

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC. 20460

**APR 17 1985**

Richard Davis  
RCRA Coordinator  
Brush Wellman, Inc.  
South River Road  
Elmore, Ohio 43416

Dear Mr. Davis:

This letter is a follow-up to the meeting that you, Philip Wilson, and Ronald Janke had with Steven Hirsch and myself at EPA Headquarters on March 27, 1985. The Agency would like to address the concerns raised at this meeting, and to clarify the delisting status of the treatment sludges produced by Brush Wellman's facility in Elmore, Ohio.

The decision that has been reached at the Agency is that the petitioned waste should be regulated as an F006 waste. The reasoning for this decision is as follows. First, in regard to your affirmation that Brush Wellman uses an alkaline surface cleaning step as opposed to the acid cleaning more commonly used in electroplating, the Agency does not believe that the Listing Background Document excludes the use of such alkaline cleaning in its definition of electroplating operations. Reference to the use of both acids and bases as surface preparation agents is made in the Listing Background Document itself, *e.g.*, "etching solutions are commonly made up of strong acids or bases" (p. 108). The mere use of an alkaline cleaning solution should not exempt an electroplater from compliance with the RCRA regulations.

Your contention that no cadmium or nickel from the electrocleaning operation enters the lagoons is not completely supportable, since your flow, diagram of the treatment process indicates that contaminated electrocleaning solutions are routed to the lagoons along with neutralized rinse waters from the electrocleaning and bright dip steps. In addition, rinse waters from the nickel sulfamate plating step are routed through the effluent filtration system prior to discharge to the lagoons. Although copper is recovered and a large proportion of the metals are precipitated as hydroxides, there is a significant concentration of metals in the effluent entering the lagoons.

The designation of the process steps 1-3 in your electroplating system (as a unit) as a non-hazardous point source in regard to copper forming operations (see 48 FR 36942) does not have bearing on the hazardous wastes produced from your electroplating operation.

This cited Federal Register notice for copper forming wastewater sludges indicates that the sludges produced from three similar steps in the context of copper forming are solid wastes that will not fail the EP toxicity characteristic (and therefore do not fall into the category of characteristic hazardous wastes for EP toxicity) if the recommended treatment technology is applied. Electroplating (F006) wastes, on the other hand, are listed hazardous wastes, and as such are presumed hazardous as they may be capable of posing a substantial present or potential hazard to human health or the environment if they are mismanaged. A listed waste must be determined to be determined non-hazardous in regard to the hazardous waste characteristics (ignitability, corrosivity, reactivity, and EP toxicity), the constituents for which the waste was listed, and to other factors or constituents which the Agency may reasonably believe to be present in the waste.

The listing for F006 wastes (“wastewater treatment sludges from electroplating operations”) was intended to be broad in order to encompass all possibilities within the various industries using electroplating. The industries employing electroplating (p. 107; Listing Background Document) are divided into six general categories. Within these categories, process variations are expected to occur from facility to facility, and “the composition of the sludges will vary because of the multitude of production processing sequences that exist in the industry (p.111, Listing Background Document). Figure 1 in the Listing Document, to which you referred at our meeting, was meant as a general example of a standard electroplating operation, and was not intended to incorporate or represent the range of process variation now in existence among the many types of industries that perform electroplating.

As a result of these findings, the Agency believes that the treatment wastes generated by Brush Wellman from their electroplating operations should continue to be regulated as an F006 waste. The Agency will continue to process your petition (#0573), and we will wait for all of the additional information we have requested from you before making a final decision concerning the delisting of the lagoon sludges. If you have any questions, please do not hesitate to contact me at (202) 382-4783.

Sincerely yours,

Scott J. Maid  
Environmental Protection  
Specialist  
Waste Identification Branch