United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
(OS-305)

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Office of Solid Waste

EPA

Environmental Fact Sheet

Agency Determines Final Regulatory Status of Special Wastes from Mineral Processing

BACKGROUND

Under the Resource Conservation and Recovery Act (RCRA), mining wastes from the extraction, beneficiation, and processing of ores and minerals are solid wastes. RCRA Section 3001(b)(3), the "Bevill Amendment," has excluded these wastes from regulation as RCRA hazardous wastes under Subtitle C until the Environmental Protection Agency (EPA) makes a final regulatory determination.

This action is the culmination of a number of studies and reports characterizing mining wastes, and a part of the continuing effort toward the development of a mining waste management program.

In 1985, EPA completed a Report to Congress on extraction and beneficiation wastes and determined in 1986 that their regulation as hazardous waste was not warranted. Final rules published in September 1989 and January 1990, defined "high volume" and "low hazard" criteria and applied these criteria to processing wastes to determine which wastes remained within the Bevill exclusion. Out of more than a hundred possible mineral processing waste streams, 20 specific waste streams were retained within the Bevill exclusion. These 20 wastes were the subject of a Report to Congress issued in July 1990. This Report served as both an information source and a proposed rule. It, along with a Notice of Data Availability published in January 1991, is the primary basis for the regulatory decisions in this rulemaking.

ACTION

This rulemaking covers 20 mineral processing wastes generated by 91 facilities in 29 states, representing 12 mineral commodity sectors (see Attachment A).

The Agency has determined that regulation under RCRA Subtitle C is inappropriate or infeasible for all 20 wastes because these wastes either exhibit no or negligible hazardous characteristics, pose low risks, or are not amenable to the requirements of Subtitle C. Eighteen of these wastes will become subject to the Agency's developing RCRA Subtitle D mining waste program. The remaining two wastes—phosphogypsum and phosphoric acid process wastewater—are not amenable to controls under either RCRA Subtitle C or D. These wastes will be addressed by a program developed under the authority of the Toxic Substances Control Act (TSCA). In the interim, the Agency will rely on existing authorities under RCRA, Section 7003 and Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to deal with any imminent or substantial hazards that may be present or arise due to the management of these wastes at phosphoric acid production sites. These authorities require containment and/or remediation, as necessary.

Under TSCA, EPA has the authority to prohibit or regulate any manner or method of disposal of a chemical substance or mixture by anyone who uses or disposes of it for commercial purposes. Most importantly, TSCA can be used to effectively explore, promote, and enforce pollution prevention and/or source reduction approaches in the phosphoric acid production industry.

The July 1990 Report to Congress proposed to ban the use of elemental phosphorus slag in construction and/or land reclamation due to radioactivity levels in the slag. EPA is uncertain about the potential gamma radiation exposures and risks associated with elemental phosphorus slag and has postponed any regulatory determination pending more extensive review.

States are responsible for implementing the management standards for these mineral processing wastes. Therefore, the effective date for this rulemaking is determined by the individual states.

CONTACT

For additional information or to order a copy of the *Federal Register* notice, contact the RCRA Hotline, Monday-Friday, 8:30 a.m. to 7:30 p.m. EST. The national, toll-free number is (800) 424-9346; TDD (800) 553-7672 (hearing impaired); in Washington, D.C., the number is (703) 920-9810, TDD (703) 486-3323.

Copies of documents applicable to this rulemaking may be obtained by writing: RCRA Information Center (RIC), U.S. Environmental Protection Agency, Office of Solid Waste (OS-305), 401 M Street SW, Washington, D.C. 20460.

Attachment A

Mineral Processing Wastes Addressed in This Regulatory Determination

Alumina
Red and brown muds from bauxite refining

Chromium (sodium chromate/dichromate)
Treated residue from roasting/leaching of chrome ore

Coal Gas
Gasifer ash from coal gasification
Process wastewater from coal gasification

Copper
Slag from primary processing
Calcium sulfate wastewater treatment plant sluge from primary processing
Slag tailings from primary processing

Elemental Phosphorus
Slag from primary production

Ferrous Metals (iron and carbon steel)
Iron blast furnace air pollution control dust/sludge
Iron blast furnace slag
Basic oxygen furnace and open hearth furnace air pollution control dust/sludge
Basic oxygen furnace and open hearth furnace slag

Hydroflouric Acid
Fluorogypsum
Process wastewater

Lead
Slag from primary processing

Magnesium
Process wastewater from primary magnesium processing by the anhydrous process

Phosphoric Acid
Phosphogypsum
Process Wastewater

Titanium Tetrachloride
Chloride process waste solids

Zinc
Slag from primary processing