United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
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Office of Solid Waste

EPA

Environmental Fact Sheet

PROPOSED RULE TO ELIMINATE MOST MINERAL PROCESSING WASTES FROM THE BEVILL AMENDMENT

BACKGROUND

In 1980, Congress amended the Resource Conservation and Recovery Act (RCRA) to temporarily exclude from hazardous waste regulation wastes from the extraction, beneficiation, and processing (smelting and refining) of ores and minerals. Known as the Bevill Amendment, this exclusion was temporary until EPA completed a Report to Congress and made a regulatory determination on these wastes. In November 1980, EPA published an interim final amendment to its hazardous waste regulations which interpreted this exclusion to apply to "solid waste from the exploration, mining, milling, smelting and refining of ores and minerals."

In 1985, EPA proposed to narrow the Agency's 1980 interpretation of the Bevill Amendment for mineral processing wastes. However, the Agency later withdrew this proposal because EPA believed that it was technically inadequate.

The withdrawal of the proposal to narrow the Bevill exclusion for mineral processing wastes led to a lawsuit by the Environmental Defense Fund (EDF) and the Hazardous Waste Treatment Council (HWTC) asking that the Agency be required to narrow the exclusion. The resulting court decision (July 1988) was made in favor of EDF and HWTC and the Agency was required to make a new proposal to narrow the Bevill exclusion to include only so-called "special wastes" (i.e., only those mineral processing wastes that are both "high volume" and "low hazard" wastes). In addition, the court specifically ordered EPA to list as hazardous wastes six smelting wastes that the court determined were clearly hazardous wastes. The Agency listed these six wastes as hazardous wastes on August 31, 1988.

In compliance with the court order, EPA proposed on October 20, 1988, to narrow the scope of the Bevill Amendment for mineral processing wastes. Although the proposal included specific criteria for defining "high volume" special wastes, the Agency believed at that time that inadequate testing criteria and data were available to propose specific criteria for defining "low hazard." Therefore, a "low hazard" criterion was not included in this proposal.

Based on the public comments received on the October 1988 proposal, EPA believes that a criterion for evaluating the hazard of mineral processing wastes is necessary in order to identify those mineral processing wastes that are "special wastes." Therefore, EPA determined that a new proposal was necessary in order to incorporate a hazard criterion.

ACTION

EPA has developed criteria for identifying the high volume, low hazard solid wastes from ore and mineral processing that are consistent with the "special waste" concept. In applying these criteria using available data, EPA identified 39 ore and mineral processing wastes that potentially fall under the "special waste" category. Therefore, EPA is re-proposing the October 1988 rulemaking to retain these 39 specific wastes within the Bevill Amendment.

First, EPA defines the three "special waste" criteria. The proposal defines "solid waste from processing of ores and minerals" and "beneficiation" so as to more precisely delineate the Bevill Amendment boundaries. The proposal revises the "high volume" criterion to include only the average facility generation rate. Under this proposed criterion, a waste is considered "high volume" if the average annual per-facility generation rate for all facilities generating that waste exceeds 50,000 metric tons. The proposal adds the "low hazard" criterion to identify possible Bevill processing wastes that clearly pose a high level of hazard to human health and/or the environment. Any waste failing such a criterion cannot be considered a "low hazard" waste and, hence, does not qualify as a "special waste." EPA intends to finalize these criteria for identifying "special wastes" in August 1989.

For those wastes remaining within the Bevill exclusion, EPA will issue a Report to Congress and regulatory determination as the *final* stages of EPA's response to the provisions of RCRA Section 8002(p). We do not expect there to be any further studies or regulatory determinations related to ore and mineral processing wastes as a group.

CONTACT

For further information, or to order a copy of the Federal Register notice, please call the RCRA Hotline Monday through Friday, 8:30 a.m. to 7:30 p.m. EST. The national toll-free number is 800-424-9346; in Washington, D.C., the number is 202-382-3000.

Second, EPA identifies six of the 39 wastes that satisfy the "special waste" criteria using available data. Therefore, EPA is proposing to retain these six wastes within the Bevill Amendment. EPA intends to finalize the Bevill status of these six wastes by August 1989.

Third, EPA is proposing to *conditionally* retain the other 33 mineral processing wastes within the Bevill Amendment because they satisfy the high volume criterion, but EPA does not currently have adequate data to evaluate whether they meet the low hazard criterion. Using the criteria finalized in August 1989, EPA will propose a rule by September 1989 to identify which of the 33 wastes would remain within the Bevill Amendment and which wastes would be removed. That proposal will be promulgated by January 1990.

PUBLIC COMMENT

EPA is soliciting public comment on the criteria defined in this proposed rule to identify "special wastes" and on its choice of the six wastes to be retained within the Bevill Amendment. In particular, EPA is seeking information, including chemical characterization or other relevant hazard data, regarding the other 33, as well as *any other*, mineral processing wastes that may meet the criteria for "special wastes."

CONCLUSIONS

If this proposed rulemaking is promulgated, the six wastes will be retained within the temporary exclusion provided by the Bevill Amendment. In addition, the high volume and low hazard criteria will be finalized and, therefore, used to identify the status of the other 33 wastes in the proposed rule scheduled for September 1989.

In January 1990, the September 1989 proposed rule will be promulgated, listing the wastes covered under the Bevill Amendment. Operators of facilities that generate non-excluded wastes will have to determine whether their processing wastes exhibit one or more of the hazardous waste characteristics and, if so, will have to comply with the technical and administrative requirements of Subtitle C of RCRA. These requirements will become effective, at the latest, six months after the promulgation of the final rule in those states that do not have authorization to administer an EPA-approved hazardous waste program, and somewhat later in authorized states.

SIX "SPECIAL WASTES"
REMAINING WITHIN THE BEVILL AMENDMENT

1. Slag from primary copper smelting;
2. Slag from primary lead smelting;
3. Red and brown muds from bauxite refining;
4. Phosphogypsum from phosphoric acid production;
5. Slag from elemental phosphorus production;
6. Furnace scrubber blowdown from elemental phosphorus production.

33 ORE AND MINERAL PROCESSING WASTES
CONDITIONALLY REMAINING WITHIN THE BEVILL AMENDMENT

1. Barren filtrate from primary beryllium processing;
2. Raffinate from primary beryllium processing;
3. Bertrandite thickener sludge from primary beryllium processing;
4. Process wastewater from primary cerium processing;
5. Ammonium nitrate process solution from primary lanthanide processing;
6. Roast/leach ore residue from primary chrome ore processing;
7. Gasifier ash from coal gasification;
8. Cooling tower blowdown from coal gasification;
9. Process wastewater from coal gasification;
10. Bleed electrolyte from primary copper refining;
11. Process wastewater from coal gasification;
12. Slag tailings from primary copper smelting;
13. Calcium sulfate wastewater treatment plant sludge from primary copper smelting/refining;
14. Furnace off-gas solids from elemental phosphorus production;
15. Process wastewater from elemental phosphorus production;
16. Fluorogypsum from hydrofuloric acid production;
17. Air pollution control dust/sludge from iron blast furnaces;
18. Iron blast furnace slag;
19. Process wastewater from primary lead smelting/refining;
20. Air pollution control scrubber wastewater from light weight aggregate production;
21. Wastewater treatment sludge/solids from light weight aggregate production;
22. Process wastewater from primary magnesium processing by the anhydrous process;
23. Process wastewater from primary selenium processing;
24. Process wastewater from phosphoric acid production;
25. Wastes from trona ore processing;
26. Basic oxygen furnace slag from carbon steel production;
27. Leach liquor from primary titanium processing;
28. Sulfate processing waste acids from titanium dioxide production;
29. Sulfate processing waste solids from titanium dioxide;
30. Chloride processing waste acids from titanium and titanium dioxide production;
31. Chloride processing waste solids from titanium and titanium dioxide production;
32. Blowdown from acid plants at primary zinc smelters;
33. Process wastewater from primary zinc smelting/refining.