

# memorandum

DATE: September 17, 1996

REPLY TO  
ATTN OF: Office of Environmental Policy and Assistance(EH-413):Sikri:6-1879

SUBJECT: Consolidated Departmental Response to Proposed Hazardous Waste Identification Rule for Contaminated Media (HWIR-Media)

TO: Distribution

## PURPOSE

The purpose of this memorandum is to inform Program Offices and Field Organizations of the availability of the consolidated Departmental response to the Environmental Protection Agency (EPA) on the subject proposed rule.

## BACKGROUND

On April 29, 1996 (61 FR 18780), the EPA published a Notice of Proposed Rulemaking (NPRM) regarding requirements for the management of hazardous contaminated media. These proposed regulations would address contaminated media (i.e., contaminated soils, groundwater and sediments) that currently are subject to regulation as "hazardous waste" under the Resource Conservation and Recovery Act. The NPRM indicated the purpose of the rule to be development of more flexible management standards for media and wastes generated in the course of site cleanups.

The HWIR-media proposal would establish a new Part 269 to Title 40 of the Code of Federal Regulations entitled Part 269--Requirements for Management of Hazardous Contaminated Media. As proposed, the rule would apply only to contaminated media, and not to sludges, debris, and other non-media remediation wastes. EPA's proposed regulatory approach would distinguish between higher- and lower-risk contaminated media, and outlines associated regulatory regimes for these media categories (i.e., the "Bright Line" concept). The proposed rule also discusses alternative approaches to HWIR-media regulations. Furthermore, HWIR-media proposes to eliminate the existing regulations for corrective action management units (CAMUs), with certain "grandfathering" provisions.

On April 30, 1996, the Office of Environmental Policy and Assistance (EH-41) notified DOE elements of the availability of the proposed rule and requested comments for consideration in the development of a consolidated Departmental response.<sup>1</sup> On June 26, 1996, EH-41 distributed another memorandum to DOE elements extending the deadline for the submission of comments to EH-41.<sup>2</sup>

<sup>1</sup> EH-41 memorandum dated April 30, 1996, subject: Proposed Hazardous Waste Identification Rule for Contaminated Media -- Notification and Request for Comments.

<sup>2</sup> EH-41 memorandum dated June 26, 1996, subject: Proposed Hazardous Waste Identification Rule for Contaminated Media (HWIR-Media) -- Extension for Submitting Comments.

AREAS OF  
COMMENT

The consolidated DOE response reflects comments from 15 field organizations, 4 program offices, an internal EH-413 analysis, and input from the HWIR-media Focus Group. Among other things, the Departmental response:

- In general, supports EPA's efforts to develop more flexible and effective requirements for the management of contaminated media and other cleanup wastes.
- Encourages EPA to adopt a hybrid of the proposed "Bright Line" approach and the alternative "Unitary" approach for the final HWIR-media rule (based on the "conditional exclusion" theory). Under the DOE proposed approach:
  - All remediation wastes could be managed under a site-specific remediation management plan (RMP).
  - All remediation wastes managed under a RMP would be exempt from RCRA Subtitle C regulations.
  - EPA guidance would specify "bright line" concentrations.
- Urges EPA to expand the scope of the final rule to include all remediation wastes (not just contaminated media, as proposed).
- Opposes withdrawal of the existing regulations for CAMUs.

AVAILABILITY  
and  
ADDITIONAL  
INFORMATION

A copy of the Departmental response submitted to EPA is available through the Internet on the EH-41 World Wide Website for viewing and/or downloading at <http://www.eh.doe.gov/oepa> under the "WHAT'S NEW" and "DOE COMMENTS" sections.

If you have any questions regarding this consolidated Departmental response, or the proposed rule in general, please contact Bill Fortune/Al Sikri of my staff by:

- calling (202) 586-7302/586-1879
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- communicating electronically, via the Internet, to [william.fortune@eh.doe.gov](mailto:william.fortune@eh.doe.gov) or [atam.sikri@eh.doe.gov](mailto:atam.sikri@eh.doe.gov)



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**Department of Energy**  
Washington, DC 20585

August 28, 1996

RCRA Docket Information Center  
Office of Solid Waste (5305W)  
U.S. Environmental Protection Agency Headquarters (EPA, HQ)  
401 M Street, S.W.  
Washington, D.C. 20460

Docket Number F-96-MHWP-FFFFF

Dear Sir or Madam:

Re: 61 FR 18780, "Requirements for Management of Hazardous Contaminated Media (HWIR-Media)"

On April 29, 1996, the Environmental Protection Agency (EPA) published the subject Federal Register notice proposing new regulations in regards to managing contaminated media under the Resource Conservation and Recovery Act (RCRA). The new regulations, known as the proposed HWIR-media, would address contaminated media (i.e., contaminated soils, groundwater and sediments) that are currently subject to regulation as "hazardous waste" under RCRA. EPA's notice indicated the purpose of the rule to be development of more flexible management standards for media and wastes generated in the course of site cleanups.

The proposed HWIR-media rule would establish a new Part 269 to Title 40 of the Code of Federal Regulations entitled Part 269--Requirements for Management of Hazardous Contaminated Media. The proposed rule would apply to contaminated media; however, sludges, debris, and other non-media remediation wastes would not be subject to the proposed requirements. Among other things, the proposal would give responsible regulatory agencies the authority to exempt certain contaminated media from regulation as hazardous wastes under Subtitle C of RCRA. Furthermore, the existing regulations applicable to corrective action management units (CAMUs) would be eliminated, with certain "grandfathering" provisions.

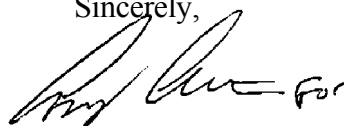
The Department of Energy (DOE) generally supports EPA's efforts to make regulation of contaminated media more flexible, and appreciates the opportunity to raise concerns and provide input in response to the proposed HWIR-media. As the enclosed comments reveal, DOE's primary suggestions include that EPA consider adopting a hybrid of the proposed "Bright Line" approach and the alternative "Unitary" approach for the final HWIR-media rule. DOE suggests that the final rule rely on a theory of conditional exclusions, which, as the Agency explains in the HWIR-media preamble, is grounded on RCRA's provision giving EPA and authorized States discretion to determine that a waste need not be defined as

“hazardous” where restrictions are placed on management such that no improper management could occur that might threaten human health or the environment. Furthermore, DOE asserts that the scope of the final HWIR-media should be broadened to encompass all remediation wastes (including debris and sludges) rather than media alone.

DOE also raises concern and issues related to the proposal to eliminate the CAMU rule. CAMUs offer protection of human health and the environment along with significant flexibility to accommodate site-specific circumstances. For this reason, several DOE facilities are either considering or pursuing CAMUs. As a result, DOE is concerned that, if the CAMU rule is eliminated, adequate provisions also be adopted to prevent consequent losses of invested time and resources, as well as consequent delays in cleanups.

The enclosed comments combine viewpoints and issues identified by DOE Field Organizations and Program Offices, and are presented for EPA's consideration in finalizing the HWIR-media regulations. These comments have been divided into three sections: general, specific and other. The general comments discuss broad Departmental suggestions about the structure and applicability of the proposed regulations, as well as some concerns about implementation. The specific comments focus on preamble discussions that raised either Departmental endorsement of, or questions or uneasiness about potential regulatory approaches. For clarity, each specific comment is preceded by a reference to the section of the proposed rule to which it applies and a brief description in bold-face type of the issue within that section to which DOE's comment is directed. The other comments deal with particular proposed regulatory language not addressed by any specific comment.

Sincerely,



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Deputy Assistant Secretary  
for Environment  
Environment, Safety and Health

Enclosure

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UNITED STATES DEPARTMENT OF ENERGY

COMMENTS ON REQUIREMENTS FOR MANAGEMENT OF  
HAZARDOUS CONTAMINATED MEDIA

PROPOSED RULE (61 FR 18780 - 18864; April 29, 1996)

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UNITED STATES DEPARTMENT OF ENERGY  
COMMENTS ON REQUIREMENTS FOR MANAGEMENT OF  
HAZARDOUS CONTAMINATED MEDIA

PROPOSED RULE (61 FR 18780 - 18864; April 29, 1996)

GENERAL COMMENTS

1. In general, the Department of Energy (DOE) supports the efforts of the Environmental Protection Agency (EPA) to develop requirements appropriate for the management of contaminated media and other cleanup wastes (generated in the course of site cleanups) that are more flexible and effective.

As EPA recognizes in the preamble [61 FR 18782], there are often significant differences between "as-generated" process wastes (which most of the existing hazardous waste management requirements were designed to control) and contaminated media or other remediation wastes. Furthermore, as EPA states, remedial actions generally receive intensive government oversight, and remedial decisions are approved by a State or Federal Agency only after site-specific conditions have been thoroughly investigated. Under the current Resource Conservation and Recovery Act (RCRA) regulations, however, the same waste management requirements are applied to wastes generated from both cleanup activities and process waste generating activities. DOE agrees that the considerable differences between as-generated process wastes and remediation wastes, such as contaminated media, warrants distinct programs with greater flexibility for remediation wastes to encourage, rather than obstruct, remedial efforts. The Department welcomes and supports the EPA's continuing efforts to provide a system for management of remediation wastes that is different from the system now applicable to as-generated wastes. DOE believes that a distinct regulatory program for the management of hazardous remediation wastes would improve the efficiency of the site remediation process by eliminating some of the requirements that impose unnecessary costs or delays, and that often limit the range of cleanup options.

2. DOE encourages EPA to adopt a hybrid of the proposed "Bright Line" approach and the alternative Unitary approach as the final HWIR-Media rule, using the conditional exclusion theory to exempt all remediation wastes from Subtitle C regulation.

In the preamble to the proposed HWIR-Media rule, EPA explains that various combinations of the provisions of the proposed "Bright Line"<sup>1</sup> and "Unitary" approaches could be devised based on the conditional exclusion theory for exempting remediation wastes from Subtitle C regulation (except LDRs in some cases) [61 FR 18836]. The Agency requested comment on which "Hybrid" approach

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<sup>1</sup> Throughout this comment package, EPA's proposed approach and the associated set of constituent concentrations used as criteria for dividing contaminated media into low- and high-risk categories are referred to using the term "Bright Line," with initial capital letters. DOE's proposed hybrid approach suggests that a set of constituent concentrations be developed only as guidance in evaluating whether certain remediation wastes might be candidates for management requirements similar to RCRA hazardous waste management requirements. When this comment package makes reference to the set of constituent concentrations that would provide guidance under DOE's suggested approach, the term "bright line," with initial lowercase letters, is used.

would be appropriate (p. 18836, col. 3). In response, DOE encourages EPA to finalize a “Hybrid” HWIR-Media rule having the following attributes:

- All remediation wastes, including media, debris and sludges, could be managed under a site-specific remediation management plan (RMP) [hereinafter, for the purpose of discussions of DOE's suggested hybrid approach, the plan describing how remediation wastes will be managed will be referred to as a RMP].
- All remediation wastes managed under a RMP would be exempt from RCRA Subtitle C regulations.
- RMPs would be required to be developed and submitted for approval to responsible regulatory agencies in accordance with an approved program (subject to appropriate public participation requirements) and guidance to be published by EPA.
- EPA's RMP guidance would specify “bright line” concentrations for hazardous constituents in remediation wastes. The “bright line” constituent concentrations would divide remediation wastes into low-risk and high-risk categories and would be applicable nationwide.
- EPA's RMP guidance would establish recommended remediation waste management standards for the high-risk category. Responsible regulatory agencies would be allowed to impose more or less stringent standards in RMPs based on site-specific considerations. It is recommended that guidance documents clearly establish the advisory nature of the “bright line” concentrations and state that significant deviations from guidance on the use of the “bright line” may be appropriate based on site-specific considerations. Other matters that should be covered by RMP guidance include the assumptions, equations and models which have been developed for deriving “bright line” concentrations, and the methodology for developing “bright line” concentrations on a site-specific basis for constituents that EPA has not yet addressed.
- Remediation waste management requirements for the low-risk category would be established by responsible regulatory agencies based on site-specific considerations.

DOE supports the alternative “Hybrid” approach described above for the final HWIR-Media rule because:

- a. It would be simpler to implement and administer since “bright line” constituent concentrations would not be promulgated as part of the regulations. Therefore, updates and changes would be less burdensome.
- b. The legal basis for it (i.e., "conditional exclusion") seems less complicated. Under the proposed approach EPA uses the contained-in principle as a legal basis for allowing media to

be removed from Subtitle C regulation (except LDRs in some instances).<sup>2</sup> However, to achieve the Agency's goal of allowing low-risk media to exit Subtitle C, EPA proposes to change the historical approach to conducting contained-in evaluations. The preamble indicates that for the HWIR-media rule, media could be determined to not contain hazardous wastes based on site-specific circumstances or controls in a RMP [p. 18833, col. 1]. Historically, contained-in determinations were made based on site-specific factors, but management practices and controls were not among them. Further, considering management practices and controls in the evaluation seems inconsistent with the intuitive meaning of determining that media "no longer contain hazardous waste." Such consideration is also inconsistent with the methodology EPA assumed for conducting contained-in evaluations for contaminated debris.<sup>3</sup>

"Conditional exclusion" on the other hand, is based on EPA's interpretation of RCRA as giving the Agency and the States discretion to determine that a waste need not be defined as "hazardous" where restrictions are placed on management so that no improper management could occur that might threaten human health or the environment. This is a straight-forward way of approaching the problem and can be applied to the broad spectrum of remediation wastes, rather than just to media. It is a concept that EPA developed in the context of a previous rulemaking,<sup>4</sup> and seems particularly appropriate for application in the context of remediation wastes because of, as EPA has stated, the significant level of oversight generally given to cleanup actions (p. 18833, col. 3).

- c. It would provide the same flexibility to account for site-specific conditions and management for all remediation wastes, rather than just media (as defined in proposed §269.3).
- d. It would avoid situations where differing regulatory programs apply to similar wastes at one remediation site. For example, as EPA noted in the preamble, under the proposed HWIR-media rule, "base" Subtitle C regulations would apply to non-media (including debris and sludges), modified Subtitle C regulations would apply to media with constituent concentrations above the "Bright Line," and site-specific requirements would apply to media with constituent concentrations below the "Bright Line" (p. 18834, col. 1). Hence, if a former landfill site was being cleaned up, contaminated tree stumps, rocks and rubble (which might be mixed with significant amounts of contaminated soils) would be subject to Subtitle C regulations, while the soils could exhibit hazardous constituent concentrations either above or below the "Bright

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<sup>2</sup> Although media could be removed from Subtitle C regulation under the proposed approach for all other purposes, it would remain subject to LDRs if the waste contaminating the media was prohibited from land disposal at the time it was placed; or if wastes disposed prior to the effective date of an applicable prohibition are removed from the land and placed into a land disposal unit after the applicable LDR effective date (see pp. 18804, col.3 -18805, cols. 1 & 2).

<sup>3</sup> EPA stated in the preamble to the debris rule that "debris which no longer 'contains' listed hazardous waste would no longer be subject to subtitle C regulation, provided that it does not exhibit any hazardous waste characteristic. This involves a case-by-case determination by EPA, made upon request, that debris does not contain hazardous waste at significant levels, taking into consideration such factors as site hydrogeology and potential exposure pathways, but excluding management practices." [57 FR 37194, 37226 (08/18/92)]

<sup>4</sup> See HWIR-waste proposed rule [60 FR 66344-66469 (12/21/95)]

Line” and, hence, require management: (1) as high-risk hazardous media subject to full Subtitle C requirements, but eligible for alternative LDR treatment standards for soils; (2) as low-risk hazardous media subject to LDR treatment standards and requirements of a RMP, but eligible for alternative LDR treatment standards for soils; (3) as low-risk hazardous media subject to LDR requirements and requirements of a RMP, but treated according to a site-specific media treatment variance; (4) as low-risk nonhazardous media (i.e., that has been determined to no longer contain hazardous waste) subject to LDR treatment standards and requirements of a RMP, but eligible for alternative LDR treatment standards for soils; (5) as low-risk nonhazardous media subject to requirements of a RMP and treated according to a site-specific media treatment variance; (6) as low-risk nonhazardous media subject to requirements of a RMP, but not subject to LDR treatment standards; or (7) as low-risk media exempt from Subtitle C under the HWIR-waste rule, but subject to State nonhazardous solid waste regulations. In contrast, under the alternative approach being suggested by DOE, each remediation site would have a RMP defining the management and disposal standards applicable to all of its remediation wastes. While guidance would be available recommending management and disposal standards for wastes containing hazardous constituent concentrations above a specified “bright line,” flexibility would exist, and there would be no predetermined mandates.

- e. It would provide a national guideline (in the form of guidance) that States could use as a starting point for regulating contaminated remediation wastes in a manner protective of human health and the environment. This should promote some consistency of regulation among remediation sites, while retaining flexibility. DOE believes that it is important for EPA to provide national guidelines for distinguishing between low- and high-risk remediation wastes because without such criteria, too much site-specific discretion can result in inconsistent cleanups, or stagnation of cleanups caused by reluctance on the part of States to make difficult decisions (such as when not to apply Subtitle C standards to remediation wastes). Also, DOE is concerned that without guidance, some states may be overly conservative and establish significantly more stringent criteria for making contained-in determinations than EPA's proposed Bright Line concentrations,<sup>5</sup> or continue to rely on more stringent criteria which certain States have already developed. For this reason, DOE suggests that guidance be provided by EPA not only on “bright line” concentrations and methodologies for deriving them, but also on criteria for States to apply in deciding when it might be appropriate for constituent concentrations (for making contained-in determinations) to be set at levels more stringent than the “bright line” concentrations offered as guidance. Finally, the regulated community needs to have some expectations as to how certain categories of contaminated media will be managed. However, DOE suggests establishing “bright line” concentrations as guidance rather than regulations, because if they are promulgated as proposed, States would not have the flexibility to establish criteria for making decisions that media no longer contain hazardous waste when constituent concentrations are above the proposed Bright Line concentrations.

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<sup>5</sup> Note: As stated in the preamble (see p. 18795, col. 3), EPA believes it would generally be acceptable to make a decision that media do not contain hazardous waste at the Bright Line concentrations specified in the proposed rule.

- f. It is very similar to the Unitary Approach, which has broad acceptance within the regulated community and the States. At EPA’s public meeting on the HWIR-media rule, all industry representatives and the representative from the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) supported the Unitary Approach and the concept of conditional exclusions.
- 3. DOE advocates a final rule that would apply to all remediation wastes (as opposed solely to contaminated media).

DOE advocates a final rule that would apply to all remediation wastes (as opposed solely to contaminated media) because:

- a. As EPA points out, under the proposed HWIR-media rule, remediation wastes would be subject to differing management standards depending on how they are defined: non-media that is not debris, debris, or contaminated media (p. 18789, col. 3). Hence, it could be necessary to segregate remediation wastes in order to ensure compliant management of the various components. DOE believes such a system would unnecessarily complicate cleanups and add to their cost. In some cases, it may not even be possible to segregate remediation wastes. Under such circumstances, if segregation is required in order to access the HWIR-Media rule, it may prevent the rule from being implemented.
- b. From a practical perspective, the emphasis of cleanup actions should be on ensuring that remediation waste is managed in a manner that is protective of human health and the environment. Whether or not the remediation waste consists of debris or non-media waste is immaterial from this standpoint. In many instances, debris and non-media waste (e.g., buried drums) are commingled with hazardous contaminated media. The notion that such wastes should somehow be separated and subjected to different management standards is in direct conflict with the goal of creating a flexible and common-sense regulatory framework for moving forward with the cleanup of contaminated sites.
- c. If non-media wastes that have “as-generated” characteristics are identifiable at a remediation site, they can be earmarked for regulation under RCRA Subtitle C in the site-specific remedial action plan or RMP.
- d. Addressing all types of remediation wastes in one set of regulations will be easier for regulators and the regulated community to understand and properly implement.
- e. Excluding non-media remediation wastes from the scope of the proposed rule will not only create confusion in managing cleanups, but would discourage voluntary cleanups because, if some wastes are covered but others are not, the rule would not remove the disincentives that EPA acknowledges throughout the preamble as being the target of the proposed rule.
- f. In its discussion of the purpose and applicability of the proposed rule, EPA states that, “It is the Agency’s belief that the Government agency overseeing a particular remedial action is generally best suited to make decisions concerning the management of the contaminated media from that site” (p. 18791, col. 1). That reasoning should also apply to contaminated non-media

wastes. The significance of site conditions and hazardous contaminant levels would be best determined by the local regulator. By requiring other remediation wastes (such as debris and sludges) to be regulated under separate management standards, it would unnecessarily tie the hands of the local regulators, since the hazardous constituents contaminating the debris and sludge would be similar to those contaminating the surrounding soils. If the Government agency overseeing a remedial action is best suited to make decisions on media wastes, they should also be the best suited to make decisions in regards to non-media wastes.

- g. The preamble explains that certain parties involved in the FACA Committee process stated that non-media remediation wastes (e.g., drummed wastes and sludges) are physically and chemically similar to as-generated hazardous waste (p. 18790, col. 1). This may have been true at the time the drummed wastes, sludge or debris were placed on the land, but it does not account for the fact that over time, these wastes and their containers often deteriorate and become more closely related to soils than to as-generated wastes.
  - h. Since an approved RMP can cover all remediation wastes at a cleanup site, it is counterintuitive to artificially separate wastes into different waste types, when it is likely for instance, that a hazardous debris commingled with a hazardous soil would need to be treated using the same technology.
4. DOE encourages EPA to champion implementation of currently authorized State RCRA corrective action programs, as well as the future HWIR-media rule, in a manner consistent with EPA's stated policy objective [p. 18786, col. 1] of removing obstacles to expeditious cleanups.

DOE is concerned that some States with authorized RCRA corrective action programs are not utilizing or implementing such programs in ways that would remove obstacles to expeditious cleanups. DOE is further concerned that these States may take a similar approach to implementing the HWIR-media rule, which could frustrate EPA's policy objective. For example, DOE is concerned that a State may seek and receive authorization for the HWIR-media rule, including the provisions for remediation piles, and subsequently resist approving remediation piles, [as well as temporary units (TUs)] or other provisions intended to meet EPA's policy objectives for the HWIR-media rule. The result would be that an owner/operator's only option for managing remediation wastes would be to place such wastes into containers, tanks, and containment buildings, and comply with 90-day limit on unpermitted storage by the generator of hazardous waste (in accordance with 40 CFR 262.34), or seek a RCRA storage permit. For this reason, DOE encourages EPA to strongly advocate that authorized States implement RCRA corrective action programs and the proposed HWIR-media rule in a manner that will remove obstacles to expeditious cleanups.

Another example of possible action by a State that would foster rather than remove obstacles to expeditious cleanups involves the elimination of the CAMU rule. Because such elimination would be more stringent than the existing federal hazardous waste regulations, EPA has announced that States would be required to modify their authorized programs to incorporate the change. However, because the HWIR-media rule is otherwise less stringent, authorized States would not be required to modify their programs to include its other provisions. [See p. 18827, col. 3] Also, EPA would not implement the HWIR-media rule in authorized States. Therefore, it is possible that EPA's objective of removing

obstacles to expeditious cleanups through promulgation of the HWIR-media rule could be thwarted in an authorized State that eliminated the CAMU rule, but opted not to embrace the HWIR-media rule. Therefore, DOE again encourages EPA to be a strong advocate for incorporation of the HWIR-media rule into authorized State programs, as well as for implementation in a manner that will remove remediation obstacles.



## SPECIFIC COMMENTS

### II. Background

#### II.B Relationship to Previous Regulatory Initiatives

##### II.B.1 Proposed Subpart S Corrective Action Regulations

1. p. 18782, col. 3 and p. 18783, col. 1 -- EPA mentions that, in July 1990, EPA proposed comprehensive regulations (40 CFR Part 264, Subpart S) to address the substantive and procedural requirements for implementing corrective action at RCRA facilities. Also mentioned, is the fact that an advance notice of proposed rulemaking (ANPRM) would be issued that would describe the relationship of the HWIR-media rule to a contemplated revised version of the 1990 proposed Subpart S rule.

DOE notes that while the preamble to the proposed HWIR-media rule acknowledges that an ANPRM would be issued concerning a revised proposal of 40 CFR Part 264, Subpart S, little discussion is provided about the relationship of the two proposals. Similarly, the Subpart S ANPRM [61 FR 19432 (May 1, 1996)] provides little insight into how the two proposals would interact. Therefore, DOE requests that EPA provide a more detailed discussion on this subject. Issues that should be discussed include:

- How will RMPs be addressed with voluntary cleanups?
- How will action levels, media cleanup standards, and "hot spot" determinations correlate with the Bright Line?
- At what stage of the RCRA corrective action process (RCRA Facility Assessment, RCRA Facility Investigation, interim actions) will the HWIR-media activities (developing the RMP, identifying treatment, establishing Bright Line numbers for constituents not addressed in Appendix A to Part 269) be conducted?
- How will the Bright Line incorporate site-specific risk assessments and ecological risk factors?
- How will future land use designations impact the Bright Line?
- How should RMPs reflect performance base permit modifications?

### III. EPA's Policy Objectives for the HWIR-Media Rule

1. p. 18785, col. 3 and 18786, col. 1 -- EPA states that the prescriptive standards of current prevention-oriented regulations under RCRA can create disincentives for environmental cleanups. Therefore, one of the policy objectives of the proposed HWIR-media rule is to modify existing RCRA Subtitle C requirements to create a more flexible and common-sense regulatory system for management of contaminated media.

DOE believes that in certain instances the proposed HWIR-media rule provisions may act to hinder, rather than further, the above-stated policy objective. In particular, it is unclear whether the proposed regulations would act to notably lessen the disincentives to cleanup or provide significant relief from LDR treatment standards for excavated media. DOE is mindful that EPA is proposing alternative LDR treatment standards for contaminated media that are intended to reduce the burden of compliance with LDRs. Nevertheless, DOE believes the continued applicability of LDR treatment standards to remediation wastes will be a disincentive to cleanups involving excavation and treatment. Two examples are provided below.

- a. EPA explains in the preamble that LDR treatment standards will attach to certain media unless a determination is made that the media no longer contain hazardous waste (i.e., a contained-in determination is made) prior to removal of the media from the land [p. 18805, col. 1]. EPA proposes, however, to prohibit media exhibiting concentrations of contaminants in excess of proposed Bright Line values from being eligible for contained-in determinations. Further, the proposed rule gives responsible States and EPA Regions discretion to set contaminant levels defining whether media no longer contain hazardous waste at values lower than such Bright Line values.

The HWIR-media preamble does not discuss the relationship between acceptable levels for making contained-in determinations and site-specific media cleanup standards. In fact, EPA emphasizes that the Bright Line values identified in the proposal (which the Agency views as generally acceptable levels for determining that media no longer contain hazardous waste [p. 18795, col. 3]) are not designed as cleanup levels [p. 18789, col. 2]. DOE notes, however, that it would be difficult for a responsible regulatory agency to explain why media that exceed site-specific cleanup levels could be said to no longer contain hazardous waste. Therefore, DOE believes that the values for making contained-in determinations will most often be set equal to site-specific media cleanup levels. This being the case, very small volumes of media are likely to qualify for exemption from LDR treatment standards as a result of contained-in determinations made prior to excavation. Hence, it appears that most excavated media at remediation sites will be required not only to meet site-specific media cleanup standards, but also to comply with LDR treatment requirements (or obtain a treatment variance) before being returned to the land. Further, unless a “minimize threat” determination is made pursuant to RCRA §3004(m) regarding the treatment applied, treated media (or media subject to a variance) will presumably be required to be managed in a land disposal facility that meets 40 CFR Part 264 minimum technological requirements (MTRs) [ see Specific Comment V.D, item 2]. In such situations, DOE submits that because of the applicability of the LDR treatment requirements, a significant disincentive to remedies involving excavation remains. The Department is mindful that EPA has proposed alternative LDR treatment standards for contaminated media that are intended to reduce the burden of compliance in such circumstances. Notwithstanding, it seems possible that the proposed alternative standards for hazardous soils (i.e., 90% concentration reduction capped by 10 times the Universal Treatment Standards) could be lower than the site-specific (risk-based) media cleanup standards. As a result, even the proposed alternative LDR treatment standards may not provide any notable relief to remove the disincentive created by LDR applicability itself.

To address these concerns (i.e., if EPA decides not to adopt a final HWIR-media rule based on an approach that would exempt remediation-generated media from RCRA Subtitle C regulation, including LDR requirements), DOE suggests the following as a possible way to address LDR requirements so as to provide sufficient relief to remove the disincentive to excavation remedies created by LDR applicability. LDR treatment standards for media could be capped at each site by the site-specific cleanup standards. Also, the site-specific cleanup levels could be mandated as the site-specific “minimize threat” levels, as well as the levels at which media should be determined to no longer contain hazardous waste. In this way, one uniform set of standards would apply at each site, and once the site-specific media cleanup standards were met, treated media could be returned to the land without being managed in units requiring compliance with MTRs.

- b. If a company undertakes an action to remove the immediate threats to the environment by removing the source of contamination material (i.e., performs an interim action), it appears that “removal from the land” may occur in such an action, thus triggering the LDR requirements for anything removed from the land (including wastes placed into a remediation pile). Since interim actions are not designed as final remedies, and often remove drums, sludges, etc. while proposing to leave potentially contaminated soil in place for later cleanup, it seems overly restrictive to trigger LDR requirements for any contaminated media removed from the land on an interim basis. For instance, just to dig drums out of a unit, soils need to be removed and stockpiled (i.e., placed into a remediation pile) to reach the drums. It appears from the way the proposed regulations are structured, this would be done with Agency oversight, in most instances, and thus would/could use the RMP to facilitate the action. However, it doesn’t appear that there is sufficient flexibility built into the proposed 40 CFR 269.30 to allow such soils to be replaced on an interim basis without meeting LDR standards in these types of actions (unless the excavated area associated with the interim action can itself be designated a remediation pile).

To remedy this situation, several alternatives exist:

- (1) Modify the wording of proposed 40 CFR 264.554 (Remediation piles) to specifically provide that an area where media have been excavated for the purpose of completing an interim action could be designated as a remediation pile into which only those media excavated during the interim action could be replaced. Such a remediation pile would be required to be managed in accordance with the provisions of a RMP approved under the provisions of 40 CFR 269, Subpart D (Remediation Management Plans) until a final remedy addressing the area has been completed.
- (2) Modify the wording of proposed 40 CFR 269.30 to indicate that the LDR treatment standards apply to final remedies but not to interim remedies or interim actions. This is DOE’s preferred alternative.
- (3) Modify proposed 40 CFR 269.31 to allow/strongly suggest that a media treatment variance is appropriate for interim remedies and interim actions.

2. p. 18786, col. 2 -- EPA states as its final policy objective that “the regulations should be easy to understand.”

DOE observes that after EPA states its policy objective that the regulations should be easy to understand, the next section of the preamble (i.e., section IV.A, p. 18786, col. 3) presents a somewhat confusing discussion of the applicability of the LDR program to both hazardous and non-hazardous contaminated media. DOE suggests that a graphic diagram be provided to visually show the decision tree for determining the correct application of the LDR requirements to particular categories of contaminated media. This would assist the regulated community in better understanding of the LDR applicability and issues when attempting to determine the compliant path forward.

V. Section-by-Section Analysis

V.A. General Provisions

V.A.1 General Scope of Today’s Proposal - §269.1

1. p. 18789, cols. 2&3 -- EPA indicates that proposed §269.1(e) specifies that “these rules would not be self-implementing.” Instead, the provisions of Part 269 would only be implemented with oversight by EPA or an authorized State, by an approved Remediation Management Plan (RMP) or analogous document.

DOE requests clarification in regards to how the proposed rule would be applied to interim status facilities undergoing partial closure, and facilities undergoing certain decommissioning activities. It appears that interim status facilities may not be able to access the HWIR-media provisions during partial RCRA closure activities since closure plans in place for interim status units are not required to be submitted to the responsible regulatory agency for approval until final closure of the entire facility. Additionally, certain decommissioning activities, which do not involve solid waste management units (SWMUs), or RCRA permitted or interim status units [and which are not being conducted under CERCLA authority], may be undertaken by DOE without regulator oversight of the type seemingly contemplated by the proposed rule. Therefore, it appears that hazardous media and debris generated by such activities could not take advantage of the provisions of 40 CFR Part 269 as it is proposed. Further definition from EPA regarding the availability of the proposed HWIR-media rule to media wastes generated in these two specific situations would be helpful.

V.A.2 Purpose/Applicability - §269.2

1. p. 18789, col. 3 - EPA states that it is proposing to promulgate RCRA requirements for management of hazardous contaminated media as a new Part 269 (of Title 40 of the Code of Federal Regulations) in order to help make the requirements clearer and easier to understand.

DOE agrees that establishing a separate set of regulations for contaminated media, or preferably for all remediation wastes, in a new Part (i.e., Part 269) is a much better approach than making a series of amendments and modifications to existing RCRA Subtitle C regulations. Having the pertinent

regulations located together makes identification of applicable requirements easier for the regulated community, and thus will serve to promote proper implementation and compliance.

2. p. 18789, col. 3 and p. 18790, col. 2 - EPA proposes that Part 269 (except Subpart D) apply only to hazardous contaminated media, not to all cleanup wastes.
  - a. For the reasons stated in General Comment 3, DOE encourages EPA to expand the scope of the final rule to include all remediation wastes. By not doing so, the Department believes EPA will create an unnecessarily complex regulatory system that deals with similar wastes very differently and inconsistently.
  - b. DOE also requests that EPA clarify that the scope of the final HWIR-media rule includes “old wastes” (i.e., stored investigation and remediation wastes that were generated during past remedial investigations or activities). Actions for addressing such wastes may be subject to existing permit modifications, which could be rolled into a RMP (along with associated milestones) so that the risk based priorities can be realized.
3. p. 18790, col. 3 - EPA explains that individual members of the FACA Committee as well as several other stakeholders have contended that the scope of the proposed HWIR-media rule should include debris and should allow it to be addressed under the same modified regulatory scheme as for media. The Agency states that if persuasive comments are received, it will consider including hazardous debris within the scope of the final rule.

General Comment 3 indicates DOE’s support for expanding the scope of the final HWIR-media rule to encompass all remediation wastes, including debris. If EPA decides against an approach that would cover all remediation wastes, DOE suggests that the final rule’s scope be expanded to at least include debris. Most of the reasons offered by General Comment 3 for developing a rule that would encompass all remediation wastes also apply to this suggestion. Additional reasons specific to the recommendation that the HWIR-media rule should be expanded to include debris are:

- a. Under the proposed definitions of media (p. 18792, col. 3) and soil (p. 18794, col. 2), similar language is incorporated relative to mixtures -- "a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of [media/soil]." Merging debris into the final HWIR-media regulatory system would appear to facilitate, and be more consistent with, EPA's intent to "eliminate requirements for chemical analysis of soil to differentiate between waste, soil and debris" (p. 18794, col. 3). Maintaining debris as a distinct, separately regulated material, creates pressure to conduct the types of chemical analyses and testing which the Agency recognizes would be difficult to administer, and appears interested in avoiding.
- b. During remedial activities, debris and media are typically inextricably mixed, and in most cases are contaminated by the same hazardous constituent(s). Therefore, it generally makes sense to deal with both the media and debris as a whole, at the same time, under the same regulatory framework, thereby avoiding confusion over regulatory compliance during the actual field efforts.

4. p. 18790, col. 3, - EPA requests comment on the management standards or combinations of management standards that should be imposed if debris is included within the scope of the final HWIR-media rule.

It is unclear to DOE whether the Superfund Soil Screening Levels used by EPA to set proposed Bright Line concentrations for soil would also be appropriate for setting Bright Line concentrations for debris. If they are, or if no other more appropriate methodology exists, DOE would support setting bright line constituent concentrations for debris that are the same as those for soils.

DOE recognizes that testing of debris for constituent concentrations is often difficult. However, if practicable, the debris should be tested to determine whether its hazardous constituent concentrations fall above or below the bright line. If testing is not practicable, an attempt should be made (if supported by site-specific circumstances), to estimate constituent concentrations in debris based on the constituent concentrations in soils or other media commingled with the debris. This approach is suggested because it seems logical that, in many situations, if the media surrounding the debris does not contain hazardous waste, then neither should the debris. However, if contaminated debris can neither be tested nor its hazardous constituent concentrations be estimated based on concentrations in the surrounding soils, it should be managed as hazardous waste.

Regarding LDR treatment standards, DOE would support allowing the responsible regulatory agency to (1) impose the generic debris treatment technologies codified in the debris rule, (2) if appropriate, specify the alternative soils treatment standard as proposed in 40 CFR 269.30 (p. 188852, cols. 1 & 2), or (3) specify site-specific LDR treatment standards. Another possibility, of course, would involve a determination either before or after treatment that the commingled soils and debris no longer contain hazardous waste. In any event, the applicable treatment standards, or the levels that must be achieved to attain a determination that the waste no longer contains hazardous waste should be specified in the RMP. The unique nature of remediation wastes justifies allowing as much flexibility in the standards applicable to such wastes as is possible, while protecting human health and the environment.

5. p. 18791, col. 1 - EPA requests that commenters address the distinctions, if any which should be made between naturally occurring debris (e.g., gravel, tree roots) and man-made debris (e.g., crushed drums, sorbants).

DOE suggests that the final HWIR-media rule scope include both “naturally occurring” (e.g., tree stumps, rocks) and man-made (e.g., drums, sorbants) debris, without distinction. DOE believes the HWIR-media rule should be based on the hazardous contaminants in remediation wastes rather than on the material to which contaminants are attached. If either man-made or naturally occurring debris contain contaminants in concentrations that resemble as-generated wastes, the RMP should require management (i.e., storage, treatment, shipment and disposal) consistent with RCRA Subtitle C requirements.

#### V.A.3 Definitions - §269.3

1. Bright Line Constituent

- a. p. 18791, col. 3 and 18792, col. 2 - EPA proposes to define Bright Line Constituent as:

... any constituent found in media that is listed in Appendix A of this Part, and which is: (1) The basis for listing of a hazardous waste (as specified in Appendix VII of 40 CFR Part 261) found in that media; or (2) a constituent which causes the media to exhibit a hazardous characteristic.

- (1) Whether EPA decides to promulgate Bright Line concentrations, or provide guidance that incorporates “bright line” concentrations as suggested in General Comment 2, DOE supports the definition of “Bright Line Constituent” as proposed. The Department agrees with EPA’s reasoning that “the use of the same constituents that have caused the wastes in the media to be regulated as hazardous form a sound basis for deciding whether those same media should be eligible to be ‘deregulated.’” (p. 18792, col. 1). Since media and debris become subject to hazardous waste management requirements only because, under the contained-in policy, they contain hazardous waste, it makes sense that to determine the relative risk of such contaminated materials (i.e., whether the contaminant concentrations fall above or below the Bright Line) should depend on the constituents of concern in the contaminating hazardous waste.
- (2) DOE notes that proposed 40 CFR Part 269, Appendices A-1 (p. 18858) and A-2 (p. 18862), list Bright Line numbers for polychlorinated biphenyls (PCBs). However, it is unclear why PCBs would be included on the lists of Bright Line numbers since PCBs are not listed in 40 CFR Part 261, Appendix VII, as the basis for listing of any hazardous waste. Also, PCBs are not themselves listed hazardous wastes, and they are not one of the constituents that must be evaluated when determining whether a waste exhibits the toxicity characteristic (TC). Therefore, DOE requests that EPA clarify the inclusion of PCBs as a Bright Line constituent.
- (3) If EPA determines that PCBs should remain on the lists of Bright Line numbers, DOE recommends that the concentrations included be consistent with current and proposed regulations under the Toxic Substances Control Act (TSCA). The Bright Line threshold of 1,000 ppm PCBs conflicts with the TSCA threshold of 50 ppm. Use of 1,000 ppm as the Bright Line number may inadvertently lead members of the regulated community to believe that there are no regulatory storage and disposal requirements for media contaminated with PCBs at greater than 50 ppm, but less than 1,000 ppm, when in fact, TSCA imposes significant requirements upon such wastes. The EPA TSCA program proposed a major revision of the PCB use, storage, and disposal regulations in December 1994 [59 FR 62788 (Dec. 6, 1994)]. In the preamble to that proposal, EPA discussed its goal of integrating and streamlining the requirements of TSCA, CERCLA and RCRA with respect to requirements for remediation wastes. DOE is concerned that the proposed HWIR-media rule does not reflect such integration.
- (4) DOE requests that EPA confirm that degradation products of listed hazardous wastes would not be Bright Line constituents in media under the proposed definition unless they cause the media to exhibit a hazardous characteristic. Many of the chemicals listed by 40 CFR Part 261, Appendix VII undergo chemical and biochemical degradation while in the soil and groundwater. For example, many of the chlorinated solvents in F001 and F002 will react anaerobically to form vinyl chloride. Vinyl chloride is not a constituent of F001 or F002

solvents. However, it is a TC constituent (D043). Therefore, DOE believes that under such circumstances, vinyl chloride would not be a Bright Line constituent unless the contaminated media exhibited the toxicity characteristic for vinyl chloride.

- (5) DOE also requests that EPA confirm in the final HWIR-media rule preamble that constituents that are listed in Appendix A to Part 269 and are present in media do not constitute Bright Line Constituents if they do not cause the media to exhibit a hazardous characteristic, and are either of unknown origin, or are known to not originate from a listed hazardous waste.
- b. p. 18792, col. 2 - EPA explains that in cases where constituents are present in media but are not among those listed with concentration values in Appendix A to Part 269, the Director would have the discretion (but not the obligation) to specify site-specific or State-wide Bright Line concentrations.

DOE observes that in situations such as EPA describes, where constituents are present in media, but no Bright Line concentration has been listed in Appendix A, and the responsible regulatory agency has discretion to set site-specific concentrations, the owner/operator of a media remediation site is likely to be asked to assist in deriving the supplemental Bright Line concentrations. To support the process developing these values, DOE urges EPA to issue timely guidance which specifies acceptable computer modeling methodologies and assumptions for performing such a task. This should streamline the process of reaching agreement on appropriate, site-specific supplemental Bright Line numbers.

## 2. Media

- a. p. 18792, col. 3 - EPA proposes to define media as:

... materials found in the natural environment such as soil, ground water, surface water, and sediments; or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of media. This definition does not include debris (as defined in [40 CFR] §268.2).

DOE suggests that EPA clarify in the final rule that the definition of “media” includes investigation-derived media (media generated as a result of investigation, characterization and monitoring activities), such as soil borings, drill muds and monitoring well purge water. Most drill muds are a mixture of soils and groundwater, or a mixture of such materials with liquids, sludges or solids which are inseparable by simple mechanical removal process and is made up primarily of media. Similarly, soil borings consist largely of soils. The quantities of drill muds and soil borings associated with investigative characterization and remediation can be quite large. If wells are drilled, purged and developed in groundwater that contain listed wastes, these drill muds, as well as the purge water, must be managed as listed hazardous waste under existing regulations. DOE believes that since there is no identifiable difference between investigation-derived contaminated media and contaminated media generated during remedial activities, the investigation-derived contaminated media should also be covered by the HWIR-media.



3. Media Remediation Site

- a. p. 18792, col. 3 and p. 18793, col. 3 - EPA proposes to define media remediation site as:

... an area contaminated with hazardous waste that is subject to cleanup under State or Federal authority, and areas that are in close proximity to the contaminated area at which remediation wastes are being managed or will be managed pursuant to State or Federal cleanup authorities (such as RCRA corrective action or CERCLA). A media remediation site is not a facility for the purpose of implementing corrective action under §264.101, but may be subject to such corrective action requirements if the site is located within such a facility (as defined in § 260.10).

EPA indicates that it considered the option of allowing certain off-site areas to be considered media remediation sites, such as sites dedicated to managing only remediation wastes, and sites where only remediation wastes from a specific cleanup site were managed. However, the Agency concluded that, while such an approach might be more streamlined with respect to approvals, it could be more complicated to administer. Comments are requested.

- (1) DOE supports the media remediation site concept. The Department believes it is important to establish clear aerial boundaries within which relief from Subtitle C hazardous waste management and permitting requirements is available. However, this definition is unclear about the meaning of "areas that are in close proximity to the contaminated area."

In previous Departmental comments on the 1992 proposed HWIR,<sup>6</sup> DOE recommended an approach that would allow an owner/operator to consolidate remediation wastes from multiple remediation sites into one large management/disposal facility when the remediation sites and the management/disposal facility are all within the boundaries of property controlled by the owner/operator. For example, DOE postulated that it might want to build some centralized waste disposal facilities to handle wastes from remediation activities on the Oak Ridge Reservation. DOE suggested that such centralized units should be allowed to accept wastes from any or all remediation sites with EPA identification numbers on the Oak Ridge Reservation (e.g., Oak Ridge National Laboratory (ORNL), K-25, Y-12, or ORNL's Walker Branch Watershed).

DOE continues to believe that centralized remediation waste treatment and disposal at large DOE sites could be needed for economic and radiation protection reasons. With these reasons in mind, the Department urges EPA to define media remediation site broadly enough to encompass areas such as those described above, even if this necessarily includes the entire facility boundary; or at least to allow the use of an area that may be nearby, but not necessarily in the immediate proximity. There are locations, for example, especially in older developed

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<sup>6</sup> DOE Comments, Hazardous Waste Management System: Identification and Listing of Hazardous Waste, "Contingent Management of Contaminated Media," p. 7 (07/24/92).

facilities, where space is limited and the remediation site needs to be expanded to a location that is removed from general employee access. The actual dimensions of the media remediation site would, of course, be established on a case-by-case basis in the RMP (taking into account site-specific factors such as the location and proximity to public and/or environmental receptors). It appears, however, that the definition currently proposed would not allow responsible regulators to include areas such as those described above because the preamble explains that the proposed definition would limit the media remediation site to "the area that is contaminated and subject to cleanup, and adjacent areas that are used for managing remediation wastes as part of cleanup activities" (p. 18793, col. 2). Hence, DOE urges EPA to clarify in the final definition that centralized waste treatment, storage and disposal facilities at large reservations containing multiple contaminated areas, or within a specified radius of multiple contaminated areas, can be designated as part of a media remediation site (so long as those facilities are protective of human health and the environment).

DOE does not believe that the expansion of the media remediation site concept suggested in the preceding paragraphs would, in most cases, result in additional administrative difficulties, since the new areas covered by the definition would be within the boundaries of a single industrial facility or government-owned reservation.

- (2) While DOE supports the media remediation site concept, the Department requests that EPA consider whether, instead of creating another term of art (within the remedial action context) to describe the boundaries within which certain activities can be conducted at a remediation site, it would be possible to incorporate this concept into an existing definition. One possibility might be the definition of "on-site" from the Comprehensive Environmental Response, Compensation and Liability Act.
- (3) DOE suggests that regulatory language be added, either within the definition, or elsewhere, to indicate how (i.e., in what document) and by whom an area would become designated as a media remediation site, and whether media remediation sites must be deed recorded if waste is disposed of within them.

#### 4. Non-hazardous Contaminated Media

- a. p. 18794, col. 1 - EPA proposes to define non-hazardous contaminated media as:

... media that are managed as part of cleanup activities and that the Director has determined do not contain hazardous wastes (according to § 269.4), but absent such a determination would have been hazardous contaminated media.

DOE suggests that EPA consider developing a different phrase than "non-hazardous contaminated media" for referring to media that have been determined not to contain hazardous wastes, especially if EPA retains its proposed approach of allowing contained-in determinations to be made based on media management practices. The Department believes the phrase "non-hazardous contaminated media" implies on its face that it refers to media that either never met the definition of hazardous waste (i.e., never was subject to RCRA Subtitle C management requirements), or is excluded from the definition of

hazardous waste for all purposes. Therefore, it is misleading and confusing to use this phrase to refer to media in which hazardous wastes may still be present and that may revert to Subtitle C regulation upon a change of management practices.

5. Remediation Management Plan

- a. p. 18794, cols. 1 and 2 - EPA proposes to define Remediation Management Plan (RMP) as:

... the plan which describes specifically how hazardous and non-hazardous contaminated media will be managed in accordance with this Part [269]. Such a plan may also include, as allowed under Subpart D of this Part, requirements for other remediation wastes and any other (non-Part 269) requirements applicable to hazardous contaminated media.

EPA states that there could be several different kinds of RMPs. EPA believes that it would be unnecessarily burdensome to specify a fixed form of documentation for the RMP. Therefore, the RMP requirement can be met by any combination of provisions in enforceable documents containing the information required to be included in the RMP, if such documents have had at least the minimum public participation required by proposed §269.43.

DOE agrees that it should not be necessary to create entirely new provisions in a RMP if adequate provisions for accomplishing what would otherwise have been placed into the RMP already appear in other enforceable documents. However, DOE has several concerns about the implementation of the proposed requirements for RMPs, which are expressed in Specific Comment V.D.1, item 3, below.

6. Sediment

- a. p. 18794, col. 2 - EPA proposes a definition for sediment.

DOE does not object to the proposed definition of sediment. However, the Department questions whether, in the context of site remediations, it will always be possible to differentiate, or separate, sediment from soils. Further, in many situations, soil and sediment have similar properties and are treated in the same manner. DOE suggests that EPA consider incorporating sediment into the definition of soil, which would allow the soil bright line values to be applied to both, at least until information becomes available, through EPA's efforts to develop a national unified management strategy for sediment (see Specific Comment V.A.4.c, item 1), on which to base sediment bright line values.

7. Soil

- a. p. 18794, col. 2 - EPA proposes to define soil as:

... unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay,

silt, sand, or gravel size particles (sizes as classified by the U.S. Soil Conservation Service), or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes, and is made up primarily of soil.

The Agency specifically solicits comments on this proposed definition and the approach it implies for classifying mixtures of soil and other materials.

As indicated in the preamble, EPA previously proposed this same definition of soil as part of the Phase II LDR proposal (i.e., LDRs for Newly Identified and Listed Wastes and Hazardous Soil; 58 FR 48092, 48123). In general, DOE concurs with this definition of soil. The Department believes that its comment in response to the definition of soil when it was previously presented remains pertinent. DOE commented as follows:<sup>7</sup>

The Department supports this definition because, as EPA states, it would avoid requiring chemical analyses for soil properties in order to differentiate precisely between waste, soil and debris. This type of approach would minimize handling and exposure, and would avoid analytical delays which yield no value-added results. For the sake of better clarification and consistency with the hazardous debris rule, EPA should provide further guidance regarding mixtures of soil with other materials. DOE suggests that mixtures of materials should be classified as soil based on volume (i.e., where the soil portion comprises the largest amount of material present by volume), according to visual inspection. This method of classification would be consistent with the classification scheme specified for debris (August 18, 1992, Phase I LDR final rule, 57 FR 37224).

V.A.4 Identification of Media Not Subject to Regulation as Hazardous Waste - §269.4

V.A.4.a The Contained-in Principle in the HWIR-media Proposal

1. p. 18796, col. 2 -- EPA explains that contained-in decisions would be documented in the site's approved Remediation Management Plan (RMP). If an approved RMP expires or is terminated, cleanup activities previously completed in compliance with the RMP while it was in effect would continue to be considered to be in compliance. Activities completed after the RMP was terminated or expired, however, would have to be completed prospectively in compliance with non-Part 269, Subtitle C regulations.

DOE notes that the proposed language of 40 CFR 269.45, Expiration, termination, and revocation of RMPs, [p. 18854, col. 3] does not address the status of media covered by a RMP if the RMP is terminated, revoked or expires as outlined by the preamble discussion cited above. DOE recommends that regulatory language be added consistent with such preamble language. Additionally, regulatory language should be developed indicating the procedure for renewing RMPs. For example, if a renewal request is filed, and the responsible regulatory agency fails to act on the request prior to the RMP's

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<sup>7</sup> DOE Comments, Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soil, Specific Comment VII.B.4, item 1, pp. 6-7 (03/15/94).

expiration, will the RMP continue in effect until the agency acts? If so, is the continuation dependent on a timely filing of the renewal request? Also, within what time frame must the renewal request be submitted? Further, what is the status of a RMP (i.e., would a RMP be considered to be terminated) if it is composed of more than one pre-existing enforceable document and one of the parts expires, terminates or is revoked?

2. p. 18796, col. 2 -- Once the overseeing Agency has determined that media no longer contain hazardous waste (i.e., has made a “contained-in decision”), the media would no longer be regulated as hazardous wastes. Comments are requested on whether the final rule should make this exemption contingent upon the media being managed in compliance with the provisions of the RMP.

DOE agrees with EPA’s conclusion as stated in the preamble that reversion to RCRA Subtitle C (which would occur upon noncompliance with any provision of the RMP if the exemption for a “contained-in decision” were contingent on RMP compliance) would be an unduly harsh penalty for noncompliance with most provisions of a RMP. DOE suggests that reversion to regulation as hazardous waste should be the penalty only for egregious and persistent violations. Otherwise, since the RMP would be enforceable, more appropriate sanctions would be available (through the normal procedures associated with enforceable documents) to address less significant occurrences of noncompliance with provisions of a RMP.

3. p. 18796, col. 3 -- Under the proposed rule, specific factors would not be mandated relative to making contained-in decisions, but the Director would be allowed to base these decisions on appropriate site-specific factors. However, EPA requests comment on whether decision factors should be codified for making contained-in decisions. Comment is also requested on what decision factors, if the Agency decided to include them in the final rule, would ensure consistent decision-making, and yet keep the process efficient and flexible.
  - a. Consistent with previous DOE comments in response to several LDR-related proposals,<sup>8</sup> the Department supports codification of the contained-in principle for determining when certain contaminated media no longer contain hazardous waste. Also, as indicated in the Department’s response to the September 1993 LDR Phase II proposal (i.e., those portions related to hazardous soil standards and contained-in provisions),<sup>9</sup> DOE would recommend that EPA identify specific factors as guidelines for consideration in making contained-in determinations. DOE makes this recommendation because the Department contends that contained-in

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<sup>8</sup> DOE Comments, Proposed Rule regarding Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soil (58 FR 48092-48204), Specific Comment VII.B.3, item 1, p. 4 (03/15/94); DOE Comments, ANPRM regarding Potential Treatment Standards for Newly Identified and Listed Wastes and Contaminated Soil, Item IV.B, pp. 25-27 (12/09/91); DOE Comments, ANPRM regarding LDRs, Potential Treatment Standards for Newly Identified and Listed Waste and Contaminated Debris, Item IV.B. pp. 11-12 (06/28/91).

<sup>9</sup> DOE Comments, Proposed Rule regarding Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soils, Specific Comment VII.D, item 1, pp. 21-22 (03/15/94).

determinations should be predicated on the application of consistently applied criteria, regardless of jurisdictional boundaries. Hence, if the contained-in principle for contaminated media is codified, DOE encourages EPA to also codify explicit types of information and factors that should be considered by the State regulatory agencies and EPA Regional offices who will make contained-in determinations (i.e., in order to minimize inconsistencies among EPA Regions and State agencies relative to the review of contained-in petitions). Along with codification, DOE recommends that information and factors that should be considered in making contained-in determinations be thoroughly explained by EPA in guidance.

- b. DOE agrees with EPA's position (as indicated on p. 18796, col. 3) that a risk assessment should not be required as part of the contained-in analysis at every site. Instead, the effort expended on contained-in analyses for media should be commensurate with the potential threat to human health and the environment that would result if media were determined at a particular site to not contain hazardous waste. DOE agrees that this threat would depend on the types of information and factors listed by EPA, such as media properties, constituent properties, exposure potential, surface and subsurface properties, climatic conditions, and other site- or waste-specific properties and conditions that affect potential human or environmental exposure to constituents. However, as is explained by Specific Comment V.A.4.a, item 4, DOE does not support the inclusion of site-specific management controls and practices as part of the "exposure potential" factor.
- c. DOE recommends that EPA provide guidance concerning how certain information and factors would be interpreted, including guidance on the following:
  - (i) specific data that must be gathered and submitted to support a contained-in decision;
  - (ii) the level of quality assurance/quality control associated with data gathered and submitted to support a contained-in decision;
  - (iii) methods to be used for calculating whether media pose an unacceptable risk to human health and the environment;
  - (iv) information regarding waste characteristics that should be determined (e.g., persistence and potential to bioaccumulate); and
  - (v) methods to be used by the responsible agency to reach contained-in decisions.

Certain other topics that also may be appropriate for EPA to discuss in guidance related to the information and factors required to be considered in making contained-in determinations include (as outlined previously in DOE's response to the LDR Phase II proposed rule <sup>10</sup>):

- (i) identification of the source of the contamination if available and known;
- (ii) estimated volumes of media which will be affected by the contained-in determination; and
- (iii) any analytical data which are available (while avoiding requirements for extensive testing, at least for radioactive mixed waste, due to associated analytical difficulties (see Specific Comment V.D.2, item 2).

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<sup>10</sup> See Footnote 9 above.

- d. In responding to public comments on the proposed LDR standards for hazardous debris, EPA noted that decontaminated equipment fits the definition of debris and does not resemble intact containers. Based on this, EPA indicated that decontaminated equipment should be managed for purposes of land disposal in accordance with the LDR standards for hazardous debris. [Response to Comments on the January 9, 1992 Proposed Rulemaking (NPRM) for Contaminated Debris, p. E-10 (July 2, 1992)] Further, in the final rule setting LDR standards for hazardous debris, EPA stated that the Agency was setting (if possible) performance or design and operating requirements for each of the extraction and destruction technologies designated as BDAT for hazardous debris [57 FR 37194, 37228, col. 3 (Aug. 18, 1992)]. If a discarded pipe or pump had been used to manage hazardous waste, EPA mentioned that the performance standards would have to be met for the inside surfaces of the pipe or pump [57 FR 37194, 37229, col. 2 (Aug. 18, 1992)]. Once the performance or design and operating standard has been met by applying one of the designated extraction and destruction technologies to hazardous debris, the treated debris automatically meets the “minimize threat” treatment standard of RCRA §3004(m) and is no longer subject to RCRA Subtitle C hazardous waste regulations [57 FR 37194, 37239, col. 1 (Aug. 18, 1992)].

With respect to contained-in determinations for debris, in the same Federal Register notice that announced the final LDR standards, EPA indicated that, on a case-by-case basis at the request of the generator, the responsible regulatory agency is allowed to determine that debris no longer contain hazardous waste [57 FR 37194, 37226, col. 1 (Aug. 18, 1992)]. However, other than to say that such factors as site hydrogeology and potential exposure pathways (but not management practices) can be considered, EPA provided no guidance about how contained-in determinations should be made. Therefore, whether EPA decides to expand the scope and applicability of the final HWIR-media rule to include debris, or not, DOE encourages EPA to issue guidance regarding contained-in determinations for certain types of debris. Specifically, the Department recommends that “container-like” debris, such as piping, pumps, tanks, and similar debris, be considered to no longer contain hazardous waste following the administration of certain procedures to remove or rinse out any hazardous waste, similar to the RCRA provisions for declaring a container to be “empty.” For example, piping, pumps, fittings, etc., used to pump blow-down water from an off-gas system for a hazardous waste treatment process (i.e., a “derived-from” hazardous waste) to a wastewater treatment facility are currently classified as hazardous waste when removed from the system because they “contain” hazardous waste. However, it is highly unlikely that these system components will retain any harmful level of hazardous constituent after removal from the system. Because there is minimal risk of the presence of hazardous constituents remaining in components under these circumstances, it is recommended that, if a clean flush of the system is made to remove contaminants from the system prior to removal and replacement of such components, the components should be considered to no longer contain hazardous waste. Thus, upon removal from the system, they would not require storage, treatment, shipment, or disposal as hazardous waste.

Similarly, systems that pump listed wastes such as F039 or pure chemicals could be required to undergo a triple rinse prior to removal and replacement of system components such as piping, pumps, fittings, etc. Once the triple rinsing procedure is completed, it is recommended that the system components be considered to no longer contain hazardous waste.

4. p. 18796, col. 3 -18797, col. 1 --After listing several factors that the Agency believes contain the types of information that may be appropriate to consider in making contained-in decisions (one of which is “exposure potential”), EPA states that these suggested factors differ from those proposed in the LDR Phase II proposed rule for hazardous soil (58 FR 48092; Sept. 14, 1993) in one significant respect. That is, the Agency has determined that it may be appropriate, when assessing “exposure potential,” to consider site-specific management controls imposed by the Director that limit potential exposures of human or environmental receptors to media. This position is based upon EPA’s understanding that RCRA provides EPA and the States the discretion to determine that a waste need not be defined as “hazardous” where restrictions are placed on management such that no improper management could occur that might threaten human health or the environment.

DOE urges EPA to exclude site-specific management controls and practices from the criteria to be considered in making contained-in determinations [but supports consideration of these factors in evaluating whether media should be regulated under RCRA Subtitle C, as explained below]. Including management controls and practices as a decision factor would be confusing since it would be inconsistent with the regulated community's current understanding of the contained-in principle based on past Agency policy and as it is codified in the debris rule [57 FR 37194, 08/18/92]. Under the debris rule, contained-in determinations are made based on site-specific factors, which do not include management practices and controls.<sup>11</sup> This seems consistent with the intuitive meaning of determining that debris "no longer contains hazardous waste." Under the proposed HWIR-media rule, on the other hand, media could be determined to not contain hazardous wastes based on consideration of factors which include the effect of management controls and practices on exposure potential. DOE believes that the conflict this would create with the debris rule and with the current concept of the contained-in principle would be confusing.

Additionally, DOE notes that EPA’s legal theory supporting consideration of management controls and practices in determining whether media no longer contain hazardous waste (p. 18797, cols. 1, 2 and 3) appears to be the same legal theory used to justify the Unitary and Hybrid approaches to HWIR-media regulation which are discussed in section VI of the preamble. Therefore, it appears that the distinction EPA has drawn between the legal basis for the proposed approach (i.e., the contained-in principle) and the legal basis for the alternative approaches (i.e., the “conditional exclusion” theory) may not be clear if determinations that media do not contain hazardous waste can be based on considerations of management controls and practices. If EPA decides to include management controls and practices as a factor to consider when making contained-in determinations, DOE requests that EPA further clarify the distinction between the two legal theories.

By this comment, DOE does not wish to imply that it opposes consideration of site-specific management controls and practices in evaluating how contaminated media should be regulated at

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<sup>11</sup> EPA stated in the preamble to the debris rule that "debris which no longer 'contains' listed hazardous waste would no longer be subject to subtitle C regulation, provided that it does not exhibit any hazardous waste characteristic. This involves a case-by-case determination by EPA, made upon request, that debris does not contain hazardous waste at significant levels, taking into consideration such factors as site hydrogeology and potential exposure pathways, but excluding management practices." [57 FR 37194, 37225-37226 (08/18/92)]



remediation sites. On the contrary, as indicated in General Comment 2, DOE favors an overall regulatory approach for remediation wastes, including contaminated media, that would conditionally exclude such wastes from RCRA Subtitle C hazardous waste regulation, predicated on site-specific management controls and practices. What DOE opposes is extending the contained-in concept (i.e., determining whether a particular media no longer “contains” hazardous waste) to allow determinations to be based on management controls and practices (a factor which would not actually affect the hazardous constituent concentration in media).

V.A.4.b Issues associated with hazardous debris.

1. p. 18798, cols. 1 and 2 -- EPA explains that when the contained-in principle was codified for hazardous debris, it was the Agency's practice to make contained-in decisions at "health-based" levels, thus a decision that debris no longer contains hazardous waste would clearly constitute a “minimize threat” determination for purposes of RCRA §3004(m). Therefore, contained-in decisions for debris under 40 CFR 261.3(f)(2) also eliminate the duty to comply with the land disposal restriction requirements. EPA requests comments on whether the contained-in principle codified for hazardous debris is adequate or whether the contained-in policy should be applied to debris in the same way the proposed HWIR-Media rule would apply it to hazardous contaminated media.

DOE believes that contained-in determinations should be standardized for both media and debris, using the approach promulgated by the debris rule (see Specific Comment V.A.4.a, item 4). However, DOE also believes that debris should be included within the scope of the HWIR-media rule, along with other non-media remediation wastes (see General Comment 3), and allowed the opportunity for reduced regulation based on site-specific information and factors that justify “conditional exclusions” from RCRA hazardous waste requirements.

2. p. 18798, col. 2 -- EPA requests comment on whether contained-in decisions for debris should be based on determinations made for media co-located with the debris (i.e., if debris were located in the same area as media that was determined not to contain hazardous wastes, should the debris be presumed not to contain hazardous wastes?).

As was stated in Specific Comment V.A.2, items 3 and 4, during remedial activities, debris and media are typically inextricably mixed, and in most cases are contaminated by the same hazardous constituent(s). Therefore, it seems logical that, in many situations, if the media surrounding the debris does not contain hazardous waste, then neither should the debris. Based on this, DOE would support allowing presumptive contained-in determinations for debris that is co-located with media that has been determined to not contain hazardous waste. Since one of the more costly aspects of remedial actions is characterization (i.e., sampling and analysis) of wastes, substantial cost savings could result from such an approach.

V.A.4.c            The Bright Line

1.        p. 18799, col. 2 -- EPA explains that the proposed HWIR-media rule does not include Bright Line concentrations for contaminated sediments. The Agency proposes that site-specific contained-in decisions be made for hazardous contaminated sediment, but requests comments on whether it would be appropriate to use the Bright Line for soils as the Bright Line for sediments instead.

In 1994, the EPA Office of Water issued EPA's Contaminated Sediment Management Strategy, EPA/823/R-94/001 (Aug. 1994) as part of the federal initiative to "reinvent government." The Strategy indicated that it was EPA's intent to develop and promulgate standard sediment quality criteria for use in determining when RCRA corrective actions or CERCLA remedial activities should be required at a site. Apparently, EPA has not yet promulgated such criteria, but DOE encourages EPA, to the extent appropriate, to coordinate future development of sediment Bright Line concentrations with its development of sediment quality criteria. In the mean time, DOE believes the Bright Line concentrations for soil should also be used as bright line guidance for sediment ( see Specific Comment V.A.3, item 6.a). DOE believes this would be appropriate for the following reason. Remediation of contaminated sediments may involve removal of the sediments from the associated water body followed by treatment and disposal on uplands. In situ treatment or ex situ treatment and either replacement into the drained water body or placement on uplands followed by backfilling of the water body is also a possible remedy. In similar fashion, remediation may involve permanent drainage of a water body (e.g., impoundment) and subsequent management and disposal of permanently exposed sediments in uplands. In all such cases, the end state of sediments is, in effect, soil. With this in mind, it seems appropriate to establish the soil Bright Line values as applicable to sediments. At a minimum, the soil Bright Line levels should be applied where the RMP specifies that the sediments will be land disposed outside of a water body.

2.        p. 18799, col. 2 and p. 18800, col. 3 -- EPA states that in setting the Bright Line for soils, the Agency chose to use exposure scenarios and assumptions that were developed for the Superfund Soil Screening Levels (SSLs). These included residential land use assumptions and two human exposure scenarios: direct contact ingestion and inhalation. For each constituent, the Bright Line value was set using whichever human exposure scenario yielded the more conservative (i.e., lower) concentration. The Agency explains that since the purpose of using risk assessment to develop the Bright Line is to differentiate between the relative risks of constituents, and not to establish the risks posed at specific sites, either residential or industrial assumptions would have been equally appropriate, and evaluation of additional exposure pathways (e.g., drinking of contaminated groundwater and risks to ecological receptors) is not necessary.

DOE agrees with those stakeholders who voiced concerns about the residential land use assumptions which are inherent in the SSL exposure scenarios and assumptions (p. 18800, col. 3) used to calculate Bright Line values for the following reasons. As was mentioned in Specific Comment III, item 1.a, EPA explains in the preamble that LDR treatment standards will attach to certain media unless a determination is made that the media no longer contain hazardous waste (i.e., a contained-in determination is made) prior to removal of the media from the land [p. 18805, col. 1]. EPA proposes,

however, to prohibit media exhibiting concentrations of contaminants in excess of proposed Bright Line values from being eligible for contained-in determinations. Further, the proposed rule gives responsible States and EPA Regions discretion to set contaminant levels defining whether media no longer contain hazardous waste at values lower than such Bright Line values. The HWIR-media preamble does not discuss the relationship between acceptable levels for making contained-in determinations and site-specific media cleanup standards. In fact, EPA emphasizes that the Bright Line values identified in the proposal (which the Agency views as generally acceptable levels for determining that media no longer contain hazardous waste [p. 18795, col. 3]) are not designed as cleanup levels [p. 18789, col. 2]. DOE notes, however, that it would be difficult for a responsible regulatory agency to explain why media that exceed site-specific cleanup levels could be said to no longer contain hazardous waste. Therefore, DOE believes that the values for making contained-in determinations will most often be set equal to site-specific media cleanup levels. This being the case, if the Bright Line values were ever to serve as contained-in levels, they would also need to be developed as acceptable media cleanup levels. Hence, it would seem more appropriate to use an industrial land use assumption to calculate Bright Line values since it better reflects the reality of situations involving carefully managed remediation waste subject to a RMP. However, if EPA should decide against revising the Bright Line concentrations to account for industrial rather than residential land use assumptions, the Department recommends allowing regulated parties to propose site-specific bright line concentrations based on site-specific industrial land use assumptions, as an alternative to the generic Bright Line concentrations.

EPA should recognize that there is a major difference between SSLs and Bright Lines in that SSLs are a screening tool for scoping site investigations and data collection, while Bright Lines may very well be used to make the determination that contaminated media does not contain hazardous waste [ see p.18795, col.3, indicating that “EPA believes it would generally be acceptable to make a decision that media do not contain hazardous waste at the Bright Line concentrations ”]. DOE suggests that since Bright Lines can be used for purposes other than screening, it may not be appropriate to base them on a “screening level” risk assessment methodology as was used to develop SSLs.

3. p. 18799, col. 3 -- EPA proposes two considerations to overlay the soil Bright Line numbers. First, a cap on Bright Line values is proposed at 10,000 ppm, equivalent to 1% of the volume of the contaminated media. Second, a cap on soil Bright Line values is proposed at the saturation limit (C<sub>sat</sub>).

DOE is concerned that the two “caps” placed by EPA on the soil Bright Line values are, at least in part, responsible for the concentration limit anomalies between the HWIR-waste exit levels and HWIR-media Bright Line concentrations. EPA states a belief that it is sound science to compare the concentrations developed through the inhalation and ingestion risk scenarios to the actual concentration that could physically saturate the soil. If the C<sub>sat</sub> is lower than the concentrations from the inhalation or ingestion scenarios, EPA set the Bright Line concentration at the C<sub>sat</sub>. However, the value for C<sub>sat</sub> will vary with different soil properties (e.g., soil organic carbon, moisture content, and porosity). Therefore, it may not be reasonable to expect that C<sub>sat</sub> will be a single value. DOE suggests that EPA consider whether saturation limit values should be adjusted, or should be eliminated.

Regarding the 10,000 ppm cap, EPA provides no justification, other than the Agency’s unsubstantiated conclusion, that this level reasonably defines “highly contaminated” media. DOE requests that EPA provide additional justification for this cap.

4. p. 18801, col. 1 -- EPA requests comments on whether it is necessary to have a Bright Line at all. If there were no Bright Line, all media would be eligible for contained-in decisions by the overseeing agency on a site-specific basis.

While DOE supports providing a set of “bright line” constituent concentrations as guidance ( see General Comment 2), the Department is concerned about promulgation of the Bright Line as proposed by EPA for the following reasons:

- a. It is somewhat confusing because it is inconsistent with the risk-based "exit level" approach taken in the HWIR-Waste proposed rule. The "Bright Line" concentrations for hazardous constituents in media are not intended to identify levels of actual risks to human health or the environment. Instead, the "Bright Line" concentrations are intended only to differentiate relative risks among contaminated media. In other words, media contaminated above “Bright Line” concentrations should pose higher risks than media below the “Bright Line” under the same given exposure scenario, regardless of what the exposure scenario is. Hence, to derive “Bright Line” concentrations, EPA was able to use relatively simple computer modeling which accounted for only two human exposure pathways for soils and one for groundwater and surface water. Furthermore, the modeling approach utilized a residential land use setting and did not account for ecological risks. Meanwhile, the "exit levels" for hazardous constituents in wastes, established by the proposed HWIR-waste rule, are intended to differentiate: (a) wastes that could pose actual risks above acceptable levels under any plausible exposure scenario, and (b) from wastes that would pose no unacceptable risk under any plausible exposure scenario. Since the actual risk posed by any particular contaminated waste depends on the actual circumstances by which human or environmental receptors may be exposed to the waste, actual risks were estimated in deriving the “exit level” concentrations proposed by the HWIR-waste rule based on detailed multi-pathway modeling under an assumed worst plausible exposure scenario.

Even though the HWIR-media rule preamble explains the difference between the approaches taken to set “Bright Line” concentrations and “exit level” concentrations, DOE has observed that people are confused. Because of the use of "exit levels" based on actual risks in the proposed HWIR-waste rule, the regulated community expects the Bright Line concentrations to identify actual hazard levels. They also expect media with concentrations below the Bright Line to be automatically exempt from RCRA Subtitle C. Since it is not intuitively obvious that the Bright Line should serve a purpose other than the one people expect, the approach becomes confusing.

- b. In the preamble, EPA states that "[r]equirements for management of contaminated media should be flexible and should reflect actual media cleanup site conditions” [p. 18786, col. 1]. However, if EPA's goal is to provide flexibility at the site level for setting management standards applicable to contaminated media, the proposed Bright Line seems counter to that goal. Instead of being flexible, the proposed Bright Line approach is not flexible enough because it forces certain highly contaminated media to be managed under Subtitle C without consideration of any other options that may be protective of human health and the environment.

- c. As EPA points out [p. 18801, cols. 1 & 2], the Bright Line approach would create implementation problems if it is incorporated into regulations rather than presented as guidance. For example, how should the Bright Line be updated? When updated, what would be the effect on ongoing remediations if media moves from above to below the Bright Line, or vice-versa; how should the regulated community comply with the "moving target"? How should wastes containing hazardous constituents for which no Bright Line concentration has been established be evaluated for purposes of determining whether they fall above or below?
5. p. 18801, cols. 1 & 2 -- EPA notes that the Agency's understanding of risk assessment and the science surrounding risk-based numbers is constantly developing. Therefore, almost as soon as risk-based numbers (such as the Bright Line concentrations) are published, they can become outdated. Comments are requested on alternatives to keep the Bright Line concentrations up-to-date with the most current Agency risk information and policies.

DOE believes that Bright Line values should be periodically updated and expanded, whether they are promulgated or presented as guidance, as DOE suggests in General Comment 2. However, DOE suggests that the final HWIR-media rule clarify how and in what time frame Bright Line updates and expansions would be implemented at media remediation sites conducting activities pursuant to approved RMPs. In particular, DOE urges the Agency to include provisions (or at a minimum, provide clarification in preamble to the final rule) to preclude the retroactive application of Bright Line updates and expansions.

Regardless of the frequency of updates, it is important for the public and the regulated community to have real-time access to the most up-to-date agency information, guidance, or proposed and final rules on this subject. Therefore, DOE suggests that the Agency institute the use of its on-line clean-up information bulletin board system (CLU-IN), or the Internet, or both, as a means of making such materials available. Of course, if rules which modify Bright Line concentrations or applications are proposed and finalized, the suggested electronic access would be in addition to public notice and comment procedures otherwise imposed by law.

6. pp. 18801, col. 3 & 18802, col. 1 -- EPA determined that for 27 percent of the HWIR-media Bright Line constituent concentrations for soil, the proposed Bright Line concentration was lower (i.e., more conservative) than the exit criterion for the same constituent in non-wastewaters proposed by the HWIR-waste rule. Similarly, for approximately 20 percent of the HWIR-media Bright Line concentrations for groundwater/surface water, the proposed Bright Line concentration was lower than the exit level for the same constituent in wastewater proposed by the HWIR-waste rule. The Agency points out that if the HWIR-media rule specified that media at concentrations below the HWIR-waste exit levels were still "above the Bright Line" and not eligible for a contained-in determination, the two rules (i.e., HWIR-media and HWIR-waste) would be inconsistent. Comments are requested on how to resolve this issue.

DOE suggests that, at a minimum, if the HWIR-waste exit levels are higher than the proposed Bright Line concentrations, the HWIR-waste exit levels should be used as the Bright Line value. Alternatively, perhaps for purposes of identifying relative risk, the HWIR-media values should be the

greater of (1) the calculated values using the methodology described in the proposed rule, or (2) 1,000 times the HWIR-waste limits for carcinogens and 10 times the HWIR-waste limits for non-carcinogens [Recognizing that it seems highly inappropriate that the HWIR-media values based on a  $10^{-3}$  cancer risk and a hazard index of 10 would ever be more conservative than the proposed HWIR-waste values based on a  $10^{-6}$  cancer risk and hazard index of 1]. In any event, DOE agrees that the inconsistencies must be resolved before the two proposed rules are finalized.

V.B. Other Requirements Applicable to Management of Hazardous Contaminated Media

V.B.1 Applicability of Other Requirements -- §269.10

1. p. 18803, col. 2 -- EPA indicates that, for both hazardous and non-hazardous contaminated media that remain subject to LDRs, treatment to meet the minimum LDR treatment requirements for media (i.e., 40 CFR 269.30 - 269.34) and compliance with 40 CFR 268.2 through 268.7, 268.44 and 268.50 will constitute compliance with RCRA §3004(m).

DOE notes that the regulatory language proposed for 40 CFR 269.10 (p. 18851, cols. 2 & 3) does not mention the requirement for compliance with 40 CFR 268.44 (treatment variances) that is mentioned in the preamble. DOE requests that EPA confirm in the final HWIR-media rule whether the preamble or the proposed regulatory language reflects the Agency's intention.

V.B.3 Interstate Movement of Contaminated Media -- §269.12

1. p. 18803, col. 3 -- Media must be managed as Subtitle C waste in receiving or transporting States if the receiving or transporting State has not been notified of the designation as non-hazardous, or if the receiving or transporting State does not agree with the determination made by the generating state. Receiving and transporting States would also have to be authorized for Part 269 in order to approve these decisions in their states. EPA requests comment on this proposed approach, especially on implementation concerns.

For entities such as DOE or large industrial corporations that may move waste from one location to another for purposes of treatment or disposal, the proposed approach appears unworkable. DOE believes that as proposed, these provisions will provide a strong disincentive for out-of-state remediation waste shipments, and may cause generators to manage material that will be shipped out-of-state as if it were hazardous for shipping and disposal purposes, in spite of the non-hazardous status designated in the generating state. This would defeat one of the stated purposes of the proposed rule, namely that the "HWIR-media regulations should, to the extent possible, remove administrative obstacles to expedite cleanups... [p. 18786, col. 1]." DOE's reasons for reaching these conclusions are:

- a. Independent approval of the non-hazardous designation would be required from each State along the entire transport route from generator to receiving facility. Obtaining such approvals would be time consuming, cumbersome and might not be forthcoming in today's world of limited budgets and small staffs.

- b. If a change is made in receiving facility during the course of a remedial action that would require a different transport route, or if new or additional transportation carriers are hired that use different routes, the changes could not be implemented until new approvals had been obtained.
- c. The proposed rule does not address manifesting requirements, but it seems conceivable that different packaging, placarding and manifesting requirements might apply in each State along the transport route. Compliance could be logistically very difficult under such conditions.
- d. DOE is concerned that some recipient/transit States may disapprove a finding by another State that media no longer contains hazardous waste in an effort to restrict interstate commerce, rather than because of technical concerns about the finding.

Some issues not addressed by the proposed regulation include: (1) Which State authority in the generating State should conduct the notification? (2) How much time must other States be provided in order to comment on the draft RMP (which sets out the basis for a designation as non-hazardous)? (3) Which authority in the receiving or transit State must approve? (4) If the receiving/transit State does not reply, can the failure to reply be taken as concurrence? (5) What must be done if, after a RMP is adopted, but before a remedial action is completed, shipments to one receiving state are stopped and shipments to a different receiving state begin, consequently changing the transport route? (6) Since proposed 40 CFR 269.12 assigns the generating state responsibility for notifying the receiving and transporting states, will EPA be responsible for such notification if the generating state is not an authorized state? (7) How will differing packaging, placarding and manifesting requirements, if any, along the transport route be dealt with? (8) If EPA expects certain U.S. Department of Transportation (DOT) packaging and placarding requirements to be used (as they are under 40 CFR Part 262, Subpart C) DOE suggests that EPA consult with DOT before the HWIR-media rule is finalized. Existing DOT provisions are not clear on how wastes that are deemed non-hazardous in the generating state, but hazardous in the receiving state, or vice-versa, should be packaged and placarded.

Based on the above, it appears likely that the proposed interstate movement provisions may compel generators of contaminated media (whether or not the media has been determined to no longer contain hazardous waste), to transport that media as hazardous material because doing otherwise would be too complicated and time consuming. The regulations applicable to shipping hazardous wastes, which would be expected to pose much greater risks than media determined by the responsible regulatory agency to not contain hazardous waste, do not require that States through which the wastes travel be notified. Therefore, shipping media as hazardous material would be simpler. DOE notes that this result is undesirable because it gives the wrong impression about the actual risk associated with the material being shipped. DOE recommends that transportation requirements for media either be deleted from the final HWIR-media rule, or be made commensurate with the hazards of the material. If transportation requirements are included, they should be developed by EPA in consultation with DOT. Notification of the receiving State might be appropriate, but notification of other States through which the media is transported should not be required.

V.C. Treatment Requirements

V.C.2 Treatment Requirements -- §269.30

V.C.2.b Proposed treatment standards for contaminated media.

V.C.2.b(2) Today's Proposal

1. p. 18806, col. 3 -- Under the proposed rule, EPA would (1) establish generic, technology-based treatment standards for higher-risk contaminated media subject to the LDRs, and (2) for lower-risk contaminated media subject to the LDRs, establish (as a policy matter) a presumption for site-specific LDR treatment variances. For hazardous contaminated soils, the proposed rule would establish alternative soil-specific LDR standards.

To the extent that LDR treatment standards continue to apply to remediation wastes after promulgation of the final HWIR-media, DOE would fully support EPA's objective of developing separate treatment standards that are appropriate for hazardous contaminated soils. In this regard, DOE urges EPA to adopt a regulatory scheme that facilitates the use of different technologies and allows the selection of the most appropriate technology for hazardous soil at a particular site.

EPA's proposed LDR treatment standard for hazardous contaminated soils [i.e., 90 % reduction in concentration for constituents subject to treatment (capped at 10 times the UTS), and removal of the hazardous characteristic if soil is ignitable, corrosive or reactive] would require considerable sampling and analysis, both before and after treatment in order to demonstrate that required concentration reductions have occurred. DOE is concerned that such requirements do not account for the potential difficulties that can be encountered when sampling and analyzing RMW-contaminated soils. Thus, DOE believes that EPA should expand the proposed LDR treatment scheme to accommodate specified technology treatment standards for hazardous soils as an alternative to the proposed approach in appropriate circumstances. As DOE asserted in comments on the proposed LDR Phase II rule,<sup>12</sup> such an alternative would be similar to the treatment standards established for hazardous debris in 40 CFR 268.45, except that unlike treated debris, treated remediation soils would continue to be managed with regulatory oversight in accordance with a RMP.

As stated in responses to prior EPA notices concerning LDR treatment standards for hazardous contaminated soil,<sup>13</sup> DOE firmly believes that generators and managers of hazardous soils should be provided with the flexibility to select the most appropriate treatment option for their particular hazardous soil waste streams. Recognizing the difficulties involved with meeting potential sampling and analysis requirements associated with RMW-contaminated soil and the need for a flexible regulatory approach for selecting the most appropriate treatment methods, DOE recommends that EPA specify some acceptable technologies for categories of hazardous soil, and in particular for RMW-contaminated soils (following the same type of regulatory approach promulgated for hazardous debris). Such specified technologies would then be available, to be employed as alternatives to the proposed

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<sup>12</sup> DOE Comments, Proposed Rule regarding Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soils (58 FR 48092-48204), Specific Comment VII.C, item 1, p. 11-12 (03/15/94).

<sup>13</sup> DOE Comments, Proposed Rule regarding Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soils, Specific Comment VII.C, item 1, p. 12 (03/15/94); DOE Comments, Advance Notice of Proposed Rulemaking (ANPRM) regarding Land Disposal Restrictions, Potential Treatment Standards for Newly Identified and Listed Wastes and Contaminated Soil, Item IV.D, pp. 27-28 (12/09/91).



concentration-based requirements. Of course, for any treatment standard consisting of a specified technology, demonstrating compliance would include demonstrating that performance and/or design and operating standards were being properly implemented.

DOE has pointed out specific sampling and analytical difficulties associated with RMW on numerous prior occasions in response to EPA rulemaking notices.<sup>14</sup> Generally, the difficulties arise because the conditions and protocols for handling radioactive samples often preclude the use of standard non-nuclear sampling and analytical methods. Concerns relate to sampling and laboratory personnel radiation exposures, chemical and physical changes in samples over time due to the presence of radioactivity, and reactivity-induced interference with the performance of analytical instruments.

### V.C.3 Constituents Subject to Treatment

1. p. 18809, cols. 2 and 3 -- EPA explains that for contaminated media other than soil, treatment would be required for each constituent subject to treatment having concentrations in the media in excess of Universal Treatment Standards (UTS). For contaminated soil, treatment would be required for each constituent subject to treatment having concentrations in the soil that exceed 10 times the UTS. In the case of media that exhibit a characteristic, the Agency explains that treatment would be required for the characteristic constituent (in the case of TC wastes) or the characteristic property (in the case of ignitable, reactive, or corrosive wastes) and for all underlying hazardous constituents listed in 40 CFR 268.48 "Table UTS -- Universal Treatment Standards" that are present and of concern in the media. The Agency specifically requests comments on the scope of constituents that should be subject to treatment under the proposed HWIR-media rule. As an example of a possible restriction of scope, EPA asks whether background concentrations of naturally occurring hazardous constituents should be explicitly evaluated when identifying constituents that would be subject to treatment.

DOE believes it is not necessary to require treatment of every constituent subject to treatment that exceeds UTS in contaminated media other than soils, or exceeds 10 times UTS in contaminated soils.

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<sup>14</sup> DOE Comments, Proposed Rule regarding LDRs for Newly Identified and Listed Wastes and Hazardous Soil, Specific Comment VII.C, item 1, pp. 13-14 (03/15/94); DOE Comments, Proposed Rule regarding LDRs for Newly Identified and Listed Wastes and Hazardous Soil, General Comment #2, pp. 2-4, item III.A.1, pp. 8-11, and item IV.A.2, pp. 35-36 (11/15/93); DOE Comments, Interim Final Rule regarding Treatment Standards for Certain Ignitable and Corrosive Wastes, General Comment 2, pp. 2-3, and item III.A.1, pp. 12-13 (07/09/93); DOE Comments, Notice of Data Availability regarding Response to Court Decision, General Comment 8, p. 5, and item II.B.1.1, pp. 6-7 (03/04/93); DOE Comments, Proposed Rule regarding LDR Treatment Standards for Newly Listed Wastes and Contaminated Debris, item IV.A, p.4, and item V.G.6, p. 28 (02/24/92); DOE Comments, ANPRM regarding LDRs, Potential Treatment Standards for Newly Identified and Listed Wastes and Contaminated Soil, item III.B.1, pp. 11-17, item III.B.4, pp. 21-22, and item IV.D., pp. 27-29 (12/09/91); DOE Comments, ANPRM regarding LDRs, Potential Treatment Standards for Newly Identified and Listed Wastes and Contaminated Debris, item III.A.2, p. 5 (07/29/91); and DOE Comments, ANPRM regarding LDRs, Potential Treatment Standards for Newly Identified and Listed Wastes and Contaminated Debris, General Comments, p. 1, and item II.D.c, p. 7 (06/28/91).

Instead, DOE would support an approach that would account for background concentrations of naturally occurring hazardous constituents when considering whether non-soil contaminated media contain concentrations of hazardous constituents that exceed UTS and whether soil contains concentrations of hazardous constituents that exceed 10 times the UTS. Additionally, DOE would support an approach that would account for background concentrations of naturally occurring hazardous constituents when determining whether any media exhibits a hazardous characteristic, thus subjecting it (upon excavation) to LDR treatment standards. The Department suggests that to account for background concentrations, LDR treatment standards for media could be capped at the background concentration levels for the site where the media is generated.

In the case of soils that exhibit a hazardous characteristic, DOE is concerned that the LDR treatment requirements named by EPA (i.e., removal of the characteristic, plus treatment of underlying hazardous constituents to meet the UTS) will be a disincentive in certain situations to remedial actions involving excavation and treatment. Therefore, the Department encourages EPA to adopt an approach (such as accounting for naturally occurring hazardous constituents when testing for hazardous characteristics) that will reasonably ensure that, if soils generated during remedial actions are found to exhibit a hazardous characteristic, it is not the result of naturally occurring hazardous constituents.

2. p. 18810, col. 1 -- EPA requests comment on an approach that would allow site-specific minimize threat Media Treatment Variances for constituents subject to treatment that have initial concentrations below Bright Line concentrations, and require compliance with the generic treatment standards only for constituents subject to treatment that have initial concentrations above Bright Line concentrations.

Generally, as is discussed in Specific Comment V.C.8, item 1, DOE supports defining contaminated media that are subject to LDR standards as a new treatability group, or preferably, defining generation of remediation waste as a new point of generation. This should allow EPA to set LDR treatment standards for contaminated media, independently of the treatment standards applicable to the contaminating waste. However, if EPA elects against such an approach, DOE believes that "Media Treatment Variances" should be available for any constituent (not just for constituents that have initial concentrations below the Bright Line) if an appropriate demonstration justifying a variance can be made, and the responsible regulatory agency reviews and approves such a demonstration. However, DOE notes that, based on past experience, treatability variances are time consuming and expensive to process, both for the applicant and the responsible regulatory agency. This tends to discourage potential applicants from seeking variances in the first place. Hence, in spite of EPA's intention that a policy of expeditiously granting Media Treatment Variances be implemented, DOE questions whether there will be much relief from LDR treatment requirements (for the situations intended by EPA) as a result of the proposed availability of Media Treatment Variances.

#### V.C.4 Nonanalyzable Constituents

1. p. 18810, col. 1 -- EPA states that treatment standards for nonanalyzable organic constituents found in hazardous contaminated media are not being proposed because the Agency believes that treating the analyzable constituents to meet treatment standards should provide adequate treatment of any nonanalyzable constituents. Comments are requested on this approach.

DOE agrees with EPA's conclusion that treatment of analyzable constituents to meet their applicable standards should provide adequate treatment of any nonanalyzable constituents. The alternative of specifying treatment technologies for nonanalyzable constituents would limit flexibility in selecting remedial alternatives.

#### V.C.6 Management of Treatment Residuals -- §269.34

1. p. 18810, col. 2 -- Under the proposed rule, waste residuals would be managed according to RCRA Subtitle C or Subtitle D requirements. Media residuals would remain subject to Part 269. EPA requests comment on whether the Agency should address (in the form of regulations or guidance) methods for determining whether treatment residuals are media or non-media. EPA also solicits comment on whether the approach promulgated for residuals from treatment of hazardous debris should be utilized and require that media and non-media treatment residuals be separated using simple physical or mechanical means.

In many situations, simple physical or mechanical means may not serve to distinctly separate treatment residuals that are media from those that are non-media. DOE suggests that guidance on methods for making the determination (i.e., whether treatment residuals are media or non-media) will be necessary, but suggests that the guidance not be promulgated as part of the regulations because there may be multiple ways to make the determination that would be equally acceptable. If one approach were promulgated, it might preclude the use of equally justifiable and possibly more suitable or cost effective methods.

In situations such as the preamble describes where certain treatment methods may completely destroy the media treated, leaving only non-media residuals, DOE believes that the residuals should be evaluated based on their own characteristics to determine whether they must be classified as hazardous waste. If so, they should be required to meet LDR standards applicable to other wastes which exhibit the same hazardous characteristics. If not, further management under Subtitle C should not be required. DOE does not believe that protection of human health or the environment is enhanced by requiring that non-media residuals (especially those that have different physical or chemical attributes than the original hazardous waste that contaminated the media) meet the LDR standards applicable to the wastes that contaminated the media. To justify basing LDR treatment standards for non-media residuals on the characteristics of the residuals, rather than on the LDR standards applicable to either the original contaminating wastes or the contaminated media (if the change of treatability group principle is applied as discussed in Specific Comment V.C.8, item 1), DOE advocates using the change of treatability group principle.

#### V.C.7 Media Treatment Variances -- §269.31

1. p. 18810, col. 3 - p. 18811, col. 1 -- EPA proposes to allow variances from generic treatment standards in three situations: when the generic standard is technically impracticable, when the generic standard is inappropriate, or when the Director can demonstrate, based on site-specific circumstances, that less treatment will "minimize threats" in accordance with the standard of RCRA section 3004(m). Comments are requested on the need for the specific Media Treatment Variances proposed and the

relationship of the proposed Media Treatment Variances to the existing site-specific variance procedures in §268.44(h).

- a. DOE supports the establishment of provisions which allow treatment variances for circumstances involving technical impracticability and inappropriate standards. DOE also believes that Media Treatment Variances as provided in proposed 40 CFR 269.31 will be needed. Proposed section 269.1, Scope, indicates that the provisions in 40 CFR Part 269 modify and replace only certain specific Subtitle C regulations, and that other Subtitle C regulations that are not specifically addressed will continue to apply to hazardous contaminated media. Based on this provision, it appears that non-hazardous media (i.e., media determined to no longer contain hazardous waste) to which LDR standards have attached would not be able to petition for or obtain treatment variances under 40 CFR 268.44, since such media are no longer hazardous. Therefore, in order for treatment variances to be available to non-hazardous media (i.e., media determined to no longer contain hazardous wastes), EPA must specifically provide such regulatory provisions, as put forth under proposed 40 CFR 269.31. However, as indicated above (see Specific Comment V.C.3, item 2), treatability variances are time consuming and expensive to process, both for the applicant and the responsible regulatory agency. This tends to discourage potential applicants from seeking variances in the first place. Hence, in spite of EPA's intention that a policy of expeditiously granting Media Treatment Variances be implemented, DOE questions whether much regulatory relief will actually be realized as a result of the availability of Media Treatment Variances.
- b. DOE observes that proposed 40 CFR 269.31 does not address specific instructions on the content of the petition that must be filed to obtain a Media Treatment Variance. Thus, it is unclear whether differing information is required for hazardous versus non-hazardous media. section 268.44 requires filing of a petition for a treatability variance in accordance with the procedures in 40 CFR 260.20, and requires a certification statement about the content of the petition. There are no similar requirements in proposed section 269.31. Hence, DOE requests that EPA clarify the specific filing requirements (in the final rule) associated with pursuing a variance from a treatment standard(s) in proposed section 269.31.

V.C.7.c Threats can be minimized with less treatment than the generic technology-based standard would require.

1. p. 18812, cols. 1-3 -- EPA proposes to limit the availability of the site-specific minimize threat variance to hazardous (or formerly hazardous) contaminated environmental media with all constituent concentrations below the Bright Line. The Agency requests comment on whether site-specific minimize threat variances should be allowed for contaminated media containing constituents with initial concentrations that are greater than the Bright Line. Commenters supporting this are asked to address the relationship of these determinations to contained-in decisions (which under the proposed approach, would not be allowed for contaminated media with constituent concentrations above the Bright Line).
  - a. DOE believes that there is no technical or legal justification for prohibiting minimize threat variances for media that contain initial concentrations of constituents above the Bright Line.

DOE believes that if a demonstration can be made to show that contaminated media have been treated such that toxicity has been substantially diminished, or the likelihood of migration of hazardous constituents has been substantially reduced so that threats to human health and the environment are minimized (RCRA §3004(m)), such media should be allowed to obtain a minimize threat variance, whether the initial concentrations of constituents were above the Bright Line, or not.

- b. DOE would advocate that EPA promulgate the contained-in policy for contaminated media consistently with the existing contained-in policy that was previously codified for hazardous debris. Further, DOE is suggesting that EPA provide guidance on the types of information and factors that should be considered for contained-in analyses, and that such criteria exclude site-specific management practices from consideration ( see Specific Comment V.A.4.a, items 3.a, 3.c and 4 above). Additionally, a determination that media no longer contains hazardous waste should concurrently serve as a LDR "minimize threat" determination (as it does for debris), and media that is the subject of the determination should no longer be subject to regulation under 40 CFR parts 260, 261 through 266, 268, or 270. This approach would be fitting because, if media no longer contains hazardous waste based on an analysis that does not consider management practices, it is obvious that further toxicity and migration potential reductions would not further reduce threats to human health and the environment.
2. p. 18812, col. 3 -- EPA requests comments on whether it should attempt to provide explicit opportunities for site-specific minimize threat determinations outside the HWIR-media context (e.g., add appropriate provisions for non-HWIR-media contaminated media to the current treatment variance rules at §268.44(h)).

DOE would support adding provisions to 40 CFR 268.44 to provide explicit opportunities for site-specific minimize threat determinations outside the HWIR-media context. Such provisions would be desirable in order to provide flexibility for non-HWIR-media contaminated media that would be similar to the flexibility provided for media covered by the HWIR-media rule.

#### V.C.8 Request for Comment on Other Options

1. pp. 18812, col. 3 - 18813, col. 1 -- EPA requests comments on other options for developing appropriate land disposal restriction standards for contaminated media; especially requested are comments that address environmental media with all constituent concentrations below the Bright Line. For example, EPA asks if it would be appropriate for EPA to define contaminated soil and/or other contaminated environmental media as a separate LDR "treatability group."
- a. DOE supports EPA's suggestion that LDRs for remediation wastes under the Unitary Approach be handled through application of the "new treatability group" principle [see 61 FR 18835], and advocates that such an approach also be applied to the hybrid approach that DOE suggests in General Comment 2. Under the "new treatability group principle," generating remediation waste would be recognized as a sufficient change in the physical and chemical properties from the original hazardous waste to justify establishing LDR treatment standards based on the waste's new characteristics. It makes sense conceptually that remediation should

constitute a new treatability group. RCRA was conceived as a system for ensuring proper management of hazardous wastes "from cradle to grave." By applying LDR treatment standards that have been developed based on the composition and characteristics of the original hazardous waste to remediation wastes having completely different composition and characteristics, EPA extends the scope of RCRA coverage beyond the "grave" to "resurrected" (i.e., remediation) wastes. This complicates matters and may cause inappropriate standards to be applied. Remediation wastes often have different physical and/or chemical characteristics than the wastes which contaminate them, and thus, the performance of particular treatment technologies on these wastes may be significantly different. Hence, it seems reasonable that the notable changes in the properties of remediation wastes should be recognized with a new treatability group.

DOE believes that the application of appropriate LDR standards can be made more understandable, and hence more efficient, for remediation waste if remediation wastes were, by definition considered a new treatability group. Using this approach, the responsible regulatory agency would not lose any degree of control, since LDR treatment requirements would be developed on a site-specific basis and approved as part of the RMP/RAP. In this manner, flexibility is gained without any reduction in protection of human health and the environment.

- b. As an alternative to defining contaminated media and/or other remediation wastes as a separate LDR treatability group, DOE requests that EPA consider defining generation of remediation wastes as a completely new point of generation
  - (1) It makes sense conceptually for remediation of wastes to be considered a new point of generation. As described in the preceding item a, remediation wastes often have different physical and/or chemical characteristics than did the original wastes. Therefore, assigning management and disposal standards to remediation wastes based on the characteristics they exhibit, without the burden of trying to be consistent with standards applicable to the original wastes that created the contamination being remediated, seems logical.
  - (2) Defining a new point of generation would allow the determination of whether remediation wastes were hazardous or non-hazardous to be based on their own characteristics, rather than based on the mixture and derived-from rules and the contained-in principle. In other words, management and disposal standards for remediation wastes could be based on the risks presented by the remediation wastes themselves, rather than by the original wastes.
- c. DOE requests that EPA consider defining the generation of wastes during remedial activities as a new point of generation regardless of which approach the Agency chooses for the final HWIR-Media rule.
- d. DOE requests that EPA provide clarifying examples and additional explanation of how the change of treatability group concept would be implemented. Specifically, discussion would be appreciated concerning how the change of treatability group would affect LDR standards

applicable to media wastes that: (1) are treated; (2) experience a change of treatability group during the treatment; and (3) are subsequently land disposed.

#### V.C.9 LDR Treatment Requirements for Non-HWIR-media Soils

1. p. 18813, cols. 1&2 -- EPA notes that the proposed alternative LDR treatment requirements for hazardous contaminated soils will not be available for contaminated soils in states that choose not to adopt the final HWIR-media rule, or for contaminated soils generated at sites where cleanup occurs without direct agency approval (e.g., voluntary cleanups). The Agency requests comment on whether it would be appropriate to extend the proposed alternative LDR treatment standards to all hazardous contaminated soils regardless of whether the cleanup is subject to State or Agency oversight (i.e., managed under an approved RMP). As an alternative, the Agency asks whether it should adopt soil treatment standards for non-HWIR-media hazardous soils that are adjusted to account for the lack of State or Agency oversight over how they are administered.

DOE urges EPA to adopt the alternative LDR treatment standards for all hazardous soils, regardless of whether they are generated by a cleanup that is subject to State or Agency oversight pursuant to proposed 40 CFR Part 269. The absence of such standards will likely act as a significant disincentive for voluntary cleanups. EPA states that it believes situations will be rare where meeting the proposed treatment standards for hazardous contaminated media would be insufficient to meet RCRA section 3004(m)'s requirement that threats to human health and the environment be minimized [p. 18809, col.1]. Therefore, DOE would support extending the proposed LDR treatment standards to all contaminated soils. DOE believes that besides being inconsistent, it would be very confusing to have LDR treatment standards for contaminated soils managed under 40 CFR Part 269 that differ from LDR treatment standards applicable to non-HWIR-media contaminated soils.

#### V.C.10 Issues Associated With Hazardous Debris

1. p. 18813, col. 3 -- EPA requests comments on whether the current LDR treatment standards for hazardous debris remain appropriate or whether hazardous debris should, instead, be subject to treatment standards similar to the standards in the proposed rule for contaminated media, or whether some combination of the standards would be most appropriate.

As stated in General Comment 3, DOE supports expanding the scope of the HWIR-media rule to include hazardous debris and other non-media remediation wastes such as sludges. This would allow inextricably mixed media and non-media remediation wastes to be managed more efficiently under management requirements developed on a site specific basis. Nevertheless, in circumstances where hazardous debris is not generated as a result of remedial activities per se, or is not inextricably mixed with media, DOE believes that the current LDR treatment standards would remain appropriate, and should be explicitly retained.

V.D Remediation Management Plans (RMPs)

1. p. 18814, col. 1 -- EPA states that the proposed HWIR-media rule would provide a new administrative mechanism -- RMPs -- as the means for documenting, providing for public review and comment, and enforcing site-specific requirements for managing contaminated media as part of remedial actions.

DOE generally favors the RMP concept and supports EPA's effort to craft a streamlined administrative mechanism to cover the management of contaminated media during remedial actions. However, the Department is concerned that a RMP could potentially become another collection of duplicative documents that must be formally submitted to and reviewed and approved by an already busy, responsible regulatory agency. If so, the process proposed to determine whether contaminated media can be removed from RCRA Subtitle C control may prove to be more burdensome than States are willing to embrace. DOE is also concerned that significant amounts of time, money and effort may be needed to develop, revise and negotiate RMPs, thus delaying, rather than expediting, remedial actions because both regulators and owners/operators have limited resources.

2. p. 18814 and p. 18853 -- EPA presents the proposed requirements for Remediation Management Plans (RMPs).

DOE is concerned that the proposed regulatory language in 40 CFR 269, Subpart D - Remediation Management Plans (RMPs) [see 61 FR 18853 - 18854], is unclear about whether a RMP can authorize on-site land disposal. The proposed regulatory language most often refers to remediation waste management, which is generally understood to include disposal. Also, proposed 40 CFR 269.40(c) mentions that a RMP approved by the Director will constitute a RCRA permit for remedial activities "involving treatment, storage or disposal" (emphasis added) of remediation wastes that would require a RCRA permit, and proposed 40 CFR 269.45 requires review and modification as necessary every 5 years of RMPs approved for land disposal facilities. However, 40 CFR 269.41(c), which specifies the information that must be included in a RMP, requires information about design and operation of treatment facilities, as well as sampling and analysis to demonstrate effective treatment, but requires no specific information related to disposal. DOE requests clarification of this point in the final rule. It would seem appropriate for a RMP that constitutes a permit for a land disposal unit to include certain information specific to the disposal system involved. For instance, such a RMP should be required to at least include closure and post-closure information.

In addition, it is unclear whether land disposal units covered by a RMP would be required to meet the minimum technological requirements (MTRs) specified by 40 CFR Part 264. As mentioned above, proposed 40 CFR 269.41(c) contains no requirement for the RMP to include information on land disposal unit design specifications. Proposed 40 CFR 269.43(c) (Approval of RMPs) indicates that the Director has discretion to include concentration levels in the RMP below which media will be determined not to contain hazardous waste, as well as to include provisions in the RMP specifying when threats to human health and the environment will be considered to have been minimized. But nothing in the proposal indicates the consequences on land disposal unit design requirements of including such provisions in RMPs, or not including them. It would not be appropriate to include a generic requirement that media managed under a RMP be required to be disposed in land disposal units meeting MTRs. Instead, DOE suggests that a RMP should be required to stipulate site-specific land



disposal unit design requirements (where applicable). Further, if EPA does intend for media managed under a RMP to be disposed in land disposal units meeting MTRs, the Department questions whether the HWIR-media notice of proposed rulemaking gives adequate public notice of this. Therefore, under such circumstances, DOE would suggest that EPA consider whether a supplemental notice might be appropriate.

V.D.1 General Requirements -- §269.40

1. p. 18814, cols. 1&2 -- The preamble discusses the general requirements associated with RMPs, indicating when RMPs would be required.

DOE notes that the preamble discussion regarding RMPs (cols. 1&2) does not mention their relationship to media remediation sites. The proposed regulatory language (40 CFR 269.40(b)) indicates that a RMP "shall specify requirements for management of hazardous and non-hazardous contaminated media at a media remediation site ...." However, neither the preamble language nor the proposed regulatory language indicates whether a separate RMP is required for each media remediation site, or whether one RMP can address multiple media remediation sites at a facility. DOE requests clarification of this issue. It seems logical that one RMP should be allowed to address multiple media remediation sites at a single facility. This would be consistent with how RCRA permits are written. Also, as suggested in Specific Comment V.A.3, item 3.a(1), above, allowing more than one media remediation site to be covered by a RMP would support allowing centralized remediation waste treatment, storage and disposal units to be designated as media remediation sites at large installations.

2. p. 18814, col. 2 -- EPA explains that RMPs would not be required for CERCLA actions, although the Record of Decision (ROD), or other CERCLA decision document, would specify the requirements for compliance with 40 CFR Part 269, if the remedy involved management of contaminated media.

DOE requests clarification about where, in the case of CERCLA actions, 40 CFR Part 269 implementing provisions would be documented for wastes generated or managed in the context of site investigations, treatability studies, or other activities conducted prior to issuance of a ROD or other CERCLA decision document.

DOE also requests that when the final HWIR-media rule is published, EPA provide an expanded discussion of the impact on CERCLA remedial actions of the HWIR-media rule (i.e., 40 CFR Part 269) as an "applicable or relevant and appropriate requirements" (ARAR) in States authorized for the HWIR-media rule. For example, DOE is concerned about potential situations such as the following:

If a facility is involved in a cleanup under CERCLA, the Proposed Plan (i.e., prepared in accordance with section 117 (a) of CERCLA) satisfies the requirements for public participation. The Proposed Plan recommends a preferred alternative based on those alternatives identified in the feasibility study (FS). One of the evaluation criteria for the FS is the cost effectiveness of the alternatives. If a facility assumed that LDR requirements would be waived based on the concentration of contaminants compared to the Bright Line values, certain costs associated with treatment or disposal would be assumed for the FS. If LDR requirements would not be waived, then costs would be considerably higher for treatment or disposal. It is

not clear how a facility could rely on decisions regarding components of a RMP (i.e., attachment of LDRs) without approval of the RMP itself. In this example, the public might not support an LDR waiver for remediation wastes, thus requiring recosting of the FS alternatives and potentially selection of a different remedy

3. p. 18815, col. 1 -- EPA explains that a RMP could be a "stand alone" document, or might often be a part of a more comprehensive document prepared by the overseeing agency (e.g., an enforcement order, or RCRA permit).

As mentioned in Specific Comment V.A.3, item 5.a, above, DOE agrees that it should not be necessary to create entirely new provisions in a RMP if adequate provisions for accomplishing what would otherwise have been placed into the RMP appear in other enforceable documents. However, how these existing enforceable documents will be substituted for the RMP is unclear. The proposed regulatory language (40 CFR 269.40(e)(2)) implies, but does not specify, that only one other enforceable document can be involved, and that it must specify "requirements for compliance with this part [269]." DOE requests that the final HWIR-media rule clarify the following issues: (1) If other enforceable documents are substituted for the RMP, can there be more than one such document (i.e., can portions of both a RCRA permit and a Federal Facility Compliance Agreement be used at the same time)? (2) How will the responsible regulatory agency verify that other enforceable documents contain the information required to be included in the RMP (i.e., must a RMP still be proposed or a new document created in order to confirm references to portions of the other enforceable document(s) that would apply)? (3) Does EPA envision the other enforceable document(s) as indicating which provisions meet 40 CFR Part 269 requirements? If so, does that mean existing documents would have to be modified? (4) If other enforceable documents are used to implement 40 CFR Part 269, must they replace the RMP in its entirety, or can some requirements be covered by other documents and some by a RMP?

4. p. 18815, cols. 1&2 -- EPA believes it may also be appropriate to specify that compliance with a RMP during its term would constitute compliance, for purposes of enforcement with Subtitle C of RCRA. The Agency requests comment on this issue.

DOE agrees that it would be appropriate to specify that compliance with a RMP during its term would constitute compliance with RCRA. As recognized by EPA in the preamble, this would be consistent with regulatory provisions applicable to RCRA permits [40 CFR 270.4(a)].

#### V.D.2 Content of RMPs -- §269.41

1. p. 18815, col. 2 - p. 18816, col. 3, and p. 18853, cols. 2 & 3 -- The preamble discusses the required content of RMPs as specified by proposed 40 CFR 269.41.

DOE believes that a RMP must contain the following information in addition to the information which the proposed regulatory language (p. 18853, cols. 2 & 3, proposed 40 CFR 269.41(c)) lists:

- (1) A list of the sections of other enforceable documents, if any, that are being substituted for RMP provisions that would otherwise be included; and

- (2) A designation of the aerial extent of media remediation site(s) to which the RMP applies.
- b. DOE suggests that EPA consider including regulatory provisions making it possible to take an approach for RMPs under certain circumstances similar to that developed in the CERCLA program for presumptive remedies. Under such an approach, EPA could develop a set of “standard” RMP provisions to cover commonly encountered situations at sites undergoing cleanup. These generic provisions could be customized, as necessary, to address appropriate site-specific considerations. The customized versions could then be inserted into a RMP. DOE believes this approach could streamline the process for approval of RMPs, and allow their expeditious issuance for public review and comment.
2. p. 18816, col. 1 -- EPA explains that RMPs will be required to include information on planned or completed sampling, and analysis procedures to be used for characterization, ensuring effective treatment, and demonstrating compliance with the applicable treatment standard. Furthermore, EPA notes that it is currently developing guidance on how to sample, test, and analyze contaminated media.

As indicated in numerous prior comments submitted by the Department in response to EPA rulemaking notices,<sup>15</sup> DOE is concerned about difficulties involved with meeting potential sampling and analysis requirements associated with certain RMW-contaminated media. Generally, the difficulties arise because the conditions and protocols for handling radioactive samples often preclude the use of standard non-nuclear sampling and analytical methods. Concerns relate to sampling and laboratory personnel radiation exposures, chemical and physical changes in samples over time due to the presence of radioactivity, and reactivity-induced interference with the performance of analytical instruments. DOE requests that EPA remain mindful of these concerns when finalizing both the contaminated media sampling, testing and analysis guidance and the HWIR-media rule.

3. p. 18816, col. 3 -- EPA requests comments on what specific regulatory or policy changes should be added to the final HWIR-media rule to: (1) Increase incentives for innovative technologies; and (2) identify and reduce any existing barriers to innovative technologies.

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<sup>15</sup> See Footnote 14 above.

As EPA has long recognized,<sup>16</sup> there are two primary areas of regulatory impediments relative to developing and applying new technologies in the arena of hazardous waste management: (1) permitting requirements; and (2) technology-based regulatory standards. DOE acknowledges and supports the efforts that EPA has made both in the proposed HWIR-media rule and in other recently proposed regulations to address these impediments, particularly as they affect site cleanups. DOE encourages EPA to continue its quest in this regard. Further, with respect to the proposed HWIR-media rule, DOE suggests that EPA consider the following possibilities:

- As stated by Specific Comment V.D.4, item 1, DOE believes that it would be appropriate to allow differing degrees of public participation in the approval process for a RMP based on the activities to be performed under the RMP, with decisions about the warranted level made on a site-specific basis. With a provision of this type in the HWIR-media rule, low risk activities to develop new technologies for either treatment or site characterization under a RMP might receive more streamlined approvals.
- In general, DOE would encourage EPA to consider ways to expedite the RMP approval process for remedial activities involving innovative technologies.
- As stated by Specific Comment V.F, DOE supports retaining regulations that provide for CAMUs, in part because they allow site-specific development of design standards for land-based remediation waste management facilities, rather than imposing the minimum technological requirements (MTRs) specified by 40 CFR Part 264. In some situations, MTRs may not only be more expensive, but also less innovative and protective. Under the CAMU regulations, the flexibility exists to propose more innovative and current containment cell liner and groundwater monitoring systems that are more suited to site-specific situations. In addition, site-specific geological, hydrological and climatic factors can be considered in designing containment cell caps, thus providing designs more suited to the particular climate than a traditional RCRA cap might be. Hence, DOE suggests that, to the extent possible, EPA either retain the CAMU regulations, or modify the proposed HWIR-media rule to provide for site-specific development of design standards for land-based remediation waste management facilities, or both.
- Specific Comment V.F, item 5 discusses DOE's preference that CAMU regulations be retained because CAMUs can accept all types of remediation wastes. DOE suggests that national,

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<sup>16</sup> For example, in *The Nation's Hazardous Waste Management Program at a Crossroads*, The RCRA Implementation Study [EPA/530-SW-90-069, p. 110, cols. 1&2 (July 1990)], EPA issued a finding stating "[t]he Research, Development, and Demonstration (RD&D) permit mechanism has not generally been a streamlined mechanism for fostering technology development." In the ensuing discussion, EPA observed that RD&D permit processing was "considerably longer than many vendors find desirable." The Agency went on to say that "at least one report cites [RD&D permit] application costs and paperwork requirements that rival the full "Part B" application." Regarding the effects of regulatory standards, in the same document EPA reports (p. 112, col. 2) that "[t]he prospect of choosing expensive cleanup technologies (e.g., high-temperature incineration) due to the stringent treatment and disposal requirements of the land ban regulations for RCRA wastes has been cited as a factor in no action or capping decisions at Superfund sites." Continuing, EPA laments that "[e]ven if an innovative technology vendor is capable of meeting BDAT, treated material must still be disposed of in a hazardous waste management facility, unless it is delisted."

minimum performance-based design standards for CAMUs be set to ensure that site-specific requirements applied to CAMUs will be protective of human health and the environment. DOE proposes that such standards might specify that an individual member of the public who would receive the highest exposure to hazardous constituents as a result of activities at the CAMU from all pathways could have an increased cancer risk of no greater than  $10^{-6}$ . Under this approach, EPA could then develop guidance on acceptable methodologies for demonstrating compliance with the performance standard. Similarly, DOE believes that a performance-based approach to the design of remediation waste management facilities generally under the HWIR-media rule could remove barriers to the use of innovative technologies. It would be important, however, for EPA to provide guidance on methodologies for adequately demonstrating anticipated compliance with any promulgated performance-based design standards.

#### V.D.3 Treatability Studies -- §269.42

1. p. 18817, col. 1 -- EPA describes proposed provisions in the HWIR-media rule for conducting treatability studies under a RMP (i.e., proposed 40 CFR 269.42). The Agency mentions that, if applicable, the currently available Treatability Sample Exclusion Rule (40 CFR 261.4(e)-(f)) could also be used. However, the Treatability Sample Exclusion Rule might not cover all situations where relief for treatability studies is needed. Comments are solicited on whether revising the existing Treatability Sample Exclusion Rule to allow site-specific decisions regarding quantities and time frames for treatability studies that have been conducted in support of activities covered by HWIR-media, or other cleanup projects, would be preferable to adopting provisions for treatability studies in the HWIR-media rule.

DOE supports including provisions related to conducting treatability studies in the HWIR-media rule. The flexibility to adapt the scale of media treatability studies to the site-specific circumstances while offering relief from certain administrative requirements, such as manifesting and permitting, would be beneficial in facilitating the adaptation of remedial technologies to specific sites. However, the existing treatability study sample exclusion should also remain available (as EPA implies that it will) as it may adequately cover the circumstances for a number of treatability studies involving contaminated media.

2. p. 18817, col. 1 -- EPA states that it is aware, based on comments received on the proposed Treatability Sample Exclusion Rule, that the quantity limits were not always sufficient to allow treatability studies of appropriate scale, particularly for in-situ treatments. EPA requests comment on whether the responsible regulatory agency should be allowed to determine, on a site-specific basis, to exempt (from RCRA Subtitle C regulation) waste under treatability studies when necessary in order to obtain effective treatability study results.

DOE supports giving the responsible regulatory agency authority to exempt quantities of waste from remedial cleanup activities from RCRA Subtitle C regulation for the purpose of performing treatability studies if doing so would facilitate the treatability studies.

#### V.D.4 Approval of RMPs - §269.43

1. p. 18817, col. 3 - p. 18818, col. 1 [and p. 18825, col. 3] -- EPA proposes to require the use of the minimum public participation requirements set out in RCRA section 7004(b). The Agency requests comments on whether these public participation requirements are appropriate for RMPs. Specifically, comments are requested on whether the final rule should allow for different degrees of public participation depending on the nature of the activities being performed, and whether EPA should allow decisions to be made on a site-specific basis about the level of public participation necessary.

DOE believes that it would be appropriate to allow differing degrees of public participation in the approval process for a RMP based on the activities to be performed under the RMP. This would avoid potentially delaying cleanups (in order to comply with public notice, comment and hearing requirements) in situations where the RMP would not be serving as a RCRA permit. DOE also believes that site-specific determinations about the level of public participation would be appropriate, with the RCRA statutory minimum required if the RMP would in fact serve as a RCRA permit. For some remedial activities (e.g., remedial activities in locations nearby public receptors), an elevated level of public participation (e.g., notice, comment and opportunity for hearings) will be important. However, for other locations (e.g., well within a facility boundary) where public receptors are distant or absent, a lesser degree of public participation (e.g., notice only) may be adequate. Notwithstanding, if a CERCLA remedial action is ongoing at a facility, the public participation requirements for approval of a RMP in regards to the same remediation site should be consistent with the public participation requirements of CERCLA.

2. p. 18818, col. 1 and p. 18854, col. 2 -- EPA explains that once the RMP has been approved, it would be an enforceable document, and a final Agency action (not subject to administrative appeals in 40 CFR 124.19). This requirement is addressed in proposed 40 CFR 269.43(e)(4) which states, in part, that:

The Director's approval of a RMP shall constitute final Agency action (not subject to the administrative appeals in 40 CFR 124.19).

DOE requests that EPA reconsider this provision, at least as it applies to situations where EPA is the responsible regulatory agency, and another federal agency, such as DOE, is the RMP applicant. Proposed 40 CFR 269.43(e)(3) requires the Director to consider and respond to timely comments on the draft RMP, and allows the Director to modify the RMP based on those comments, as appropriate, before approving the RMP pursuant to 40 CFR 269.43(e)(4). Inasmuch as federal administrative agencies are unable to seek judicial review of final actions of other federal administrative agencies, if EPA is the responsible regulatory agency, the proposed procedure would preclude DOE, and other federal administrative agencies, from disputing any modifications made by the Director in response to public comments. DOE requests that EPA address this concern in the final HWIR-media rule.

Even for non-federal agency facilities, DOE questions the wisdom of not giving RMP applicants at least the opportunity to comment on modifications made by the Director in response to public input before the RMP becomes enforceable. It is possible that changes resulting from public comments would substantially increase the cost of compliance, or otherwise significantly affect the facility's ability to complete remedial actions, without the Director's being aware of it. Under such

circumstances, the facility would have no choice but to comply, or suspend remedial activities, while seeking judicial review. This would have the undesirable result of slowing the remedial process; a situation that could possibly be avoided by simply giving the facility the chance, before final Agency action, to respond to changes that result from public comments.

3. p. 18818, cols. 1&2 and p. 18854, col. 2 -- The preamble explains that RMPs that require combustion of cleanup wastes at a media cleanup site would have to be approved according to the more rigorous procedures that are required for RCRA permits under Part 270. This would include the requirement for "preliminary demonstrations of performance through trial burns." This requirement is addressed in proposed 40 CFR 269.43(f), which specifies that:

For remedial actions involving on-site combustion of hazardous remediation wastes, the procedural requirements for issuance of RCRA permits (specified in 40 CFR Parts 124 and 270) shall at a minimum be followed for review and approval of RMPs.

DOE believes that confusion could result from the proposed regulatory language. It is not clear from this language which specific requirements in 40 CFR Parts 124 and 270 constitute "procedural requirements" for the purpose of this provision. For instance, preliminary performance demonstrations of hazardous waste combustion units (e.g., through trial burns), could be considered non-procedural. Therefore, DOE recommends that in the final HWIR-media rule, EPA clarify 40 CFR 269.43(f) by referencing the specific sections of 40 CFR Part 270 with which compliance is mandated.

#### V.D.5 Modification of RMPs -- §269.44

1. p. 18818, col. 2 and p. 18854, col. 2 -- Proposed 40 CFR 269.44(a) states:

(a) The Director shall specify in the RMP procedures for modifying the RMP. Such procedures must provide adequate opportunities for public review and comment on any modification that would result in a major or significant change in the management of contaminated media at the site, or which otherwise merits public review and comment.

DOE requests that the final HWIR-media rule provide better definition of the types of modifications that would be judged to result in "a major or significant change" in contaminated media management, thus triggering the requirement for public review and comment. Without additional guidance, DOE believes there could be considerable inconsistency among remediation sites as to when public review and comment is required on modifications. DOE suggests that the listing of types of facility modifications requiring Class 3 RCRA permit modifications [Appendix I to 40 CFR 270.42] might be an appropriate model.

#### V.E Streamlined Authorization Procedures for Program Revisions (Part 271)

- V.E.3 Streamlined Procedures -- §271.21

V.E.3.c Clarification of the meaning of the term “Equivalent” (§271.21(j))

1. p. 18822 , col. 2 & 3 -- EPA clarifies that the term “equivalent” means that the proposed State program is no less stringent than the Federal program. The Agency requests comments on whether or not this definition of equivalent should be applied to all authorization decisions, and if so, whether it should be finalized in 40 CFR 271.21(j), or 40 CFR 270.2.

DOE supports the proposed streamlined authorization procedures for State program revisions. The use of Category 2 authorization procedures discussed in the HWIR-media proposal, in conjunction with the Category 1 authorization procedures previously proposed, should make the State program authorization process more efficient while maintaining adequate review by EPA and opportunity for public comment.

DOE recommends that, for consistency, the proposed clarification of the term “equivalent” be finalized in 40 CFR 270.2 rather than 40 CFR 271.21(j) and be applied to all authorization decisions, rather than only to Category 2 authorizations.

V.F Corrective Action Management Units -- §264.552

1. p. 18829, col. 2 -- EPA states that the proposed rule, at §264.552 would withdraw the existing regulations for Corrective Action Management Units (CAMUs), which were promulgated on February 16, 1993 (58 FR 8658).

DOE opposes withdrawal of the existing regulations for CAMUs because existing CAMU regulations protect human health and the environment while providing a great deal more site-by-site flexibility for managing remediation wastes than would the HWIR-media rule, as proposed. Specifically:

- a. CAMUs can be located anywhere within the boundaries of a RCRA facility that is undergoing corrective action, including uncontaminated areas, if warranted, and can receive remediation wastes from remediation activities being conducted anywhere at the RCRA facility (including wastes which have migrated beyond the facility boundary). In contrast, media remediation sites (as defined under proposed 40 CFR 269.3) are restricted to being located at contaminated areas and areas "in close proximity to the contaminated area," which EPA interprets as being adjacent to the contaminated area (61 FR 18793, col. 2), and are not allowed to receive remediation wastes from beyond their boundaries. As DOE mentioned in Specific Comment V.A.3, item 3.a(1) above, at large industrial installations, DOE believes it is important to have the option to centrally manage remediation wastes (i.e., to consolidate remediation wastes from multiple remediation sites into one centralized management/disposal facility when the remediation sites and the management/disposal facility are all within the boundaries of property controlled by the owner/operator of the management/disposal facility). As an example, at DOE’s Sandia National Laboratory, where there are multiple small and very dispersed solid waste management units requiring corrective action, being able to centralize remediation waste management in a CAMU has provided incentive for cleaning up even the smallest, least contaminated sites. Under the proposed HWIR-media provisions the incentive to cleanup these smaller areas would be diminished. Without the availability of centralized



waste management as offered by the CAMU regulations, the preferred option at many of these small sites may be to pursue a finding that no further action is required.

- b. Design and operating standards for units located in CAMUs are established on a site-by-site basis, and consolidation or placement of remediation wastes into such units does not subject the unit to minimum technological requirements (MTRs) [40 CFR 264.552(a)(2)]. Under the proposed HWIR-media rule, however, land-based units (except remediation piles) located at media remediation sites would be required to meet MTRs, regardless of site-specific conditions. DOE sees this as a significant disincentive to choosing remedies involving excavation, treatment and replacement of remediation wastes when compared to CAMUs because on-site disposal facilities are likely to be much more expensive as a result of the requirement to meet MTRs. Also, in some situations, MTRs may not only be more expensive, but also less innovative and protective. For example, DOE's Sandia National Laboratory is planning a CAMU which will include a containment cell at an arid site in New Mexico. Under the proposed HWIR-media regulations, MTRs would be required. Under the CAMU regulations, however, Sandia has had the flexibility to propose more innovative and current containment cell liner (geotextile rather than clay) and groundwater monitoring (superior vadose zone monitoring) systems that are more suited to the site-specific situation. In addition, Sandia has addressed site-specific geological, hydrological and climatic factors in designing the containment cell cap, thus providing a cap more suited to the arid climate than a traditional RCRA cap would be. While the newly proposed provisions for remediation piles are intended to preserve some flexibility with respect to treatment and storage options, they do not make up for the lost flexibility relative to disposal options.
  
- c. Although placement of remediation wastes into CAMUs does not trigger LDR requirements, treatment standards applicable prior to disposal are considered and imposed by the responsible regulatory agency on a site-by-site basis for remediation wastes managed in CAMUs. Remediation wastes disposed of at media remediation sites under the proposed HWIR-media rule, however, would be required to meet LDR treatment standards, unless LDRs had not attached at the time the remediation wastes were removed from the land (i.e., the contaminating waste was disposed of prior to the date on which LDR treatment standards became applicable to it, or remediation media is determined to not contain hazardous waste before it is excavated). DOE views the proposed requirement to meet LDR treatment standards as a potentially significant disincentive under the HWIR-media regulations to remedies involving excavation, treatment and replacement of remediation wastes. First, applicable LDR treatment standards for remediation wastes are difficult to determine because they may vary significantly depending on the type of remediation waste (i.e., media, sludge, debris), the timing of disposal of the contaminating hazardous waste, the qualification of media or debris for a contained-in determination, the availability of a media treatment standards and the availability of alternative treatment standards for media and debris. Then, once determined, if the applicable LDR treatment standards are those that would have applied to the hazardous waste that caused the contamination, such standards may be difficult or impossible to meet for remediation wastes. To accommodate this situation, EPA has proposed alternative LDR treatment standards for hazardous soils and has proposed presumptive media treatment variances for media containing constituent concentrations below the Bright Line. Nevertheless, DOE regards these accommodations as inadequate substitutes for the flexibility now offered by the CAMU rule.

DOE suggests that EPA consider retaining the CAMU rule in addition to finalizing the HWIR-media rule if the scope of the HWIR-media rule is not broadened to include all remediation waste. The broader scope of the existing CAMU rule now affords responsible agencies the flexibility to deal with both media and non-media remediation wastes in the most appropriate and beneficial way on a site-specific basis. Since the HWIR-media rule, as proposed, would not preserve such flexibility for non-media remediation wastes, it would be beneficial to retain the CAMU rule, in spite of promulgation of the HWIR-media rule.

2. p. 18829, col. 3 -- EPA mentions that some parties have argued that the CAMU rule allows regulators too much discretion in determining appropriate, site-specific management requirements for cleanup wastes. EPA goes on to explain that these parties support the idea of having some type of minimum national LDR treatment standards for cleanup wastes.

Regarding LDR treatment standards for remediation wastes placed in CAMUs, the current regulations exempt such wastes from LDR requirements since placing remediation wastes into CAMUs “does not constitute land disposal of hazardous waste” [40 CFR 264.552(a)(1)]. However, the current regulations also establish as one of the criteria for CAMU designation that the CAMU enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU [40 CFR 264.552(c)(6)]. Therefore, in considering whether to approve a CAMU, the responsible regulatory agency must evaluate whether remediation waste treatment is needed and, if so, designate appropriate technologies. Further, all site-specific requirements for a CAMU must be incorporated into a RCRA permit, or an administrative order (for interim status units) [40 CFR 264.552(e)]. Since the RCRA permitting process, as well as the process for issuing administrative orders, to approve CAMUs is subject to public review and comment, DOE believes the concerns that some parties have raised about the level of discretion given to regulators by the CAMU rule are somewhat overstated. Nevertheless, if EPA wants to address the concerns by changing the way the CAMU regulations deal with the applicability of LDR treatment standards to remediation wastes, DOE suggests that EPA consider changing this approach by defining the generation of remediation wastes as a new point of generation. As explained by Specific Comment V.C.8, item 1.b, this would allow remediation wastes to be characterized based on their own attributes at the time they are removed from the land, rather than based on the mixture and derived-from rules and the contained-in principle. LDR standards could then be applied only if the newly generated wastes exhibited a hazardous characteristic, in which case either the LDR treatment standards appropriate to hazardous wastes with such characteristic could be applied, an LDR treatment standard appropriate for the type of remediation waste produced could be applied (e.g., hazardous soils), or a treatability variance could be sought. DOE suggests this approach to deciding what LDR standards should apply to remediation wastes regardless of the applicability of LDR standards to the waste that caused the contamination of the remediation wastes. Of course, if LDR standards were applicable to the waste that caused the contamination at the time such waste was disposed, and the applicable LDR standards were not met, the responsible regulatory agency could still bring an enforcement action for that noncompliance. However, the newly

generated remediation waste would not necessarily be required, under this suggested approach, to meet the LDR standard that applied to the waste causing it to be contaminated.

DOE believes that it makes sense conceptually for removal of remediation wastes from the land to be considered a new point of generation. RCRA was conceived as a system for ensuring proper management of hazardous wastes "from cradle to grave." Using this visual image, the hazardous wastes which contaminate a remediation site, should be considered to have reached their graves at the time they were land disposed. When contaminated remediation wastes are generated, they often have different attributes (i.e., physical and/or chemical characteristics) from the original wastes. For example, many of the chlorinated solvents in F001 and F002 wastes will react anaerobically to form vinyl chloride. Vinyl chloride is not a constituent of F001 or F002 solvents. Hence it seems inappropriate to "resurrect" the original wastes for purposes of determining how the remediation wastes should be managed. Instead, it seems more reasonable to recognize the removal of remediation wastes from the land as a new point of generation, and manage them in a manner appropriate for their attributes and characteristics at that time.

3. p. 18829, col. 3 -- EPA states that the proposed elimination of the CAMU rule "should also minimize potential disruptions to site cleanups that are planned or under way, since existing CAMUs approved prior to the publication date of a final HWIR-media rule could continue to operate until their cleanup activities are complete."
- a. As stated in Specific Comment V.F, item 1, DOE opposes elimination of the CAMU rule. However, if EPA decides to go forward with its elimination, DOE suggests that the Agency reconsider its proposal to grandfather only those CAMUs that have been approved on the date that the HWIR-media rule becomes final. This cut-off date would prevent CAMUs for which applications have been submitted from being approved, which DOE submits would be unduly burdensome for applicants. Preparation of an application for a RCRA permit modification is very time consuming, requires a major level of effort, and is very costly for the applicant. A more reasonable approach would be to prohibit applications for CAMUs after the finalization of the HWIR-media rule, but to allow the processing and consideration of applications already completed and submitted to continue (i.e., based on decisions made by the responsible regulatory agencies). Sandia National Laboratory (SNL) advocated this position in a statement at the June 4, 1996 public hearing held by EPA on the HWIR-media rule in Arlington, Virginia. SNL's statement pointed out that the Laboratory began considering the feasibility of a CAMU in June 1994, and that submission of a permit modification request was planned for July 1996. During the two intervening years, SNL worked with EPA Region 6, the New Mexico Environment Department, and concerned community members to develop a plan for CAMU designation that would be protective of human health and the environment, as well as provide the flexibility to manage all remediation wastes generated during corrective action activities using innovative and site-specific technologies and address stakeholder concerns. Approximately two million dollars and considerable effort on the part of SNL personnel, regulatory staff, and members of the public, was expended. SNL requested, as DOE does now, that EPA recognize the efforts and commitment of resources already made when an application

for a CAMU has been submitted, and allow processing of submitted applications to continue at the discretion of the responsible regulatory agency if the CAMU option is eliminated.

- b. A second reason supporting an approach that would allow continued processing of applications for CAMUs that have been submitted before the finalization date of the HWIR-media rule [i.e., if EPA decides to go forward with the elimination of CAMU regulations] involves the time that will necessarily pass before a State can incorporate the HWIR-media rule into its authorized RCRA hazardous waste program. If only CAMUs that are already approved on the final date of the HWIR-media rule are grandfathered, there will be an interim period between finalization of the HWIR-media rule and receipt of a State's authorization to implement the HWIR-media rule when remediation waste management activities could not be approved unless they were compliant with full Subtitle C requirements applicable to contaminating wastes. This hiatus would slow approvals of remedial activities and frustrate efforts to expedite cleanups.
4. p. 18829, col. 3 and p. 18830, col. 1 -- The proposed rule would cover only contaminated media, whereas all types of cleanup wastes can be managed in CAMUs. Therefore, eliminating CAMUs could have a significant impact in some situations, such as remedies involving sludges and other non-media wastes that will revert to full Subtitle C regulation, including LDRs and MTRs, under the proposed rule. Therefore, EPA requests comments on what benefits might accrue if the CAMU rule were retained. Specifically, the Agency requests comments on what the ramifications may be of failing to provide the degree of relief that the CAMU rule has provided.
    - a. DOE believes that, in addition to significantly affecting remedies involving sludges and other non-media wastes, elimination of the CAMU rule could significantly affect remedies involving hazardous media and non-hazardous media (i.e., media which has been determined to not contain hazardous waste) to which LDRs apply. While alternative LDR treatment standards (and possibly a media treatment variance) would be available under the HWIR-media rule, it appears that the RCRA Subtitle C requirement that treated hazardous media be disposed of in a land disposal unit meeting MTRs would not be eliminated by the HWIR-media rule. Therefore, if treated media must be disposed of in units meeting MTRs (regardless of the risks posed by the treated media), rather than in CAMUs, for which responsible regulatory agencies have established design requirements on a case-by-case basis (taking the risks posed by the treated media into account), DOE believes the cost of many remedial actions would significantly increase, with no corresponding improvement in the protection of public health and the environment. This would be a disincentive to selection of remedies involving excavation, treatment and replacement, and could signal a return to frequent reliance on potentially less protective in situ remedies.
    - b. On June 4, 1996, EPA held a public hearing on the proposed HWIR-media rule in Arlington, Virginia. At that hearing, DOE's Sandia National Laboratory presented testimony describing the potential ramifications for Sandia's remediation efforts of failure by the HWIR-media rule to provide the degree of relief from RCRA Subtitle C regulations that the CAMU rule has provided, unless Sandia succeeds in obtaining approval for its proposed CAMU before the HWIR-media rule becomes final. The negative impacts listed in Sandia's testimony include:

- reduction in waste management flexibility and options (e.g., inability to convert the approved TU elements into a CAMU);
- loss of the investments (time and financial) to date in CAMU designation efforts;
- inability to complete site remediation efforts by the year 2000 due to increased costs associated with off-site transport and management of contaminated media;
- loss of DOE small site status and associated funding;
- increased costs associated with management of contaminated media and debris;
- deterioration of relationships and loss of trust established with stakeholders which may affect future Sandia activities; and
- increased costs and site remediation time associated with preparation and implementation of a Remediation Management Plan.

5. p. 18830, col. 1 -- EPA requests suggestions of ways that the CAMU might be modified to target the CAMU provisions on wastes that pose lower risks.

DOE does not favor an approach that would modify the CAMU provisions by limiting the universe of remediation wastes allowed to be managed in CAMUs to lower-risk wastes. Nevertheless, DOE would prefer such limitation to complete elimination of the CAMU option. As an alternative, DOE suggests that CAMUs be allowed, as they now are, to accept any remediation wastes from RCRA facilities on which they are located, provided that site-specific requirements imposed on CAMUs provide for management of such wastes in a manner that protects human health and the environment. The issue then becomes one of ensuring that site-specific requirements applied to CAMUs will be protective. DOE believes this could be accomplished by setting national, minimum performance standards for CAMUs which would be applied locally at each site. For example, such standards might specify that an individual member of the public who would receive the highest exposure to hazardous constituents as a result of activities at the CAMU from all pathways must achieve a risk of cancer range of  $10^{-4}$  to  $10^{-6}$ . Under this approach, EPA could then develop guidance on acceptable methodologies for demonstrating compliance with the performance standard.

V.G Remediation Piles -- §§260.10 and 264.554

1. p. 18830, col. 3 and p. 18850, col. 1 -- Although the design and operating requirements for remediation piles are specified in proposed §264.554, remediation piles could also be approved under orders, and at interim status facilities.

DOE notes that proposed §264.554(a) refers to setting case-by-case design and operating standards for remediation piles used "during remedial operations that are conducted in accordance with an approved permit or order [emphasis added]." Also, proposed §264.554(b) indicates that "[p]lacement of remediation waste (including hazardous contaminated media) into a remediation pile designated in an approved permit or order shall not constitute placement in a land disposal unit for the purposes of section 3004(k) of RCRA [emphasis added]." Finally, proposed §264.554(d) requires the Director to "specify in the permit or order the design, operating and closure requirements for any remediation pile, ... [emphasis added]." The italicized language in the preceding quoted passages implies that remediation piles must be designated by an approved RCRA permit or order. There is no mention of designating remediation piles in Remediation Management Plans (which under the proposed HWIR-media rule would function as RCRA permits). DOE requests that the Agency clarify in the final

regulatory language that remediation piles can be designated, designed, operated and closed in accordance with Remediation Management Plans, as well as RCRA permits and orders.

2. p. 18831, col. 1 -- By proposing the concept of remediation piles in 40 CFR 264, such units will be available for cleanups that are not mandated by RMPs under Part 269, and for cleanups that include remediation wastes other than contaminated media.

DOE would support establishing provisions applicable to remediation piles in 40 CFR 264.552 so they would be available, like temporary units, for cleanups other than those governed by RMPs under Part 269.

3. p. 18831, col. 2 -- EPA explains that the proposed HWIR-media rule does not prescribe any specific design or operating standards for remediation piles. Instead, the Director would establish such requirements on a case-by-case basis, using the decision factors specified for Temporary Units. Comments are requested as to whether more national uniformity is necessary in the design and operation of remediation piles.

DOE suggests that EPA publish guidance on good engineering practice for remediation piles. This should encourage national uniformity in design and operation while leaving actual requirements to be established on a case-by-case basis, as proposed.

#### V.H Dredged Material Exclusion -- §261.4

1. p. 18831, cols. 2&3 -- EPA proposes to establish that dredged material disposed in waters of the United States in accordance with a permit issued under section 404 of the Clean Water Act (CWA) or in ocean waters in accordance with a permit issued under section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), would not be subject to Subtitle C of RCRA.

DOE supports efforts directed at the removal of dual regulation whenever possible. In the case of dredged material, DOE supports excluding it from regulation under RCRA Subtitle C when it is being disposed in accordance with a CWA section 404 permit, or a permit issued under section 103 of the MPRSA.

#### VI. Alternative Approaches to HWIR-media Regulations

##### VI.A The Unitary Approach

##### VI.A.3 LDRs Under the Unitary Approach

1. p. 18835, cols. 1-3 -- Under the Unitary Approach, remediation wastes (including contaminated media) addressed in a RAP would, as a general matter, be excluded from all RCRA Subtitle C requirements, including LDRs. However, in *Chemical Waste Management v. EPA*, 976 F.2d 2 (D.C. Cir. 1992), the Court reasoned that elimination of a waste's "hazard" designation does not necessarily eliminate LDR obligations. Thus, for wastes that have entered the Subtitle C system, and for which LDRs have attached, a

finding that such wastes are conditionally exempt from RCRA (as is proposed by the Unitary Approach) may not eliminate LDR obligations. If EPA promulgates the Unitary Approach, the Agency proposes to address the residual LDR issue by applying the "new treatability group" principle. Under this principle, each change in treatability group is a new point of generation for purposes of determining whether a waste is hazardous under RCRA Subtitle C. Therefore, if contaminated media were, by definition, considered a new treatability group under the LDR program, and, media addressed in a RAP is, by definition, not considered hazardous waste, media addressed in a RAP would not be subject to the LDR treatment standards. [Note: If no RAP has been issued at the time media are removed from the land, then Subtitle C applies if the media are hazardous.] For remediation wastes other than media, as long as they were not land disposed after the effective date of an applicable land disposal prohibition, they would not be subject to LDRs if a RAP determined them to be non-hazardous before they were removed from the land. EPA requests comments on alternative approaches to the LDR requirements.

- a. As indicated by General Comment 2, DOE encourages EPA to adopt a hybrid of the proposed "Bright Line" approach and the alternative Unitary approach as the final HWIR-media rule. DOE believes that under the suggested hybrid approach, LDRs would need to be addressed in the same manner as would be required if EPA promulgates the Unitary approach. In that regard, DOE supports EPA's suggestion that the residual LDR issue, relative to remediation wastes under the Unitary Approach, be addressed through application of the "new treatability group" principle. The reasons for DOE's position, as well as other pertinent comments, are presented in Specific Comment V.C.8, item 1.

#### VI.B Hybrid Approach

1. p. 18837, col. 2 -- After describing one possible hybrid of the proposed "Bright Line" and alternative "Unitary" approaches, EPA requests comments on the described hybrid and on "other alternatives that could be adopted to exempt remediation wastes, as appropriate, from Subtitle C regulation."

As indicated in General Comment 2, DOE encourages EPA to adopt a hybrid of the proposed "Bright Line" approach and the alternative "Unitary" approach as the final HWIR-media rule, using the conditional exclusion theory to exempt all remediation wastes from Subtitle C regulation. General Comment 2 outlines the attributes that DOE believes the hybrid approach should have, including:

- All remediation wastes, including media, debris and sludges, could be managed under a site-specific remediation management plan (RMP) [hereinafter, for the purpose of discussions of DOE's suggested hybrid approach, the plan describing how remediation wastes will be managed will be referred to as a RMP].
- All remediation wastes managed under a RMP would be exempt from RCRA Subtitle C regulations.

- RMPs would be required to be developed and submitted for approval to responsible regulatory agencies in accordance with an approved program (subject to appropriate public participation requirements) and guidance to be published by EPA.
- EPA's RMP guidance would specify “bright line” concentrations for hazardous constituents in remediation wastes. The “bright line” constituent concentrations would divide remediation wastes into low-risk and high-risk categories and would be applicable nationwide.
- EPA's RMP guidance would establish recommended remediation waste management standards for the high-risk category. Responsible regulatory agencies would be allowed to impose more or less stringent standards in RMPs based on site-specific considerations. It is recommended that guidance documents clearly establish the advisory nature of the “bright line” concentrations and state that significant deviations from guidance on the use of the “bright line” may be appropriate based on site-specific considerations. Other matters that should be covered by RMP guidance include the assumptions, equations and models which have been developed for deriving “bright line” concentrations, and the methodology for developing “bright line” concentrations on a site-specific basis for constituents that EPA has not yet addressed.
- Remediation waste management requirements for the low-risk category would be established by responsible regulatory agencies based on site-specific considerations.

Further, General Comment 2 explains DOE's reasons for supporting this particular hybrid approach, which is different from the specified hybrid outlined by the HWIR-media preamble.

#### VI.C. Key Elements of an HWIR-media Rule

##### VI.C.2 The Bright Line

1. p. 18838, col. 2 -- EPA acknowledges that by using certain exposure assumptions in determining the Bright Line, especially residential exposure assumptions, could cause confusion. For example, this method could lead to confusion in communicating to the public the actual risks posed by a site. However, EPA does not believe that consensus exists on a methodology for determining non-residential (i.e., industrial) exposure scenarios that could be used as a basis for setting nationwide Bright Line concentrations. EPA requests comment on whether the Bright Line should be based on an industrial exposure scenario, and if so, how the appropriate scenario for a site should be determined and how the methodology for assessing alternative exposure scenarios should be developed.

As stated in Specific Comment V.A.4.c, item 2, DOE believes it would be appropriate to set the bright line based on an industrial human exposure scenario. DOE suggests that one possible approach might be to establish the risk level (i.e.,  $10^{-3}$  for carcinogens and HQ 10 for non-carcinogens) as the bright line, rather than setting nationwide concentration levels. In conjunction with this, a methodology for assessing the risks on a site-specific basis could be designated (either in the regulations, or in guidance).



The RMP could then be required to include analyses of the risk levels at the site for purposes of evaluating whether they are above or below the bright line risk level.

#### OTHER COMMENTS ON PROPOSED REGULATORY LANGUAGE

1. References to 40 CFR Part 267 should be deleted.

EPA has referenced 40 CFR Part 267, usually as part of a range of parts, in several instances in the proposed language. Part 267 was deleted from the CFR on June 29, 1995 [60 FR 33921]. Although references to Part 267 impose no additional requirements on management of media, DOE recommends that references to it in proposed regulatory language be deleted. Examples of such references include:

- p. 18848, col. 3 -- §260.1(a)
- p. 18848, col. 3 -- §260.1(b)(1)
- p. 18848, col. 3 -- §260.1(b)(2)
- p. 18848, col. 3 -- §260.1(b)(3)
- p. 18848, col. 3 -- §260.1(b)(4)
- p. 18848, col. 3 -- §260.2(a)
- p. 18849, col. 1 -- §260.2(b)
- p. 18849, col. 1 -- §260.3
- p. 18849, col. 1 -- §260.10
- p. 18849, col. 1 -- §260.20
- p. 18849, col. 2 -- §261.1(a)(1)
- p. 18849, col. 3 -- §262.11(d)
- p. 18851, col. 2 -- §269.10(a)
- p. 18851, col. 3 -- §269.12(a)
- p. 18851, col. 3 -- §269.12(b)(1)
- p. 18853, col. 2 -- §269.41(c)(2)

2. p. 18849, col. 2 -- §261.4(h)

For consistency of format, DOE recommends adding the words “Dredged Material” at the very beginning of the section as a descriptor.

3. p. 18850, col. 2 -- §264.554(d)

The last sentence of this proposed section reads: “Remediation piles shall not be permitted to operate beyond the time that remedial operations are completed.” [emphasis added] DOE suggests that the word “operate” in this sentence be changed to “receive waste.” This should avoid confusion that could arise about whether activities associated with closure of remediation piles would constitute operation “beyond the time that remedial operations are completed.”

4. p. 18852, cols. 1 -- §269.30(a)(1)

DOE requests that EPA consider codifying in this section the Agency’s policy that if a generator makes a good faith effort to do so, but is unable to determine the date on which listed hazardous waste that

contaminates media was placed, the date is presumed to precede the date on which LDR treatment standards became applicable to the listed waste.

5. p. 18852, col. 1 -- §269.30(d)

DOE requests that EPA consider modifying this proposed section to read:

(d) Prior to land disposal, media identified in paragraph (a) (as modified by paragraph (b)) of this section must be treated according to the applicable treatment requirements specified in paragraphs (e) and (f) of this section unless a variance is given according to §269.31 (Media Treatment Variances), or the Director requires more stringent treatment standards according to §269.32.

6. p. 18852, col. 1 -- §269.30(e)(1)

DOE requests that EPA consider modifying the introductory language of this proposed section to read:

(e) (1) For soils, treatment must achieve the following standards for all constituents subject to treatment (as defined by paragraph (g) of this section) that are present in the soils at concentrations greater than 10 times the Universal Treatment Standard for the constituent(s):

7. p. 18852, col. 2 -- §269.30(g)(2)

In order to reflect the LDR treatment standards applicable to characteristic wastes (D001 - D043) [40 CFR 268.40(e)] promulgated in the Land Disposal Restrictions Phase III final rule [61 FR 15566; 15597 (Apr. 8, 1996)], DOE suggests that EPA modify the language of this section to read:

(2) For media identified by paragraph (a) of this section because it exhibits a characteristic of hazardous wastes as defined by part 261, subpart C of this chapter, any constituent listed in 40 CFR 268.48, Table UTS -- Universal Treatment Standards that is present in the media except fluoride, zinc and vanadium.

8. p. 18853, col. 1 -- §269.40(d)

In order to make the relationship between RMPs and media remediation sites more clear, DOE suggests that EPA consider modifying the language of this section to read:

(d) The corrective action requirements of sections 3004(u) and (v) of RCRA do not apply to persons engaging in treatment, storage or disposal of hazardous wastes ~~solely as part of a cleanup action~~ at a media remediation site pursuant to a RMP.

9. p. 18853, col. 2 -- §269.41(a)

In order to make the relationship between RMPs and media remediation sites more clear, DOE suggests that EPA consider modifying the language of the first sentence of this section to read:

(a) A draft RMP submitted to the Director for approval must contain sufficient information to demonstrate to the Director that the proposed management activities for contaminated media at the media remediation site will comply with the requirements of this part.

10. p. 18854, col. 1 -- §269.43(b)

In order to clarify that draft RMPs are proposed by the owner/operator of a media remediation site, rather than prepared by the responsible regulatory agency, DOE suggests that EPA consider modifying the language of this section to read:

(b) A proposed draft RMP proposed by the owner/operator of the proposed media remediation site shall be signed in accordance with 40 CFR 270.11.

11. pp. 18859-18862 -- Appendix A-2, Bright Line Numbers for Groundwater

DOE encourages EPA to gather adequate data to allow the inclusion of Bright Line numbers in Appendix A-2 for 1,1,1-trichloroethane (TCA) and trichloroethylene (TCE) in groundwater. It is not clear why no data are available for these constituents (as indicated by footnote 1 to the Table in Appendix A-2) from which to derive Bright Line numbers. The proposed HWIR-waste rule [60 FR 66344-66469, Dec. 21, 1995] included exit levels for both TCA and TCE. Further, these are two of the most frequent contaminants at Superfund sites.