

**HTRW Center of Expertise
Environmental Regulatory
Fact Sheet 99-08**

**Hazardous Remediation Waste Management Requirements
(Also Known as the Hazardous Waste Identification Rule for
Media “HWIR Media”)**

PURPOSE

This fact sheet highlights aspects of the 30 Nov 1998 final rule entitled, “Hazardous Remediation Waste Management Requirements (HWIR- Media)” which are expected to impact the Army. The rule was promulgated in the Federal Register, 63 FR 65874, and primarily addresses management of hazardous remediation waste treated, stored, or disposed of during cleanup actions. EPA is finalizing only selected portions of the proposed HWIR Media rule. [The key issue of the proposed HWIR rulemaking, exit levels for hazardous media, was not finalized. In a related Federal Register on 1 Dec 1998, 63 FR 66101, options for exempting lower-risk contaminated media (the “bright line” and “unitary approaches”) were formally withdrawn by EPA.]

SUMMARY

Some rules written for traditional hazardous waste treatment, storage, and disposal facilities (TSDFs) impede progress when applied to remediation projects. EPA, in the HWIR Media Rule, provides relief from some of these requirements. Under the new rule:

- Remedial Action Plans (RAPs) can be used as an alternative to traditional “Part B” permits for treating, storing, or disposing of remediation waste. Information requirements and procedural steps for obtaining a permit via an approved RAP are lessened and therefore the permit process is expedited.
- Remediation waste management sites do not require facility-wide corrective action. Previously, there was a disincentive toward certain cleanup actions because facility-wide corrective action requirements were imposed when receiving a permit to treat, store, or dispose of hazardous remediation waste.
- Flexible performance standards are available for remediation waste management sites. Rather than complying with prescriptive standards designed for TSDFs, general performance standards are identified which can be imposed via a RAP or traditional TSDF permit.
- Staging piles can be designated to allow temporary storage (2 years or less) of remediation waste without land disposal restrictions (LDRs) applying. Previously, storage in piles was

not allowed unless LDRs had been satisfied.

These provisions are all expected to lead to more effective, efficient cleanups.

ADDITIONAL DETAILS

Remedial Action Plans (RAPs), 40 CFR 270 Subpart H

RAPs are a special form of RCRA permit available for treatment, storage, or disposal of wastes generated during remediation activities. Up until now, treatment, storage, or re-disposal of hazardous remediation waste required the same type of RCRA permit as a TSDF engaged in managing process wastes. The process of obtaining these permits was extremely costly and time consuming. It was not unusual for it to take several years to process a permit. Now, however, RAPs provide an alternative in lieu of traditional permits that will expedite the process. RAPs will resemble CERCLA record of decisions or work plan approvals rather than typical RCRA “Part B” permits. RAPs can be utilized in areas of contamination or in close proximity to the contamination to treat, store, or dispose of hazardous waste. Under special circumstances, EPA can even allow RAPs for off-site locations when such action will be more protective than managing the waste on-site.

The process of obtaining a RAP is summarized as follows:

- A complete application is signed by both the owner and operator and submitted to the Director (EPA or State implementing agency).
- Upon receipt of the complete application, the Director prepares a draft RAP or notice of intent to deny, a statement of basis, administrative record, and makes the information available to the public.
- The Director sends a notice of intent to approve or deny to the applicant.
- The Director publishes a notice in the newspaper, broadcasts intentions over local radio, and sends notice to local governments regarding the RAP application.
- If opposition is received, a public hearing is held.
- The Director responds to significant comments, issues a final decision, and compiles a complete administrative record for the action.
- The RAP is issued or denied.

Advantages of utilizing a RAP rather than a traditional Part B permit include:

- reduced information requirements for permit application;
- a streamlined permitting process; and
- replacement of detailed standards applicable to Part B permitted facilities with broader performance standards developed on a site-specific basis.

Limitations of RAPs:

- RAPs are not available for combustion units. However, combustion units are still exempt from facility wide corrective action if the site is a remediation-only site.
- RAPs are not for “as generated wastes” (process wastes), only remediation waste.

- RAPs for offsite locations retain the exclusion from facility wide corrective action, but must meet the minimal location standards applicable to traditional TSDFs. (See 40 CFR 264.18)

Impacts on Army:

- RAPs can be used to expedite corrective actions carried out at Army facilities requiring a RCRA permit to treat, store, or dispose of remediation waste. They can be used for voluntary cleanups as well as remediations conducted under State or Federal authorities.
- Facilities undergoing RCRA response actions can use RAPs to obtain approval for non-combustion type treatment processes; to allow storage of investigation-derived wastes and other hazardous wastes in excess of 90 days; and to designate corrective action management units (CAMUs), temporary units (TUs), staging piles and disposal areas. (See discussion on 63 FR 65885, middle column regarding re-disposal).
- RAPs will have minimum applicability at Army facilities responding to releases under the CERCLA process since permits are not required for onsite actions.
- Landfills; surface impoundments; land treatment units; and wastes piles typically require post-closure permits or some other type of enforceable document to address wastes that remain in place after closure. Though EPA did not fully discuss RAPs with respect to closure, since RAPs are enforceable documents, it would appear that they could be used in lieu of post-closure permits for these types of units. Clarification will be requested of EPA on this issue.

Remediation Waste Management Sites

The rule revises the definition of “remediation waste management site” to remove facility-wide corrective action requirements from such sites. Previously whenever a treatment, storage, or disposal permit was required for a remediation, corrective action requirements were imposed on the entire facility as part of the permitting process in the same manner as they attached to TSDFs engaged in long-term management of process wastes. Corrective action essentially requires owners/operators to identify, investigate, and remediate all solid waste management units throughout the facility and is a disincentive from obtaining a TSDF permit for remediation activities. Under the revised definition, this disincentive is removed. The rule defines a remediation waste management site as “a facility where an owner or operator is or will be treating, storing or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under 40 CFR 264.101, but is subject to corrective action requirements if the site is located in such a facility.” In other words, the remediation alone does not trigger facility wide corrective action requirements, but if corrective action requirements have attached for another reason, such as a permitted TSDF co-located on the property, then the corrective action requirements continue to apply.

In a related issue, EPA revises the definition of “remediation waste.” It is no longer restricted solely to wastes managed in CAMUs and TUs, but applies to “all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that contain

listed hazardous waste or that themselves exhibit a hazardous characteristic and are managed for implementing cleanup.” Thus it applies to non-hazardous as well as hazardous wastes and is no longer restricted to wastes originating only from within the facility boundary as was the case under the old definition. This allows items generated during treatment processes to be considered remediation waste such as carbon canisters generated from pump and treat operations.

Flexible Performance Standards for Remediation Waste Management Sites

EPA seeks to enhance RCRA remediations by providing performance standards in lieu of certain portions of 40 CFR 264 which contain prescriptive standards designed for traditional TSDFs. Remediation waste management sites must comply with all parts of 40 CFR 264 except Subparts B (General Standards), C (Preparedness and Prevention Standards), D (Contingency Plans and Emergency Procedures), and 264.101 (Corrective Action Standards). In place of these standards, performance based standards are specified in 40 CFR 264.1 for:

- obtaining EPA ID numbers;
- waste analysis;
- security;
- inspection;
- personnel training;
- prevention of accidental ignition or reaction of wastes;
- prevention of washout by a 100 year flood;
- placement of containerized or bulk liquid hazardous waste in salt dome formations, salt bed formations, underground mines or caves;
- construction quality assurance programs;
- contingency planning;
- emergency coordination;
- planning and recordkeeping.

The Staging Pile

The “staging pile” is another provision to facilitate the implementation of a reliable, effective and protective remedy. It is defined as, “an accumulation of solid, non-flowing remediation waste that is not a containment building and that is used only during remedial operations for temporary storage at a facility.” EPA or an authorized state can designate an area for a staging pile via a permit (traditional or RAP), or for interim status facilities via a closure plan. They must be within contiguous property under the control of the owner/operator of the area being remediated, but can be inside or outside of the area of contamination. Once designated, wastes managed in the staging pile are not considered land disposed and thus are not subject to LDRs or minimum technology requirements (MTRs) while being stored. This allows soils to be excavated and placed into a pile irrespective of whether or not LDR treatment standards have been attained.

Staging piles:

- can be used only to store, not treat waste;

- can accept other remediation waste related to the cleanup such as personal protective equipment rather than just contaminated media;
- can be used to manage uncontained or contained waste;
- can be used to manage ignitable, reactive, and/or incompatible wastes only if protected from the conditions that would cause them to ignite or react; and
- must meet design and operating standards designated on a case-by-case basis as opposed to MTRs.

Staging pile performance standards will be stipulated by EPA or the authorizing state and:

- must facilitate a reliable, effective and protective remedy;
- must be designed to prevent or minimize releases to the environment, and minimize or adequately control cross-media transfer, as necessary to protect human health and the environment; and
- must state the operating period, not to exceed 2 years unless an extension is granted.

At the end of their designated operating period, staging piles must be closed. Closure requirements depend upon whether or not the pile is located within the contaminated area. For staging piles in uncontaminated areas, “clean closure” is required. On the other hand, if the staging pile is within the contaminated area, then subsoils are decontaminated according to the requirements and schedules specified by EPA or the authorized state. However, within 180 days after the expiration of the operating term of the staging pile, all remediation waste, contaminated containment system components and structures, contaminated equipment and leachate must be removed.

Impacts on Army:

- At RCRA corrective action sites, staging piles could be used to store remediation wastes without regard to whether MTRs or LDRs have been attained.
- At CERCLA sites, staging piles could be used to allow hazardous remediation wastes from separate areas of contamination to be consolidated into a single staging pile without first meeting LDRs or MTRs.
- During CERCLA response actions, staging piles could be cited as applicable or relevant and appropriate (ARARs) and designated via decision documents rather than permits since onsite CERCLA actions are exempt from permitting requirements.

IMPLEMENTATION OF REMEDIATION WASTE MANAGEMENT REQUIREMENTS

The table below illustrates the differences in implementing a cleanup action under CERCLA and RCRA under the prior versus new standards.

**Example of CERCLA vs RCRA Remediation
Under Old vs New Standards**

Soil fails TCLP for lead and needs to be remediated. The preferred remedy is ex-situ stabilization. The site operator intends to excavate, store/stockpile, treat the soil to render it non-hazardous, then re-dispose of on-site.

	CERCLA Site Under Prior RCRA Requirements	CERCLA Site Under New HWIR Media Requirements	RCRA Site Under Prior RCRA Requirements	RCRA Site Under New HWIR Media Requirements
Storage/ Stockpiling On Land	Allowed because of “Area of Contamination (AOC) Policy”. Soil can be stored in AOC without meeting LDRs.	Same as before.	Prohibited because soil does not meet LDRs.	Designation as a staging pile allows stockpiling without first satisfying LDRs.
Ex-Situ Treatment On-Site	Allowed because CERCLA on-site actions are exempt from obtaining permits.	Same as before.	Required traditional TSDF permit to treat hazardous waste.	Can use RAP to expedite permit process.
TSDF Standards Applicable	Substantive standards applied. Administrative standards did not apply.	Substantive standards apply. New performance standards in 264.1 can be applied in lieu of 40 CFR 264 Subparts B, C, D, and 264.101	All standards applicable to traditional TSDF applied	General performance-based standards provide flexibility to facility.
Facility-Wide Corrective Action	Not required under CERCLA	Same as before.	Facility wide corrective action is triggered by obtaining a permit to treat, store, or dispose of hazardous waste.	Not triggered by permit to treat, store or dispose of remediation waste only.

OTHER PROVISIONS

Corrective Action Management Units (CAMUs) and Temporary Units (TUs)

EPA had proposed to withdraw CAMU provisions, but has decided to retain and modify them. The definition of a CAMU has been modified to remove limitations such that CAMUs can be approved for all types of remediation facilities, not just those undergoing RCRA corrective action.

The CAMU definition has also been modified to specify CAMUs must be located within contiguous property under the control of the owner/operation where the wastes originated.

Likewise, TU provisions have been modified to remove limitations to allow use at all types of remediations, but to restrict locations to contiguous property under the control of the owner/operation where the wastes being managed originated.

RCRA Exclusion for Dredged Material

The HWIR media rule excludes certain dredged material from RCRA Subtitle C, hazardous waste regulation. It provides, "dredged material that is subject to the requirements of a permit that has been issued under 404 of the Federal Water Pollution Control Act (FWPCA) [also known as the Clean Water Act] (22 U.S.C. 1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (33 U.S.C. 1413) is not a hazardous waste." It is important to note the conditions of the exclusion. Permits issued under section 404 relate to discharge of dredged material into waters of the United States (U. S.). Section 103 relates to ocean dumping. Therefore, the exclusion only applies to these circumstances and does not apply to upland disposal of dredged material where no return flow to waters of the U.S. is occurring. Therefore, if the dredge material is being sent to a landfill, it is still necessary to determine whether it constitutes a hazardous waste. It is also important to note that the exclusion only exempts dredged material from hazardous waste regulation, not from solid waste regulation. Therefore the waste may still be subject to state regulation under their subtitle D programs.

In the case of Corps of Engineer Civil Works dredging activities, for which the Corps does not issue itself FWPCA/MPRSA permits, the RCRA exclusion can still apply. These activities, however, must meet the administrative equivalent of a permit by complying with substantive requirements such as public notice, opportunity for public hearing, and application of the section 404 guidelines or MPRSA criteria in order to take advantage of the exclusion.

Status of Suspension of the Toxicity Characteristic for Non-UST Petroleum Contaminated Media and Debris

Certain petroleum contaminated media and debris from underground storage tank corrective actions are currently federally exempt from hazardous waste regulation while similar wastes from aboveground tanks continue to be regulated. EPA had proposed an exclusion for non-UST media

and debris, but thus far has not taken final action on the proposal.

EFFECTIVE DATES

While the effective date of the rule is June 1, 1999, this rule is effective then only in the three States that do not have final authorization of the base RCRA program (i.e. Alaska, Hawaii, and Iowa). The rule is not applicable in authorized States unless and until the State revises its program to adopt equivalent requirements. Adoption of the requirements of this rule is optional for authorized state RCRA programs because these requirements are less stringent than existing requirements. Note that the staging pile provisions are published pursuant to HSWA authority. See pages 65924-65927 of the 30 Nov 98 Federal Register regarding state authorities and effective dates.