



ENVIRONMENTAL GUIDANCE REGULATORY BULLETIN

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

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Renewal of Hazardous Debris Case-By-Case Capacity Variance

Final Rule Issued to Renew Variance

Introduction

The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) directed the Environmental Protection Agency (EPA) to develop regulations imposing, on a phased schedule, restrictions on the land disposal of hazardous wastes. On June 1, 1990 (55 *FR* 22520), EPA promulgated regulations implementing the last of five Congressionally-mandated land disposal restrictions (LDR) rule-makings (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 hazardous wastes (i.e., extending the LDR effective

date until May 8, 1992). This variance was also applicable to “Thirds” soil and debris contaminated with radioactive mixed waste.

Subsequently, in a January 9, 1992, *Federal Register* notice (57 *FR* 958), EPA proposed to revise the LDR treatment standards applicable to contaminated debris and outlined a proposed regulatory approach for identifying treatment technologies that must be performed on these wastes prior to land disposal. At the time of this proposed rule, hazardous debris was subject to the treatment standards established for the hazardous waste(s) that contaminated the debris.

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. Furthermore, it was apparent that the revised treatment standards for debris would not be finalized by the variance expiration date.

Accordingly, on May 15, 1992, EPA published a notice to approve (under 40 CFR 268.5) a generic, hazardous debris case-by-case capacity variance from the LDR requirements.¹ This regulatory action provided a one-year extension of the LDR effective date.

¹ See EH-231 *Environmental Guidance Regulatory Bulletin* entitled “Hazardous Debris Case-By-Case Capacity Variance,” July 15, 1992.

EPA indicated in this notice that persons desiring a renewal of the variance (beyond May 8, 1993) would be required to submit an individual case-by-case variance application (i.e., for their respective sites). EPA further stated that individuals interested in receiving a renewal must have their application submitted before November 8, 1992.

Independent of the generic, case-by-case variance, in a final rule published on August 18, 1992 (57 *FR* 37194), EPA promulgated revised treatment standards for debris contaminated with listed hazardous waste or debris that exhibited certain hazardous waste characteristics. Under the revised standards, hazardous debris can be treated using specified treatment technologies, dependent on the type of debris and type of contaminant(s) present. The August 1992 rule identifies a number of Best Demonstrated Available Technologies (BDAT) for treating hazardous debris and allows the generator and/or treater managing the waste the flexibility of choosing the technology. Alternatively, generators and/or treaters have the option to meet the existing waste-specific treatment standards for the prohibited listed or characteristic waste contaminating the debris. For a further discussion see the "Other Related Requirements" section of this bulletin.

Despite the promulgation of the revised treatment standards, by November 8, 1992, EPA had received almost 200 case-by-case variance applications requesting a renewal of the extension. Applicants stated that treatment capacity in compliance with the August 18, 1992, debris rule was still lacking and that the period of time necessary to permit, construct, and start-up treatment and storage units would prevent them from providing the necessary treatment capacity. Also, a recent EPA capacity analysis indicates that a general lack of treatment capacity for hazardous debris exists. Furthermore, uncertainty associated with the physical and chemical prop-

erties of debris generated during remediation projects, as well as the type(s) of equipment needed/available to manage these debris wastes are difficult to determine.

Therefore, based on the large number of case-by-case variance applications, and the additional factors discussed above, EPA published a final rule on May 14, 1993 (58 *FR* 28506), granting a renewal of the case-by-case capacity variance for certain hazardous debris.² This rule became effective on May 8, 1993, and extends the LDR effective date for covered hazardous debris until May 8, 1994.

Information submitted by the Hazardous Waste Treatment Council to EPA indicates that some treatment capacity is available for certain categories of debris. As a result, the requirements associated with this extension include a notable difference from the preceding generic, case-by-case variance. To be eligible for this variance, EPA requires persons claiming the variance to submit a report that satisfies certain information requirements and includes a demonstration that a good-faith effort to locate appropriate treatment capacity has been undertaken (see the requirements associated with the extension described below).

Conditions of the Variance

As with the initial case-by-case capacity variance, this extension applies to debris (1) contaminated with wastes listed in 40 CFR 268.10, 268.11, and 268.12 (First, Second, and Third Third scheduled wastes); (2) contaminated with characteristic hazardous wastes for which LDR treatment standards have been established (i.e., corrosive, reactive, ignitable, and former EP toxic wastes); and (3) contaminated with these hazardous wastes that are also radioactive mixed wastes. Debris contaminated with solvent wastes ad-

² See Office of Environmental Guidance memorandum, "Renewal of Hazardous Debris Case-By-Case Capacity Variance," June 21, 1993.

dressed in 40 CFR 268.30, dioxin-containing wastes addressed in 40 CFR 268.31, or non-liquid California list wastes that are addressed in 40 CFR 268.32 or RCRA 3004(d) are not covered by this extension.

Of integral importance when identifying material that is eligible for this variance is EPA's application of the term *debris*. EPA affords generators some latitude when identifying material that is eligible for the renewal by allowing debris to be defined as either

- (1) *debris* as defined in 40 CFR 268.2(g);
- (2) nonfriable inorganic solids incapable of passing through a 9.5 mm standard sieve that require size reduction prior to stabilization, limited to the following inorganic or metal materials:
 - metal slags (either dross or scoria);
 - glassified slags;
 - glass;
 - concrete (excluding cementitious or pozzolanic stabilized hazardous wastes);
 - masonry or refractory bricks;
 - metals cans, containers, drums, or tanks;
 - metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment; and
 - scrap metal [bits and pieces of metal parts (e.g., turnings, rods, and wire) and metal pieces that are combined using bolts or solder (e.g., radiators, railroad cars)]; **or**
- (3) organic debris, inorganic debris, geologic materials that are not indigenous to the

natural environment at or near the site, or 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 treatment technologies performance (see 55 *FR* 22650)³.

The current definition for *debris* under 40 CFR 268.2(g) was promulgated in the August 18, 1992, final rule (57 *FR* 37270). This definition includes "...solid material exceeding a 60 mm [2.5 inch] particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material...."

The particle size criterion may be implemented based on visual observation (i.e., screening is not required). EPA defines *solid material* in a literal sense to mean a material that retains its volume at room temperature without the need for support by a container (57 *FR* 37222). Although debris must be a solid material, in many cases, it may contain or be mixed with liquids or sludges. EPA prescribes "[a] mixture of debris... is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection." EPA further clarifies that if debris contains free liquid that oozes from the debris, the remaining volume of entrapped liquid need not be considered when visually determining whether the mixture is primarily debris. However, if nondebris materials (e.g., oozing liquids, clumps of soil, etc.) separate from the debris prior to treatment by a specified technology, the separated materials are no longer classified as debris.

If the materials constitute a listed hazardous waste or exhibit a prohibited characteristic, they must be managed as hazardous waste—or soil contaminated with a hazardous waste—subject to the applicable waste-

³Conversations with EPA personnel (Capacity Programs Branch and Office of General Counsel) indicate that the intent of this renewal is to include all hazardous debris that was covered by the previous generic, hazardous debris case-by-case capacity variance. Eligibility for the first generic variance relied on the narrative description of debris provided in the preamble to the Third Third final rule. EPA personnel have indicated that they plan to publish a technical correction notice to clarify the appropriateness of using the June 1, 1990, description.

specific treatment standards. Clumps of agglomerated clay or soil do not qualify as debris and are subject to the waste-specific treatment standards for the waste contaminating the soil. (see 57 FR 37223 and 37224)

In addition to identifying materials that qualify as debris, in the August 18, 1992, (Phase I) final rule, EPA specifically excluded several materials from meeting the codified definition of *debris* [40 CFR 268.2(g)]. Materials *not* meeting the definition of debris include the following:

- ❑ Materials with specified treatment standards identified in 40 CFR Part 268, Subpart D (e.g., D006 - cadmium containing batteries and D008 - radioactive lead solids subcategory). These wastes are subject to more specific treatment standards, which take precedence over the general debris standards.
- ❑ ***Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues*** (emphasis added).
- ❑ Nonempty, intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume.

Although process residuals were excluded from the revised definition of *debris* under the Phase I rule, in the preamble to the variance renewal EPA notes, "...excluded process residuals will... be included within the scope of today's renewal." Process residuals may be covered by the renewal provided the residuals meet the previously applicable definition of debris described in the June 1, 1990, Third Third final rule (see footnote 3), and are not excluded from the extension.

EPA (in the preamble to the Phase I final rule) clarifies the applicability of the definition of *debris* to discarded industrial equip-

ment (e.g., filters and pumps) and associated treatment residues involved in the treatment of wastes or wastewaters. EPA states that "A discarded pump or filter used to treat a waste is debris.... Although some filtered or pumped waste will contaminate the pump or filter,... the contaminated pump or filter will virtually always be comprised primarily of debris rather than waste and so would be classified as debris." (57 FR 37225)

Under 40 CFR 268.5, seven demonstrations are specified that must be made and evaluated by EPA in determining the applicability of a case-by-case variance. Normally, these demonstrations must be included as part of the case-by-case application that is submitted individually to EPA for review. However, EPA has conducted an evaluation of the demonstration requirements and determined that a renewal of the one-year variance from LDR treatment standards is warranted for eligible hazardous debris. As mentioned above, this renewal will remain in effect from May 8, 1993, to May 8, 1994 [40 CFR 268.35(e)]. No further variance or extension can be granted for hazardous debris beyond May 8, 1994, pursuant to RCRA statutory provisions.

To be eligible for the one-year extension, ***by August 12, 1993, or within 90 days after the hazardous debris is generated (whichever is later)***,⁴ each generator or facility owner/operator must ***submit a report to EPA*** containing the following information:

- (1) The name, mailing address, location, and EPA identification number of the site where hazardous debris will be generated.
- (2) A description of the hazardous debris waste stream, including waste code(s).
- (3) Waste generation rates (m³/y), and estimated inventories (m³).
- (4) A demonstration that the generator or owner/operator has made a good-faith effort to locate and contract with treatment

⁴See footnote 2.

or recovery facilities that offer technologies suitable for managing their waste(s). To successfully make this demonstration, generators must include, at a minimum, a summary of:

- activities that demonstrates that the generators have contacted a substantial number⁵ of treatment or recovery facilities, but each facility rejected the debris due to its composition or because the facility lacked the necessary treatment capacity,
- the letters sent to these facilities describing the debris waste and requesting treatment, recovery or disposal (protective) for the waste, and
- the responses received from these facilities rejecting the debris waste (if the correspondence does not explain the reasons for rejection, generators must provide an explanation).

(5) Certification by an authorized representative as required under 40 CFR 268.5(b).

Two copies of the report containing the information identified above should be sent to following address:

Chief of Training & Technical Assistance Branch
U.S. Environmental Protection Agency
Office of Waste Programs Enforcement (OS-520)
401 M Street, S.W.
Washington, D.C. 20460
Attn: Debris Case-By-Case Progress Report

This report must be submitted to EPA by August 12, 1993, for hazardous debris generated prior to May 14, 1993. For hazardous debris generated after May 14, 1993, the report must be submitted within 90 days after generation of the hazardous debris. EPA has indicated that a one-time submittal of such reports will satisfy the requirements for this ex-

ension (i.e., progress reports during the period of the extension will not be necessary).⁶ EPA also has indicated that in cases where a specific type of hazardous debris is generated (during the period of the extension), and this type of debris has already been identified in a previously submitted report by that generator, it is unnecessary to submit an additional report for the newly generated debris wastes. Generators must continue to locate capacity during the period of this variance, and if located, must use it to the fullest extent possible.

Other Related Requirements

Although EPA has taken this regulatory action to renew the hazardous debris case-by-case capacity variance, as with the initial one-year extension, certain LDR requirements still remain applicable. Restricted hazardous debris subject to this variance remains subject to the LDR notification requirements [40 CFR 268.7(a) (3)]. Specifically, if a generator's debris is not excluded from the definition of hazardous waste under 261.3(f) and is subject to this 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, the treatability group of the waste (e.g., wastewater or nonwastewater), the CFR sections and paragraphs where the applicable treatment standards appear, and, where applicable (i.e., for treatment standards ex-

⁵ EPA considers contact with 10 or more facilities to constitute a "substantial number."

⁶ Based on telephone conversations of July 14, 1993, with responsible EPA personnel within the Capacity Programs Branch and Office of General Counsel.

pressed as specified technologies), the corresponding five-letter treatment code (e.g., CHOXD, MACRO);

- ❑ the manifest number;
- ❑ waste analysis data, where available;
- ❑ the hazardous debris contaminants that are subject to treatment and a statement that the debris is subject to the alternative treatment standards; and
- ❑ the date the waste is subject to the prohibitions (e.g., May 8, 1994).

Also, waste generators who also treat, store, and dispose on-site must put the same information in their operating record (except for the manifest number).

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 this additional 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.

In the August 1992 final rule, EPA identifies three general categories of treatment technologies appropriate for hazardous debris—extraction, destruction, and immobilization. The 17 technologies identified within these

categories are considered BDAT and were based on, among other things, the properties of debris (e.g., brittleness, moisture content, and size) that may directly affect treatment efficiency. EPA also established performance and/or design and operating standards for these 17 specified technologies (40 CFR 268.45, Table 1 - Alternative Treatment Standards For Hazardous Debris).

Under the hazardous debris regulations, the selection of an appropriate BDAT for the hazardous debris is left up to the generators and treaters managing the waste. Upon treatment by one of the specified extraction or destruction technologies identified in Table 1 of 40 CFR 268.45, hazardous debris is *no longer subject to regulation under Subtitle C*, provided the debris does not exhibit a hazardous waste characteristic identified in Subpart C of 40 CFR Part 261 (i.e., ignitability, corrosivity, reactivity, or toxicity).

Generators and treaters also retain the option of treating waste to meet waste-specific treatment standards for the waste contaminating the debris. However, debris treated to waste-specific treatment standards *remains subject to Subtitle C* regulation unless, based on a site-specific determination, an EPA Regional Administrator determines the debris no longer “contains” significant levels of hazardous waste [40 CFR 261.3(f)(2)]. Reduction of the waste levels can be achieved using any permissible form of treatment, and need not result from the application of treatment technologies specified for hazardous debris under 40 CFR 268.45.

In addition to promulgating treatment technologies, EPA amended the documentation requirements for generators and treaters of hazardous debris in the August 1992 final rule. Specifically, in addition to bearing the burden of proof that hazardous debris meet all of the exclusions from Subtitle C requirements, the following recordkeeping requirements apply:

- ❑ Notifications under 268.7(a)(1) must identify the hazardous debris contami-

nants subject to treatment, and include a statement that the debris is subject to alternative treatment standards identified in 40 CFR 268.45 [268.7(a)(1)(iv)].

- ❑ Generators that treat their hazardous debris to meet applicable treatment standards in tanks, containers, or containment units using an alternative treatment standard provided in 40 CFR 268.45 are not subject to written waste analysis plan requirements [268.7(a)(4)].
- ❑ Hazardous debris that is either treated by an extraction or destruction technology provided in Table 1 of 40 CFR 268.45, or determined to no longer contain a hazardous waste, are not subject to the LDR certification requirements of 40 CFR 268.7(a)(2) for generators, or the notification/certification requirements of 40 CFR 268.7(b)(4) & (5) for treaters. Rather, such generators and treaters, who first claim their hazardous debris is excluded from the definition of hazardous waste, must submit a one-time notification to the EPA or authorized state, accompanied by a certification of compliance [40 CFR 268.7(d)].

Hazardous debris that is subject to the Atomic Energy Act because it contains radioactive components (i.e., it qualifies as radioactive mixed waste), remains subject to the LDR treatment standards for the hazardous waste component. On October 6, 1992, the Federal Facility Compliance Act, which waives sovereign immunity for RCRA requirements, was signed into law. This Act contains special provisions for radioactive mixed waste that delay the effective date (three years from enactment) for Federal agency violations of RCRA 3004(j) (the LDR storage prohibition), provided the mixed waste is managed in compliance with all other applicable RCRA requirements.

Although certain radioactive mixed wastes meet the definition of *debris* and could qualify for the generic, hazardous debris case-by-case variance, claiming the variance may not be necessary. Specifically, generators of mixed debris waste that will only undergo storage during the period of May 8, 1993 through May 8, 1994, will not require the benefits of the variance (i.e., their mixed waste will not be land disposed without meeting the treatment standards). Conversely, generators that identify disposal capacity for their mixed debris waste, but do not possess the treatment technologies necessary to achieve compliance with the LDR treatment standards, must comply with the conditions of this variance to ensure their debris may be land disposed (in compliance with the LDR program) without meeting applicable treatment standards. Any landfill or surface impoundment that receives hazardous debris (including mixed debris waste) covered by the variance must meet minimum technology requirements [40 CFR 268.5(h)(2)].

Finally, a hazardous debris that is also a polychlorinated biphenyl (PCB) waste under 40 CFR Part 761 must comply with both the applicable debris treatment standards under RCRA and PCB requirements under the Toxic Substances Control Act (TSCA) [40 CFR 268.45(a)(5)]. Debris that is treated using a prescribed extraction or destruction technology remains subject to only TSCA rules, whereas debris treated by an immobilization technology remains subject to regulations promulgated under both statutes.

Please direct any questions about this RCRA notice regarding the Renewal of 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.