



Environmental Fact Sheet

AGENCY RELEASES REPORT TO CONGRESS ON 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," temporarily excludes these wastes from regulation as RCRA hazardous wastes under Subtitle C until the Environmental Protection Agency (EPA) completes a Report to Congress assessing the wastes, followed by a regulatory determination within six months.

In 1985, EPA completed a report to Congress on extraction and beneficiation wastes and determined in 1986 that regulation as hazardous waste was not warranted. The Agency committed to developing a mining waste management program under Subtitle D. As part of this program development effort, the Agency recently released for comment a Strawman II draft approach to a mining waste management program.

Under a 1988 Court Order, the Agency was directed to narrow the scope of mineral processing wastes covered by the Bevill exclusion before completing a Report to Congress on processing wastes. As a result, 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. In particular, for high volume wastes, the criteria used volumetric cutoffs of 45,000 metric tons per year per facility for nonliquid wastes and 1,000,000 metric tons per year per facility for liquid wastes. For low hazard wastes, the criteria used pH levels between 1 and 13.5 and the synthetic precipitation leaching procedure. Out of more than a hundred possible mineral processing waste streams, 20 specific waste streams have been retained within the Bevill exclusion. These 20 wastes are the subject of this Report to Congress, and are listed in Attachment A.

ACTION

EPA is releasing a Report to Congress on 20 mineral processing wastes generated by 91 facilities in 29 States, representing 12 mineral commodity sectors. The Report characterizes and presents findings for each waste, and solicits comments on the findings.

The Agency is considering two decision-making approaches for these wastes. Both approaches have a series of three questions in common:

- What are the risks and damages associated with the waste?
- Is additional regulation needed?
- What are the costs and impacts of more stringent regulatory controls (comparing regulation under Subtitle D, full regulation under Subtitle C, or a flexible Subtitle C regulation using the authority of RCRA Section 3004(x))?

Under the first approach, the Agency found that 16 of these wastes would be regulated under Subtitle D. For the remaining four wastes, the Agency found that regulation under Subtitle C or D would depend on whether full or flexible Subtitle C requirements were considered:

- Process wastewater from hydrofluoric acid production;
- Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- Slag from primary lead processing; and
- Chloride process waste solids from titanium tetrachloride production.

The second approach adds consideration of impacts on development of State programs for mining and mineral processing wastes. Regulating special wastes from mineral processing under the Subtitle D mining waste program may facilitate development and maintenance of strong State programs.

Under this second approach, all 20 wastes would be considered for regulation under Subtitle D. However, this approach would require that the States, with support from EPA, act in the short-term to address the most immediate problems posed by these wastes. If these steps are not taken and/or State actions do not result in adequate control of the wastes, the Agency would reconsider regulating them under Subtitle C.

Under both approaches, the Agency is proposing to ban the use of elemental phosphorus slag in construction and/or land reclamation due to radioactivity levels in the slag. The Agency is soliciting comment on the appropriate regulatory language and on the implementation of such a ban.

CONTACT

For more information or to receive a copy of the *Federal Register* notice, please 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; for the hearing impaired, it is TDD (800) 553-7672. In Washington, DC, the number is (202) 382-3000 or TDD (202) 475-9652.

Copies of documents applicable to this proposal 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, DC 20460.

ATTACHMENT A

COMMODITY SECTORS AND WASTES COVERED IN THE REPORT TO CONGRESS ON SPECIAL WASTES FROM MINERAL PROCESSING

Alumina

Red and brown muds from bauxite

Chromium (sodium chromate/dichromate)

Treated residue from roasting/leaching of chrome ore

Coal Gas

Gasifier ash from coal gasification

Process wastewater from coal gasification

Copper

Slag from primary processing

Calcium sulfate wastewater treatment plant

sludge 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

Hydrofluoric 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