determine whether small entities will be adversely affected by the regulation. If affected small entities are identified, regulatory alternatives must be considered to mitigate the potential impacts. Small entities as described in the Act are only those "businesses, organizations and governmental jurisdictions subject to regulation."

EPA has determined that today's rule will primarily affect Federal agencies, such as the Department of Defense, and therefore few, if any, small entities will be adversely affected. Furthermore, since today's final notice generally provides savings over current requirements, EPA believes that any small entities engaged in activity covered by the rule will not be adversely affected. Therefore, EPA provides the following certification under the Regulatory Flexibility Act, as

amended by the Small Business Regulatory Enforcement Fairness Act. Pursuant to the provision at 5 U.S.C. 605(b), I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities.

C. Paperwork Reduction Act

The Paperwork Reduction Act of 1980, 44 USC 3501 *et seq.*, authorizes the Director of OMB to review certain information collection requests by Federal agencies. EPA has determined that the record keeping and reporting requirements of this proposed rule do not constitute a "collection of information" as defined in 44 USC 3502(4) because they apply to Federal entities (i.e., DOD, DOE, Coast Guard, and National Guard), or for those sections that apply to non-Federal entities (e.g., emergency responses) they do not impose new record keeping or reporting requirements.

D. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMBRA), P.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, Tribal, and local governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. When a written statement is needed for an EPA rule, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, giving them meaningful and timely input in the development of EPA regulatory

proposals with significant Federal intergovernmental mandates, and informing, educating, and advising them on compliance with the regulatory requirements.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. EPA has estimated that the total potential cost to State, local, and Tribal governments would not exceed approximately \$200,000 per year over ten years. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

VII. Submission to Congress and the General Accounting Office

Under 5 U.S.C. 801(a)(1)(A) as added by the Small Business Regulatory Enforcement Fairness Act of 1996, EPA submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives and the Comptroller General of the General Accounting Office prior to publication of the rule in today's Federal Register. This rule is not a "major rule" as defined by 5 U.S.C. 804(2), therefore, the effective date of the rule is not affected.

List of Subjects

40 CFR Part 260

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 261

Hazardous waste, Recycling, Reporting and recordkeeping requirements.

40 CFR Part 262

Emergency responses, Exports, Hazardous materials transportation, Hazardous waste, Imports, Labeling, Packaging and containers, Reporting and recordkeeping requirements.

40 CFR Part 263

Emergency responses, Hazardous materials transportation, Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 264

Air pollution control, Emergency responses, Hazardous waste, Insurance, Storage containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Treatment and disposal.

40 CFR Part 265

Environmental Protection, Air pollution control, Emergency responses, Hazardous waste, Insurance, Storage containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Treatment and disposal.

40 CFR Part 266

Energy, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

40 CFR Part 270

Administrative practice and procedure, Confidential business information, Emergency responses, Hazardous materials transportation, Hazardous waste, Permit application requirements, Permit modifications, Reporting and recordkeeping requirements.

Dated: February 3, 1997.

Carol M. Browner,
Administrator.

For the reasons set forth in the preamble, 40 CFR Parts 260, 261, 262, 263, 264, 265, 266, and 270 are amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921-6927, 6930, 6934, 6935, 6937-6939, and 6974.

2. Section 260.10 is amended by adding the following definitions, in alphabetical order, to read as follows:

§ 260.10 Definitions.

* * * * *

Explosives or munitions emergency means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

Explosives or munitions emergency response means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or

eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

Explosives or munitions emergency response specialist means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under

DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

* * * * *

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for part 261 is revised to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y), and 6938.

2. Section 261.2 is amended by removing the period at the end of paragraph (a)(2)(iii) and adding a semicolon followed by "or"; and by adding new paragraph (a)(2)(iv) to read as follows:

§ 261.2 Definition of solid waste.

- (a) * * *
- (2) * * *
- (iii) * * *; or
- (iv) A *military munition* identified as a solid waste in 40 CFR 266.202.

* * * * *

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

1. The authority citation for part 262 is revised to read as follows:

Authority: 42 U.S.C. 6906, 6912, 6922–6925, 6937, and 6938.

2. Section 262.10 is amended by adding, before the notes, new paragraph (i) to read as follows:

§ 262.10 Purpose, scope, and applicability.

* * * * *

(i) Persons responding to an explosives or munitions emergency in accordance with 40 CFR 264.1(g)(8)(i)(D) or (iv) or 265.1(c)(11)(i)(D) or (iv), and 270.1(c)(3)(i)(D) or (iii) are not required to comply with the standards of this part.

* * * * *

3. Section 262.20 is amended by adding new paragraph (f) to read as follows:

§ 262.20 General requirements.

* * * * *

(f) The requirements of this subpart and § 262.32(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding 40 CFR 263.10(a), the generator or transporter must comply with the requirements for transporters set forth in 40 CFR 263.30

and 263.31 in the event of a discharge of hazardous waste on a public or private right-of-way.

PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

1. The authority citation for part 263 is revised to read as follows:

Authority: 42 U.S.C. 6906, 6912, 6922–6925, 6937 and 6938.

2. Section 263.10 is amended by adding new paragraphs (e) and (f) to read as follows:

§ 263.10 Scope.

* * * * *

(e) The regulations in this part do not apply to transportation during an explosives or munitions emergency response, conducted in accordance with 40 CFR 264.1(g)(8)(i)(D) or (iv) or 265.1(c)(11)(i)(D) or (iv), and 270.1(c)(3)(i)(D) or (iii).

(f) Section 266.203 of this chapter identifies how the requirements of this part apply to military munitions classified as solid waste under 40 CFR 266.202.

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

1. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

2. Section 264.1 is amended by adding new paragraphs (g)(8)(i)(D), (g)(8)(iv), and (i) to read as follows:

§ 264.1 Purpose, scope and applicability.

* * * * *

- (g) * * *
- (8) * * *
- (i) * * *

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 40 CFR 260.10.

* * * * *

(iv) In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or

the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

* * * * *

(i) Section 266.205 of this chapter identifies when the requirements of this part apply to the storage of military munitions classified as solid waste under § 266.202 of this chapter. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 40 CFR parts 260 through 270.

3. Section 264.70 is revised to read as follows:

§ 264.70 Applicability.

The regulations in this subpart apply to owners and operators of both on-site and off-site facilities, except as § 264.1 provides otherwise. Sections 264.71, 264.72, and 264.76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources, and to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under 40 CFR 266.203(a). Section 264.73(b) only applies to permittees who treat, store, or dispose of hazardous wastes on-site where such wastes were generated.

4. Part 264 is amended by adding new subpart EE, consisting of §§ 264.1200 through 264.1202, to read as follows:

Subpart EE—Hazardous Waste Munitions and Explosives Storage

Sec.
264.1200 Applicability.
264.1201 Design and operating standards.
264.1202 Closure and post-closure care.

§ 264.1200 Applicability.

The requirements of this subpart apply to owners or operators who store munitions and explosive hazardous wastes, except as § 264.1 provides otherwise. (NOTE: Depending on explosive hazards, hazardous waste munitions and explosives may also be managed in other types of storage units, including containment buildings (40 CFR part 264, subpart DD), tanks (40 CFR part 264, subpart J), or containers (40 CFR part 264, subpart I); See 40 CFR

266.205 for storage of waste military munitions).

§ 264.1201 Design and operating standards.

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

(1) Minimize the potential for detonation or other means of release of hazardous waste, hazardous constituents, hazardous decomposition products, or contaminated run-off, to the soil, ground water, surface water, and atmosphere;

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

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

(4) 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 (e.g., additional containment, such as overpacking, or removal from the waste area); and

(5) 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) Hazardous waste munitions and explosives stored under this subpart may be stored in one of the following:

(1) *Earth-covered magazines.* Earth-covered magazines must be:

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

(ii) Designed and constructed:
(A) To be of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;

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

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

(iii) 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.

(2) *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.

(3) *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) Hazardous 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 40 CFR 264.14, the preparedness and prevention procedures of 40 CFR part 264, subpart C, and the contingency plan and emergency procedures requirements of 40 CFR part 264, subpart D, then these procedures will be used to fulfill those requirements.

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

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

(f) Hazardous 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.

§ 264.1202 Closure and post-closure care.

(a) At closure of a magazine or unit which stored hazardous waste under this subpart, 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 hazardous waste unless § 261.3(d) of this chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for magazines or units must meet all of the requirements specified in subparts G and H of this part, 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 paragraph (a) of this section, 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 (§ 264.310).

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

1. The authority citation for Part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6906, 6912, 6922, 6923, 6924, 6925, 6935, 6936 and 6937, unless otherwise noted.

2. Section 265.1 is amended by adding new paragraphs (c)(11)(i)(D), (c)(11)(iv), and (f) to read as follows:

§ 265.1 Purpose, scope, and applicability.

* * * * *

- (c) * * *
- (11) * * *
- (i) * * *

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 40 CFR 260.10.

* * * * *

(iv) In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

* * * * *

(f) Section 266.205 of this chapter identifies when the requirements of this part apply to the storage of military munitions classified as solid waste under § 266.202 of this chapter. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 40 CFR parts 260 through 270.

3. Section 265.70 is revised to read as follows:

§ 265.70 Applicability.

The regulations in this subpart apply to owners and operators of both on-site and off-site facilities, except as § 265.1 provides otherwise. Sections 265.71, 265.72, and 265.76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources, and to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under § 266.203(a) of this chapter.

4. Part 265 is amended by adding new subpart EE, consisting of §§ 265.1200 through 265.1202, to read as follows:

Subpart EE—Hazardous Waste Munitions and Explosives Storage

Sec.

- 265.1200 Applicability.
- 265.1201 Design and operating standards.
- 265.1202 Closure and post-closure care.

§ 265.1200 Applicability.

The requirements of this subpart apply to owners or operators who store munitions and explosive hazardous wastes, except as § 265.1 provides otherwise. (NOTE: Depending on explosive hazards, hazardous waste munitions and explosives may also be managed in other types of storage units, including containment buildings (40 CFR part 265, subpart DD), tanks (40 CFR part 265, subpart J), or containers (40 CFR part 265, subpart I); See 40 CFR 266.205 for storage of waste military munitions).

§ 265.1201 Design and operating standards.

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

- (1) Minimize the potential for detonation or other means of release of hazardous waste, hazardous constituents, hazardous decomposition products, or contaminated run-off, to the soil, ground water, surface water, and atmosphere;
- (2) Provide a primary barrier, which may be a container (including a shell) or tank, designed to contain the hazardous waste;
- (3) For wastes stored outdoors, provide that the waste and containers will not be in standing precipitation;
- (4) 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 (e.g., additional containment, such as overpacking, or removal from the waste area); and

(5) 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) Hazardous waste munitions and explosives stored under this subpart may be stored in one of the following:

- (1) *Earth-covered magazines.* Earth-covered magazines must be:
 - (i) Constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed;
 - (ii) Designed and constructed:
 - (A) To be of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;
 - (B) To provide working space for personnel and equipment in the unit; and

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

(iii) 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.

(2) *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.

(3) *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) Hazardous 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 40 CFR 265.14, the preparedness and prevention procedures of 40 CFR part 265, subpart C, and the contingency plan and emergency procedures requirements of 40 CFR part 265, subpart D, then these procedures will be used to fulfill those requirements.

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

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

(f) Hazardous 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.

§ 265.1202 Closure and post-closure care.

(a) At closure of a magazine or unit which stored hazardous waste under this subpart, 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 hazardous waste unless § 261.3(d) of this chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for magazines or units must meet all of the requirements specified in subparts G and H of this part, 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 paragraph (a) of this section, 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 (40 CFR 264.310).

PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

1. The authority citation for Part 266 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6934.

2. Part 266 is amended by reserving subparts I through L and adding new subpart M to read as follows:

Subparts I–L (Reserved)

Subpart M—Military Munitions

Sec.	
266.200	Applicability.
266.201	Definitions.
266.202	Definition of solid waste.

266.203 Standards applicable to the transportation of solid waste military munitions.

266.204 Standards applicable to emergency responses.

266.205 Standards applicable to the storage of solid waste military munitions.

266.206 Standards applicable to the treatment and disposal of waste military munitions.

Subpart M—Military Munitions

§ 266.200 Applicability.

(a) The regulations in this subpart identify when military munitions become a solid waste, and, if these wastes are also hazardous under this subpart or 40 CFR part 261, the management standards that apply to these wastes.

(b) Unless otherwise specified in this subpart, all applicable requirements in 40 CFR parts 260 through 270 apply to waste military munitions.

§ 266.201 Definitions.

In addition to the definitions in 40 CFR 260.10, the following definitions apply to this subpart:

Active range means a military range that is currently in service and is being regularly used for range activities.

Chemical agents and munitions are defined as in 50 U.S.C. section 1521(j)(1).

Director is as defined in 40 CFR 270.2.

Explosives or munitions emergency response specialist is as defined in 40 CFR 260.10.

Explosives or munitions emergency is as defined in 40 CFR 260.10.

Explosives or munitions emergency response is as defined in 40 CFR 260.10.

Inactive range means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

Military means the Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE), or other parties under contract or acting as an agent for the foregoing, who handle military munitions.

Military munitions is as defined in 40 CFR 260.10.

Military range means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas,

and buffer zones with restricted access and exclusionary areas.

Unexploded ordnance (UXO) means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

§ 266.202 Definition of solid waste.

(a) A military munition is not a solid waste when:

(1) Used for its intended purpose, including:

(i) Use in training military personnel or explosives and munitions emergency response specialists (including training in proper destruction of unused propellant or other munitions); or

(ii) Use in research, development, testing, and evaluation of military munitions, weapons, or weapon systems; or

(iii) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, "use for intended purpose" does not include the on-range disposal or burial of unexploded ordnance and contaminants when the burial is not a result of product use.

(2) An unused munition, or component thereof, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal as defined in 40 CFR 261.2(c)(1), or burning for energy recovery as defined in 40 CFR 261.2(c)(2).

(b) An unused military munition is a solid waste when any of the following occurs:

(1) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in paragraph (a) of this section), incinerated, or treated prior to disposal; or

(2) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal, or

(3) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or

(4) The munition has been declared a solid waste by an authorized military official.

(c) A used or fired military munition is a solid waste:

(1) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or

(2) If recovered, collected, and then disposed of by burial, or landfilling either on or off a range.

(d) For purposes of RCRA section 1004(27), a used or fired military munition is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under sections 3004(u) and (v), and 3008(h), or imminent and substantial endangerment authorities under section 7003, if the munition lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).

§ 266.203 Standards applicable to the transportation of solid waste military munitions.

(a) *Criteria for hazardous waste regulation of waste non-chemical military munitions in transportation.* (1) Waste military munitions that are being transported and that exhibit a hazardous waste characteristic or are listed as hazardous waste under 40 CFR part 261, are listed or identified as a hazardous waste (and thus are subject to regulation under 40 CFR parts 260 through 270), unless all the following conditions are met:

(i) The waste military munitions are not chemical agents or chemical munitions;

(ii) The waste military munitions must be transported in accordance with the Department of Defense shipping controls applicable to the transport of military munitions;

(iii) The waste military munitions must be transported from a military owned or operated installation to a military owned or operated treatment, storage, or disposal facility; and

(iv) The transporter of the waste must provide oral notice to the Director within 24 hours from the time the transporter becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of paragraph (a)(1) of this section that may

endanger health or the environment. In addition, a written submission describing the circumstances shall be provided within 5 days from the time the transporter becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of paragraph (a)(1) of this section.

(2) If any waste military munitions shipped under paragraph (a)(1) of this section are not received by the receiving facility within 45 days of the day the waste was shipped, the owner or operator of the receiving facility must report this non-receipt to the Director within 5 days.

(3) The exemption in paragraph (a)(1) of this section from regulation as hazardous waste shall apply only to the transportation of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to storage, treatment or disposal.

(4) The conditional exemption in paragraph (a)(1) of this section applies only so long as all of the conditions in paragraph (a)(1) of this section are met.

(b) *Reinstatement of exemption.* If any waste military munition loses its exemption under paragraph (a)(1) of this section, an application may be filed with the Director for reinstatement of the exemption from hazardous waste transportation regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of paragraph (a)(1) of this section. If the Director finds that reinstatement of the exemption is appropriate based on factors such as the transporter's provision of a satisfactory explanation of the circumstances of the violation, or a demonstration that the violations are not likely to recur, the Director may reinstate the exemption under paragraph (a)(1) of this section. If the Director does not take action on the reinstatement application within 60 days after receipt of the application, then reinstatement shall be deemed granted, retroactive to the date of the application. However, the Director may terminate a conditional exemption reinstated by default in the preceding sentence if the Director finds that reinstatement is inappropriate based on factors such as the transporter's failure to provide a satisfactory explanation of the circumstances of the violation, or failure to demonstrate that the violations are not likely to recur. In reinstating the exemption under paragraph (a)(1) of this section, the Director may specify additional conditions as are necessary to ensure and document proper transportation to

protect human health and the environment.

(c) *Amendments to DOD shipping controls.* The Department of Defense shipping controls applicable to the transport of military munitions referenced in paragraph (a)(1)(ii) of this section are Government Bill of Lading (GBL) (GSA Standard Form 1109), requisition tracking form DD Form 1348, the Signature and Talley Record (DD Form 1907), Special Instructions for Motor Vehicle Drivers (DD Form 836), and the Motor Vehicle Inspection Report (DD Form 626) in effect on November 8, 1995, except as provided in the following sentence. Any amendments to the Department of Defense shipping controls shall become effective for purposes of paragraph (a)(1) of this section on the date the Department of Defense publishes notice in the Federal Register that the shipping controls referenced in paragraph (a)(1)(ii) of this section have been amended.

§ 266.204 Standards applicable to emergency responses.

Explosives and munitions emergencies involving military munitions or explosives are subject to 40 CFR 262.10(i), 263.10(e), 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3), or alternatively to 40 CFR 270.61.

§ 266.205 Standards applicable to the storage of solid waste military munitions.

(a) *Criteria for hazardous waste regulation of waste non-chemical military munitions in storage.* (1) Waste military munitions in storage that exhibit a hazardous waste characteristic or are listed as hazardous waste under 40 CFR Part 261, are listed or identified as a hazardous waste (and thus are subject to regulation under 40 CFR Parts 260 through 279), unless all the following conditions are met:

(i) The waste military munitions are not chemical agents or chemical munitions.

(ii) The waste military munitions must be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB).

(iii) The waste military munitions must be stored in accordance with the DDESB storage standards applicable to waste military munitions.

(iv) Within 90 days of August 12, 1997 or within 90 days of when a storage unit is first used to store waste military munitions, whichever is later, the owner or operator must notify the Director of the location of any waste storage unit used to store waste military munitions for which the conditional

exemption in paragraph (a)(1) is claimed.

(v) The owner or operator must provide oral notice to the Director within 24 hours from the time the owner or operator becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of paragraph (a)(1) that may endanger health or the environment. In addition, a written submission describing the circumstances shall be provided within 5 days from the time the owner or operator becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of paragraph (a)(1) of this section.

(vi) The owner or operator must inventory the waste military munitions at least annually, must inspect the waste military munitions at least quarterly for compliance with the conditions of paragraph (a)(1) of this section, and must maintain records of the findings of these inventories and inspections for at least three years.

(vii) Access to the stored waste military munitions must be limited to appropriately trained and authorized personnel.

(2) The conditional exemption in paragraph (a)(1) of this section from regulation as hazardous waste shall apply only to the storage of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to transportation, treatment or disposal.

(3) The conditional exemption in paragraph (a)(1) of this section applies only so long as all of the conditions in paragraph (a)(1) of this section are met.

(b) Notice of termination of waste storage. The owner or operator must notify the Director when a storage unit identified in paragraph (a)(1)(iv) of this section will no longer be used to store waste military munitions.

(c) Reinstatement of conditional exemption. If any waste military munition loses its conditional exemption under paragraph (a)(1) of this section, an application may be filed with the Director for reinstatement of the conditional exemption from hazardous waste storage regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of paragraph (a)(1) of this section. If the Director finds that reinstatement of the conditional exemption is appropriate based on factors such as the owner's or operator's provision of a satisfactory explanation of the circumstances of the violation, or a demonstration that the violations are not likely to recur, the Director may

reinstate the conditional exemption under paragraph (a)(1) of this section. If the Director does not take action on the reinstatement application within 60 days after receipt of the application, then reinstatement shall be deemed granted, retroactive to the date of the application. However, the Director may terminate a conditional exemption reinstated by default in the preceding sentence if he/she finds that reinstatement is inappropriate based on factors such as the owner's or operator's failure to provide a satisfactory explanation of the circumstances of the violation, or failure to demonstrate that the violations are not likely to recur. In reinstating the conditional exemption under paragraph (a)(1) of this section, the Director may specify additional conditions as are necessary to ensure and document proper storage to protect human health and the environment.

(d) Waste chemical munitions. (1) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under 40 CFR Part 261, are listed or identified as a hazardous waste and shall be subject to the applicable regulatory requirements of RCRA subtitle C.

(2) Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under 40 CFR Part 261, are not subject to the storage prohibition in RCRA section 3004(j), codified at 40 CFR 268.50.

(e) Amendments to DDESB storage standards. The DDESB storage standards applicable to waste military munitions, referenced in paragraph (a)(1)(iii) of this section, are DOD 6055.9-STD ("DOD Ammunition and Explosive Safety Standards"), in effect on November 8, 1995, except as provided in the following sentence. Any amendments to the DDESB storage standards shall become effective for purposes of paragraph (a)(1) of this section on the date the Department of Defense publishes notice in the Federal Register that the DDESB standards referenced in paragraph (a)(1) of this section have been amended.

§ 266.206 Standards applicable to the treatment and disposal of waste military munitions.

The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 40 CFR Parts 260 through 270.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation for Part 270 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

2. Section 270.1 is amended by adding new paragraphs (c)(3)(i)(D) and (c)(3)(iii) to read as follows:

§ 270.1 Purpose and scope of these regulations.

* * * * *

(c) * * *

(3) * * *

(i) * * *

(D) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 40 CFR 260.10.

* * * * *

(iii) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

* * * * *

3. Section 270.42 is amended by redesignating paragraph (h) as (i) and adding a new paragraph (h) to read as follows:

§ 270.42 Permit modification at the request of the permittee.

* * * * *

(h) *Military hazardous waste munitions treatment and disposal.* The permittee is authorized to continue to accept waste military munitions notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if:

(1) The facility was in existence as a hazardous waste facility, and the facility was already permitted to handle the waste military munitions, on the date when the waste military munitions became subject to hazardous waste regulatory requirements;

(2) On or before the date when the waste military munitions become subject to hazardous waste regulatory requirements, the permittee submits a Class 1 modification request to remove or amend the permit provision restricting the receipt of off-site waste munitions; and

(3) The permittee submits a complete Class 2 modification request within 180 days of the date when the waste military munitions became subject to hazardous waste regulatory requirements.

* * * * *

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**APPENDIX B: *Military Munitions Rule*, U.S. Department of
Energy Office of Environmental Policy and Assistance RCRA
Information Brief EH-411-097/0002 (April 1997)**



MILITARY MUNITIONS RULE

BACKGROUND: On February 12, 1997, the Environmental Protection Agency (EPA) issued the final version of *Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties* (62 FR 6622). The rule identifies when conventional and chemical military munitions become a hazardous waste under the Resource Conservation and Recovery Act (RCRA), and provides for the safe storage and transport of these wastes. The rule also amends existing regulations regarding emergency responses involving both military and non-military munitions and explosives. In addition, the rule exempts all generators who have contiguous properties divided by public right-of-ways from the RCRA manifest and transporter Hazardous Waste Identification requirements when transporting hazardous waste between or along the border of their contiguous properties. The rule does not finalize provisions regarding the solid waste status of military munitions on closed and transferred ranges. EPA has decided to postpone action for further analysis of comments received on the proposed *Military Munitions Rule* and an analysis of the *Department of Defense (DOD) Range Rule*. The *DOD Range Rule* will govern the cleanup of munitions on closed, transferring, and transferred ranges.

Issuance of the *Military Munitions Rule* was mandated by Congress in 1992 with passage of the Federal Facility Compliance Act (FFCA) of 1992. Section 107 of the FFCA amended RCRA by adding Section 3004(y), which requires the EPA, in consultation with DOD and appropriate State officials, to develop regulations identifying when conventional and chemical military munitions become hazardous waste subject to RCRA, and providing for their safe transportation and storage. Beginning in November 1992, EPA consulted with the DOD, the military services, the States, and various environmental interest groups on this regulatory initiative and issued a proposed rule in November 1995 (60 FR 56468). Because the Department of Energy (DOE) manages the nation's nuclear arsenal, maintains security forces to protect it, and conducts development and testing of conventional weapons for DOD, it has been an active participant in developing the rule.

STATUTES: *Sections: 2002, 3001-3007(including 3004(y)), 3010, 7003, and 7004 of the Solid Waste Disposal Act of 1965, as amended, including amendments by RCRA and Section 107 of the FFCA (42 U.S.C. 6912, 6921-7, 6930, and 6973-4).*

REGULATIONS: 40 CFR Parts 260, 261, 262, 263, 264, 265, 266, and 270.

REFERENCES:

1. *Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties* (February 12, 1997, 62 FR 6622)
2. *DOE Explosives Safety Manual* (DOE M 440.1-1 [Formerly DOE/EV/06914]-REV. 8., March 29, 1996)
3. *Military Munitions Rule Issues Papers* (August 16, 1994)
4. *Consolidated DOE Response to the Military Munitions Proposed Rule* (August 1, 1996)
5. *The Alternatives Presented in the EPA Issue Papers on the Munitions Rule* (DOD Comments, December 12, 1994)
6. *FFCA Munitions Provision (DDESB-KO, June 5, 1995)*
7. *Draft DOD Range Rule* (DOD, February 10, 1997)

What are military munitions and why are they of concern to DOE?

The term "military munitions" is defined in the preamble to the rule "to include all types of both conventional and chemical ammunition products and their components, produced by or for the military

for national defense and security (including munitions produced by other parties under contract to or acting as an agent for DOD—in the case of Government Owned/Contractor Operated [GOCO] operations and subcontractors)." Examples of components include propellants, explosives, bulk chemical warfare, and warheads. Product examples include

rockets, bombs, small arms ammunition, and chemical munitions.

The definition excludes nuclear weapons, nuclear devices, and non-nuclear components managed under the DOE nuclear weapons program, which still must have necessary "sanitization" operations completed under the Atomic Energy Act (AEA) of 1954. However, upon completion of "sanitization" of the non-nuclear components (or component subparts) of nuclear weapons and devices, the remaining materials (i.e., sanitized materials) are considered "military munitions." Also, non-nuclear components not requiring "sanitization" are considered "military munitions." This exclusion is made because the FFCA does not contemplate including nuclear weapons within the scope of the rule pursuant to Section 107. Furthermore, EPA recognizes that DOE's practices and procedures for managing nuclear weapons under the AEA, as well as the potential impacts on DOE operations, are significantly different from those of DOD pertaining to conventional and chemical munitions.

Other related definitions include the following:

"Sanitization" - the irreversible modification or destruction of any parts of nuclear weapons, devices, trainers, or test assemblies as necessary to prevent revealing classified or otherwise controlled information.

"Military" - for purposes of the rule, "military" is meant to include DOE as well as the DOD, the Armed Services, Coast Guard, National Guard or other parties under contract to or acting as an agent for these organizations, as long as they manage "military munitions." (§ 266.201)

"Military ranges" - designated land and water areas set aside to conduct military munitions research and development testing or to train military personnel in weapons use and handling.

Military munitions constitute a major part of operations within the DOE complex at several sites representing both the Defense Programs and Environmental Management Program. At the Pantex Plant, weapons are assembled and disassembled for stockpile management and final disposition according to Presidential directives under the AEA. Weapons development and testing are conducted at Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL). These laboratories also act as stockpile stewards for the

DOD. The *Military Munitions Rule* affects the work in each of these areas. In addition, site security throughout the DOE complex uses military munitions.

What are the major provisions of the Military Munitions Rule that may affect DOE?

In the *Military Munitions Rule*, EPA has consolidated all requirements that are solely applicable to military munitions in 40 CFR Part 266, subpart M. They have included appropriate cross references to other RCRA requirements that are applicable, but not unique. Unless specified in this subpart, the applicability of requirements in 40 CFR Parts 260 through 270 to military munitions is not changed.

1) Determining When Military Munitions Become Solid Wastes

In meeting the requirement of the FFCA (RCRA Section 3004[y]) to identify when military munitions have become "hazardous wastes," EPA focuses on determining when they become a "solid waste." Under RCRA regulations, if a material is not a "solid waste" (as defined in 40 CFR § 261.2), it cannot be a "hazardous waste." "Hazardous wastes" are solid wastes that meet the criteria in 40 CFR § 261.3.

The rule finalizes conditions under which munitions become a solid waste. It also clarifies conditions under which management of military munitions (used and unused) constitutes intended use and therefore is not subject to RCRA regulation.

When military munitions become a solid waste

Unused military munitions become a solid waste when 1) abandoned by being disposed of, burned, or incinerated or treated before disposal; 2) removed from storage for disposal or treatment prior to disposal; 3) deteriorated beyond usage; or 4) determined by an authorized military official to be a solid waste.

Thus, open burning/open detonation or incineration of unused munitions (except during training or emergency response) is regulated under RCRA Subtitle C standards. This includes permit requirements in 40 CFR Part 270 (assuming the waste munitions meet the § 261.3 definitions of "hazardous waste"). Munitions being used for their intended purpose during training, testing, and development, or emergency response are not subject to this

requirement.

Used military munitions become a solid waste when they are managed off-range, (i.e., when transported off-range and stored, reclaimed, treated, or disposed of), or disposed of on-range (i.e., buried or landfilled).

Munitions that land off-range and are not promptly rendered safe (if necessary) and retrieved are considered abandoned and become a solid waste.

When military munitions are not a solid waste

- Intended use

Under RCRA, using products for their intended purpose, even when it results in their being deposited on the land, does not necessarily constitute “discard.” It is not waste management and is not subject to regulation.

Munitions used in military training exercises for military personnel and explosive ordnance disposal personnel are not regulated under RCRA. This type of “intended use” includes DOE security force training.

Munitions used in weapons research, development, testing, and evaluation programs, such as those conducted at LLNL, LANL, or SNL, are not regulated. In addition, removal of a used or fired munition from a testing or training firing range for further testing and evaluation is considered to be within the definition of use of a material for its intended purpose and is not regulated under RCRA Subtitle C. Any debris or unexploded ordnance (UXO) shipped off-range for further evaluation is not a solid waste (unless the evaluation is related to treatment and disposal).

Determination of whether a range is active or inactive, or is closed is key to determining if the range clearance operations are part of range maintenance or are subject to RCRA Subtitle C. The recovery, collection, and on-range treatment or destruction of UXO at active or inactive ranges are considered an intrinsic part of training or testing, and therefore are excluded from regulation under RCRA Subtitle C. The collection of fired bullets, including those that contain lead, at indoor firing ranges is also considered range maintenance.

The requirements of debris and UXO on active or inactive ranges can be summarized as follows: on-range collection and treatment or destruction of

UXO are not regulated. On-range disposal (collection and landfilling) of UXO and contamination is regulated. Any debris or UXO shipped off-range for treatment is a solid waste and, if hazardous, is potentially regulated under RCRA Subtitle C.

EPA did not finalize the proposed requirement that used or fired munitions that are recovered and then treated on-range at a closed or transferred range (unless the transferred range is still in active use as a range) would be a solid waste potentially subject to RCRA Subtitle C regulations. DOD is developing a rule for *Closed, Transferred, and Transferring Ranges Containing Military Munitions* that may be used for DOE UXO clearances. Until the *Range Rule* is finalized and EPA completes analysis of relevant *Military Munitions Rule* comments and the adequacy of the protection offered by the *Range Rule*, the current regulatory framework will remain in effect. Clearing closed ranges will be subject to regulatory control. Use of EPA’s Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulations will avoid many of the administrative burdens that would be encountered under RCRA.

- Disassembly Operations

The rule states that “unused military munitions that are being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subject to materials recovery activities are not solid waste.” Only when processing of these materials involves use constituting disposal (§ 261.2[c][1]) or burning for energy recovery (§ 261.2[c][2]) or if they have already been classified as wastes are they subject to RCRA Subtitle C.

2) Emergency Response Standards

The rule clarifies that persons responding to explosives and munitions emergencies are not subject to RCRA generator, transporter, or permit requirements (§ 262.10[i] and § 263.10[e]). After the emergency has passed, however, any additional waste management activities may be subject to RCRA.

3) Storage Standards

For military munitions that are hazardous waste, EPA has added subpart EE, *Hazardous Waste Munitions and Explosives Storage* to 40 CFR Parts 264/265 (treatment, storage, and disposal facility [TSDF] standards and interim status standards, respectively). Subpart EE lays out requirements for the storage of both chemical and nonchemical

waste munitions. Storage of waste nonchemical munitions is subject to subpart EE and other requirements found in 40 CFR Parts 260-279 unless it meets the conditions of the exemption at § 266.205(a) (essentially requiring that they be subject to the Department of Defense Explosives Safety Board [DDESB] management standards). While portions of the DDESB management standards have been incorporated by reference into the *DOE Explosives Safety Manual*, DOE does not qualify for the exemption. However, subpart EE was built around the DDESB standards with the additional standards (e.g., secondary containment and closure plans) being incorporated where required for completeness. As a result, subpart EE should not require major changes in the *Explosives Safety Manual*. Obtaining new TSDF storage permits for military munitions waste at DOE sites is anticipated to be less cumbersome under subpart EE requirements than under existing regulations.

Newly regulated waste military munitions will require generators to respond based on their permit status. Generators who do not have permits will need to ensure that they can remove waste military munitions from their sites within 90 days. Generators who have interim status permits will be required to file a modified Part A, and those with permits will be required to submit either a Class 1 or Class 2 permit modification.

4) Transport Standards

Because of universally applicable changes made by the new rule, manifests are no longer required for DOE shipments of hazardous waste (including transport of hazardous waste military munitions) on right-of-ways on or between contiguous properties or along the perimeter of contiguous properties owned by the same person. This change is found in § 262.20(f) and serves also to exempt shipments from DOT "hazardous waste" shipping regulations (49 CFR Parts 171-180), which depend on their being subject to EPA Uniform Hazardous Waste Manifest Requirements. However, these materials are still potentially subject to other DOT shipping requirements if they are classed as hazardous materials for some other reason. In addition, under § 263.10(a), these shipments are no longer required to use a transporter with a hazardous waste identification number. However, transporter requirements found at § 263.30 and § 263.31 concerning responding to discharges of hazardous waste on a public right-of-way will continue to apply in the event of a spill. In taking advantage of the manifest exemption, DOE will need to consider

how the emergency coordinators are to be kept informed of waste movements under the new regime involving shipments along public roads and along the perimeters of properties without manifests and how to minimize exposure to local areas surrounding the property.

5) State Authority

The *Military Munitions Rule* promulgates several requirements that are less stringent than those currently in effect through state programs (e.g., exemption from manifest requirements during transportation between contiguous properties). Even though states are required only to maintain regulations that are at least as stringent as federal regulations (40 CFR 271.21), EPA "strongly urges" them to adopt the relaxed requirements to ensure clear, consistent guidelines for handlers of military munitions. As a result, the less stringent aspects of the *Military Munitions Rule* may or may not be adopted by all states.

How do I find out more about the Military Munitions Rule?

DOE staff may obtain additional information on the *Military Munitions Rule* in several ways:

DOE Staff Contacts:

Denise Freeman
Office of Environmental Policy and
Assistance (EH-411)
Phone: (202) 586-7879; FAX: 586-0955
By Internet: denise.freeman@eh.doe.gov

EPA Contacts:

Phone:

- RCRA Hotline (9:00-6:00 EST)
(800)424-9346 or
(703)412-9810 from Government or
Washington, DC local calling area.
- (For more detailed information on specific
aspects of the *Military Munitions Rule*)
Ken Shuster, EPA
(703) 308-8759

Write:

- US EPA
Office of Solid Waste
Permits and State Programs Division
401 M St., S.W. (Mailcode 5303W)
Washington, DC 20460

Internet:

- <http://www.epa.gov/epaoswer>

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APPENDIX C: List of Hazardous Waste Treatment, Storage, and Disposal Facilities That Are Exempt from RCRA Permitting Requirements

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APPENDIX C

List of Hazardous Waste Treatment, Storage, and Disposal Facilities That Are Exempt from RCRA Permitting Requirements

The regulations implementing Subtitle C of the Resource Conservation and Recovery (RCRA) exempt certain types of hazardous waste treatment, storage, and disposal (TSD) units or facilities from the requirement to obtain a RCRA permit. Such exemptions are briefly described below. Each description contains a regulatory citation for ease of reference.

- Storage units where generators accumulate waste on-site for less than 90 days are not required to have RCRA permits as long as the units are in compliance with the applicable requirements of 40 CFR 262.34 [40 CFR 270.1(c)(2)(i)].
- Storage units in which a generator of greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month accumulates such waste on-site for 180 days or less (270 days or less if off-site transport for treatment and disposal must exceed 200 miles) are not required to have RCRA permits provided that (1) the quantity of accumulated waste never exceeds 6,000 kilograms; (2) the accumulation units comply with applicable interim status standards for containers or tanks in 40 CFR part 265, subparts I and J, respectively; (3) the date accumulation began and the words “hazardous waste” are marked on the accumulation tank or container; (4) the generator complies with interim status standards in 40 CFR part 265 for preparedness; (5) the generator complies with the requirement for a waste analysis plan in 40 CFR 268.7(a)(4); and (6) the generator meets all other requirements listed in 40 CFR 262.34(d)(5) [40 CFR 262.34(d) and (e)].
- Containers at or near the point of generation in which generators accumulate less than 55 gallons of hazardous waste, or less than one quart of acutely hazardous waste, are not required to have RCRA permits as long as (1) the containers are under the control of the operator of the waste-generating process, (2) the containers are in compliance with certain requirements for interim status container use, and (3) the generator is in compliance with 40 CFR 262.34(c)(1)(ii) and 262.34(c)(2) [40 CFR 262.34(c)].
- Facilities operated solely for the purpose of treating, storing, or disposing of hazardous waste that is excluded from regulation under 40 CFR 261.4 do not need a RCRA permit [40 CFR 270.1(c)(2)(iii)]. Wastes excluded from regulation by 40 CFR 261.4 include the following:
 - Certain materials that are excluded from the definition of solid waste [40 CFR 261.4(a)];
 - Certain solid wastes that are excluded from the definition of hazardous waste [40 CFR 261.4(b)];

- Hazardous wastes generated in certain tanks, vessels, pipelines, and manufacturing units, until the wastes exit the unit in which they are generated, provided that the waste exits the unit within 90 days after the unit ceases operation, and provided that the unit is not a surface impoundment [40 CFR 261.4(c)];
 - Solid waste and media samples collected for the purpose of testing [40 CFR 261.4(d)];
 - Certain hazardous waste samples generated and collected for the purpose of conducting treatability studies [40 CFR 261.4(e)]; and
 - Certain hazardous waste samples undergoing treatability studies [40 CFR 261.4(f)].
- Facilities permitted, licensed, or registered by a State to manage municipal solid waste or nonmunicipal nonhazardous solid waste do not need RCRA permits to manage hazardous waste if the only hazardous waste that the facility treats, stores, or disposes of either is excluded from regulation under 40 CFR 261.4 or originates from conditionally exempt small quantity generators (CESQGs), as defined in 40 CFR 261.5, and if the facility complies with all applicable conditions of the exemption [40 CFR 270.1(c)(2)(iii)].
 - Totally enclosed treatment facilities as defined by 40 CFR 260.10 are not required to obtain RCRA permits [40 CFR 270.1(c)(2)(iv)]. Such facilities include facilities for the treatment of hazardous waste that are directly connected to industrial production processes and that are constructed and operated in a manner that prevents the release of any hazardous waste or any constituent thereof into the environment during treatment (40 CFR 260.10).
 - Wastewater treatment units meeting the definition of a wastewater treatment unit in 40 CFR 260.10 are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(v)].
 - Elementary neutralization units (devices used for neutralizing wastes that are hazardous only because they exhibit the characteristic of corrosivity or because they were listed for exhibiting the characteristic of corrosivity) are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(v)].
 - Transfer facilities where transporters store manifested shipments of hazardous waste in containers meeting the requirements of 40 CFR 264.30 at a transfer facility for a period of ten days or less are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(vi)].
 - Operations that involve adding absorbent material to waste in a container or adding waste to absorbent material in a container (provided that these actions occur when the waste is first placed in the container) are exempt from RCRA permit requirements, as long as such operations comply with the requirements of 40 CFR 264.17(b), 264.171, and 264.172 [40 CFR 270.1(c)(2)(vii)].

- Universal waste handlers and universal waste transporters who are regulated under 40 CFR part 273, “Standards for Universal Waste Management,” and who manage (1) batteries as described in 40 CFR 273.2, (2) pesticides as described in 40 CFR 273.3, and (3) thermostats as described in 40 CFR 273.4 are not required to obtain RCRA permits [40 CFR 270.1(c)(2)(viii)].
- Treatment or containment activities do not require a RCRA permit when taken in immediate response to the following: a discharge of hazardous waste; an imminent and substantial threat of a discharge of hazardous waste; discharge of a material which, when discharged, becomes a hazardous waste; or an immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 40 CFR 260.10. Treatment activities that are continued or initiated after the immediate response is over, however, do require a RCRA permit [40 CFR 270.1(c)(3)].
- Some hazardous waste recycling processes (e.g., the blending of reclaimed solvents) do not require a RCRA permit. The storage of RCRA hazardous materials before they are recycled, however, does require a RCRA permit [40 CFR 261.6(c)].

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APPENDIX D: Module 6-1, “The Structure of State Authorization,” excerpted from *RCRA Permitting Guide for Hazardous & Radioactive Mixed Waste Management Facilities*, U.S. Department of Energy, DOE/EH [RCRA] 9705 (April 1997)

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FEDERAL/STATE AUTHORITY AND IMPLEMENTATION

INTRODUCTION

Chapter 6 briefly describes the RCRA provisions whereby EPA grants States and Territories authorization to implement the Subtitle C hazardous waste program within their boundaries. The scopes of authorization granted before and after Congress passed the Hazardous and Solid Waste Amendments of 1984 (HSWA) are addressed. Permitting responsibilities in authorized States and Territories are also discussed.

MODULE 6-1: The Structure of State Authorization

STATE AUTHORIZATION BEFORE HSWA

Before HSWA, authorized States administered RCRA Subtitle C entirely in lieu of the Federal program.

Under RCRA §3006, a State that applies and is found qualified by EPA to do so can take over administration and enforcement within the State's boundaries of the RCRA Subtitle C program. When EPA authorizes a State in this manner to administer and enforce the portion of the RCRA Subtitle C program that is sanctioned by RCRA provisions pre-dating HSWA, such authorization is referred to as "RCRA base authorization." Before Congress adopted HSWA in 1984, States with RCRA base authorization implemented the RCRA Subtitle C program within their boundaries entirely in lieu of the Federal program. Federal requirements that existed at the time a State became authorized no longer applied within the State, and EPA did not issue permits to facilities that the State was authorized to permit under its RCRA base authorization. When EPA issued new or amended Federal regulations pursuant to pre-HSWA RCRA authority, the Agency would administer them only in those States not having RCRA base authorization. In States with RCRA base authorization, such regulations did not take effect until the authorized State adopted them as state law. Further, unless such new or amended Federal regulations were more stringent than existing Federal regulations, a State with RCRA base authorization was not obligated to adopt them as state law. Instead, the State was allowed to ignore the new or amended, less stringent, pre-HSWA-based Federal regulations. If EPA issued more stringent, pre-HSWA-based, new or amended Federal regulations, such

**STATE
AUTHORIZATION
AFTER HSWA**

HSWA created three exceptions to exclusive state administration of RCRA Subtitle C

regulations would specify a date by which States with RCRA base authorization would be required to adopt them as state law. If an authorized State failed to incorporate the more stringent, pre-HSWA-based Federal regulations into its program by the specified date, the State would risk losing its base authorization.¹

HSWA modified RCRA §3006 and created three exceptions to the rule that States with RCRA base authorization would implement RCRA Subtitle C within their boundaries entirely in lieu of the Federal program. The three exceptions are [40 CFR 271.3(b)]:

- (1) New, more stringent Federal requirements imposed pursuant to HSWA now take effect and are implemented immediately under Federal authority by EPA in all States, including States with RCRA base authorization;
- (2) New, more stringent Federal requirements promulgated by EPA pursuant to HSWA now supersede existing, less stringent provisions of authorized state programs. Such Federal requirements are implemented by EPA in authorized States until the States amend their programs to cover the changes; and
- (3) If new or amended Federal program requirements are being implemented by EPA in a State with RCRA base authorization, EPA issues permits or permit modifications in that State as required to carry out the implementation, even though the State still issues and enforces RCRA base permits. However, under such circumstances, RCRA §3006(c)(4) requires EPA to coordinate with the State. Also, the State can assist in administering the new or amended Federal requirements under the

¹ Historically, EPA has not rescinded RCRA base authorizations for failure to enact equivalent authority within a specified time frame. For example, several States with RCRA base authorization did not enact adequate mixed waste regulatory authority within the required time frames. Nevertheless, EPA did not rescind the base authorization of any of these States. [See Appendix III which shows that as late as December 31, 1996, eight States with RCRA base authorization had not been granted mixed waste regulatory authority, even though the latest deadline set by EPA for such authorization was July 3, 1988.]

provisions of a State/EPA agreement [RCRA §3006(c)(3)].

The HSWA exceptions to exclusive state administration only apply to new or amended, more stringent Federal program requirements imposed pursuant to HSWA

Significantly, these three exceptions only materialize when EPA promulgates new or amended Federal requirements *pursuant to HSWA* that are *more stringent* than existing Federal requirements. If EPA promulgates new or amended requirements pursuant to RCRA provisions that pre-date HSWA, then such requirements do not take effect in States with RCRA base authorization until the States adopt them, whether or not they are more stringent. Further, if EPA promulgates new or amended requirements pursuant to HSWA that are less stringent, or equivalent in stringency to existing Federal requirements, such new or amended requirements do not take effect in those States with RCRA base authorization and authorization for the affected HSWA program unless and until the States adopt them. In States with RCRA base authorization, but without authorization for the affected HSWA program, new or amended less stringent or equivalently stringent Federal HSWA requirements take effect according to the schedule set by EPA and are implemented by EPA unless and until the States become authorized for the affected HSWA program.

Example of Federal program requirements being imposed pursuant to RCRA provisions pre-dating HSWA

An example of EPA promulgating more stringent requirements under RCRA provisions that pre-date HSWA occurred in 1986. On July 3, 1986, EPA published notice that the hazardous components of mixed wastes, which the Agency had previously treated as exempt from RCRA Subtitle C regulations, were to be regulated under 40 CFR part 261. In light of this interpretation, States with RCRA base authorization were told that, to maintain their authorization, they had one year (i.e., until July 3, 1987), or if a statutory amendment was required, two years (i.e., until July 3, 1988), to implement any hazardous waste program changes needed to incorporate regulation of mixed wastes. Since EPA's revised interpretation of the applicability of RCRA to mixed waste was not the result of any HSWA provision, mixed waste remained exempt from RCRA Subtitle C Federal regulation in States with RCRA base authorization until



such States made the program changes needed and received approval from EPA.

In eight States and the District of Columbia, mixed wastes are not regulated under RCRA Subtitle C

As of December 31, 1996, 39 States and one Territory had been granted mixed waste program authorization. Since 47 States have RCRA base authorization, that means 8 States with RCRA base authorization are still not authorized to regulate mixed wastes. Hence, in those 8 States, mixed wastes are not regulated under RCRA Subtitle C. Similarly, the District of Columbia has received RCRA base authorization, but not mixed waste authorization. Therefore, mixed wastes are not regulated in the District of Columbia under RCRA Subtitle C (See Appendix III for detailed listings of States and non-state entities having RCRA base and mixed waste authorizations). Notwithstanding, a number of the States with RCRA base authorization but not mixed waste authorization are regulating mixed waste under the provisions of state laws.

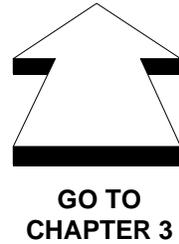
In States that have received no RCRA program authorizations, EPA administers the Federal RCRA Subtitle C program, which covers mixed waste.

The standards and requirements for RCRA Subtitle C state program authorization are presented in 40 CFR part 271, "Requirements for Authorization of State Hazardous Waste Programs." As of December 31, 1996, only three States and four Territories had not received RCRA base authorization (see Appendix III).

MODULE 6-2: RCRA Permitting in Authorized States

Permitting in States having RCRA base authorization and authorization for all HSWA programs

In a State with RCRA base authorization and authorization for all HSWA programs listed on Table 1 of 40 CFR 271.1(j)(1), all RCRA permit applications and permit modification requests must be filed with the responsible state agency in accordance with the process outlined in Chapter 3.



Permitting in States having RCRA base authorization and authorization for some, but not all, HSWA programs

If a State has RCRA base authorization but is not authorized to administer all of the effective HSWA regulations listed on Table 1 of 40 CFR 271.1(j)(1), the EPA Regional Office may issue those portions of new RCRA permits that the State is not authorized to issue. Likewise, the EPA Regional Office may add or amend HSWA portions of existing permits. Nevertheless, in States with RCRA base authorization but without some or all HSWA authorizations, all RCRA permit applications and permit modification requests should still be filed with the responsible state agency. The State will usually then coordinate the overall permitting process and solicit required input from EPA. Details of State/EPA interactions are presented in a State/EPA Memorandum of Agreement (MOA) defining the scope of the State's authorized RCRA program [40 CFR 271.8(b)].

Permitting in States having no RCRA program authorizations

In States without RCRA base authorization, RCRA permit applications and permit modification requests must be filed with the responsible EPA Regional office. Also, some States that do not have RCRA authorization may have their own independent hazardous waste permitting programs under state law that require submission of a separate state permit application. If so, DOE facilities should file state hazardous waste permit applications with the appropriate state agency.

Communication with both EPA and the responsible state agency is recommended

DOE personnel who obtain permits for hazardous and mixed waste treatment, storage, and disposal facilities should consult early in project planning with both EPA and the state agency responsible for hazardous waste regulation. This consultation is recommended regardless of whether the State administers any portion of the Federal

RCRA program. It is also recommended that DOE facilities provide copies of all correspondence related to RCRA permit applications, including the applications themselves, to both EPA and the responsible state agency.

EPA monitors state-issued RCRA permits

In addition to fulfilling its HSWA permitting responsibilities, if any, in authorized States, EPA also monitors all authorized state permitting programs. This may include reviewing state-issued permits for the treatment, storage, or disposal of hazardous waste [40 CFR 271.19(a)]. In this role, the EPA Region may comment if a State-issued permit provision seems inconsistent with the authorized state program. In most cases, if EPA decides to comment, the State will address or refute the comments, and the EPA Region will then withdraw the comment. However, in any event, a copy of EPA's comments will be sent to the applicant. Then, whether or not the State includes a condition in the final permit as suggested by EPA, EPA may take action under RCRA §3008(a)(3) to enforce the condition [RCRA §3008(a)(3); 40 CFR 271.19(e)].

Exhibit 6-1, located at the end of this module, provides an overview of the respective roles of EPA and States in implementing new or modified Federal RCRA regulations requiring issuance of permits or permit modifications.

Both EPA and the authorized State can enforce the provisions of an authorized RCRA base program

Once authorized to implement RCRA Subtitle C (including RCRA base authorization and authorization for any HSWA program), a State assumes primary RCRA hazardous waste enforcement responsibility within its boundaries for the authorized programs. Nevertheless, EPA can also enforce the authorized State's program requirements, as well as any more stringent new or modified Federal requirements imposed by HSWA [40 CFR 271.3(b)].² One exception to EPA's power to enforce a State's program occurs if state requirements are broader in scope than the Federal program (i.e., the state laws increase the size of the regulated community beyond the size of the Federal program). While RCRA allows state programs to be

EPA cannot enforce any portion of a State's hazardous waste program that is broader in scope than the Federal program

² Beginning in 1985, EPA called for State/EPA Enforcement Agreements. Such Agreements ensure that clear criteria are established in advance for direct Federal enforcement in authorized States. They also set procedures for advance consultation and notification before direct Federal enforcement [EPA Policy Framework for State/EPA Enforcement Agreements (8/25/86)].

broader than the Federal program, the additional coverage is not part of the Federal program assumed by the State and, hence, is not enforceable by EPA. This notwithstanding, EPA can take enforcement action at any appropriate time under RCRA §7003 (“Imminent Hazard”).

EXHIBIT 6-1 EPA/STATE RCRA PERMITTING RESPONSIBILITIES

