

US EPA ARCHIVE DOCUMENT

This chapter discusses aspects of today's proposal that are not directly related to the application of LDR standards to newly identified hazardous mineral processing wastes, as well as certain other administrative requirements.

6.1 NON-LDR REGULATORY ISSUES

Today's supplemental NPRM addresses several issues that relate to the definition and regulation of hazardous mineral processing wastes. The Agency is today responding to several Appeals Court remands of previous regulatory activity that relate to both particular waste categories and the identification of hazardous mineral processing wastes generally. These topics are discussed briefly below.

6.1.1 Use of the TCLP Test for Identifying Hazardous Mineral Processing Wastes

The Agency proposes to continue using the TCLP (SW-846 Test Method 1311) as the basis for determining whether mineral processing wastes and manufactured plant gas wastes are hazardous by toxicity characteristic. The applicability of the TCLP to mineral processing wastes was challenged in *Edison Electric Institute v. EPA* (2 F.3d 438 (D.C. Cir. 1993)). In the *Edison* case, the Court held that EPA had not provided sufficient information in the record to establish a rational relationship between the TCLP's mismanagement scenario¹ and management of mineral processing wastes. Specifically, the Court remanded use of the TCLP for identifying hazardous mineral processing wastes and directed EPA to demonstrate that disposal of mineral processing wastes in a municipal solid waste landfill is a "plausible" mismanagement scenario.

After further research and analysis, the Agency has compiled a substantial amount of evidence to suggest that mineral processing wastes may plausibly be mismanaged in a manner similar to that described in the TCLP mismanagement scenario. In particular, the Agency has identified a number of cases in which mineral processing wastes are likely to have been co-disposed with municipal solid waste. The specific details of these cases are discussed in the preamble to today's proposed rule and in the TCLP Technical Background Document, available in the public docket. As a consequence of this evidence, the Agency concluded that the TCLP should continue to be used to determine whether mineral processing wastes are hazardous by toxicity characteristic.

The Agency has also determined that a Regulatory Impact Analysis (RIA) is not necessary for this proposal. Today's proposal does not change existing Agency regulations or policy; rather, it merely complies with the Court's ruling that the Agency provide more extensive evidence for an existing Agency position. It is, therefore, unlikely that there will be a significant additional impact associated with the proposal to continue application of the TCLP to mineral processing wastes.

6.1.2 Remanded Listed Mineral Processing Wastes

The Agency is also proposing to revoke the current hazardous waste listings for five court-remanded smelting wastes. The Agency has determined not to re-list the wastes, but will regulate them as characteristic wastes.

In 1980, the Agency listed as hazardous eight wastes generated from primary metal smelters. Later that year, in response to enactment of the Bevill Amendment, the Agency withdrew the listings. In 1985, after further study of the wastes, the Agency proposed to relist six of the wastes, but did not finalize the listings and withdrew the proposal in October 1986. In response to a court order (*Environmental Defense*

¹ The mismanagement scenario assumes that wastes will be co-disposed with municipal solid waste and forms the basis for the TCLP.

Fund v. EPA, 852 F. 2d 1316 (D.C. Cir. 1988)), EPA relisted the six wastes. This relisting was subsequently challenged by the American Mining Congress (*American Mining Congress v. EPA*, 907 F. 2d 1179 (D.C. Cir. 1990)). The Court upheld one of the listings (K088, spent potliners from primary aluminum reduction), but determined that the Agency's record for the five remaining waste streams did not adequately address certain issues raised by commenters during the rulemaking. These five listings are:

K064 -- Copper acid plant blowdown;

K065 -- Surface impoundment solids at primary lead smelters;

K066 -- Acid plant blowdown from primary zinc production;

K090 -- Emission control dust and sludge from ferrochromium-silicon production; and

K091 -- Emission control dust and sludge from ferrochromium production.

The Court did not vacate the listings, therefore they remain in effect.

Upon further study, the Agency determined that current waste generation and management practices did not warrant the listing of these five wastes. Many of the wastes are no longer generated, and of the wastes that continue to be generated, many are recycled. As a consequence, the Agency determined that these wastes may be best regulated by characteristic and not as listed wastes. A detailed description of current management of these wastes, along with a discussion of the Agency's specific rationale for its decision to withdraw the five waste listings, are provided in the Five-Remanded Wastes Technical Background Document, available in the public docket for this rulemaking.

The Agency has also determined that a Regulatory Impact Analysis (RIA) is not necessary for this proposal. As discussed above, many of the wastes affected by the Agency's decision are no longer generated. In addition, a relatively small number of facilities generate the remaining wastes, and most of these remaining wastes are recycled. Consequently, the Agency does not anticipate that a significant impact will be incurred by the regulated community as a result of today's proposal.

6.1.3 Lightweight Aggregate Production Wastes

In response to Court directives in the *Solite* case (*Solite Corporation v. EPA*, 952 F 2d 473, 500 (D.C. Cir. 1991)) and based upon further analysis, EPA is proposing to remove lightweight aggregate production air pollution control (APC) dust and sludge from the Mining Waste Exclusion, because it is not a high volume mineral processing waste, as defined by the Agency.

APC dust and sludge was one of many mineral processing wastes made conditionally exempt from RCRA Subtitle C regulations under the 1980 Bevill Amendment. Following additional study, the Agency determined in 1990 that the waste did not qualify for the Bevill Exemption. The Agency's determination was challenged in court in the *Solite* case in 1991, and the Federal Court directed the Agency to reconsider, after providing public notice and soliciting comment, whether the wastes should qualify for the Bevill exemption.

In order to qualify for Bevill-exempt status, wastes must be generated in high volume. The Agency defined high volume in its 1989 and 1990 rules concerning Bevill eligibility as waste generation greater than 45,000 metric tons per year per facility for a solid waste, or 1,000,000 metric tons per year per facility for liquid wastes, averaged across all facilities generating the wastes. After analyzing data from the 1989 National Survey of Solid Waste from Mineral Processing Facilities (SWMPF), data from two facilities currently classified as Confidential Business Information, and public comments, the Agency has confirmed that APC dust and sludge from lightweight aggregate production does not meet the definition of high volume, and therefore does not qualify for the Bevill exemption. Details concerning the Agency's analysis are provided in the preamble to today's proposed rule.

The Agency has determined that a Regulatory Impact Analysis (RIA) is not necessary for this proposal because the proposal is unlikely to significantly affect the regulated community, for two main reasons.

First, the Agency's waste characterization data indicate that APC dust and sludge from lightweight aggregate production would not be expected to exhibit the hazardous waste characteristic of toxicity, nor would their composition suggest that they would ever be corrosive, reactive, or ignitable. In most cases, therefore, generators of these wastes are not subject to Subtitle C regulation and would not be subject to LDR treatment standards.

There are, however, approximately six facilities that generate APC dust from lightweight aggregate production that burn listed hazardous wastes as fuels or fuel supplements. Accordingly, the APC residues might be affected by the Subtitle C derived from rule and be considered hazardous wastes. In that event, the affected operator would have three choices: 1) treat and dispose the dust in accordance with Subtitle C standards; 2) recycle the dust to the process (kiln) without reclamation, assuming that the ultimate product is not placed on the land (see 40 CFR Part 261.2(e)); or 3) use the dust to produce an end product (e.g., block mix). If the operator chooses option 2, then the APC residue is not a solid waste and therefore, not affected by today's proposed rule. If s/he chooses option 3, then the dust can be exempted from Subtitle C requirements even if the product is used on the ground if the following conditions are met: 1) the recyclable material (APC dust) has undergone a chemical reaction so as to have become inseparable by physical means; and 2) the product meets LDR standards (see 40 CFR Part 266.20(b)). EPA believes that lightweight aggregate producers could meet these conditions, and therefore, that application of LDR standards outlined in today's proposed rule would have no impact on this mineral commodity sector.

6.1.4 Titanium Tetrachloride Chloride-Ilmenite Wastes

Finally, the Agency proposes to classify titanium tetrachloride chloride-ilmenite wastes as mineral processing wastes not eligible for Bevill exemption. Waste acid from the production of titanium tetrachloride was also among the many wastes conditionally-exempted from Subtitle C regulation under the 1980 Bevill Amendment. In 1989, the Agency determined that the waste did not qualify for Bevill-exempt status because the Agency found that the waste is a mineral processing waste that did not meet the criteria for exemption for mineral processing wastes (high volume and low hazard).

One titanium tetrachloride producer, the DuPont Corporation, requested a determination that waste from its production process be classified as beneficiation waste, and therefore eligible for the Bevill

Exemption. DuPont argued that its process differed from that used by other manufacturers and included a beneficiation step that generated the wastes in question. When the Agency determined that the wastes were generated as a result of mineral processing operations and not beneficiation activities, DuPont challenged the determination in court (*Solite Corporation v. EPA*, 952 F.2d 473 (D.C. Cir. 1991)). Based on the challenge, the Court remanded the Agency's determination for further consideration.

After a detailed analysis of DuPont's chloride-ilmenite production processes, the Agency has again concluded that the waste acid (ferric chloride) is a mineral processing waste and is not eligible for the Bevill exemption because it does not meet criteria for exempting such wastes. The Agency's determination is based on a more detailed understanding of Dupont's production process that found no evidence to support DuPont's contention that some steps in the process, including the step generating the waste acid, can be classified as beneficiation. Details concerning Dupont's process, and the Agency's analysis of the process and its rationale for determining that the process does not include beneficiation operations, are provided in the preamble to today's proposal.

The Agency has also determined that a Regulatory Impact Analysis (RIA) is not necessary for this proposal. Today's proposal clarifies earlier Agency regulatory determinations and affects only one member of the regulated community. As a consequence, the Agency anticipates that there will be no significant impact on the regulated community as a result of this proposal.

6.2 OTHER ADMINISTRATIVE REQUIREMENTS

This section describes the Agency's response to other rulemaking requirements established by statute and executive order, within the context of today's proposed rule.

6.2.1 Regulatory Flexibility Analysis

Pursuant to the Regulatory Flexibility Act of 1980, 5 U.S.C. 601 *et seq.*, when an agency publishes a notice of rulemaking, for a rule that will have a significant effect on a substantial number of small entities, the Agency must prepare and make available for public comment a regulatory flexibility analysis that considers the effect of the rule on small entities (i.e.: small businesses, small organizations, and small governmental jurisdictions). Under the Agency's *Revised Guidelines for Implementing The Regulatory Flexibility Act*, dated May 4, 1992, the Agency committed to considering regulatory alternatives in rulemakings when there were any economic impacts estimated on any small entities. (See RCRA sections 3004(d), (3) and (g)(5), which apply uniformly to all hazardous wastes.) Previous guidance required regulatory alternatives to be examined only when significant economic effects were estimated on a substantial number of small entities.

In assessing the regulatory approach for dealing with small entities in today's proposed rule, for mineral processing wastes, the Agency had to consider that due to the statutory requirements of the RCRA LDR program, no legal avenues exist for the Agency to provide relief from the LDRs for small entities. The only relief available for small entities are the existing small quantity generator provisions and conditionally-exempt small quantity generator provisions found in 40 CFR 262.11 to 12, and 261.5, respectively. These exemptions establish 100 kilograms (kg) per calendar month generation of hazardous waste as the threshold below which a facility may be exempted from complying with the RCRA hazardous waste standards.

Given this statutory constraint, the Agency was unable to frame a series of small entity options from which to select the lowest cost approach; rather, the Agency was legally bound to regulate the land disposal of the hazardous wastes covered in today's rule without regard to the size of the entity being regulated.

6.2.2 Environmental Justice

EPA is committed to addressing environmental justice concerns and is assuming a leadership role in environmental justice initiatives to enhance environmental quality for all residents of the United States. The Agency's goals are to ensure that no segment of the population, regardless of race, color, national origin, or income bears disproportionately high and adverse human health and environmental impacts as a result of EPA's policies, programs, and activities, and that all people live in clean and sustainable communities. In response to Executive Order 12898 and to concerns voiced by many groups outside the Agency, EPA's

Office of Solid Waste and Emergency Response formed an Environmental Justice Task Force to analyze the array of environmental justice issues specific to waste programs and to develop an overall strategy to identify and address these issues (OSWER Directive No. 9200.3-17).

Today's proposed rule covers wastes from mineral processing operations. The environmental problems addressed by this rule could disproportionately affect minority or low income communities, due to the location of some mineral processing and waste disposal facilities. Mineral processing sites are distributed throughout the country and many are located within highly populated areas. Mineral processing wastes have been disposed of in various states throughout the U.S., representing all geographic and climatic regions. In some cases, mineral processing waste is generated in one state and disposed of in another. In addition, mineral processing wastes are occasionally disposed of in municipal solid waste landfills.

Today's rule is intended to reduce risks from mineral processing wastes, and to benefit all populations. It is, therefore, not expected to result in any disproportionately negative impacts on minority or low income communities relative to affluent or non-minority communities.

6.2.3 Unfunded Mandates Reform Act

Under Section 202 of the Unfunded Mandates Reform Act of 1995, signed into law on March 22, 1995, EPA must prepare a statement to accompany any rule where the estimated costs to state, local, or tribal governments in the aggregate, or to the private sector, will be \$100 million or more in any one year. Under Section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objective of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly impacted by the rule.

EPA has completed an analysis of the costs and benefits from today's proposed rule and has determined that this rule does not include a federal mandate that may result in estimated costs of \$100 million or more to either state, local or tribal governments in the aggregate. The private sector may incur costs exceeding \$100 million per year under one of the three costing scenarios described in Chapter 4, above.