

**Federal Register**

---

Wednesday  
November 8, 1995

---

**Part III**

**Environmental  
Protection Agency**

---

40 CFR Part 260, et al.  
**Military Munitions Rule: Hazardous Waste  
Identification and Management;  
Explosives Emergencies; Redefinition of  
On-Site; Proposed Rule**

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Parts 260 through 265, and 270**

[EPA 530-Z-95-013; FRL-5325-5]

RIN 2050-AD90

**Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Redefinition of On-Site**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

**SUMMARY:** In response to Section 107 of the Federal Facility Compliance Act (FFCA) of 1992 which added a new subsection 3004(y) to the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. section 6924(y)), EPA is today proposing a rule that identifies when conventional and chemical military munitions become a hazardous waste under RCRA, and that provides for the safe storage and transport of such waste. Today's proposal also amends existing regulations regarding emergency responses involving military munitions and other explosives. This amendment would apply to responses by non-military or private personnel, as well as by the military. The proposal also revises the definition of "on-site," which applies to all generators of hazardous waste.

**DATES:** Written comments on these proposed rules will be accepted until January 8, 1996.

**ADDRESSES:** Written comments (one original and two copies) should be addressed to: EPA RCRA Docket #F-95-MMP-FFFFF, Mail Code 5305W, 401 M Street SW, Washington, DC 20460. Comments also may be submitted electronically by sending electronic mail (e-mail) through the Internet system to: RCRA-Docket@epamail.epa.gov. All electronic comments must be submitted as an ascii file avoiding the use of special characters and any form of encryption. The comments should be identified with the above docket number.

The official action for this record will be kept in paper form. Accordingly, EPA will convert all documents received electronically into printed paper form as they are received and will place the paper copies in the official record, which will also include all comments submitted directly in writing. The official record is the paper record kept in the RCRA Docket (see address above). (Comments submitted on paper will not be transferred to electronic format.

These comments may be viewed only in the RCRA Docket as described here.)

Public comments and the supporting information used for this rule are available for public inspection and copying in the RCRA Information Center (RIC) located in room M2616 at the EPA address above. The RIC is open from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding federal holidays. To review docket materials, the public must make an appointment by calling (202) 260-9327.

The RIC will be closed November 14-24, 1995 because it is relocating to Arlington, Virginia. Between November 14 and 24, 1995, special appointments can be made for viewing material in this docket by calling the above number. Beginning November 27, 1995, call 703-603-9230. After that date, the Docket will be physically located at: Crystal Gateway, First Floor, 1235 Jefferson Davis Highway, Arlington, Virginia. The mailing address remains the same as given above.

**FOR FURTHER INFORMATION CONTACT:** The RCRA Hotline between 9 am and 6 pm EST, toll-free, at 800-424-9346; 703-412-9810 from Government phones or if in the Washington, DC local calling area; or 800-553-7672 for the hearing impaired; or Ken Shuster, U.S. EPA (5303W), 401 M St. SW., Washington, DC 20460, (703) 308-8759.

**SUPPLEMENTARY INFORMATION:**

## Preamble Outline

- I. Legal Authority
- II. Background
  - A. Statutory Mandate
  - B. Issues Addressed in Proposal
  - C. Solid Waste for Regulatory Purposes vs. Solid Waste for Statutory Purposes
- III. Summary of Proposed Rule
- IV. Section-by-Section Analysis
  - A. Definition of Military Munitions
    - B. Definition of "Solid Waste" as It Applies to Military Munitions
      1. Unused or Stockpiled Munitions
        - a. Status of Military Stockpile
        - b. Proposed § 261.2(g)(1)(i)—Unused munitions that have previously been disposed of
        - c. Proposed § 261.2(g)(1)(ii)—Munitions removed from the stockpile for the purposes of destruction
        - d. Proposed § 261.2(g)(1)(iii)—Leaking or deteriorated munitions
        - e. Proposed § 261.2(g)(1)(iv)—Munitions determined by DOD to be a solid waste
        - f. Rationale for EPA's Proposed Approach
      2. Used or Fired Munitions
      3. Munitions Used for Their Intended Purposes
        - a. Proposed § 261.2(g)(3)(i)—Military training exercises
        - b. Proposed § 261.2(g)(3)(ii)—Weapons testing
        - c. Proposed § 261.2(g)(3)(iii)—Range clearance during training or weapons testing

4. Discharged Military Munitions at Firing Ranges
5. Waste Materials Derived from Munitions Manufacture
- C. Standards Applicable to Generators and Transporters
- D. Storage of Military Munitions
- E. Emergency Responses
- F. Definition of "On-Site"
- G. Permit Modifications to Receive Off-Site Waste Munitions
- V. Discussion of Major Alternatives
  - A. Stockpiled Munitions
    1. Approach Based on Army Regulation 200-1
    2. DOD Interim Guidance
    3. Munitions Scheduled for Destruction by International Treaty
    4. Alternatives Based on Condition of Munition
    5. Regulation of the Demilitarization Process
  - B. Range Management
    1. Active Ranges
    2. Applicability of Range Cleanup Authorities
    3. Alternative Organization (Separate CFR Part)
  - VI. State Authority
  - VII. Administrative Requirements/Compliance with Executive Order
    - A. Regulatory Impact Analysis Under Executive Order 12866
      1. Cost Analysis
      2. Benefits Analysis
      - B. Regulatory Flexibility Act
      - C. Paperwork Reduction Act
      - D. Unfunded Mandates
  - VIII. References/Docket

## I. Legal Authority

These regulations are proposed under 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

## A. Statutory Mandate

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 EPA to propose regulations, after consulting with the Department of Defense (DOD) and appropriate State officials, that identify when conventional and chemical military munitions become hazardous waste under RCRA, and that provide for the safe storage and transportation of such waste.

Over the years, the applicability of RCRA to military munitions has been the subject of considerable controversy. The Department of Defense has expressed concern that differing regulations or interpretations from State to State substantially undermine its

ability to carry out its mission. DOD has particularly sought clarity in defining RCRA's application to military munitions storage and transport, the recycling or destruction of obsolete munitions, and immediate responses to emergencies involving explosives.<sup>1</sup> At the same time, citizens groups have expressed concern that many military activities involving munitions are insufficiently regulated. Congress amended RCRA to include section 3004(y) in response to these concerns.

Today's proposal responds to Congress's mandate in section 3004(y). In developing the proposal, EPA has consulted extensively with DOD and the States, as the statute requires. EPA has also met with and received comments from a consortium of citizens groups with particular interest in the environmental and human health impacts of military installations around the United States. In addition, representatives of the waste treatment industry have provided comments to EPA. Records of these meetings and information provided to EPA are included in the docket to today's rulemaking.

#### B. Issues Addressed in the Proposal

In developing today's proposal, EPA focused primarily on several key issues that have arisen in the implementation of the RCRA program at military installations, or that have been raised by DOD, States, or citizens groups. These issues are:

1. When does an unused munition become a RCRA "hazardous waste," potentially subject to RCRA permitting and technical management standards? All parties agree that the destruction of unused munitions is regulated under RCRA (if the munitions meet the definition of "hazardous"). But at what point in the process do stockpiled 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? Although EPA in the past has not regulated these activities under RCRA, it has been argued that military munitions are "discarded" during field exercises, and therefore should be subject to RCRA hazardous waste management

standards. It has also been argued that certain activities associated with munitions training or testing—for example, the detonation of unexploded ordnance at a firing range—properly fall under RCRA jurisdiction.

3. How do RCRA hazardous waste regulations apply to emergencies involving explosive materials, including military munitions? DOD has expressed concern that current RCRA hazardous waste regulations may complicate responses by emergency personnel to unexploded ordnance and other emergencies.

4. In what way (if any) do RCRA requirements apply to unexploded ordnance and environmental contamination at military ranges and impact zones, especially ones that are closed?

5. Once it has been determined that a munition is a hazardous waste for regulatory purposes, what storage and transportation standards are needed to ensure protection of human health and the environment? DOD, in particular, expressed concern that certain RCRA standards are inconsistent with its internal regulations on munitions storage, and that the RCRA transportation requirements (including the manifest) are redundant with DOD controls.

Today's notice provides EPA's proposed resolution of these issues. The notice also proposes a new definition of "on-site," to reduce unnecessary paperwork requirements for hazardous wastes transported within large facilities, including military installations.

#### C. Solid Waste for Regulatory Purposes vs. Solid Waste for Statutory Purposes

In addressing the issues above, EPA carefully reviewed the RCRA statutory and regulatory definitions of "solid" and "hazardous" waste. To avoid confusion in today's proposal, EPA notes at the outset that the terms "solid waste" and "hazardous waste" have different meanings depending upon the context in which the terms appear. These terms are defined in both the statute and in the regulations implementing RCRA Subtitle C.

RCRA statutorily defines "solid waste" in section 1004, 42 U.S.C. 6903(27), in pertinent part, as follows:

The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities . . .

42 U.S.C. 6903(27). The term "hazardous waste" is defined in the statute as those solid wastes that may "(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." 42 U.S.C. 6903(5).

The terms "solid waste" and "hazardous waste" are defined for purposes of the regulatory program under Subtitle C of RCRA at 40 CFR 261.2 (solid waste) and 40 CFR 261.3 (hazardous waste). Materials meeting these definitions are a subset of the materials meeting the statutory definitions. EPA regulations at 40 CFR 261.1(b)(1) make clear that the regulatory definition of "solid waste" applies only to wastes that are also hazardous for purposes of the regulations implementing subtitle C of RCRA. Accordingly, the statutory definition of solid waste is broader in scope than the regulatory definitions of the term. See also 40 CFR 261.1(b)(2).

In parts IV.A thru B.3 and B.5 of the preamble, EPA discusses the circumstances under which *unused* munitions in the military stockpile are considered to meet the definition of "solid waste" as defined in the *regulations* implementing Subtitle C of RCRA. Therefore, in this context the relevant definition of "solid waste" is the definition contained in the Subtitle C regulations. Unused military munitions meeting the regulatory definitions of "solid waste" could be regulated as hazardous waste and thus subject to full Subtitle C requirements.

In part IV. B.4. of the proposal EPA discusses the circumstances under which *discharged or fired* munitions meet the *statutory* definition of "solid waste". As explained below, these materials would not meet the regulatory definition of "solid waste" and thus would not be regulated as "hazardous waste". Nevertheless, these materials could be "solid waste" as defined by the statute. Therefore, in this context the relevant definition of "solid waste" is the statutory definition. Discharged or fired munitions that meet the statutory definition of "solid waste" are subject to RCRA's remedial statutory authority.

#### III. Summary of Proposed Rule

Today's proposal addresses: (1) when military munitions become a solid, and therefore potentially a hazardous waste, (2) what transportation and storage requirements apply to military munitions that become a hazardous

<sup>1</sup> EPA and DOD have developed a considerable body of interpretive guidance and memoranda addressing these issues. EPA's most recent general discussion of these issues is in a June 23, 1994 letter from Michael Shapiro, Director of the EPA Office of Solid Waste, to Patrick J. Meehan, Acting Assistant Deputy Under Secretary of Defense for Compliance. This letter and other relevant guidance are included in the docket to today's rulemaking.

waste, (3) how RCRA hazardous waste regulations apply to immediate responses to emergencies involving military munitions and other explosives, (4) what RCRA requirements apply to fired munitions, and (5) an amendment to the definition of "on-site," as it applies to hazardous waste generators.

On the issue of when a munition becomes a regulatory solid waste, today's proposal provides that *unused* military munitions in the military stockpile become solid waste when they are removed from storage in the stockpile for the purpose of disposal, or for treatment prior to disposal; when they are leaking or deteriorated to a point where they cannot be used or recycled; or when DOD or authorized Military Service personnel declare them to be a solid waste, whichever comes first. The proposal would make clear that munitions disposed of in the past, for example by burial at former military installations, are solid waste. At the same time, the proposal explicitly provides that use of munitions for their intended purpose (for example, in training exercises, or in activities associated with training, such as range clearance) does not constitute waste management regulated under RCRA.

The proposal also discusses alternate approaches to the regulation of unexploded ordnance and other munitions remaining at ranges after the range has been closed. Under the approach proposed in today's notice, these munitions would be considered statutory "solid waste," potentially subject to RCRA cleanup authorities, until DOD develops range cleanup standards, in consultation with EPA and with full opportunity for public participation. Under today's proposal, DOD's standards, once issued, would take precedence over RCRA.

The proposal would also codify EPA policy on immediate responses to emergencies involving munitions and other explosives. Under the proposal, immediate responses taken by trained personnel (whether military, other governmental, or private) would not be subject to RCRA permitting or other requirements. In addition, if emergency transportation of the explosive were necessary, this could occur without a RCRA manifest.

The proposal also includes new standards for military magazines or bunkers used to store hazardous waste munitions. These standards are designed to provide consistency between RCRA technical standards and DOD standards for munitions storage. In addition, today's proposal would exempt military munitions from RCRA

manifest and other RCRA transportation requirements, if they are being shipped to other DOD facilities under DOD's munitions tracking system.

Finally, the proposal revises the definition of "on-site," so that hazardous waste generators may define on-site property to include all contiguous property (regardless of whether or not it is split by a road or right-of-way). This change will provide military installations and other large facilities (such as universities or large industrial complexes) greater flexibility in handling waste on site and will eliminate redundant paperwork requirements (e.g., by eliminating the manifest requirement).

#### IV. Section-by-Section Analysis

##### A. Definition of Military Munitions

Today's proposal includes a definition of "military munitions" (in § 260.10). This definition, which establishes the scope of today's rule, includes all types of ammunition products and their components, including conventional and chemical munitions, produced by or for the military for national defense and security. The definition lists a number of component examples, including propellants, explosives, pyrotechnics, and chemical and riot control agents; and product examples, including rockets, bombs, mines, grenades, artillery, and torpedoes. The definition excludes improvised explosive devices, for example, home-made bombs (which are non-military)<sup>2</sup> and nuclear weapons, devices, and components thereof managed under the Department of Energy's nuclear weapons program.

The proposed definition also clarifies that such military munitions may be under the control of the Department of Energy (DOE), the U.S. Coast Guard, the National Guard, or a private company producing the munitions under contract to or as an agent for DOD, as well as the Department of Defense.

EPA considered including in this rule non-nuclear components of munitions managed by DOE under its nuclear weapons program. Upon review, however, EPA has determined that section 107 of the FFCRA does not contemplate the inclusion of nuclear weapons or their components within the scope of this rule. The statutory language and legislative history of § 107 demonstrates the intent of Congress that EPA develop regulations that address conventional and chemical munitions.

<sup>2</sup> Improvised explosive devices, or IEDs, are defined as non-standard explosive devices made from either military or non-military materials by non-military personnel.

No mention was made of nuclear weapons or their components. Furthermore, EPA recognizes that DOE's practices and procedures for the management of nuclear munitions under the Atomic Energy Act of 1954, 42 U.S.C. 2011 et seq., as well as the potential impacts on DOE operations, are significantly different from those of DOD pertaining to conventional and chemical munitions.

For these reasons, EPA has decided not to include nuclear weapons components in today's proposal. Instead, the proposal addresses conventional and chemical weapons, as contemplated by § 107, and specifically does not apply to nuclear weapons or the components thereof managed under DOE's nuclear weapons program. Conventional or chemical munitions that DOE produces or manages for the military, however, would be subject to this proposed rule.

##### B. Definition of "Solid Waste" as It Applies to Military Munitions

RCRA section 3004(y) requires EPA to identify "when military munitions become hazardous waste for purposes" of Subtitle C of RCRA. In general, materials are considered to be "hazardous waste," for regulatory purposes, if: (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. In today's proposal, EPA has focused on the first point—when munitions become a solid waste—and has not proposed to amend the definition of "hazardous waste" as it applies to munitions.

EPA has taken this approach because the controversy over when military munitions become regulated under RCRA Subtitle C hazardous waste standards has centered on the question of when munitions become "solid waste" under § 261.2, rather than on whether they are "hazardous waste" under § 261.3. Many military munitions meet the RCRA "ignitability" or "reactivity" characteristics, for example, because they are explosive (see 40 CFR 261.21 and 261.23 respectively).<sup>3</sup> In addition, other munitions are hazardous under the "toxicity" characteristic, because they contain high levels of lead or other toxic metals (see 40 CFR 261.24). EPA believes that the current definition of "hazardous waste" in 40 CFR 261.3 is adequate as it applies to

<sup>3</sup> Some munitions are not "reactive." For example, in a memorandum of June 2, 1988, EPA stated that small arms ball ammunition of up to and including 0.50 calibers are not reactive within the meaning of RCRA. The Department of the Army has codified this position in Army Regulation 200-1, section 6-7(k).

waste munitions, and therefore proposes no change to 40 CFR 261.3.

Under 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 abandoned. In today's notice, EPA proposes to add a new § 261.2(g) specifying how the regulatory term "discarded material" applies to unused military munitions. This proposed provision would address the regulatory definition of solid waste in the context of three specific categories of munitions: (1) unused munitions in the military stockpile, (2) used or fired munitions, and (3) munitions being used for their intended purpose.

Additionally, EPA proposes in new § 261.2(g)(4) to characterize munitions at closed or transferred ranges as statutory solid waste under RCRA section 1004(27). However, once DOD promulgated range cleanup regulations under its own standards, this section would be superseded.

#### 1. Unused or Stockpiled Munitions

a. Status of Military Stockpile. According to DOD, the military services currently have 5.6 million tons of conventional munitions stored in magazines at installations within the United States. Of these munitions, more than 5.1 million tons (or more than 90%) are in an "active use" inventory, and therefore are available for use in training or war. At the same time, however, the Services have a significant volume of munitions in "demilitarization" accounts (for example, the Army's Resource Recovery and Disposition Account); munitions in these accounts are generally considered to be excess and unneeded, "unserviceable" (and needing further assessment or repair), or obsolete.<sup>4</sup>

According to DOD, approximately 440,000 tons of munitions are stored in demilitarization accounts; under DOD procedures, these materials first undergo evaluation to determine whether they can be returned to service, repaired, sold, or recycled. If these options are unavailable, the munition is then scheduled for destruction. DOD currently considers that its stockpile

includes 48,000 tons of munitions scheduled for destruction.

EPA and DOD generally agree that munitions stored in the active use military stockpile do not meet the definition of "discarded material" or "solid waste" in 40 CFR 261.2, and therefore are not regulated under RCRA subtitle C. There is also general agreement that obsolete or excess munitions meet the regulatory definition of solid waste at the point when they are received for destruction or disposal—for example, at open burning/open detonation units or incinerators. Despite agreement on these points, however, there has been considerable discussion over whether and how RCRA standards apply to munitions slated for destruction before they are received at a treatment or disposal site.

This discussion has centered primarily on defining what event or munition status indicates a DOD "intent to destroy." EPA has had comparable discussions with industry over when commercial products become a solid waste. The Part 261 regulations regarding commercial products in storage rely largely on the "intent" of the owner to discard; over the years, EPA has sought to establish simple, consistent, and enforceable principles regarding the point at which commercial products are intended to be "discarded"—notably these are (1) when the products are removed from storage for disposal, or treatment prior to disposal, (2) when the owner declares them to be hazardous waste, and (3) when they are deteriorated or damaged (e.g., leaking) to the point they cannot be used, or reprocessed for beneficial use. In today's proposal EPA has sought to apply these general principles to military munitions.

In proposed § 261.2(g)(1)(i) through (iv), EPA clarifies this issue by identifying the specific circumstances under which an unused or stockpiled munition would be considered to be solid waste for regulatory purposes.

b. Proposed § 261.2(g)(1)(i)—Munitions that have previously been disposed of. Under proposed § 261.2(g)(1)(i), a munition becomes discarded, and therefore a solid waste when it is "abandoned by being disposed of, burned, or incinerated, or 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 solid waste, and, if hazardous, they would become subject to applicable subtitle C regulation when unearthed and further managed. EPA emphasizes that this proposed section would not bring use of military munitions for their intended purposes—e.g., the firing of military rounds—within the scope of subtitle C. The use of a product (in this case a military munition), in EPA's view, is not a waste management activity and does not constitute abandonment for the purposes of proposed § 261.2(g)(1). ("Discarded material" in the context of munitions used at military firing ranges is addressed in proposed § 261.2(g)(4), which is discussed below.)

c. Proposed § 261.2(g)(1)(ii)—Munitions removed from the stockpile for the purposes of disposal/destruction. Proposed § 261.2(g)(1)(ii) would specify that a military munition becomes a solid waste for regulatory purposes when it is removed from storage in a military magazine or other storage area<sup>5</sup> for the purposes of destruction, disposal, or treatment prior to disposal.

Stockpiled 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," that is, until an intent to discard the material can be demonstrated. Even if a commercial product's shelf life has expired, or it can no longer be used for its intended purpose (for example, because of physical deterioration), it may be reprocessed or used for other purposes. Thus, it would not necessarily be considered "discarded material" or solid waste.

Stockpiled military munitions are in a comparable situation, and the classification of a munition in one of the various DOD "demilitarization" accounts does not, in EPA's view, constitute a decision to discard the material because, pursuant to DOD's practices, such a classification does not necessarily evidence an intent to discard. Ammunition classified as "unserviceable," for example, may be returned to service, after further review, or in some cases after reprocessing.

<sup>5</sup> The term "military magazine or other storage area" refers to all types of military munitions storage units, including outdoor or open storage areas, sheds, bunkers, and earth-covered and above-ground magazines allowed under the DOD Explosives Safety Board (DDESB) standards (DOD 6055.9-STD), which are mandatory for use by all DOD components.

<sup>4</sup> The Services also assign "condition codes" to ammunition. For example, the Army's *Ammunition Surveillance Procedures* (November 1990) provides designations for ammunition such as Condition Code H ("Material that has been determined to be unserviceable and does not meet repair criteria").

Munitions in the demilitarization accounts (such as the Army's Resource Recovery and Disposition Account) may also be sold for non-military purposes, or to nations that still maintain older weapons systems. Even munitions scheduled for disposal may still have a deterrent purpose and may be called back into service in cases of emergency. 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 constitute a decision to dispose of it.

For these reasons, today's proposal makes it clear that unused munitions stored in military stockpiles are not considered "solid waste" subject to subtitle C (except as provided in § 261.2(g)(1) (iii) and (iv) discussed below). Instead, EPA has sought to establish a simple, consistent, and enforceable point where a munition would be considered "discarded." In EPA's view, the most appropriate point for military munitions (and the point that is most consistent with the regulation of commercial/industrial products) is when the material is finally removed from storage for the purpose of disposal or treatment prior to disposal. In practical terms, this provision would mean that storage of stockpiled munitions would, for the most part, not be subject to RCRA regulation (with exceptions described below); however, once a munition was removed from a magazine *for the purpose of destruction or disposal* it would become solid waste potentially regulated under subtitle C of RCRA.

EPA emphasizes that this provision would trigger RCRA coverage only where a decision to destroy the munition had 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 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 destruction or disposal, but rather for evaluation. The munition would be handled as a waste only if no further evaluation would take place and the decision to destroy had already been made.<sup>6</sup> Similarly, a munition may be removed from storage for the purpose of recycling

or materials recovery without triggering RCRA.

EPA recognizes that it may not always be easy to determine whether a decision to destroy the material has been made; however, it believes that the status of a munition removed from storage will generally be clear. In some cases, a decision to destroy might be evidenced by a specific order or document. In other cases, the intent to destroy the munition would be obvious even in the absence of such an order. For example, a munition sent to a commercial, non-military hazardous waste facility is presumably a waste (unless the facility is also a commercial dismantling/reclamation facility). Similarly, if a rocket undergoing demilitarization is disassembled, and the propellant shipped off-site to an incinerator at another installation, the intent to destroy the propellant would be clear. In both cases, the point of generation of the waste would be when it was removed from storage. EPA emphasizes, however, that the rocket disassembly process itself is not a form of RCRA "treatment," and only the propellant that is incinerated would be a solid waste. More generally, when a munition is disassembled, the removal of a component from the munition does not demonstrate or suggest an intent to discard that component. These activities are therefore not considered waste management under RCRA (unless the material is already classified as a waste, and the disassembly is carried out to prepare for waste disposal.)

To summarize, the disassembly of a munition and recovery of explosives or propellants and other components for reuse does not constitute a waste management activity. In fact, these operations constitute a large part of DOD's Resource Recovery and Recycling Program, and EPA strongly supports and encourages this program. EPA views recycling of unused military munitions as being directly analogous to the reclamation of commercial chemical products (see 40 CFR 261.2(c) and (e) and 261.33). Thus, the position EPA is taking in today's rule on military munitions recycling or materials recovery operations is consistent with the position it 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 include the following:

(1) Recovery of explosive filler, together with scrap metal sale. Explosive filler material may be removed from munitions by using a heated medium, such as steam, hot

water, or air. Further processing may be necessary if the explosive material is contaminated or the end use requires a specific form of explosive. The filler material is then used or reformulated for military or commercial explosives, and the inert metal parts may be reused as is or sold for scrap value.

(2) Reuse of Hazard Class (HC) 1.3 large rocket motor propellant, together with casing reuse or scrap metal sale. The HC 1.3 propellant may be removed from the rocket motor case with a high pressure water jet. The washed-out material and liquor is then processed to remove ammonium perchlorate. The ammonium perchlorate is then crystallized and reused as an ingredient in a large rocket motor propellant formulation, and the motor casing is either used or sold for scrap value.

(3) Reuse of HC 1.1 large rocket motor propellant, together with casing reuse or scrap metal sale. The HC 1.1 propellant is removed from the rocket motor as propellant chips through a dry machining process. These chips are then mixed with other ingredients to produce commercial sector blasting charges for mining or quarrying. The motor casing is, again, either reused or sold for scrap metal.

(4) Reuse of red phosphorus composition. The red phosphorus composition is removed from unserviceable L8A1 smoke grenades for reloading into the new L8A3 grenades.

(5) White phosphorus to phosphoric acid conversion. This process converts white phosphorus to saleable phosphoric acid by integrating an industrial phosphoric acid conversion process to a modified furnace.

The examples of ways in which military munitions may be reused for military and commercial applications, while specific, apply not only to the identified munitions but illustrate how RCRA requirements apply to munitions of similar types. The examples, however, do not specifically address one type of recycling identified by DOD: that is, the processing of an unused explosive to allow its use as fertilizer. In this case, the explosive, arguably, is being applied to the land in lieu of its original intended use and therefore—by analogy to commercial chemical products—its use as a fertilizer would potentially be regulated as waste management (see 40 CFR 261.33). EPA solicits comment on whether this type of recycling is appropriate for military explosives and therefore whether it should be allowed under today's rule.

Of course, treatment or disposal of residual materials generated during the disassembly or processing of unused munitions is potentially subject to

<sup>6</sup> EPA 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 Services, Inc., Browning-Ferris Industries, May 16, 1991.

RCRA regulation. In example number 2 above, ingredients remaining after the crystallization of ammonium perchlorate might be incinerated. EPA would consider this incineration to constitute waste management and the materials incinerated to be a solid waste.

Proposed § 261.2(g)(5) in today's rule clarifies these points.

d. Proposed § 261.2(g)(1)(iii)—Leaking or deteriorated munitions.

Proposed § 261.2(g)(1)(ii), discussed above, would define the most common circumstances under which a stockpiled military munition would become a solid waste—that is, when a decision has been made to dispose of it and it is removed from storage for transportation to a disposal site. EPA, however, recognizes (and States and citizens 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 an environmental threat. To address these circumstances, proposed § 261.2(g)(1)(iii) would define a munition as a solid waste if it is “deteriorated or damaged (e.g., as a result of leaks or broken seals) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes.” For example, leaking chemical munitions are typically overpacked and placed in separate storage. Further, the stabilizers and chemicals involved have often deteriorated, and these chemicals have no reclamation potential. In EPA's view, these munitions have lost any reasonably possible future uses. Therefore, they should be defined as solid waste, and if hazardous, managed accordingly.

EPA recognizes that there is no specific analogous provision for deteriorated or damaged stockpiled commercial products. EPA believes, however, that commercial products in similar situations without any reasonable future uses or recycling potential would qualify as solid waste under existing regulations. Furthermore, EPA shares commenters' concerns that, when a munition presents a threat because of leakage or physical deterioration and when there is no reasonable possibility of productive use of the material, it should be treated or destroyed as soon as feasible.

e. Proposed § 261.2(g)(1)(iv)—Munitions determined by DOD to be a solid waste. Finally, proposed § 261.2(g)(1)(iv) would make it clear that the military Services or the Department of Defense may identify a stockpiled

military munition as a RCRA “solid waste.” In this case, the munition (if “hazardous”) would be subject to hazardous waste regulations. For example, the Department of Defense has previously determined that M55 rockets containing chemical agents are hazardous waste. DOD made this decision because the rockets' delivery system no longer exists, 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. Today's proposal would not affect the waste status of these materials, or of materials DOD in the future classifies as solid waste.

EPA emphasizes that proposed § 261.2(g)(1)(iv) requires a specific declaration by an authorized military official that a munition is a solid waste. As explained earlier, a decision under DOD's classification system that a munition is “unserviceable,” or the transfer of a munition into a “demilitarization” account would not constitute a decision that a munition is a solid waste.

*f. Rationale for EPA's Proposed Approach.* EPA's proposed approach is based primarily on the recognition that stockpiled munitions are “products,” generally outside the scope of RCRA; that Congress intended for EPA to develop a “fair and coherent” approach regarding RCRA's application to munitions; that DOD has in place extensive storage standards that, in providing for safety, are also protective of human health and the environment; and that the military Services' safety record in storing munitions has been good. EPA further believes that there is no compelling environmental or legal reason to develop an intent-based test for defining when munitions become hazardous waste. Indeed, to do so would significantly increase the regulatory burden not only on DOD, but also on regulators, and it would certainly complicate DOD's management of the military stockpile. These reasons are discussed in more detail below.

In the first place, the proposed approach would be simple, straightforward, and enforceable. Munitions while stored in the stockpile would generally be excluded from RCRA regulation. Alternative approaches that would divide munitions in the military stockpile into “waste” and “non-waste” munitions (based on one or another set of intent-based criteria) would be likely to provide little certainty, and would be

difficult to implement in the field. EPA is particularly concerned about approaches that would lend themselves to site-specific disagreements over whether a particular stockpile munition is or is not a hazardous waste. Congress charged EPA with developing a “fair and coherent approach to identifying when military munitions become a hazardous waste,” and expressed the opinion that, without such regulation, RCRA jurisdiction over munitions “will likely be left to the courts.” (See H.R. Conference Report No. 886, 102d Cong., 2d Sess. 29 (1992). See also Cong. Rec. H9137 (daily ed. September 23, 1992), Floor statement of Rep. Ritter). In light of this directive, EPA has sought to draw as clear and universal a line as possible in this proposal, and to avoid definitions that are likely to lead to debate in their application, or to require specialized military expertise to interpret. EPA's goal has been to define a consistent national standard, which would eliminate the need for complicated site-specific judgments that may have little if any relevance to protection of human health and the environment.

Today's proposal on military munitions is also consistent with EPA's approach under RCRA to other products. To be sure, the proposal does not precisely parallel EPA's approach to commercial products, but the basic approach is the same; in both cases, unused products are generally excluded from RCRA jurisdiction. The only substantive differences between the proposal and the current definition of solid waste, as it applies to “commercial” products, are that: (1) RCRA jurisdiction for military munitions would generally be triggered by the actual removal of a munition from storage for disposal or treatment, rather than by evidence of an “intent” to discard the material before its removal from storage, and (2) leaking munitions that could not be returned to use would be explicitly defined as solid waste. EPA acknowledges these minor differences, but believes they are appropriate in the case of military munitions, given Congress's mandate that EPA develop specific regulations for military munitions that reflect the special circumstances surrounding these materials.

Moreover, EPA has chosen the proposed approach because it involves minimum interference with the military's established system for managing stockpiled munitions, and it would not conflict with the Services' logistical needs or constraints. Munitions in both the active and demilitarization accounts are managed

under the same storage and transportation standards, and they are often stored together in the same magazines. The threat from a specific munition does not change when it is determined to be "unserviceable"; when it is reclassified into a demilitarization account; or when it is scheduled for treatment or disposal. Today's proposal recognizes the efficiency of managing the military stockpile within the current system. Under the proposal, the demilitarization process would remain governed by logistical, safety, and strategic considerations; munitions slated for destruction or treatment could be removed from magazines and shipped to waste treatment or disposal facilities according to an orderly process, rather than by regulatory schedules.

Finally, EPA's proposal reflects the Agency's preliminary judgment that RCRA regulation of stockpiles of largely military "products" (only a very small portion of the stockpile would be "waste") would not significantly increase protection of human health and the environment. The military's storage standards and practices for munitions generally provide protection that is comparable to or better than RCRA regulation would provide. The storage of military munitions is regulated under standards overseen by the Department of Defense Explosives Safety Board (DDESB), an organization independent of the Services within DOD that was established by Congress and reports to the Secretary of Defense. 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. 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 closure requirements. At this point, however, EPA is not convinced that RCRA standards would substantially increase protection.<sup>7</sup> (Both

EPA's and the commenter's review is available in the docket of today's rulemaking.)

In addition, the military's safety record for the entire stockpile has been good. According to DOD, there have been 27 "incidents" involving stockpiled munitions over the last twenty years, with only 13 of these involving structural damage to a bunker or storage unit. This represents a very low accident rate, considering the enormous quantity of munitions stored and handled (currently 5.7 million tons of conventional munitions in 28,122 storage units) and the high inherent hazard of the material. EPA questions whether RCRA regulation would improve this safety record. (Indeed, RCRA regulation of "waste" portions of the stockpile might increase risk, by leading to increased movement of munitions.)

## 2. Munitions That Have Been Used/ Fired That Are Subsequently Discarded

Proposed § 261.2(g)(2) addresses munitions that have been used or fired and then are subsequently recycled or disposed of. This section clarifies that RCRA management standards apply to the recycling or subsequent disposal (assuming the material is hazardous).

Specifically, § 261.2(g)(2) states that munitions that have been used or fired are solid waste when they meet the definition of discarded material in § 261.2(a)(2), except as provided in § 261.2(g)(3). In other words, a used or

plans for munitions emergencies, and responsibility for responding to these emergencies generally falls on military rather than local personnel. Therefore, coordination with local response authorities is less important than it is with civilian facilities. Furthermore, it is unclear what value would be added by preparedness plans that applied only to that part of an installation's munition stockpile that was classified as waste, and not to other munitions on the installation—especially given that the active stockpile would typically dwarf "waste" munitions in quantity. The situation is different for stockpiled chemical munitions—partly because of the greater possibility that an emergency would have off-site effect, and partly because of heightened public concern. However, Congress has already required the Secretary of Defense to establish a chemical weapons stockpile safety contingency plan (National Defense Authorization Act for Fiscal Year (FY) 92) and the Secretary of the Army to establish citizens' commissions for states with stockpile sites (National Defense Authorization Act for FY93). Second, as to closure requirements, it is unclear how typical munitions bunkers would lead to contamination problems. In any case, however, storage magazines are subject to the decontamination and remediation requirements of CERCLA 120(h)(3) when the property is transferred, and DOD is required to clean up environmental contamination under the Defense Environmental Restoration Act. Residual contamination is also subject to other cleanup authorities, including RCRA section 7003. Finally, EPA sees no reason why Service inspection procedures for the active stockpile are not adequate for munitions slated for disposal.

fired munition is considered a solid waste if it is abandoned or recycled, or if it is inherently waste-like (i.e., it meets the definition of "discarded" in § 261.2(a)(2)). But the proposed language explicitly states that this definition does not include munitions used for their intended purpose (i.e., munitions covered under § 261.2(g)(3)). As explained below, munitions used for their intended purpose are products not subject to RCRA regulation. Under this approach, munitions that have been fired and can no longer be reused would be potentially subject to Subtitle C regulation if removed from their landing spot and then transported off-range and stored, reclaimed, treated, or disposed of (assuming they are "hazardous"). For example, former installations no longer under military control (i.e., Formerly Used Defense Sites or FUDS) often contain unexploded ordnance or other hazardous material. Used or fired munitions removed from their landing spot and transported off-site would have to be handled under RCRA subtitle C (assuming they are "hazardous"). Similarly, used or fired munitions resulting from military research or training exercises, when removed from firing ranges and sent off-range for destruction would be considered solid waste. (As discussed below, use of a product for its intended purpose is not considered abandonment; § 261.2(g)(3) specifies certain activities that fall within the intended use of military munitions.)

## 3. Munitions Used for Their Intended Purposes

Under RCRA, the use of products for their intended purpose does not constitute 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 construction. Similarly, EPA has consistently held that the use of munitions (military or otherwise) for their intended purpose does not constitute waste disposal, and does not require RCRA permits. Proposed § 261.2(g)(3) (i) through (iii) clarifies this point and provides specific examples of military activities that are excluded from RCRA regulation.

*a. Proposed § 261.2(g)(3)(i)—Military training exercises. Proposed § 261.2(g)(3)(i) clarifies that the use of munitions in the training of troops and explosive ordnance disposal (EOD) personnel is not regulated under RCRA.*

<sup>7</sup> Strategic Environmental Services, Inc., in comments to EPA, cited three particular areas where it concluded that DDESB standards were less stringent than RCRA's: preparedness requirement with the local community, closure requirements, and inspection frequency. EPA believes that the differences in approach between the standards in these areas is of limited significance. First, under RCRA preparedness requirements, a facility must attempt to make arrangements with local police, fire departments, emergency response teams, and hospitals to allow them better to respond to emergencies. If these local institutions do not respond to overtures from the facility, however, the facility has satisfied its obligation. Military installations already have extensive contingency



*This is because such training constitutes the normal use of a product, rather than waste disposal.*

The proposed language also makes it clear that training includes training troops in the destruction of excess propellant and other munitions, when that destruction is integral to the product's use. Propellant used for artillery and mortar rounds comes in packaged allotments that vary by the type of weapon, round, and propellant. Each allotment is made up of individual increments to allow troops to vary the distance a shell is fired—the more increments used, the farther the shell is fired. The Services generally package the allotments for wartime use, that allow maximum firing capability. During firing exercises (whether for training or during wartime), the full allotment is often not needed. In these circumstances, military procedures for safety reasons require that unused increments of propellant be burned. (In wartime, procedures specify that the excess propellant be burned at the closest safe point.) To ensure that troops can safely destroy propellant during wartime, according to DOD, military training exercises involving artillery and mortar rounds typically include the burning of excess propellant.

In EPA's view, the training of troops in the wartime use of munitions is a legitimate use that lies outside the scope of RCRA; the Agency has no reason to question DOD's position that training troops in the safe destruction of excess propellant constitutes legitimate training. Indeed, such training exercises typically follow detailed protocols for training troops in handling and burning of excess propellants. EPA in the past has concluded that training in the destruction of excess propellant is not subject to RCRA regulations, and is proposing in today's rule to codify this interpretation.

Critics of DOD have expressed concern over the burning of excess propellant, pointing out that the amount of excess propellant destroyed may equal or exceed the propellant actually used in firing the weapons. Concerns of the public have particularly focused on air emissions, although the burning of propellant directly on the ground can lead to soil (and possibly groundwater) contamination. For this reason, the Services often conduct the burning in lined trenches. (In some cases, this precaution has been required by state regulators.) In other cases, local opposition to burning of excess propellant has led individual installations to abandon the practice (and in at least one case to abandon

training altogether), or reduce the number of increments used.

Some states and citizens groups have also argued that such burning could lead to sham training, when the primary purpose is really waste disposal. In enforcing today's proposal, EPA might look at whether propellant burning during a specific exercise was part of legitimate training—for example, that troops were in fact being trained and that the training was done in accordance with a specific training manual or training procedures. However, if these tests were met, EPA would consider the destruction of excess propellant to be normal use of munitions in a training exercise and not regulated under RCRA. In response to the concerns over sham training, DOD has suggested the existence and use of training manuals, and appropriate documentation of training activities should be accepted as evidence of training. EPA agrees that, should activities in a specific training exercise be challenged, such procedures and documentation would provide evidence that the activity did not involve waste disposal.

More generally, EPA appreciates the concerns of critics of DOD on this issue, but it tentatively accepts DOD's argument that the practice is necessary for effective training. At the same time, however, EPA solicits comments on this issue, in particular whether it is appropriate or necessary, under RCRA, to impose specific restrictions on burning of excess propellant, and if so what those restrictions should be.

*b. Proposed § 261.2(g)(3)(ii)—Weapons testing.* Today's proposal 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 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. Proposed § 261.2(g)(3)(iii)—Range clearance operations as a result of training or weapons testing.* The military services often conduct range clearance exercises as a result of weapons testing or training at firing ranges. During these exercises, military specialists sweep ranges for debris and unexploded ordnance, which may be destroyed on-site or shipped off-range for treatment. 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 the training or testing exercise. Furthermore, from an environmental perspective, it makes no difference whether ordnance explodes on impact or is subsequently detonated by an EOD specialist. Therefore, today's proposal would exclude range clearance exercises from RCRA subtitle C regulation. As mentioned earlier, however, when shipped off-range for destruction (but not for further evaluation) the debris or UXO is a solid waste, and if a hazardous waste, potentially subject to the RCRA subtitle C requirements.

#### 4. Discharged Military Munitions at Firing Ranges

In today's proposal, as well as in previous statements, EPA has taken the position that the discharge of a weapon does not constitute "waste management" for the purposes of RCRA. This position is reflected in proposed § 261.2(g)(3), discussed above, which excludes munitions used for their intended purposes from the definition of solid waste. At the same time, however, this proposal provides that spent munitions left in the environment may at some point become "discarded," in a RCRA statutory sense, and therefore may be potentially subject to various RCRA remedial statutory authorities. The most important of these authorities are: (1) RCRA section 7003, which authorizes EPA to require remedial action in cases in which solid wastes may present an imminent and substantial endangerment; (2) RCRA sections 3004(u) and (v), which require corrective action for releases of hazardous waste or constituents from any solid waste management unit at treatment, storage, or disposal facilities seeking a RCRA hazardous waste permit, and (3) RCRA section 3008(h), which allows EPA to require corrective action at interim status facilities.

Proposed § 261.2(g)(4) would specify how these authorities would apply to discharged munitions found at military firing ranges and impact areas. Proposed § 261.2(g)(4)(i) states that munitions left at closed ranges, or at ranges transferred out of military control, are discarded material. "Closed" ranges are ranges taken out of service by the military as ranges and put to new uses incompatible with range activities—e.g., as storage or warehouse areas. However, an "inactive" range—i.e., a range that is not currently being used, but that is still considered by the military to be a potential range area or that simply has not been put to any new use

incompatible with range activities—would not be considered “closed.”

In the case of a closed range, the site is no longer being used as a range and it has been put to a new use incompatible with range activities. Under the proposal, any remaining munitions and debris that are left in place would be considered discarded and therefore such munitions and debris would be a “solid waste” according to the RCRA section 1004(27) definition. In the case of transferred ranges, the military no longer has control over the site and therefore the view taken by EPA in the proposal is that any remaining munitions and debris would have in effect been “discarded.” This is not to say that the transfer of the property would constitute the act of discarding. Under this approach, the property transfer would simply affirm that the remaining materials on the range could be considered to have been discarded.

This approach to closed and transferred ranges would not be unprecedented. There are a number of scenarios under which hazardous wastes may be found in the environment, but were not put there through an act or circumstance that was a violation of RCRA or that otherwise subjects those wastes in place to subtitle C permitting or other requirements. A similar example of materials that may be classified as statutory “solid waste” under RCRA, but which are not automatically subject to RCRA subtitle C permitting or in-place waste management requirements, are wastes that had been disposed of before the effective date of RCRA. These materials would also potentially be subject to RCRA remedial authorities such as sections 7003, 3004(u) and (v), and 3008(h), or to CERCLA remedial authorities.

Today’s proposal, however, contemplates that RCRA regulation of cleanups at closed and transferred ranges would be temporary. The proposal would further provide that, if DOD promulgates, pursuant to DOD’s own statutory authorities, rules that allow for public involvement in cleanups of these ranges and that are fully protective of human health and the environment, then these DOD regulations would supersede RCRA regulations. The DOD regulations, rather than RCRA, would then govern range cleanups. EPA would issue a notice at the time DOD’s regulations were issued, announcing that DOD cleanup regulations took precedence and that munitions at closed or transferred ranges are not to be considered RCRA statutory solid waste.

This “sunset” provision reflects EPA’s conclusion that the legal arguments supporting the characterization of munitions on closed or transferred ranges as “solid waste,” and the legal arguments opposing such a characterization are finely balanced, with the result that EPA has the discretion to select either interpretation pursuant to section 3004(y). The choice of whether to define such munitions as “solid waste,” then, rests with EPA, and the proposal reflects EPA’s views of how human health and the environment can best be protected, given the special hazards posed by military munitions.

In fact, the applicability of RCRA corrective action authorities to ranges has long been subject to dispute. The Department of the Army’s Regulation 200–1, Environmental Protection and Enhancement, explicitly states that RCRA sections 3004(u) and (v) do not apply to military ranges (AR–200–1, section 6–7(j), April 23, 1990). In its proposed subpart S corrective action regulations, EPA agreed, suggesting that military firing ranges and impact areas “should not be considered solid waste management units,” and therefore sections 3004(u) and (v) would not apply (55 FR 30809, July 27, 1990). On the other hand, several EPA regions and States have asserted that these authorities apply to military ranges.

Today’s proposal would resolve this question. If adopted, proposed § 261.2(g)(4) would have the effect of bringing munitions at closed ranges and at ranges being transferred from military control under RCRA corrective action standards, if the installation were otherwise subject to RCRA permitting requirements. Under this proposed section, munitions at a closed range would be defined as solid waste, and the range (if it contained munitions or other contaminants) would constitute a solid waste management unit. Releases of hazardous wastes or constituents at or from the range would therefore potentially be subject to corrective action under sections 3004(u) and (v), or 3008(h). On the other hand, active and inactive ranges would not be considered solid waste management units. In addition, proposed § 261.2(g)(4) would provide that, once DOD issued regulations for range cleanup, these DOD regulations would supersede RCRA cleanup authorities.

In practice, RCRA corrective action would generally require an assessment of possible risks and releases at closed ranges. In some cases, sampling of environmental media (for example, soil, ground water, or surface water) might be required. The level of assessment needed would be consistent with the

potential risk of exposure. It is important to emphasize, however, that the RCRA corrective action authorities do not automatically require cleanup to specific levels. For example, risks from unexploded munitions might be controlled, where appropriate, through access restrictions. In fact, DOD is already required to address range cleanup as part of its own restoration program. Thus, today’s proposal, if adopted, would simply provide EPA or a delegated State with independent oversight of cleanups at RCRA sites, but would not affect the substantive cleanup standards that apply.

Proposed § 261.2(g)(4)(i) specifies that munitions remaining at closed ranges would be solid waste, for statutory purposes. Some may argue that EPA should propose to define munitions on active ranges as solid wastes as well. EPA, however, focused on closed rather than active ranges because it is technically difficult to address munitions on active ranges, and because periodic cleanups (other than range clearance exercises) at these ranges are likely to be of limited environmental value, particularly since the ranges are under direct control of the military and public access is restricted. Also, it could involve risk to cleanup personnel. EPA emphasizes, however, that non-munition releases are unaffected by today’s rule. Also, environmental releases from range activities that migrate off-range in ground-water or runoff, including from active ranges, would be statutory “solid waste,” and could be addressed under RCRA section 7003. They could also be addressed under the Clean Water Act or CERCLA.

EPA also considered including munitions on “inactive” as well as “closed” ranges in proposed § 261.2(g)(4)(i). This approach would have the effect of pushing RCRA sections 3004(u) and (v), and 3008(h), corrective action requirements earlier in the process. EPA, however, has not proposed this approach. The Agency recognizes that inactive ranges may frequently be reused, and questions the value of a formal corrective action process when the area will likely be subject to range use again. Furthermore, such an approach might only encourage installations to continue use of ranges, rather than discontinue their active use, for fear of triggering EPA or State oversight. In any case, any necessary remedial action would be required at the time of change in land use or transfer of the range from military control, since at that point the range would clearly be closed.

There are very substantial legal arguments and, assuming DOD issues

protective standards for range cleanup, compelling policy reasons for EPA to exercise its authority pursuant to § 3004(y) in a way that will not lead to RCRA jurisdiction over range clean up at any stage. In *Barcelo v. Brown*, 478 F. Supp. 646, 668–669 (D. Puerto Rico 1979), the District Court held that materials resulting from activities that do not resemble industrial, commercial, mining, or agricultural operations, or community activities fall outside the definition of “solid waste” in RCRA. Because “uniquely military” activities such as target practice at bombing ranges do not fall into any of these categories, the Court held that such activities were not regulated under RCRA. This conclusion also would be consistent with the approach EPA took in its Subpart S proposal (55 F.R. 30809, July 27, 1990). Thus, the *Barcelo* decision provides a rationale for excluding munitions remaining at firing ranges from the RCRA definition of solid waste. EPA, however, recognizes that the lines between “uniquely military” range activities and other activities (for example, target practice at small arms ranges) are not always clear. Therefore, EPA seeks comment on what sorts of range activities are properly considered uniquely military.

Additional legal arguments in favor of this alternative approach have been advanced, including the argument that unexploded military munitions cannot become a “discarded material” because DOD is statutorily obligated by 10 U.S.C. 172 and 10 U.S.C. 2701 to address the human health and environmental hazards posed by its munitions and unexploded munitions whenever and wherever encountered. These statutory obligations, according to this argument, make it legally impossible for DOD to “abandon” such materials.

DOD has an existing responsibility to address environmental restoration under the “Defense Environmental Restoration Program” (DERP) (10 U.S.C. 2701 et seq.), and CERCLA response authorities, and is generally responsible for preventing hazardous conditions related to munitions under 10 U.S.C. 172. EPA understands that DOD intends to propose clean up standards and a clean up process under these authorities in a rulemaking to commence by January 31, 1996, and to be completed by October 31, 1996. DOD intends that the rulemaking will be an open process, with ample opportunity for the active participation of the States and of the public. Further, the remedy selection and implementation process in the rule will include a significant role for the affected states and the interested public.

The proposed rule will specifically address the role of State regulatory agencies and the interested public. DOD’s proposed rule will address the nature of the role of the States and will request comment on this important issue. DOD will conduct this rulemaking in consultation with EPA. The rulemaking is to fully involve the public and the States and adequately address the safety, health, and environmental concerns posed by munitions on closed and transferred ranges.

With the promulgation of such a rule, EPA believes that the proposed designation of munitions on closed or transferred ranges as a solid waste would be unnecessary. In this case, cleanups would be governed by clear regulations that are issued through a public process and that reflect the unique explosive safety considerations associated with munitions and the need for environmental protection. Therefore, regulation under a separate statute would be unnecessary. Further, if DOD promulgates such rules after EPA’s proposed rule becomes final, then EPA believes that the DOD rules should supersede the EPA rule identifying munitions on closed or transferred ranges as solid waste.

Citizens groups have expressed concern that, because CERCLA authorities are limited to “hazardous substances” which include “hazardous waste,” unexploded munitions might escape CERCLA control if it were not defined as being a solid (or hazardous) waste. EPA believes this concern is unfounded, because it is the Agency’s expectation that most unexploded munitions fit within the CERCLA definition of “hazardous substance,” independent of whether it is considered a solid waste.

Finally, proposed § 261.2(g)(4)(ii) would define military munitions fired off-range and not promptly rendered safe (if necessary) and retrieved to be solid waste, for the purposes of section 1004(27) of RCRA. Firing munitions that land outside of a range at a military installation would not be considered the intended use of the product (i.e., the munition.) However, today’s proposal would be 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. Rendering safe might include treatment to prevent explosion as well as destruction of the ordnance. If remedial action were infeasible—for example because the munition was deeply buried or could not be located—the operator of the installation would be

required to maintain a record of the event as long as any threat remained.

#### 5. Waste Materials Derived From Munitions Manufacture

DOD and explosives manufacturers have often raised questions about the applicability of RCRA requirements to residues from munitions manufacture or manufacturing rejects. EPA, however, does not believe that munitions manufacture raises special regulatory issues, and it is not proposing to amend the current rules in this area. Instead, EPA’s long-standing regulations defining when manufacturing products and secondary materials become solid wastes would continue to apply to residues and other byproducts of munitions manufacture and processing.

These regulations are found in 40 CFR 261.2 and 261.6, and part 266. Under these regulations, “secondary materials” from munitions manufacture or processing—including spent materials, sludges, by-products, certain commercial chemical products, and scrap metals<sup>8</sup>—are considered to be solid waste depending on how they are managed (for example, see section 261.2(c)). And, if these materials are also “hazardous,” they are regulated under Subtitle C. On the other hand, off-specification ordnance or line rejects are considered products, and not wastes subject to regulation under RCRA. If these off-specification materials or rejects continue to meet the definition of military munitions, today’s rule would define when they became hazardous waste.

EPA believes that it would be inappropriate to change these long-standing rules on the definition of solid waste in the context of today’s rulemaking. At the same time, however, EPA is considering substantial amendments to its current rules to facilitate the recycling of secondary materials. These amendments would likely apply to secondary materials resulting from munitions manufacturing as well as secondary materials from other industrial and manufacturing operations.

#### C. Standards Applicable to Generators and Transporters

Today’s proposal would make two changes to the RCRA generator and transportation requirements. First, proposed §§ 262.10(h) and 263.10(c) would clarify that persons responding to immediate threats from explosives and military munitions are not subject to RCRA generator and transportation

<sup>8</sup>These terms are defined in 40 CFR 261.1(c) and 261.33.

requirements. This proposal would apply to all explosives emergency responses (military and non-military) as well as to all conventional and chemical military munitions emergency responses. This proposal is discussed in more detail in Section IV.E of this preamble.

Second, proposed §§ 262.10(i), 263.10(d), 264.70(b)(2), and 265.70(b)(2) would exempt stockpiled munitions (that are hazardous wastes under sections 261.2(g)(ii-iv)) shipped off-site to DOD-owned or controlled TSDF under DOD tracking procedures from RCRA manifest requirements. This exemption would apply not only to military personnel, but also to commercial carriers who have signed a compliance agreement with the Military Traffic Management Command, and who operate under the DOD system. This exemption would not apply to the off-site transport of non-stockpile munitions (e.g., excavated hazardous wastes under proposed § 261.2(g)(1)(i) or range clearance munitions), since these materials are not subject to the same stringent DOD off-site shipping controls as are stockpiled munitions. Thus, the off-site shipment of buried or landfilled munitions, UXO, or munition debris would require the RCRA manifest and container markings (if the material were hazardous). The exemption would also not apply to the transport to a commercial (off-site) treatment, storage, or disposal facility.

This proposal to exempt stockpiled military munitions from the RCRA manifest is based on EPA's conclusion that the DOD transportation and inventory controls are at least equivalent to the RCRA manifest controls, and on the safe transportation record of DOD.

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) and associated Special Instructions and Notes (SIN) and Routing Instructions and Notes (RIN)—a series of files within an automated information base used in preparing the GBL continuation sheets; 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, include: Army Regulation (AR) 55-355—Transportation of Ammunition, Explosives, and Other Hazardous Materials; AR 725-50—Requisitioning,

Receipt, and Issue System, Army Material Command (AMC)-R 385-100—Safety Manual; 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 proposal.

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). Although the DOT standards are not mandatory for Federal agencies, DOD's standards have made them mandatory (e.g., DOD 4500.9—Transportation and Traffic Management, January 26, 1989). EPA has reviewed these DOD documents and concludes that the resulting procedures, in conjunction with the applicable DOT standards, provide for consistency with the requirements of RCRA section 3003.

As a result of these and other controls, DOD's transportation safety record is excellent. DOD makes approximately 50,000 shipments of military munitions and explosives annually, including shipments for demilitarization. According to the U.S. Army Technical Center for Explosives Safety's Explosives Safety Information Database and the DDES's Historical Accident Database, there are about 20 minor non-explosive incidents per year (e.g., minor traffic accidents). In the past 20 years, there have been only three accidents involving the munitions cargo itself, and of these three, only one resulted in an explosive detonation.

Regarding the RCRA manifest and marking requirements, DOD is concerned about training its personnel in two separate systems, and maintaining both of these systems simultaneously—one for its own management of the military stockpile, and one (covering a small portion of the stockpile) for regulatory oversight. In addition, DOD is concerned about

certain specific aspects of RCRA transport requirements—for example, the prohibition in § 263.12 against storage of wastes in transport in unpermitted "transfer facilities" for longer than ten days. According to DOD, this restriction may conflict with its need to sequester shipments of munitions in designated safe havens in case of emergencies or unanticipated transportation difficulties. At the same time, critics of DOD are concerned about any system that is self-regulating, and question the burden that compliance with RCRA would impose.

In light of the concerns of DOD and members of the public, EPA solicits comment on: (1) whether RCRA transportation requirements are needed for military munitions, given DOD's current practices, and whether other alternatives would be appropriate (e.g., the approach EPA adopted for "universal wastes" (60 FR 25492, May 11, 1995), which requires recordkeeping and a streamlined tracking system for certain recycled wastes), (2) whether transport of unused munitions (i.e., munitions in the stockpile) going for disposal should be handled differently from used or previously disposed of munitions, (3) whether other modifications (besides the manifest and marking exemptions) should be made to RCRA transportation requirements to address DOD concerns, and (4) whether shipment of munitions from FUDS sites or shipment to commercial waste management facilities should also be exempted from transportation requirements.

EPA has not proposed other amendments to generator or transporter standards for waste munitions. DOD has raised concern that, under today's proposal, compliance with generator standards could be complicated and expensive, particularly because of 40 CFR 262.34 requirements for contingency plans, inspections, personnel training plans, and tank or container storage. EPA emphasizes that facilities with military magazines used to store stockpiled munitions would not be subject to these requirements. These requirements apply to generator facilities that *accumulate* hazardous waste. Since in most cases a stockpiled munition in storage would not be regulated as waste until it was removed from the magazine, the facility (and the magazine) would not be subject to accumulation standards. Instead, installations removing stockpile munitions from storage for the purposes of disposal would be subject to the following standards: (1) Determining if the waste were hazardous and determining treatment requirements; (2)

obtaining a RCRA identification number; (3) preparation of a RCRA biennial report and RCRA section 3016 biennial report; and (4) waste minimization program certification under RCRA section 3002(b). EPA solicits comment on the appropriateness of these requirements and whether they are necessary.

#### *D. Storage of Military Munitions*

In enacting RCRA § 3004(y), Congress sought to ensure that management standards for waste military munitions under RCRA would not be inconsistent with safety standards established under 10 USC § 172. In the development of the FFCA, EPA and DOD jointly took forward a legislative proposal to provide for better integration of the DDESB explosives safety regulations and the specific requirements of the RCRA regulations. Although the specific statutory language of RCRA § 3004(y) does not address integration of the RCRA standards with the DDESB explosives safety standards, this point was spoken to during the legislative development process and appears throughout the legislative history for RCRA § 3004(y).

Today's proposal includes a new subpart EE in 40 CFR Parts 264 and 265 for military magazines storing hazardous waste munitions. This subpart combines the environmental features of the current RCRA storage unit standards with the DOD Explosives Safety Board (DDESB) munitions storage magazines standards to eliminate potential inconsistencies or conflicts between the RCRA and DDESB standards. The proposal does not require that all munitions be stored in magazines meeting these standards, but rather, provides an alternative for permitting the storage of military munitions waste under RCRA. Depending on the explosive hazards, military installations may still seek a permit and store waste munitions under the already existing 40 CFR parts 264 and 265 standards for other types of storage units, including containers (subpart I), tanks (subpart J), containment buildings (subpart DD), and perhaps waste piles (subpart L). DOD would apply for a permit under the most appropriate of these sets of standards. The new subpart EE standards would be more appropriate for most military explosive and chemical munitions wastes, including products that DOD determines are a hazardous waste under today's § 261.2(g)(1)(iv) and unexploded ordnance recovered from ranges and moved into storage prior to treatment or disposal.

Consistent with the RCRA standards, today's proposal covers design, operation, monitoring, inspection, closure, and post-closure care, and it addresses the same concerns as do the other RCRA storage unit standards. The design and operating standards set containment and control performance standards to prevent contamination of soil, ground water, surface waters, and the air; they also address the DOD safety concerns to protect against explosions and to minimize the impact if one should occur. The proposal includes 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 or a pervious base, and/or waste elevation.

For those few military munitions wastes that are liquids, in addition to the primary barrier or container, the unit would have to provide a secondary containment system. The secondary containment system design, operation, controls, and monitoring features may include a combination of sumps, pumps, drains, slope, double-walled containers or tanks, and/or elevated waste or other features that provide that any released liquids or precipitation are contained and promptly detected and removed from the waste area.

The proposal covers the three basic designs of the DDESB storage standards: (1) earth-covered magazines (which are frequently used for shock sensitive and other munitions), (2) above-ground magazines (which might be used for munitions that do not pose a mass detonation or fragment producing hazard), and (3) outdoor or open storage areas (typically for munitions that do not pose a significant potential for explosion).

Monitoring and inspections would be 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 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.

In addition to the subpart EE approach, EPA is considering and solicits comment on three alternative approaches.

Under the first alternative, EPA would defer regulating the storage of waste military munitions under RCRA and subject them only to the explosives safety standards developed by DDESB and Services. DOD believes that this is statutorily permissible under the definition of hazardous waste found in RCRA § 1004(5). This definition states that a "hazardous waste" is a "solid waste, or combination of solid waste, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (A) cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." With respect to the first criterion, DOD maintains there is no evidence that waste military munitions in storage cause or contribute to an increase in mortality or illness (save for the case of an accidental detonation of those munitions, which the DOD's excellent safety record shows is unlikely). Regarding the second criterion, DOD believes that the existing DOD controls over the storage and transportation of all munitions, including waste munitions, are adequate to prevent waste military munitions from posing a substantial or present threat to human health or the environment.<sup>9</sup>

DOD's underlying rationale for this approach is as follows. The regulatory program developed by EPA in response to the RCRA mandate establishes standards for the storage of wastes both by those who generate the waste and those who provide permanent long-term storage, treatment, or disposal. These regulations were designed from the outset to address problems stemming from waste management at, for example, industrial operations that, prior to RCRA, were largely unregulated. Hence, EPA has historically examined the consequences of "plausible mismanagement" scenarios since there were no other controls over the management of these wastes. DOD believes that the case of military munitions is fundamentally different in that there are existing statutory

<sup>9</sup>This logic does not extend to the treatment or disposal of waste munitions where EPA believes that full RCRA compliance is appropriate to protect human health and the environment.

authorities and regulatory programs addressing the storage of military munitions, including waste military munitions. The design and operation of all DOD ammunition storage units are conducted in compliance with standards set by DDESB and Service-specific regulations and implementing procedures. While these standards have safety as the primary concern, as explained earlier in this preamble, EPA and one interested party have 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 respects. 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 closure requirements). At this point, neither EPA nor DOD is convinced that application of the RCRA standards in addition to DDESB and Service-specific standards would substantially increase protection of human health or the environment.

For example, all military munitions-related operations, including those involving waste military munitions, are conducted in accordance with an approved Standing Operating Procedure (SOP) that provides detailed guidance on how personnel are to complete a specific activity. These SOPs address a wide variety of issues including, but not limited to: safety, security, environmental protection, and quality assurance. Each SOP must be approved by different functional areas at the installation, including: operations, safety, industrial hygiene, environmental compliance, security, quality assurance, and command representatives. Personnel implementing these SOPs are required to be trained and certified as qualified to perform the task to which they are assigned.

Munitions storage units are also required to be inventoried on at least a yearly basis; however, some munitions (i.e., security class I or II) require inventory more frequently.<sup>10</sup> During these inventories, in addition to counting the munitions present, the organization conducting the inventory updates other data elements in the record. Discrepancies are addressed through a research, investigation, and reconciliation process. All inventory-related activities are overseen by an independent quality control and quality assurance organization. Accounting

<sup>10</sup> These are items with a high intrinsic value and items for which additional security procedures are required to prevent their theft.

procedures for these munitions are managed through two separate and distinct data systems, one at the installation and one at a central repository. The records kept at the installation include: quantity, location, ownership (i.e., specific organizational element within DOD), physical condition, and current inventory status.

The actual storage procedures for military munitions are based on four factors that relate to the physical and chemical characteristics of these materials: (1) compatibility grouping; (2) hazard class; (3) net explosive weight (NEW); and (4) quantity distance formulae. These are contained in the DDESB standards "DOD Ammunition and Explosives Safety Standards" DOD 6055.9-STD, which may be obtained by contacting Ms. Lydia Sanchez, DOD Explosives Safety Board, 2461 Eisenhower Ave., Rm. 856-C, Alexandria, VA 22331-0600, or by E-mail at SANCHEZLY@DDESB.ACQ.OSD.MIL, or from the EPA docket for today's rule.

DOD also argues that the proposed approach in this first alternative is consistent with other aspects of RCRA, other findings in law, and the approach taken in other regulatory matters addressed by the Federal government.

DOD points out that the DDESB standards for the storage of munitions were subjected to judicial review in *Pratt v. Hercules, Inc.*, 570 F. Supp. 773, Cir. 1982. In this decision the court held: For reasons cited in the court's earlier analysis \* \* \* this court finds that the standards promulgated by the DDESB \* \* \* were sufficient to comply with the mandate (10 U.S.C. 172) of eliminating undue risk of harm to those (inside and) outside the (facility). Further, the Occupational Safety and Health Administration has recognized the statutory authority of DDESB and their expertise in establishing requirements for the safe storage of military munitions. In a November 8, 1990, rule OSHA stated: The DDESB has the final review and approval authority for any engineering changes at government owned facilities to assure that they are consistent with explosives safety standards and do not increase explosive risk (55 FR 46948, November 8, 1990).

The most important piece of evidence in support of DOD's position is the Services' excellent record in providing for the safe storage and transportation of military munitions, as discussed elsewhere in this preamble.

In addition, DOD believes that such an approach is wholly consistent with the President's initiative to reform Federal regulations to eliminate

unnecessary, duplicative, or superfluous requirements and is also entirely consistent with the President's requirements for promulgation of new regulations, as set forth in Executive Order 12866. Executive Order 12866 requires that any Executive Branch agency consider, as part of developing new regulations, whether existing regulations (or other laws) have created or contributed to the problem that a new regulation is intended to correct, and whether those regulations (or other laws) could be modified to achieve the intended goal of regulation more effectively.

For these reasons, DOD asserts that waste military munitions do not have to be managed in accordance with RCRA standards for the storage of hazardous waste so long as they are stored in accordance with the regulations established by DDESB and the Service-specific implementing procedures and requirements. As a separate matter, however, to meet the obligations imposed by Executive Order 12866, DOD is working with EPA to address those limited areas in the DDESB standards where EPA has noted differences between the DDESB standards and RCRA standards. Therefore, EPA solicits comments as to what specific requirements are needed to make the DDESB standards consistent with RCRA.

The second alternative approach would specify that waste munitions transported and managed in accordance with DDESB standards would not be an RCRA hazardous waste, and therefore would not be subject to Subtitle C standards. RCRA section 1004(5)(B) defines as "hazardous" those wastes that may present a hazard "when improperly \* \* \* managed." In addition, section 3001 of RCRA authorizes EPA to determine whether to designate a waste as "hazardous." In determining whether a specific waste should be designated as "hazardous," EPA traditionally considers plausible "mismanagement scenarios." If significant risk were likely to occur under these scenarios, EPA would designate the waste as hazardous. The Agency, however, believes that it is not required to consider implausible mismanagement scenarios in determining whether a waste is hazardous. Thus, if mismanagement of a particular waste is implausible even without regulation under Subtitle C, EPA believes it has authority to refrain from regulating the waste under that subtitle. Under this approach, EPA would take into account DOD's record in storing waste munitions and DOD's existing storage standards in

determining whether it was necessary to regulate waste military munitions as hazardous. Once these controls are taken into account, it would be argued that mismanagement of waste munitions is unlikely and regulation of these materials under Subtitle C is redundant.

EPA is considering this approach in several other rulemakings and will be discussing the legal rationale in detail in those rulemakings. A more detailed legal discussion will be provided in EPA's forthcoming Hazardous Waste Identification Rule proposal, scheduled for publication in November 1995. Where it is relying on this approach, EPA typically intends to prescribe specific conditions or procedures to ensure that a waste would not be mismanaged. In the case of military munitions, EPA is considering a comparable approach. Under this approach, EPA would specify that waste munitions were not "hazardous" as long as they were stored in compliance with DDESB standards. Failure to store waste munitions in compliance with these standards would, in effect, render the material "hazardous" and constitute illegal management of hazardous waste.

Under the third alternative, EPA would not establish special performance standards for waste military munitions under 40 CFR Parts 264 and 265 Subpart EE; instead, EPA would simply specify in Parts 264 and 265 that storage of waste munitions must meet DDESB standards. Waste storage units at interim status facilities would automatically be required to comply with these standards. For permitted units, EPA or the State would not specify particular standards in the permit, but would simply cite DDESB standards. This approach would allow EPA or State regulators directly to enforce DDESB standards, but would eliminate any possible inconsistency or redundancy between military and EPA standards.

EPA took essentially the same approach in its regulations of underground storage tanks in 40 CFR Part 280. In this regulation, the Agency stated that compliance with the specific industry codes constituted compliance with EPA technical standards. One traditional concern with this general approach is that industry standards change from time to time, complicating regulatory referencing. In the third alternative approach under consideration in today's proposal, EPA would not expect to revise its RCRA standards every time the DDESB changed its standards. To do so would not only require constant EPA rulemaking, unnecessarily consuming limited resources; more important, perhaps, it would foster enormous

confusion, because there would always be a time lag between DDESB's adoption of new standards and EPA's revision of the RCRA regulations. When DDESB came out with new standards, facilities would be required to meet them, and the standards would be enforceable through DDESB's regular compliance mechanisms. But (until EPA changed its standards), facilities would also remain subject to the older standards incorporated into the RCRA regulations. The state authorization process under RCRA would complicate the process even more, since it would lead to further delay in regulatory adoption of new DDESB standards. As a result, under this option, EPA would refer to the most recent DDESB standards. Given DOD and the Services' long record of safety in the storage of military munitions and the DDESB's independent status within the Department of Defense, EPA believes that this approach would be both enforceable and fully protective of human health and the environment.

As mentioned above, EPA recognizes that certain RCRA requirements (e.g., those related to closure) are not in the DDESB standards. Therefore, EPA solicits comments on what specific requirements should be added to supplement the existing DDESB standards under any of the four alternatives and whether these should be added to the RCRA or the DDESB standards.

All three of the alternative options discussed above rely on the DDESB standards. Military facilities would be assured that their basic obligation, in storing waste munitions, would be to comply with DDESB standards. If they were doing so, then under the first alternative, they would be excluded from RCRA coverage entirely; under the second alternative, the stored "waste" munitions would be RCRA solid waste, but would not be regulated as hazardous waste (e.g., permits would not be required); under the third option, "waste" munitions would be RCRA hazardous waste, but compliance with DDESB standards would constitute compliance with RCRA technical standards.

The first alternative differs from the other two options in one important respect: under this alternative, EPA and authorized States would have no enforcement or regulatory role in the storage of waste munitions. Under the other alternatives, EPA and the States would have an oversight role, and regulatory agencies could enforce against facilities storing waste munitions out of compliance with DDESB standards. At the same time,

however, the second alternative would provide significantly more relief to DOD and the Services than the third, and in many respects is similar to the "deferral" alternative. In particular, the approach (like the "deferral" approach) would eliminate permit requirements for storage of waste munitions (e.g., the procedures of Part 270, including public notice would not apply to storage of waste munitions, because waste munitions stored in compliance with DDESB standards would not be considered "hazardous waste"); facilities generating waste munitions would not have to comply with generator standards (e.g., filing biennial reports); the land disposal prohibitions against extended storage would not apply; and permitted facilities receiving munitions for disposal would not be prevented from receiving that material, even if they had "off-site" prohibitions in their permits—since the material would only become a hazardous waste when it arrived at the treatment or disposal unit.

EPA solicits comments on all three of these alternatives, as well as the subpart EE approach in today's rule.

#### *E. Emergency Responses*

Today's proposal clarifies that RCRA generator, transporter, and permit requirements do not apply to immediate responses to threats involving military munitions or other explosives. EPA is proposing this language to address concerns of DOD and other emergency response officials that RCRA requirements may impede emergency responses, especially by causing delays or confusion.

The current RCRA rules exempt emergency responses from full permit requirements in two ways: (1) permits are not required for *immediate* responses to a discharge of hazardous waste or an imminent and substantial threat of a discharge (§§ 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3)); and (2) 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 5 days, and may not exceed 90 days in duration (§ 270.61). (In clarification, EPA emphasizes that the exemption from permit requirements in the case of *immediate* responses is an exemption from the requirement for an emergency permit under § 270.61, as well as from full RCRA permitting. Thus, an immediate response, under Federal regulations,



would require neither a full RCRA permit nor an emergency permit.)

EPA has received a number of inquiries, from both military and non-military sources, seeking clarification of how these provisions apply to emergency situations involving explosives. In response, EPA has stated that it considers *immediate* responses to situations involving explosives to be exempt from RCRA permitting (including emergency permitting), and substantive requirements (e.g., the risk assessment requirements for OB/OD treatment) under the exemptions listed in §§ 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3). In EPA's view, time-critical responses to explosives emergencies constitute immediate responses to a discharge, or imminent and substantial threat of a discharge, of hazardous waste. On the other hand, if an immediate response is not necessary to address the threat, and the response can be deferred, the responding personnel should seek a RCRA emergency permit under § 270.61.

The intent of today's proposal is to codify, with some clarifications, the existing EPA policy. Proposed §§ 264.1(g)(8)(i)(D), 265.1(c)(11)(i)(D), and 270.1(c)(3)(i)(D) make it clear that explosive and chemical munition emergencies can be addressed without a RCRA permit (including an emergency permit). The proposal also clarifies, in §§ 262.10(h) and 263.10(c), that, if an emergency response expert at the site determines it to be appropriate, the explosive material may be removed and transported for safe treatment 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. This proposal, which EPA believes is necessary to allow prompt response to explosives emergencies, is consistent with current EPA policy.

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

An "explosives and munitions emergency response expert" is defined to include all military and non-military personnel trained in the identification, handling, treatment, transport, and destruction of explosives or

conventional or chemical military munitions. Military emergency response experts include DOD Explosives Ordnance Disposal (EOD) personnel, who are trained in responding to emergency situations involving military munitions and explosives, and DOD Technical Escort Unit (TEU) personnel, 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 emergency response experts include the Bureau of Alcohol, Tobacco, and Firearms (BATF), Federal Bureau of Investigation (FBI), Central Intelligence Agency (CIA), Drug Enforcement Administration (DEA), US Postal Service, Federal Aviation Administration (FAA), other Department of Transportation (DOT), Department of Interior Bureau of Mines, State and local enforcement and emergency response personnel, and private sector explosives experts or specialists.

Finally, an "explosives and munitions emergency response" is defined as all immediate response activities identified and carried out by the emergency response expert to eliminate the threat, including all handling, render-safe (e.g., methods to defuse or separate initiator from the explosive), transportation, treatment, 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.

DOD has 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 proposing 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 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 to explosives emergencies—EPA continues to regard open burning/open detonation as not constituting land disposal. Therefore, the land disposal restrictions do not apply. See 51 FR 40580 (November 7, 1986) and 52 FR 21011 (June 4, 1987). With regard to emergency responses to explosives involving deactivation 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 2. 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 liability for site remediation or investigation when they conducted an emergency response. In response to this concern, EPA emphasizes that RCRA corrective action requirements would not fall on the responding agency and that today's proposal would not in any way change or increase the responding agency's liability.

In the first place, the standard RCRA corrective action authorities in sections 3004(u), 3004(v), and 3008(h) would not be at issue, because they apply only to RCRA permitted or interim status facilities. Thus, these requirements would apply only if the emergency response took place at a RCRA 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(b), 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 threat thereof."

DOD's concern on the third issue is that, if the responding agency transported an explosive device to an off-site treatment area, that area might become 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 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 consistently stated that off-site treatment of explosives derived from emergency responses does not trigger permit requirements, as long as it 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 managed 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.

#### F. Definition of "On-Site"

Today's proposal would modify the definition of "on-site" in 40 CFR § 260.10 by adding contiguous property

under the control of one person that is divided by a public or private right-of-way, even if access is by travelling along (as opposed to across) the right-of-way to gain entry.<sup>11</sup> The definition of on-site determines whether waste must be accompanied by a manifest during transportation and whether part 263 transporter requirements apply. (See, e.g., 40 CFR 262.20(a) and 263.10(b).)

Many facilities generating hazardous wastes (including most military installations) are found on large properties split by public roads. Under current regulations, a generator or TSDF who produced or managed waste at one location and moved the waste across the road for temporary storage would be moving the waste "off-site," if the waste were transported along rather than directly across the road. The waste transported along the route currently requires a RCRA manifest. This requirement does not currently apply, however, if the wastes are transported directly across the road.

Today's proposal would expand the definition of "on-site" to allow transportation without a manifest between contiguous properties controlled by the same person regardless of how access is gained from one parcel to another when such contiguous property is cut by a public or private right-of-way. All other aspects of the definition would remain the same.

The question of how "on-site" is defined arose in the context of military munitions because many military installations are crossed by public roads. Today's proposal, however, would apply to hazardous waste generators and TSDFs in general, because the same situation exists for non-military entities. For example, a number of universities, with laboratories and other sources of small amounts of hazardous waste dispersed throughout campuses, have found that the manifesting and transportation requirements make it difficult to consolidate wastes at a single location for off-site shipment under the current requirements. Similarly, large industrial facilities may face the same administrative or logistical difficulties.

Whether waste no longer subject to the manifest would continue to be

<sup>11</sup> The current regulatory 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."

subject to Department of Transportation (DOT) requirements will depend on whether that material is regulated under any other DOT hazard class. The Hazardous Materials Regulations (HMR, 49 CFR parts 171 through 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 manifest requirements, it is not considered a "hazardous waste" by DOT. However, such material may still be regulated as a hazardous material and subject to the HMR if it meets the defining criteria for one or more of the DOT hazard classes. Therefore, for these shipments, 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 through 180 is required.

EPA believes that change in the definition of "on-site" will result on balance in an increase in protection of human health and the environment. EPA believes that the current definition of on-site may be discouraging consolidation within a generator's or TSDF's site, resulting in less control of the waste by the generator or TSDF. Removing barriers to consolidation of waste in one main area, rather than several small areas, will reduce the possibility that the public and the environment will come into contact with hazardous waste.

EPA also believes that facilitating more central consolidation will allow generators and TSDFs to place such consolidation sites in more remotely located areas than they would if confined to the boundaries within rights-of-way, thereby increasing the safety of the public should an accident occur. The new definition gives generators and TSDFs such as military bases and universities more flexibility to determine where consolidation areas are situated. In addition, EPA believes this change in definition will have the added benefit of facilitating the building of safer accumulation areas because generators and TSDFs may be more likely to exceed regulatory requirements for consolidation areas if they are responsible for fewer consolidation sites overall. EPA expects the benefit of consolidation on balance outweighs the risk of allowing transportation without a manifest along a short stretch of road to which the public has access. EPA requests comments on these views of the net benefits regarding human health and the environment.

In modifying the definition of on-site, EPA intends not to affect requirements

other than the requirement that a manifest accompany hazardous waste shipments and whether part 263 transportation requirements apply. EPA requests comments on whether other requirements of the RCRA program are affected by this change.

Even though hazardous waste traversing contiguous property may be "on-site" for RCRA purposes, discharges on public rights-of-way could expose the public to a health risk. DOT and CERCLA reporting requirements would apply to such releases, but those authorities do not necessarily require actual clean-up of the release. EPA seeks comment on whether DOT and CERCLA authorities are sufficient to provide adequate protection to public health in the event of a spill or release on a public right-of-way considered on-site or if 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 regardless of whether it is on or off site. One way to implement that result could be to limit the on-site exemption from transporter requirements in § 263.10(b) so that §§ 263.30 and 263.31 would continue to apply to any discharge of hazardous waste on a public right-of-way even if it is considered "on-site."

#### *G. 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 a permit modification. DOD maintains that this situation will cause a serious disruption of its munitions management program.

EPA shares DOD's concern that today's proposal might disrupt DOD's ongoing munitions management program, and in response is proposing in today's rule a means to minimize this impact. Under this proposal, permitted facilities with prohibitions would be allowed to continue receiving waste munitions from off-site sources, upon notification to EPA, until a final permit modification is approved. In the case of interim status, facilities would be allowed to continue receiving off-site wastes, although it might be necessary for the facility to amend its permit application.

There are three specific requirements that would attach to this provision and be codified at 40 CFR 270.42(h). First,

to be covered under this provision the permitted facility must be in existence on the date these rules go into effect. Second, for permitted facilities, the facility must submit a request for a Class 1 permit modification following the procedures of 40 CFR 270.42(a), on or before the effective date. Third, a permitted facility must develop and submit a Class 2 permit modification within 180 days of the effective date. If extenuating circumstances will not allow submission of a Class 2 modification within 180 days, the facility may, within the 180 days, request the permitting agency to allow an extension for a specified period. The permitting agency shall respond to any request for an extension within 30 days. If no action is taken by the permitting agency within 30 days, the facility is considered to have been granted the extension. The permitting agency's action may be to extend the 30 day response time.

Today's proposal would 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.

These proposed requirements are similar to the provisions for newly listed wastes in 40 CFR 270.42(g), which are designed to prevent the disruption of ongoing waste management activities, while bringing them promptly under regulatory control. EPA anticipates that the provisions in proposed 40 CFR 270.42(h) will similarly prevent disruption in the handling of waste munitions.

Despite this proposed approach, DOD remains concerned about any option that might restrict the movement of munitions undergoing demilitarization or add, in its view, unnecessary paperwork costs and redundant reviews. As DOD has pointed out, operations at the receiving facility would remain the same after permit modifications, and conditions affecting human health and environmental protection would generally not change. For example, the provisions of the facility's permit addressing the types of waste, the quantities that might be treated at any given time, and permissible releases from the treatment process would likely remain the same. In which case, the permit modification would be a paperwork exercise, adding to costs but not adding to environmental protection. DOD's preferred option, discussed in Section V.A.1 of this preamble, would be to set the point of generation of the waste at the point when it arrives at the receiving unit. In this case, the waste

would have been generated on-site, and its management would not constitute a permit violation.

EPA understands DOD's arguments, but is concerned about the expectations of the public in the vicinity of permitted installations and the perception that permit conditions are being circumvented. The permit was issued through a site-specific public process, and, on its face, it appears to prohibit acceptance of just the sort of material that would be allowed under DOD's recommended approach. Arguably, the most consistent way to address this issue would be through a site-specific permit modification, rather than a national rulemaking. EPA questions whether it would be appropriate to promulgate a regulation that would in effect remove off-site prohibitions from particular permits—at least as they applied to waste munitions—without site-specific notice and an opportunity for comment.

DOD has particularly cited the costs of permit modifications, which, it has argued, will cost in excess of \$50,000 apiece. EPA questions whether a permit modification would be as costly as DOD estimates, especially since the modification would presumably only amend the permit's prohibition against off-site waste, and the permit's technical or procedural conditions would generally not be changed. EPA does agree, however, that permit modifications to allow "off-site" waste munitions will increase the compliance burden on DOD and the procedural burden on State regulators. In the economic analysis supporting this proposal, EPA has estimated that the permit modifications will cost \$30,000 each (DOD's original estimate) and that 24 permits would have to be modified (DOD's estimate). Much of the costs, in EPA's view, would result from the need for public outreach rather than technical work associated with the permit modification.

However, in light of DOD's concerns, EPA requests comments on both the proposed approach and DOD's approach, and with specific recommendations on alternative means to address concerns regarding public involvement in the process.

#### V. Discussion of Major Alternatives

In addition to the approach proposed in today's notice, EPA considered several alternatives to addressing major issues. These alternatives are discussed below.

## A. Stockpiled Munitions

### 1. Approach Based on Army Regulation 200-1

DOD and the individual Services have historically taken the position that munitions in the military stockpile only become waste when they are received at a treatment or disposal unit. This approach has been incorporated into Army regulations in AR 200-1 and, until recently, guided military practice. DOD believes its traditional approach addresses two key points: (1) That military munitions are fundamentally different from most other types of industrial hazardous waste due to their unique physical and chemical characteristics, and (2) that the management of military munitions is different from the situation RCRA was enacted to address in that there are extensive management, oversight, and accountability controls already in place.

The primary difference between DOD's and EPA's approach is in the definition of the waste's point of generation. Under the approach proposed today, the point of waste generation is generally when the waste is removed from storage for treatment or disposal; after that point, the munition is regulated as hazardous waste. Under the approach in AR 200-1, the point of generation is moved to receipt of the munition at the waste treatment or disposal unit. Before that point, the material would not be considered RCRA solid or hazardous waste.

DOD is concerned about EPA's proposed approach in part because of the costs and paperwork associated with transporting hazardous waste. More important, however, DOD is concerned that many RCRA permits at military installations prohibit the receipt of "off-site" waste. DOD's AR 200-1 approach would solve both of these concerns.

As discussed previously, EPA addresses these concerns in today's proposal by exempting DOD-controlled shipments between DOD installations from the RCRA manifest requirements, and by providing Class 1 followed by Class 2 permit modifications to allow for off-site wastes. Nevertheless, EPA solicits comments on both approaches.

### 2. DOD Interim Guidance

A second alternative would be for EPA to codify the approach outlined by the military Services in interim guidance issued in November 1993. Under this Services-wide interim approach, munitions removed from the active inventory undergo review to determine whether they can be returned to service or used for other purposes. When the possibility of beneficial uses

has been eliminated, the material would be transferred to a hazardous waste account (e.g., the "BHW" account) and orders to destroy the munition transmitted to the installations that held it. The munition would become a hazardous waste at the point the order was received by its custodian. The custodian, then, would become the generator of the "waste"; generator standards would apply at the storage magazine; and RCRA land disposal restrictions would require prompt treatment and disposal.

EPA has chosen not to propose this approach because, in EPA's view, it would not provide any significant increase in environmental protection. EPA also shares DOD's concerns that the approach might significantly complicate the military's safe management of the military stockpile.

In particular, DOD has expressed two major concerns with this approach. First, if stockpiled munitions in a magazine were declared hazardous waste, that magazine would become subject to RCRA generator requirements, including RCRA tank, container, or containment-building standards; these standards, in turn, might require retrofitting of the units, even though they were designed according to military standards to protect against explosive hazards. Second, if the munitions were not removed from the magazine and shipped off installation within 90 days, the installation would become subject to RCRA permit requirements. Thus, the installation would be faced with the choice of readjusting its standard operating procedures for munitions to ensure that items in the BHW account were shipped off-site promptly, or seek a RCRA permit—a 2 to 3 year process involving considerable time and paperwork. Neither result, in DOD's view, would lead to increased safety or environmental protection, and risk might actually increase because munitions would be moved more frequently.

### 3. Munitions Scheduled for Destruction by International Treaty

Several interested parties have also suggested that when a munition has been slated for destruction by act of Congress or treaty, there is clear evidence of an intent to discard, and therefore the munition should be considered solid waste. For example, Congress has instructed the Department of Defense to destroy the chemical weapons stockpile by December 31, 2004 (National Defense Authorization Act for Fiscal Year (FY) 93), and, once the United States ratifies the Chemicals

Weapons Convention and the Convention goes into force, the U.S. will be bound by international treaty to destroy the weapons within ten years. It has been argued that the act of Congress and U.S. ratification of the Convention (when that occurs) would constitute a decision to discard the munitions. Therefore, the munitions should be handled as hazardous waste.

EPA has not taken this position to date in interpreting its solid waste regulations, and it is not proposing to do so in today's rule. Disarmament conventions and Congressional directives to demilitarize a weapons system should not, as a general matter, be interpreted as a decision to discard a munition. For example, the Chemical Weapons Conventions (like most such conventions) establishes a staged schedule, to allow mutual assurances that all signatories are fulfilling the agreement. Thus, the stockpiled munitions serve a deterrent purpose. Furthermore, the phased schedule laid out by the treaty would put the Army in violation of the RCRA land disposal restrictions, which would prohibit storage of "waste" munitions beyond one year (with limited extensions). Indeed, despite the convention, the stored munitions (with the exception of M55 rockets) remain part of the active military stockpile. While these "products" may be slated for phase-out in the future, they are still available (at least in theory) for use in the interim.

Furthermore, EPA questions whether RCRA regulation would substantially add to the safe management of military munitions slated for destruction. Considerable attention, to be sure, has focused on the stability and safety of the chemical weapons stockpile. EPA notes, however, that the munition on which most of the discussion has centered—the M55 rocket—is already regulated as hazardous waste. Therefore, the main concern with the stored chemical weapons is already being addressed as a regulatory matter. In addition, under proposed § 261.2(g)(1)(iii), leaking munitions would be regulated under subtitle C. Therefore, leaking chemical munitions would require regulation. Finally, the general safety of stockpiled chemical munitions is already the subject of considerable internal and external review. EPA, as a result, tentatively concludes that additional oversight under RCRA would not significantly increase protection of human health and the environment, while increasing the paperwork burden on the services and the workload burden of the regulatory agencies.

#### 4. Alternatives Based on Condition of Munition

EPA also considered definitional approaches based on the characteristics of the munition. It has been suggested, for example, that munitions should become hazardous waste when they can no longer be used for their intended purposes. This determination might be based on an analysis of the munition itself, or on a weapon's predicted service life. Similarly, "waste" munitions might include off-specification munitions and munitions rendered obsolete because the armaments for which they were made no longer exist. EPA, however, has tentatively rejected this approach (except in the case of leaking or deteriorated munitions).

First, this approach would be inconsistent with EPA's approach to other "products." Commercial products do not automatically become solid waste when they can no longer be used for their intended purposes, and off-specification commercial products are not considered solid waste. These materials remain products; they may be put to other uses, or reprocessed for their original use, or simply stored for possible future uses without being brought under RCRA jurisdiction. The event that triggers RCRA jurisdiction is an intent to discard the material.

Second, EPA believes that this approach would be extremely difficult for regulators to implement or enforce. The determination that a munition can or cannot be used for its intended purpose, for example, will often be highly technical and require detailed expertise in weaponry. EPA and State regulators typically will not have this expertise, and it will often be hard to rebut an assertion by military personnel that a munition can indeed be used. Service life is also likely to be an unreliable guide, because weapons do not necessarily lose their usefulness at the completion of service life, and reprocessing is often a possibility. Above all, EPA is concerned that this approach would not provide the clarity of regulations that Congress sought in passing the FFCA. Instead, the approach might lead to protracted disagreements between the regulators and the regulated over whether a particular munition is still usable as a munition, with no clear environmental issue at stake.

#### 5. Regulation of the Demilitarization Process

One of the primary benefits of RCRA regulation, according to critics of DOD, is that prompt treatment of waste would be required under the RCRA land

disposal restrictions or LDRs. These restrictions require that hazardous waste be treated before it is disposed of in a land disposal unit. Furthermore, the statute prohibits facilities from storing waste before treatment, except as necessary to accumulate sufficient quantities for proper treatment and disposal (RCRA § 3004(j)). (Under EPA's enforcement policy, if storage is for longer than a year, the person holding the waste must be able to demonstrate that the storage is necessary to accumulate sufficient quantities.) Thus, if "obsolete," "unserviceable," or "unusable" munitions were defined as hazardous wastes, their prompt destruction would be required.

One commenter representing members of the commercial waste treatment industry—Strategic Environmental Analysis, Inc.—expressed strong support for applying RCRA oversight at the point when a munition became unserviceable. The commenter was particularly concerned that, if RCRA did not apply at this point, DOD could play "shell games" and store waste munitions indefinitely. At the same time, the commenter acknowledged the military's need for flexibility in evaluating and managing obsolete munitions. To address these concerns, it recommended a regulatory approach that would, in effect, bring the military demilitarization process under RCRA regulatory control and set specific schedules for the recycling or destruction of obsolete munitions.

Under the recommended approach, EPA would define off-specification, obsolete, or unusable munitions as hazardous waste. This waste would be subject to technical management standards, but not yet covered by permit requirements or the land disposal restrictions. Hazardous waste munitions could be stored one to five years before they became subject to the land disposal restrictions. During this time, the holder of the munition or the appropriate service would investigate possible reclamation. If reclamation was determined to be feasible, it would be required within one to two years. (Reclamation would take place under specially designed RCRA standards.) If reclamation were not feasible, the munition would have to be treated according to land disposal standards within the regulatorily permitted time frames (i.e., one to two years), and the facility storing the munition would require a RCRA permit.

This approach, EPA notes, establishes a radically new definition of "solid waste" under RCRA, and applies RCRA standards to the reclamation of unused products—a considerable extension of

the current regulatory scope of RCRA. In effect, the approach applies RCRA requirements to munitions within the demilitarization account and sets a limit on the time period a munition can remain within that account before reclamation or destruction.

EPA has not proposed this approach for several reasons. First—leaving aside the question of whether this approach is consistent with the statutory scope of RCRA—EPA does not believe it is appropriate in this rulemaking to develop a broadly expanded regulatory definition of solid waste. EPA also notes that commenters did not provide evidence of human health or environmental damage resulting from non-RCRA storage of "obsolete" munitions, nor did it provide details on military "shell games" delaying proper treatment and disposal. While these problems may to a certain extent exist, EPA would require considerably more evidence before it imposed such a far-reaching regulatory scheme, going well beyond requirements that apply to commercial products.

In addition, although EPA has not developed specific cost estimates for the recommended approach, it clearly could impose substantial burdens not only on DOD but also on regulators as well. Presumably, DOD would be subject to significant recordkeeping and reporting burdens necessary to identify obsolete munitions and document the demilitarization process. Reclamation of unserviceable munitions would for the first time come under regulation. EPA and the States would assume new obligations in inspecting perhaps thousands of storage units and ensuring that regulatory storage times were not exceeded. Fulfilling these obligations would likely divert limited resources from more pressing and demonstrable environmental problems. Especially given that the substantive requirements on stored munitions would not change, EPA questions whether this diversion of resources is justified.

#### B. Range Management

##### 1. Active Ranges

EPA has consistently taken the position that the use of products for their intended purpose does not constitute waste management and is not reached by RCRA. Thus, today's proposal excludes military munitions training and testing activities at firing ranges from RCRA regulation on these grounds.

One group of interested parties has argued for an alternative approach at active ranges. According to this group, discharged munitions at military firing

ranges clearly meet the definition of solid waste under RCRA; while their firing may or may not constitute "disposal" of a product, they become waste "as soon as they hit the ground"—at this point they become discarded material that has served its useful purpose, that is no longer needed by the military, and that will never be retrieved for any useful purpose. These commenters argued that EPA should use its RCRA authority to tailor special regulations for military firing ranges. For example, DOD and the relevant services might be required to track all fired munitions, retrieve and properly dispose of fired munitions at reasonable intervals, and (where the munition is irretrievable) manage the munitions in place in a way that guarantees that off-site migration of contaminants does not occur.

In support of the need for RCRA regulation, these commenters have pointed to examples of environmental damage or potential threats associated with firing ranges. These include deaths resulting from detonation of unexploded ordnance at old ranges transferred to non-military ownership; numerous other cases of unexploded munitions or discarded chemical munitions found on non-military lands; threats to endangered species and other ecosystem damage from range activities; death of thousands of waterfowl resulting from consumption of residual white phosphorus at an artillery impact range; destruction of lands that are culturally or religiously significant to Native Americans; possible adverse health effects related to air emissions from military training exercises; soil and groundwater at ranges contaminated with heavy metals and possibly organic toxics; and high heavy metal concentrations in streambeds and fish tissue in the area of firing ranges.

In developing this rulemaking, EPA has not independently reviewed each of these examples in detail, and it recognizes that in many cases the extent of damage has been the subject of considerable disagreement. Furthermore, it is often unclear whether an acknowledged problem was caused by weapons testing or training at ranges, or by other activities (e.g., open burning/open detonation of munitions, other waste management activities, or weapons manufacture and processing). At the same time, however, military ranges have clearly been associated with numerous environmental or safety concerns.

Although it recognizes these concerns, EPA is not proposing in today's rule to regulate military firing range activities under RCRA. EPA is

taking this approach for several reasons. Above all, EPA questions whether RCRA regulatory authority appropriately extends to activities like weapons testing or training exercises, which involve the use of a product and which are not "waste management" as it has historically been understood. Further, EPA questions whether the RCRA regulatory apparatus is well adapted to the regulation of weapons testing or training, especially given RCRA's reliance on site-by-site permitting and the existence of statutory constructs such as the land disposal restrictions and minimum technology requirements, which make no sense in the context of range management.

DOD critics recognize the difficulties of applying conventional RCRA requirements (e.g., full RCRA permits) to every military firing range, and instead suggest a "permit-by-rule" approach. EPA has already issued permits-by-rule for certain activities involving hazardous waste; however, this approach has been adopted only in cases where detailed EPA regulations already exist under other statutory authorities implemented by EPA. The regulatory and legal difficulties of implementing such an approach at ranges are considerable. More particularly, EPA questions the need for, or (in some cases) the advisability, of the specific regulations suggested by DOD critics. A requirement that all fired munitions be tracked would be impracticable. It would also be largely redundant with existing DOD requirements. (DOD Directive 6055.9-STD, Chapter 12, requires that installations maintain permanent records of "known and suspected" ranges, including "contamination by nomenclature, hazard, quantity, exact locations, and dud rates.") Similarly, a requirement that ranges be regularly cleared for unexploded ordnance may be practical in some circumstances, but in others involve a significant safety threat to military personnel. According to DOD, the Air Force is able to require routine clearance of bombing ranges, where relatively limited numbers of unexploded munitions will be found. The Army, however, does not apply similar requirements to artillery ranges, given the much larger number of unexploded rounds.

DOD and the Services already have regulations governing range activities. For example, the DDESB has issued regulations requiring recordkeeping, remediation, use restrictions, and similar requirements. EPA believes that the most appropriate approach to regulating day-to-day range activities is through these standards, rather than

under RCRA—given the poor fit of the statute. EPA recognizes that RCRA would provide for independent oversight and enforcement, an important factor for DOD critics. It questions, however, whether the costs of this oversight (both to DOD and the regulatory agencies) would be justified. This is particularly the case since many of the concerns addressed by commenters are already addressed under other independent authorities (e.g., DOD and the services must comply with the Endangered Species Act; CERCLA governs transfer of ranges (and other military property) to non-Federal ownership; and RCRA and CERCLA remedial authorities are available for conventional contamination resulting from range activities), or under any circumstances would fall outside the scope of RCRA (e.g., radioactive materials).

## 2. Applicability of Range Cleanup Authorities

Proposed § 261.2(g)(4)(i) states that munitions left in place are considered solid waste for statutory purposes when a range is closed, or when the property is transferred from military control. In practice, this requirement would make the munitions potentially subject to section 7003 of RCRA in the case of an imminent and substantial endangerment, and to sections 3004(u) and 3008(h) cleanup authorities if the facility was otherwise subject to RCRA permitting requirements. As discussed earlier in this preamble, the proposal also contains a sunset provision; munitions left in place at closed or transferred ranges would no longer be subject to RCRA cleanup authorities once DOD promulgates, pursuant to DOD's own statutory authorities, regulations governing cleanup of ranges.

Some critics of DOD are likely to argue that today's proposal does not go far enough. Section 7003 is a discretionary authority for EPA, and sections 3004(u) and 3008(h) only apply at RCRA treatment, storage, and disposal facilities where releases have been identified. Thus, according to some commenters, these authorities may not adequately address closing ranges. It has been suggested that EPA impose "post-closure" requirements on all closed military ranges where munitions or other contaminants are left in place. These requirements might or might not be imposed through a permit, and they might include permanent access restrictions, monitoring for off-site releases, and other requirements.

EPA notes that current statutory restrictions on Federal property transfers cover many of the problems

that a post-closure requirement would also address. For example, under section 120(h)(3) of CERCLA, deeds conveying contaminated real property from the United States to non-Federal ownership must contain a covenant that all remedial action necessary to protect human health and the environment has been taken with respect to any hazardous substances remaining at the property. All remedial actions necessary to protect human health and the environment have been taken when EPA determines that an approved remedy is constructed and operating properly and successfully. Therefore, current statutory provisions already provide considerable legal protection when a former range is transferred to non-Federal owners. The applicability of these safeguards is less clear, however, when a closed range on an installation is put to other uses, or a range is transferred from the Department of Defense to another Federal agency. EPA solicits comments on the need for "post-closure" controls under RCRA to address these situations where property remains under Federal ownership. Comments should address the legal basis for such controls under RCRA; their need, given current controls (including current DOD regulations and practices); the level of controls that would be appropriate; and the regulatory burden of such controls, both on DOD and the regulatory agencies.

### *C. Alternative Organization (Separate CFR Part)*

EPA also sees the benefit of a uniform nationwide system for managing waste military munitions given DOD's national defense mission, nationwide presence, and logistical and operational needs. A consistent set of standards for waste military munitions will simplify integration of these rules with the DDESB and the Service requirements for the management of all military munitions (including waste munitions). Indeed, EPA believes Congress' intent in passing RCRA § 3004(y) was to establish a clearer, uniform national system for regulating military munitions. To support such clarity and consistency, DOD has recommended that the regulations for military munitions be included in a separate part of the CFR, which would identify the requirements that apply to military munitions in one single place. The new part as proposed by DOD would still contain numerous cross-references to other pertinent parts and sections, and the military would still have to comply with other parts for their non-munitions hazardous waste.

EPA solicits comment on whether this approach would be simpler to

implement, easier to enforce, or easier for States to adopt. For an example of how the alternative approach might be structured, commenters may refer to the DOD proposal, which may be obtained by contacting Mr. Ed Sims, U.S. Army Environmental Center, Environmental Compliance Division, Mail Code SFIM-AEC-ECA, Building E4435, Aberdeen Proving Ground, Maryland 21010-5401, through the DOD Home Page on the Internet at: EWSIMS@AEC1.APGEA.ARMY.MIL, or from the EPA docket for today's rule. DOD recommends that the standards be placed in 40 CFR part 269. However, EPA believes that, if this approach is adopted, it should be placed in a separate subpart in 40 CFR part 266, which addresses other special types of waste and waste management facilities.

### VI. State Authority

Under section 3006 of RCRA, EPA may authorize States to administer and enforce the RCRA hazardous waste program. (See 40 CFR part 271.) After authorization, the authorized State administers the program in lieu of the Federal government, although EPA retains enforcement authority under sections 3008, 7003, and 3013 of RCRA. New Federal requirements (such as today's rule) do not apply until they have been adopted by the State and the State's authorization has been revised to incorporate the requirements.<sup>12</sup>

Under RCRA regulations, States must adopt and become authorized for new requirements within one to two years of the rule's effective date, where the requirements are more stringent or broader than existing requirements. Section 3009 of RCRA allows States to impose standards that are more stringent than those in the Federal program.

Today's proposal, however, raises an issue regarding State authority because Congress clearly expected EPA to develop national standards for waste munitions through the RCRA rulemaking process. Although today's rule would lay out such national standards, States under the standard RCRA approach could enforce their own more stringent standards under their own State programs. This situation, at least in theory, could lead to just the

sort of piecemeal approach that the FFCA was intended to avoid. Therefore, EPA is also considering, in addition to the standard RCRA approach to state authorization, an approach that would prohibit States from enforcing broader or more stringent requirements with respect to military munitions. This alternative approach would be specific to today's proposal and, because it would be tied to the waiver of sovereign immunity in RCRA, it would in any case be limited to rules where the only regulated entity was the Federal government. In today's notice, EPA solicits comment on whether this alternative approach should be adopted for military munitions, or whether the standard RCRA approach should be maintained.

As explained above, the standard RCRA approach would allow States to promulgate regulations that are broader in scope or more stringent than Federal requirements. And States would not be required to adopt new regulations that are less stringent or narrower than regulations they already have in place. The legal basis for this approach would derive from section 3009, which allows States to impose more stringent hazardous waste standards.

Under the standard approach, therefore, states would be required to adopt those portions of today's rule that are more stringent or broader in scope than current requirements, but they would not be required to adopt less stringent requirements. Many of the requirements in today's rule, in EPA's view, are neither more nor less stringent than current regulatory requirements applicable to other materials. Therefore, it is EPA's view that under current RCRA procedures, the adoption of these regulatory provisions by States would not be required, as long as the States interpret their current regulations in a manner that is no less stringent than today's proposal. Similarly, States would not be required to pick up those portions of today's proposal if they are promulgated in a final rule, that are less stringent than existing requirements. The less stringent portions of the rule are: (1) the modified definition of "on-site" (§ 260.10), (2) the exemption of emergency responses involving explosives from RCRA transport requirements (§ 262.10(h)), and (3) the RCRA manifest exemption for the off-site shipment of stockpiled munitions waste from one DOD installation to another.

Although states would not be required to adopt less stringent requirements under this approach, EPA strongly urges States to adopt all aspects of today's rule, when it is finalized, to ensure clear

<sup>12</sup> 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.

guidelines for handlers of waste military munitions, State regulators, and the public. EPA believes that, although States under the standard approach can be more stringent, Congress intended for the rule to establish a uniform and consistent program for the management of waste military munitions. Therefore, States should adopt these regulations as quickly as their legislative and regulatory processes will allow.

In two respects, today's proposed rule is more stringent than current requirements: (1) The requirement that military installations retrieve munitions fired off-range (§ 261.2(g)(4)(ii)), 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)). If these proposed requirements are promulgated in a final rule, authorized States must adopt these requirements as part of their State programs and apply to EPA for approval of their program revisions. Section 270.21(e)(2) sets out the deadline for State program modifications; § 271.21 identifies the procedures for revision of State programs.

The above approach is consistent with the basic principles of Federal-State relationships under RCRA. EPA is committed to a partnership role with the States and recognizes that States should be the primary implementers of the hazardous waste program. Furthermore, it has been axiomatic under RCRA that States run their program under their own State laws, and that, while EPA sets national minimum standards, States may choose to be more stringent. At the same time, EPA recognizes DOD's very real need for national consistency in managing waste munitions, given DOD's national defense mission, nation-wide presence, and logistical and operational needs. Therefore, as discussed above, EPA is considering an alternative approach, under this rule, that ensures national standards by precluding States from enforcing more stringent requirements on waste military munitions.

This approach would characterize EPA's requirements as more stringent than the current requirements because they are new standards with respect to the identification of when munitions become waste and as to the storage and transportation standards for that waste. Under this alternative these regulations, when final, would not apply in an authorized State until such time as a State has revised its authorized program to incorporate these requirements and such revisions have been approved by EPA in accordance with 40 CFR Part

271. Additionally, this approach would interpret the waiver of sovereign immunity in section 6001 of RCRA to prohibit broader or more stringent State requirements as applied to military munitions than those requirements adopted in a final rule under section 3004(y).

The approach would be supported by policy and legal arguments that the generally available authority of the States to promulgate more stringent rules than those issued by EPA under RCRA is not present in the case of rules regulating military munitions. It could be argued that Congress in the FFCA intended that EPA, in consultation with DOD, the States, and interested parties, develop national regulations that reflected the views of all and that settled both the jurisdictional and the technical issues at one time.

The argument that the scope of the waiver of sovereign immunity does not permit a State to impose more stringent requirements than those contained in Federal regulation depends on the language of RCRA 6001. This section provides that Federal agencies "shall be subject to, and comply with, all Federal, State, interstate, and local requirements \* \* \* respecting control and abatement of solid waste or hazardous waste disposal and management in the same manner, and to the same extent, as any person is subject to under such requirements." (42 U.S.C. 6961) EPA used similar language in section 118 of the Clean Air Act, in its General Conformity Rule (40 CFR Part 51) to preclude States from applying more stringent requirements on federally-assisted facilities. In the case of today's rule, it would be argued that, because military munitions are items unique to the military, more stringent state regulation would, by definition, apply only to the military and thus be discriminatory and outside the scope of the RCRA waiver of sovereign immunity in section 6001.

EPA will carefully consider both approaches and their policy and legal interpretations. Interested parties, including both DOD and the States, are asked to comment on the approaches and to address such issues as the potential for discrimination against the Federal government; the extent to which the military munitions rule would or could apply to non-Federal entities or to entities whose costs of compliance would not ultimately be borne by the Federal government; the policy considerations raised by the dangers of military munitions and the operational needs of the Military Services; and the practical implementation issues that both approaches would raise.

## VII. 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 proposal is a significant rule under Executive Order 12866 due to the novel policy issues raised. EPA estimates that today's rule results in national annual incremental costs of \$190,000 per year. This represents a savings over baseline costs of approximately \$1,400,000 to over \$2,500,000 per year. For more information on the costs impacts of today's proposal and of some alternative approaches, see the *Economic Impact Analysis of the Proposed Munitions Rule*, in EPA Docket # \* \* \*

#### 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; (4) storage standards for waste munitions; and (5) maintenance and closure of military ranges. Some management approaches to some of these issues may result in significant costs to the U.S. Department of Defense. However, EPA has estimated that the proposed rule, which would relax requirements from the assumed full subtitle C regulations, would not result overall in additional financial burden to the Department of Defense or any military installation. 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 \$190,000 per year to the Department of Defense. The most significant costs would be related to the need for permit modifications for treatment and disposal facilities receiving off-site wastes. However, today's proposal results in avoided costs on the order of \$1,400,000 to \$2,500,000 per year over baseline. Baseline is based on DOD's current operations.

The principal sources of annual savings include avoided costs for new permits, contingency plans, manifests, and retrofitted storage units. These avoided costs may be more significant when compared with other regulatory alternatives considered by EPA. For example, analysis of costs for several alternatives suggests that incremental costs for full Subtitle C requirements and active range management may exceed \$410,000,000 per year. Other alternatives may exceed \$430,000,000 per year. The cost analysis for the proposed rule and alternatives is presented in the technical background document, *Economic Impact Analysis of the Proposed Munitions Rule*. These higher costs result primarily from the costs for active range management.

EPA did not develop specific costs for range closure and clean up (e.g., prior to property transfer) under RCRA 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, and thus, there would be no incremental costs under today's proposal. EPA requests that commenters submit additional information relevant to the cost for clean-up of closed ranges under each of these authorities.

## 2. Benefits Analysis

EPA is proposing that stockpiled munitions generally do not become hazardous waste subject to regulation until they are removed from storage for transportation to a disposal unit. This proposal recognizes that current DOD storage regulations have been successful in protecting human health and the environment, and that additional requirements would be redundant. (See section IV.B.1.f of today's proposed rule). EPA also has proposed to exempt stockpiled waste military munitions from RCRA manifest and other

requirements when transported because DOD standards provide comparable protection. The benefit of this proposed option is the annual cost savings of approximately \$1,400,000 to over \$2,500,000, due to avoided retrofits, permits, contingency plans, and manifest costs.

One exception to the above proposed definition is for munitions that are "deteriorated or damaged (e.g. leaks, broken seals) to the point that they cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes." Such munitions would be designated as regulatory solid waste under the proposed regulation. The benefit of regulating deteriorated or damaged munitions as a solid waste under RCRA would be the assurance that such munitions would be stored and transported in a safe manner and destroyed as soon as safely feasible, thus limiting the potential exposure of humans or the environment to hazardous substances.

The use of munitions for their intended purpose (i.e. discharged at a firing range) is not considered "waste management" for the purposes of RCRA. However, under today's proposal, used or fired munitions left in the environment become "discarded" in a RCRA statutory sense, and therefore are subject to RCRA statutory authorities, including RCRA sections 7003, 3004 (u) and (v), and 3008(h).

The benefits of considering used or fired munitions as "discarded" at the point of property transfer or discharge off-installation range are especially clear in the case of unexploded ordnance (UXO). Military personnel are trained in handling explosive munitions, and military installations have security precautions to prevent civilian exposure to explosive devices. Once property containing UXO leaves military control, however, there is no assurance that the same measure of protection would be maintained, even if it is transferred to another Federal Agency.

The Department of Defense Explosives Safety Board Accident Database reports that since 1943, there have been a total of 30 non-operational accidents from military unexploded ordnance, resulting in seventy-seven injuries and twenty-six fatalities. In many cases, these accidents occurred after property transfer. As more and more bases undergo closure, the potential for accidents from abandoned unexploded ordnance will increase. By including used or fired munitions which leave military control in the statutory definition of "solid waste," EPA and authorized States will be able

to provide independent oversight of property transfers involving former ranges.

## 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 proposal will primarily affect Federal Agencies, such as the Department of Defense, and therefore few, if any, small entities will be affected. Furthermore, since today's proposal generally provides savings over current requirements, EPA believes that any small entities engaged in activity covered by the rule will not be adversely affected. However, the Department of Defense has raised the issue that these regulations may adversely impact businesses doing munitions management activities for the Department of Defense, the Department of Energy, the Coast Guard, and the National Guard. EPA requests that commenters submit additional information related to the types of businesses that may be impacted, the number of small businesses that would be affected, and the extent of adverse impacts to these businesses.

## 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 recordkeeping 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 recordkeeping or reporting requirements.

Comments regarding this determination may be sent to Ken Shuster (RE: ICR Determination), EPA (Mail Code 5303W), 401 M St, SW, Washington, D.C. 20460.



#### D. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), P.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal 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 \$190,000 per year over ten years or \$1,300,000 in any one year. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

#### VIII. References/Docket

The regulatory docket for this proposal contains a number of background materials. To obtain a list of these items, contact the RCRA Docket at

202-260-9327 and ask for the list of references in Docket #F-94-MMP-FFFFF.

#### 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

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

##### 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: October 31, 1995.

Carol M. Browner,  
Administrator.

For the reasons set forth in the preamble, 40 CFR Parts 260, 261, 262, 263, 264, 265, and 270 are proposed to be 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 through 6927, 6930, 6934, 6935, 6937 through 6939, and 6974.

2. Section 260.10 is amended by revising the definition of "on-site" and by adding the following definitions, in alphabetical order, to read as follows:

#### **§ 260.10 Definitions.**

\* \* \* \* \*

*Explosives or munitions emergency response expert* means Department of Defense (DOD) emergency explosive ordnance disposal (EOD) or technical escort unit (TEU) personnel; DOD-certified civilian contractor personnel; or other trained Federal, State, local, or civilian chemical or conventional munitions or explosives handling, render-safe, destruction, and response experts.

*Explosives or munitions emergency* means a situation involving the suspected or detected presence of unexploded explosive ordnance (UXO), damaged explosive ordnance, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harming military chemical warfare material or device, that creates an imminent threat to human health, including safety, or the environment, including property, as determined by an emergency response expert, and calls for immediate action by the emergency response expert to eliminate the threat.

*Explosives or munitions emergency response* means all immediate response activities by emergency response experts to eliminate an emergency threat by treating or destroying the ordnance in place or rendering the ordnance safe and/or removing it to another location for treatment or destruction. An emergency response includes transportation and treatment to the extent necessary to abate the immediate threat. Emergencies and expert responses can occur in the public sector or on Federal installations.

\* \* \* \* \*

*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, and National Guard personnel. Military munitions include: 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, artillery, 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, devices, and components thereof managed under DOE's nuclear weapons program.

*Military range* means designated air, land, and water areas set aside, managed, and used to test and evaluate military explosives, other ordnance, and weapon systems, and to train personnel in their use and handling. Ranges include firing lines and positions, firing lanes, impact areas, and buffer zones with restricted access and exclusionary areas.

\* \* \* \* \*

*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. "On-site" also includes contiguous property comprised of an individual generation site and/or facility under the control of the same person, regardless of whether it is divided by a public or private right-of-way and whether 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 the owner controls and to which the public does not have access is also considered "on-site" property.

\* \* \* \* \*

#### 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 revising paragraph (a)(2) introductory text and adding a new paragraph (g) to read as follows:

##### § 261.2 Definition of solid waste.

(a) \* \* \*

(2) Except for military munitions addressed in § 261.2(g), a *discarded material* is any material which is:

\* \* \* \* \*

(g) *Military munitions.* (1) Unused military munitions are discarded material and therefore a solid waste when any of the following occurs:

(i) The munition is abandoned by being disposed of, burned, or incinerated, or treated prior to disposal, or

(ii) 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

(iii) The munition is deteriorated or damaged (e.g., the integrity of the round 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

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

(2) Used or fired military munitions are solid wastes if they meet the definition of discarded material in § 261.2(a)(2), unless they are excluded by paragraphs (a)(1) or (g)(3) of this section.

(3) Use of military munitions for their intended purpose does not constitute discard and is not subject to regulation under parts 260 through 271 of this chapter. "Use for intended purpose" includes:

(i) Use in training of troops and of explosives and munitions emergency response experts (including training in proper destruction of excess unused propellant or other munitions during training exercises),

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

(iii) Recovery, collection, and on-range destruction of unexploded ordnance and contaminants during range clearance operations at active, inactive, or closing ranges.

(4) *Military munitions at ranges.* Munitions discharged during military activities at ranges are discarded material (and therefore solid waste) for purposes of § 1004(27) of RCRA under the following circumstances:

(i)(A) The munition is left in place at the firing range at the time the range is closed or when the range is transferred from military control, whichever occurs first, except that,

(B) Upon the issuance of DOD regulations that govern the cleanup of munitions on closed or transferred ranges and that provide for State and public participation in the cleanup decisionmaking process at specific sites, these DOD regulations shall supersede all RCRA authority over military munitions at closed and transferred military ranges.

(ii) The munition lands off-range and it is not promptly rendered safe (if

necessary) and retrieved. To the extent feasible, 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).

(5) Military munitions that have not been discharged, including subcomponents thereof, do not become a solid waste when they are being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities.

#### PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

1. The authority citation for Part 262 continues to read as follows:

Authority: 42 U.S.C. 6906, 6912(a), 6922 through 6925, 6937, and 6938, unless otherwise noted.

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

##### § 262.10 Purpose, scope, and applicability.

\* \* \* \* \*

(h) Persons responding to an explosives or munitions emergency in accordance with sections 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.

(i) A generator of military munitions that become solid wastes under 40 CFR 261.2(g)(1)(ii through iv) is exempt from subpart B and §§ 262.32(b), 262.40(a), and 262.42 of this part when the munition is shipped under Department of Defense shipping controls (including at a minimum: Government Bill of Lading (GBL) (GSA Standard Form 1109) and associated Special Instructions and Notes (SIN) and Routing Instructions and Notes (RIN)—a series of files within an automated information base used in preparing the GBL continuation sheets, 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) from a federally-owned or operated installation to a DOD-owned or operated treatment, storage, or disposal facility, except that the Federal agency must report to the EPA Regional Administrator any waste that was not received by the receiving facility within

45 days of the day the waste was shipped.

\* \* \* \* \*

**PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE**

1. The authority citation for Part 263 continues to read as follows:

Authority: 42 U.S.C. 6912(a), and 6922 through 6925.

2. Section 263.10 is amended by redesignating paragraph (c) as (e), and adding new paragraphs (c) and (d) to read as follows:

**§ 263.10 Scope.**

\* \* \* \* \*

(c) The regulations in this part do not apply to transportation during an explosives or munitions emergency response, conducted in accordance with §§ 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).

(d) The regulations in this part do not apply to the transportation of military munitions that become solid wastes under 40 CFR 261.2(g) (1)(ii through iv) when shipped under Department of Defense shipping controls (including at a minimum: Government Bill of Lading (GBL) (GSA Standard Form 1109) and associated Special Instructions and Notes (SIN) and Routing Instructions and Notes (RIN)—a series of files within an automated information base used in preparing the GBL continuation sheets, 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) from a DOD-owned or operated installation to a DOD-owned or operated treatment, storage, or disposal facility.

\* \* \* \* \*

**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) and (g)(8)(iv) 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.

\* \* \* \* \*

(iv) In the case of an explosives or munitions emergency response, if a Federal, State, or local official acting within the scope of his or her official responsibilities, or if an explosives or munitions emergency response expert determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or expert 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 expert's 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 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 § 263.10(d). 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—Military Hazardous Waste Munitions Storage**

**§ 264.1200 Applicability.**

The requirements of this subpart apply to owners or operators who store military wastes and munitions classified as hazardous wastes in military magazines, except as § 264.1 provides otherwise. (NOTE: Depending on explosive hazards, military hazardous waste munitions 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)).

**§ 264.1201 Design and operating standards.**

(a) Hazardous waste munitions 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, or atmosphere;

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

(3) For non-liquid wastes stored outdoors, provide that the waste will not be in standing precipitation;

(4) For liquid wastes, provide a secondary containment system that assures that any released liquids or precipitation are promptly detected and removed 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) Military hazardous waste munitions 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 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.

(iii) Designed with walls and earthen covers that direct an explosion in the unit in a safe direction to prevent propagation of the explosion to adjacent units.

(2) Above-ground magazines. Above-ground magazines must be designed to disintegrate rather than blow apart into fragments.

(3) Outdoor or open storage areas.

(c) Hazardous waste munition units must be adequately designed and spaced to prevent propagation from one storage unit to another in the event of detonation.

(d) Hazardous waste munitions must be stored in accordance with a Standard Operating Procedure specifying procedures to ensure safety, security, and environmental protection. These procedures would supersede 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.

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

(f) Hazardous waste munitions must be inventoried at least annually.

(g) Inspection and monitoring as necessary to ensure stability and no migration of contaminants out of the magazine. At waste chemical munitions storage units, the preferred method for detection of leakers is the use of remote sensing equipment.

**§ 264.1202 Closure and post-closure care.**

(a) At closure of a military magazine 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 military magazines 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 magazine.

(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, 6912(a), 6924, 6925, 6935, and 6936, unless otherwise noted.

2. Section 265.1 is amended by adding new paragraphs (c)(11)(i)(D) and (c)(11)(iv) 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.

\* \* \* \* \*

(iv) In the case of an explosives or munitions emergency response, if a Federal, State, or local official acting within the scope of his or her official responsibilities, or if an explosives or munitions emergency response expert determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or expert 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 emergency response expert's 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 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 § 263.10(d).

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

**Subpart EE—Military Hazardous Waste Munitions Storage**

**§ 265.1200 Applicability.**

The requirements of this subpart apply to owners or operators who store military wastes and munitions classified

as hazardous wastes in military magazines, except as § 265.1 provides otherwise. (NOTE: Depending on explosive hazards, military hazardous waste munitions 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)).

**§ 265.1201 Design and operating standards.**

(a) Hazardous waste munitions 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, or atmosphere;

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

(3) For non-liquid wastes stored outdoors, provide that the waste will not be in standing precipitation;

(4) For liquid wastes, provide a secondary containment system that assures that any released liquids or precipitation are promptly detected and removed 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) Military hazardous waste munitions 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 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.

(iii) Designed with walls and earthen covers that direct an explosion in the unit in a safe direction to prevent propagation of the explosion to adjacent units.

(2) Above-ground magazines. Above-ground magazines must be designed to

disintegrate rather than blow apart into fragments.

(3) Outdoor or open storage areas (for munitions that do not pose a significant potential for explosion).

(c) Hazardous waste munition units must be adequately designed and spaced to prevent propagation from one storage unit to another in the event of detonation.

(d) Hazardous waste munitions must be stored in accordance with a Standard Operating Procedure specifying procedures to ensure safety, security, and environmental protection. These procedures would supersede 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.

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

(f) Hazardous waste munitions must be inventoried at least annually.

(g) Inspection and monitoring as necessary to ensure stability and no migration of contaminants out of the magazine. At waste chemical munitions storage units, the preferred method for detection of leakers is the use of remote sensing equipment.

**§ 265.1202 Closure and post-closure care.**

(a) At closure of a military magazine 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 military magazines 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 magazine.

(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 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.

\* \* \* \* \*

(iii) In the case of immediate responses involving military munitions, the responding military emergency response expert's 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.* (1) The permittee is authorized to continue to accept military munitions designated as hazardous wastes under § 261.2(g) of this chapter, notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if:

(i) The facility was in existence as a hazardous waste facility on the date when the waste munition became subject to hazardous waste regulatory requirements;

(ii) On or before the date when the waste munition becomes 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

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

(2) Within the 180-day period for submission of the Class 2 modification request, the facility may request the permitting agency to extend the 180 days for a specified period. If the permitting agency does not respond to the extension request within 30 days, the permittee is automatically granted the extension.

[FR Doc. 95-27434 Filed 11-7-95; 8:45 am]  
BILLING CODE 6560-50-P