



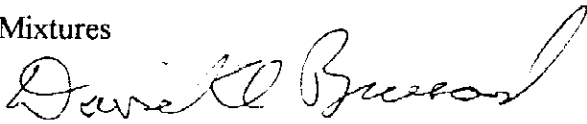
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 13 1999

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

**MEMORANDUM**

Subject: Sludges from Wastewater Mixtures

From: David Bussard, Director   
Hazardous Waste Identification Division, Office of Solid Waste

David Nielsen, Director   
RCRA Enforcement Division, Office of Regulatory Enforcement

To: Robert Springer, Director  
Waste, Pesticides, and Toxics Division, Region V

Recently, regional staff contacted our offices and asked for an agency interpretation of the regulatory status of wastewater treatment sludges that result from the mixture of wastewater that is a precursor to a RCRA hazardous waste sludge with wastewater that is not a precursor to a RCRA hazardous waste sludge. This memorandum provides further clarification of the status of sludges from wastewater mixtures and the effect of the 1994 opinion of the Seventh Circuit in *United States v. Bethlehem Steel Corp.*, 38 F.3d 862, on this issue. This memorandum covers not only the F006 listing at issue in the *Bethlehem Steel* case, but also F012, F019, K001-007, K151, K106, K032, K035, K037, K040, K041, K044, K046, K066, and K084.

It has always been EPA's interpretation that sludges from wastewater mixtures of the type described above are covered by the listing description. When promulgating the wastewater treatment sludge listings, EPA contemplated that the listings applied to sludges that result from mixtures of precursor wastewaters. For example, the F006 listing covers "wastewater treatment sludges from electroplating operations;" the listing is not modified in any way to suggest that it does not apply to sludges derived from combined wastewater streams. In fact, the F006 Listing Background Document describes a variety of sequential electroplating operations that generate rinsewaters/wastewaters. Some, but not all, of these rinsewaters/wastewaters are precursor wastestreams. Facilities with multiple operations routinely mix their wastewaters prior to treatment, and the Agency intended the listings to cover sludges from these mixtures of wastewaters.

The U.S. Court of Appeals for the Seventh Circuit rejected this interpretation in *Bethlehem Steel*. In this case, the court held that the F006 listing did not apply to sludges from combined wastewater streams. The court based its conclusion in part on the fact that "when the EPA intends to include waste mixtures in its listings, it knows how to do so," referring to EPA's amendment of the F001-F005 spent solvent listings to include solvent mixtures. 38 F.3d at 868.

The Agency previously discussed this Court decision in a November 1994 memorandum to the Regions.<sup>1</sup> As indicated in the November 1994 memorandum issued by OECA and OGC, we believe the Seventh Circuit incorrectly interpreted the F006 listing. But the decision is binding only on district courts in the Seventh Circuit; EPA's interpretation that mixed sludges are covered by the listing remains viable outside the Seventh Circuit. In the Seventh Circuit, we rely solely on the mixture rule in finding that sludges from combined wastewaters are also RCRA hazardous wastes under the federal RCRA program.

Sludges from mixed wastewaters are RCRA hazardous wastes under the mixture rule (40 CFR 261.3(a)(2)(iv)), regardless of the Seventh Circuit's interpretation of the scope of the F006 listing. As indicated above, the ruling in *Bethlehem Steel* held that, if F006 precursor wastewater from electroplating operations is mixed or combined with other wastewater prior to sludge formation, the resulting mixture is not classified as F006 waste. However, the mixture rule was not in effect at the time of that decision. Implicit in the court's decision in *Bethlehem Steel* is the conclusion that if the mixture rule had been in effect at the time of the decision, it would have applied to the treatment sludges from the combined wastewaters. The court specifically stated, "We conclude that the F006 listing does not, *independent of the mixture rule*, include Bethlehem's mixed wastewater treatment sludges." [emphasis added] 38 F.3d at 869. The sludge that is generated from the combined wastewaters is a mixture of a listed hazardous waste and a solid waste.

Because the mixture rule was not then in effect, it did not result in Bethlehem Steel's sludges being RCRA-listed wastes. Bethlehem Steel's sludges had been generated and managed during the period the mixture rule had been vacated under *Shell Oil Co. v. EPA*, 950 F.2d 741 (D.C. Cir. 1991). However, the mixture rule was reinstated in March 1992 (57 Fed. Reg. 7628), and thus it would apply to sludge from mixed wastewater generated and managed subsequent to the rule's reinstatement. Mixed sludges generated prior to the March 1992 reinstatement of the mixture rule are still regulated if they have been actively managed since.

It should be noted that only mixed treatment sludges that are separated and removed from the wastewater treatment plant/system are actually covered by the listings, but not the commingled wastewaters themselves. This is reflected in the Office of Solid Waste (OSW) interpretive letters. That is, OSW has clarified that electroplating rinsewaters are not specifically

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<sup>1</sup> Memorandum to Regional Counsel and Waste Management Division Directors from Susan E. O'Keefe, Director, RCRA Enforcement Division, and Lisa K. Friedman, Associate General Counsel, Solid Waste and Emergency Response Division, November 21, 1994 (attached).

listed under 40 CFR 261 Subpart D; once the wastewater treatment sludge precipitates, it meets the listing description of F006 (with the exception of precipitates from rinsewaters from certain excluded electroplating processes). The wastewaters discharged from the treatment plant are nevertheless subject to regulation under the Clean Water Act.

This interpretation of the federal RCRA program should be communicated to the states and to the affected regulated community. We will work with you to more widely disseminate this interpretation to the regulated community. If you have any questions regarding this matter, please call Chichang Chen of OSW at (703) 308-0441 or Mary Andrews of ORE-RED at (202) 564-4011.

cc: Regional Counsel, Regions I - X  
Waste Management Division Directors, Regions I - X  
RCRA Enforcement Managers, Regions I - X