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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

JUN 21 1991

Melanie K. Pierson
Assistant United States Attorney
Southern District of California
United States Court House
940 Front Street, Room 5-N-19
San Diego, California 92189

Dear Ms. Pierson:

This responds to your May 3, 1991 request for a regulatory interpretation regarding the status of solder skimmings, based on information supplied to you by Mr. Karl S. Lytz. In Mr. Lytz's letter to you dated April 29, 1991, he presents more specific information regarding the actual process used by a Fisher-Price facility that generates solder skimmings. The principal determination focuses on whether the solder skimmings are defined as "spent materials" or "by-products." This determination is based on how the solder skimmings are generated.

As stated in our March 19, 1991 letter to you, EPA has previously indicated in regulatory interpretations (including Federal Register preamble discussions and guidance manuals) that dross or skimmings are typically considered by-products. However, because the terms "dross" and "skimmings" can refer to secondary materials generated by a variety of processes, a more studied assessment of how a specific secondary material is generated is necessary to determine its actual regulatory status. In other words, the term used to describe a secondary material (e.g., dross or skimmings) is not necessarily determinative of its regulatory status.

To the extent that a material has been used in a process, and is subsequently removed due to contamination, the Agency would consider the material to be "spent." The term "by-product" refers to materials that result from a production process that are not the intended product and are not fit for a desired end use without substantial further processing (i.e., they are not co-products), and are not otherwise classified as spent materials or sludges. In very general terms, dross generated in the production of solder is a by-product; dross generated in the use of solder is a spent material. As stated in our March 19, 1991 letter to you, the Agency interprets "by-product" to also include drosses (or skimmings) that are generated from solder that is melted prior to use (which is analogous to the further refinement

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of a product). However, drosses generated from the solder during or after its use are defined as spent materials.

In Mr. Lytz's letter, he describes the various steps in the process that generates the solder dross. It appears that "dross" is generated both as a by-product and as a spent material. In the reservoir, which is used ". . . exclusively for melting solder rods to produce molten solder for use in the bath," the dross generated would meet the Agency's definition of a by-product. However, the dross generated by skimming the solder bath and the wire tinning operations would be considered spent materials, because the solder has been used in these operations. The basis of this differentiation is not a consideration of the chemical composition of the material (e.g., whether it is similar, or indeed identical, to the dross generated in the reservoir), or in how the material became contaminated (e.g., by oxidation with the air). The determining factor is that the solder has been used, is contaminated, and is being removed from the process. Although Mr. Lytz states that the solder has not been contaminated, but rather the oxides are "impurities" that occur naturally through use (as opposed to being residual contaminants from the parts that are soldered), the Agency would nevertheless consider the oxides to be the contaminants that cause the solder to be skimmed and removed from the process. (The Agency notes that the entire solder bath is not considered spent merely because the bath has been contaminated by the oxides rather than the small portion that must be removed or skimmed off. The "spent material" classification is only applicable to those materials that are removed from the process, and are thus "generated.")

Thus, all things being equal (i.e., the oxide contaminant), the difference between the status of the reservoir dross and the dross generated by the solder bath and the wire tinning operations is whether or not the dross is skimmed from a used or unused solder. For example, if the reservoir was to also receive previously used solder for remelting (e.g., solder returned from the solder bath) then this dross, too, would be classified as a spent material. To the extent that the different drosses can be segregated and managed without mixing, they would be subject to different regulatory requirements. As Mr. Lytz stated, 95% of the dross is generated by skimming the reservoir; this relatively large amount would not be subject to regulation as a hazardous (or solid) waste. The other drosses, however, would be subject to the applicable regulatory requirements as a hazardous waste.

In reference to the confusion raised by the Electrum letter (i.e., the July 20, 1989 letter from Mr. Devereaux Barnes to Mr. Jack Douglas of Electrum Recovery Works, Inc.), our focus in making the regulatory interpretation was whether the dross met the regulatory definition of a scrap metal. Insufficient information was provided on how the dross was generated to make a

determination of its status at the point of generation. (Indeed, the status of the dross as a by-product vs. a spent material was never raised; had the same information been provided regarding the generation of the dross, the Agency would have determined that the dross was a spent material.) We took Mr. Douglas' assessment that the "dross" was a characteristic by-product at face value without evaluating how the material was generated and erroneously agreed with this classification in a letter written for the purpose of addressing his claim that the dross was a scrap metal (see the enclosed June 5, 1989 letter from Mr. Douglas to Mr. Straus and the May 22, 1989 letter from Ms. Deborah S. Kinburn to Mr. Matt Straus).

I hope this has helped to clarify the regulatory status of the dross generated at the Fisher-Price facility. Generally, a determination regarding the regulatory status of a specific secondary material is made by the State regulatory agency or the appropriate EPA Regional office because of the site-specific factors that may warrant consideration. However, this letter presents the factors the Agency would consider in making such a determination. If you have any further questions regarding this issue, you should contact Mitch Kidwell, of my staff, at (202) 475-8551.

Sincerely,

Original Document signed

David Bussard, Director
Characteristics and
Assessment Division

Enclosures