



ENVIRONMENTAL GUIDANCE REGULATORY BULLETIN

Office of Environmental Guidance • RCRA/CERCLA Division (EH-231)

July 15, 1992

Hazardous Debris Case-By-Case Capacity Variance

Notice to Approve Capacity Variance

Introduction

The Hazardous and Solid Waste Amendments (HSWA), enacted on November 8, 1984, include provisions to prohibit the land disposal of hazardous wastes that were listed or identified prior to the date of enactment. The amendments prescribe dates on which particular groups of hazardous wastes are prohibited from land disposal unless wastes meet specific levels or methods of treatment (i.e., treatment standards), or are subject to a variance or extension. In addition to prohibiting disposal, Congress forbid storage of any hazardous

waste that is prohibited from land disposal unless “...such storage is solely... to facilitate proper recovery, treatment or disposal.”

On June 1, 1990 (55 *FR* 22520), EPA promulgated regulations implementing the last of five Congressionally-mandated prohibitions on land disposal of hazardous wastes (i.e., the “Third Third” final rule). In this rule [and the January 31, 1991 final rule - technical amendment (56 *FR* 3864)], EPA granted a national capacity variance for certain soil and debris contaminated with First, Second, or Third Third scheduled wastes.

Specifically, a two-year national capacity variance was granted for: Thirds contaminated soil and debris for which the treatment standards were based on incineration, vitrification, mercury re-torting, acid leaching followed by chemical precipitation, or thermal recovery of metals; inorganic solid debris contaminated with D004 through D011 hazardous wastes; and Thirds soil and debris contaminated with radioactive mixed waste. These specified wastes were granted a variance until May 8, 1992.

Subsequently, in a January 9, 1992 *Federal Register* (57 FR 958), EPA proposed to revise the Land Disposal Restrictions (LDR) treatment standards that are applicable to contaminated debris, and outlined a proposed regulatory approach for identifying treatment technologies that must be applied to these wastes prior to land disposal.

These standards would replace the waste code-based treatment standards finalized in or prior to the June 1, 1990 *Federal Register* and would require the use of specific treatment methods listed under three general technology categories for contaminated debris: extraction, destruction, or immobilization. This regulatory approach identifies a group of applicable technologies based on the types of debris and the contaminant categories.

On June 30, 1992, EPA's Administrator signed the "Phase I" LDR final rule, which contains among other provisions, revised treatment standards applicable to hazardous debris (40 *CFR* 268.45). The revised standards for hazardous debris will take effect 90 days after publication of the rule in the *Federal Register*. An *Environmental Guidance Regulatory Bulletin* identifying the new provisions of this final rule is forthcoming.

In response to the January 1992 proposal, EPA received over 130 comments, many expressing that there would be inadequate treatment capacity for hazardous debris as of May 8, 1992

(i.e., the date upon which the variance for most debris expired). EPA was cognizant of the existing capacity shortfall for hazardous debris and recognized that adequate treatment capacity for hazardous debris could not be provided by the prohibition effective date. Accordingly, on May 8, 1992, the EPA Assistant Administrator, Office of Solid Waste and Emergency Response signed a notice to approve, under Title 40 of the *Code of Federal Regulations (CFR)* 268.5, a generic, case-by-case capacity variance from the LDR requirements found in Part 268.

The one-year extension appeared in the May 15, 1992 *Federal Register* (57 FR 20766) and is applicable to all persons managing debris identified or listed as hazardous with several exceptions. These exceptions include debris contaminated with a prohibited waste that is no longer eligible for a case-by-case extension (e.g., spent solvents, dioxins and California list wastes). See the Resource Conservation and Recovery Act (RCRA) Sections 3004(e) and (d), respectively. The statutory time frame for granting case-by-case capacity extensions for these wastes has expired, so that further extensions are not possible.

Conditions of the Variance

In order to be eligible for a case-by-case variance, 40 *CFR* 268.5 specifies seven demonstrations that must be made

and evaluated by EPA. Normally, these demonstrations must be included as part of a case-by-case application that is submitted individually to EPA for the Agency's review. However, based on the evaluation of comments and information submitted in response to previous rulemakings and proposals (e.g., January 9, 1992 proposal), EPA has conducted an evaluation of the seven demonstration requirements and decided to grant a one-year extension that is effective from May 8, 1992 to May 8, 1993 [40 *CFR* 268.35(e)].

As prescribed in 40 *CFR* 268.35(e), this extension only applies to debris contaminated with wastes listed in 40 *CFR* 268.10, 268.11, and 268.12 (First, Second, and Third Third scheduled wastes), and debris contaminated with characteristic hazardous wastes for which LDR treatment standards have been established (i.e., corrosive, reactive, ignitable, and the former EP toxic wastes). The variance also applies to debris contaminated with these hazardous wastes that are radioactive mixed wastes as well. However, as noted above, debris contaminated with solvent wastes listed in 40 *CFR* 268.30, dioxin wastes listed in 40 *CFR* 268.31, or California list wastes that are listed in 40 *CFR* 268.32 or RCRA 3004(d) cannot receive an extension.

To be eligible for the one-year extension, by **July 8, 1992**, or at the time the hazardous debris is generated or treated, whichever is later, each generator, or fa-

cility owner or operator must include the following information in their facility's file:

- (1) The name, mailing address, location, and EPA identification number of the site where hazardous debris will be generated as of May 8, 1992;
- (2) A description of the hazardous debris waste stream, including waste code(s), waste generation rates (m^3/yr), and estimated inventories (m^3) on May 8, 1992, and as of May 8, 1993; and
- (3) A written plan describing how the facility will obtain adequate treatment capacity. This written plan must include a schedule of how the owner or operator plans to design, construct, and obtain the necessary permits to provide on-site treatment, recovery or disposal capacity, or a description of the binding contractual commitment for off-site capacity. The plan must also include the method of storage, storage capacity, and the storage unit's RCRA status (e.g., generator accumulating hazardous waste on-site for 90-days or less, interim status facility, or permitted facility) during the period of the extension. If management of the hazardous debris involves the use of a surface impoundment or landfill, the owner or operator must certify that each *unit* meets the requirements of 40 *CFR* 268.5(h)(2) (i.e., minimum technology requirements). Finally,

the plan must include certification by an authorized representative [40 *CFR* 268.5(b)].

In the case of a generator, the written plan must be kept in the generator's files maintained on-site in accordance with 40 *CFR* 268.7(a)(5). Under 40 *CFR* 268.7(a)(7), generator files must be retained on-site for a period of five years from the date that the waste was last sent to on-site or off-site treatment, storage or disposal. For owners and operators of treatment, storage, or disposal facilities (TSDFs), the written plan must be maintained in their facility's operating record until closure of the facility [40 *CFR* 264.73(b) and 40 *CFR* 265.73(b)]. Furthermore, it is a requirement of this capacity variance that the written plan be furnished and made available upon request, for inspection by a duly designated representative of the EPA or State agency.

For the purpose of this variance, EPA will allow materials meeting *either* the definition of debris that was provided in the preamble to the June 1, 1990, Third Third final rule (55 *FR* 22650), or the definition prescribed in the recently signed final rule that addresses hazardous debris. The June 1, 1990, definition includes both organic debris (e.g. rags, cardboard, plastic liners, and PVC piping) and inorganic solid debris as identified below.

As explained in the June 1, 1990 *Federal Register*, debris itself is defined as

“materials that are primarily non-geologic in origin, such as grass, trees, stumps, shrubs, and man-made materials (e.g., concrete, clothing, partially buried whole or crushed empty drums, capacitors, and other synthetic manufactured items). Debris may also include geologic materials:

- (1) identified as not indigenous to the natural environment at or near the site, or
- (2) identified as indigenous rocks exceeding a 9.5-mm sieve size that are greater than 10 percent by weight, or that are at a total level that, based on engineering judgment, will affect the performance of available treatment technologies.

In many cases, debris will be mixed with liquids or sludges. EPA will determine on a case-by-case basis whether all or portions of such mixtures should be considered debris.”

More recently, in the LDR final rule signed June 30, 1992, EPA revised 40 *CFR* 268.2 by codifying a definition for debris. In general, the codified definition incorporates a change in particle size (i.e., solid material exceeding 60 mm), and includes manufactured objects, plant or animal matter, or natural geologic materials. This revised definition and the remainder of the LDR final rule regarding newly listed wastes and hazardous debris will be addressed in a

forthcoming *Environmental Guidance Regulatory Bulletin*.

It is worth noting that under either definition for debris, debris and associated waste materials generated during cleanup activities may require different management methods under RCRA and the LDR program. For example, partially crushed containers treated using one of the destruction technologies specified in the recent LDR rule (signed June 30, 1992) would be eligible for disposal at a Subtitle D facility (as nonhazardous waste). Conversely, any liquid meeting a listing of hazardous waste(s), which separates from the hazardous debris prior to treatment of the debris, must be treated to meet the waste-specific treatment standards for the listed waste(s) and disposed of at a Subtitle C facility.

Regarding inorganic solid debris, EPA received a number of comments in response to the Third Third proposed rule (November 22, 1989; 54 *FR* 48372) in which both the regulated community and States explained that many of the treatments applicable to metals (e.g., stabilization) require size reduction, which is not available at a sufficient number of facilities.

EPA agreed with the comments and in the Third Third final rule established a separate treatability group for debris that would have to be reduced in size prior to stabilization in order to comply with the treatment standards established

for D004 through D011 wastes. This group is known as “inorganic solid debris.” Inorganic solid debris is defined as nonfriable inorganic solids contaminated with D004 - D011 hazardous wastes that are incapable of passing through a 9.5 mm standard sieve (approximately the size of small pebbles); and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization.

This specific treatability group consists of the following materials:

- Metal slags (either dross or scoria);
- glassified slags;
- glass;
- concrete (excluding cementitious or pozzolanic stabilized hazardous waste);
- masonry or refractory bricks;
- metal cans, containers, drums, or tanks;
- metal nuts, bolts, pipes, valves, appliances, or industrial equipment;
- bits and pieces of metal parts (e.g., turnings, rods, wire); and
- metal pieces that are combined using bolts or solder (e.g., radiators, scrap automobiles, etc.).

Finally, any owner or operator that believes they will require a renewal of this one-year extension must submit an application to EPA by **November 8, 1992**. The application must address the seven demonstrations required under 40 *CFR* 268.5, and must justify the requested renewal period. A renewal of the one-year extension (effective from May 8, 1992 to May 8, 1993) may be granted to an individual applicant until May 8, 1994 (48 months beyond the statutory deadline for Third Third wastes). See RCRA 3004(h)(3).

Other Related Requirements

Although EPA has taken this regulatory action to approve a generic, one-year extension of LDR effective date for persons managing hazardous debris, be aware that certain LDR requirements remain applicable. Restricted wastes that are subject to a variance or extension remain subject to notification requirements [40 *CFR* 268.7(a)(3)]. Specifically, if a generator's waste is subject to an exemption from a prohibition (e.g., case-by-case extension), with each shipment of waste, a notice stating that the waste is not prohibited from land disposal must be submitted to the facility receiving that waste. The notice must include the following information:

- ❑ EPA Hazardous Waste Number;

- ❑ the corresponding treatment standards, either included or referenced by including the appropriate subcategory (e.g., D009, elemental mercury contaminated with radioactive materials), the treatability group of the waste (e.g., wastewater or non-wastewater), the *CFR* sections and paragraphs where the applicable treatment standards appear, and, where applicable (i.e., for treatment standards expressed as specified technologies), the corresponding 5-letter treatment code (e.g., HLVIT, AMLGM);
- ❑ the manifest number;
- ❑ waste analysis data; and
- ❑ the date the waste is subject to the prohibitions (e.g., May 8, 1993).

Also, note that under the LDR program, waste generators who treat, store, and dispose on-site must put the same information in the operating record (except for the manifest number).

In the September 6, 1989, *Federal Register* (54 *FR* 36967), EPA provides a chart that identifies the applicability of certain LDR provisions during the period of a case-by-case extension. Pursuant to this chart, hazardous wastes eligible for a case-by-case extension are subject only to the waste analysis and tracking requirements in 40 *CFR* 268.7, but **not** the dilution or storage prohibition. See 54 *FR* 36968. Furthermore, in the

September 1989 notice, EPA also revised the regulatory language in 40 *CFR* 268.50(d) to specifically state that the storage prohibition does not apply to wastes subject to an approved case-by-case extension.

EPA has stated repeatedly that the California list regulatory and statutory prohibitions are superseded by more specific prohibitions and treatment standards. See 52 *FR* 25773, 53 *FR* 31188, and 55 *FR* 22674. However, during the period of a capacity variance related to more specific standards (e.g., during a case-by-case extension), the California list prohibitions continue to apply.

For hazardous debris that is eligible for the one-year extension, but exceeds a California list threshold, a generator's notification (i.e., during the one-year extension) must contain both the information listed above for the waste code(s) subject to the extension, as well as the appropriate treatment standard(s) applicable to the California list constituent(s). Before this type of waste can be land disposed, the waste must be treated below the California list prohibition level or treated by the specified technology. Once the variance expires, generator's will resume listing only the more specific waste code on the notification.

Finally, it should be noted that if hazardous debris that is subject to this case-by-case extension is treated to meet the applicable treatment standards, the land disposal restrictions allow such waste to

be disposed in a Subtitle C landfill or surface impoundment (or any other Subtitle C unit) regardless of whether the unit meets minimum technology requirements (MTR). See 55 *FR* 22526 and 22659.

Additionally, as explained in the June 1, 1990 *Federal Register* (55 *FR* 22659), if during the period of a case-by-case extension, a characteristic hazardous waste (e.g., D009) was treated to be nonhazardous, it can be sent to a Subtitle D landfill or surface impoundment unit regardless of whether the unit meets MTR. Furthermore, once the hazardous debris portion of the June 1992 final rule takes effect (i.e., 90 days after publication), hazardous debris that is treated using one of the required extraction or destruction technologies will no longer be subject to Subtitle C regulation, provided that the treated debris no longer exhibits a characteristic of hazardous waste. Requirements applicable to hazardous debris that is excluded from Subtitle C under this new provision will be described in the forthcoming *Environmental Guidance Regulatory Bulletin* regarding the recently signed LDR final rule.

Please direct questions about this RCRA notice regarding the Hazardous Debris Case-By-Case Capacity Variance to Bill Fortune, DOE Office of Environmental Guidance, RCRA/CERCLA Division, EH-231, 1000 Independence Ave., S.W., Washington, D.C., 20585, at (202) 586-7302.

Fold here

Postmaster: If unable to deliver, return to:

Office of Environmental Guidance
RCRA/CERCLA Division, EH-231
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

ADDRESS CORRECTION REQUESTED

