9441.1990(09a)

RCRA/Superfund/OUST Hotline Monthly Report Question

March 1990

## 1. Clarification of By-Product Versus Scrap Metal

A manufacturer of computer circuit boards sends unused off-specification printed circuit boards and board trimmings from the production process off-site for reclamation. The printed circuit boards are made of alternating layers of thin copper and fiberglass plates coated with tin lead; containing approximately 30% copper, 68% fiberglass, and 2% tin lead. How are the unused boards classified under 40 CFR 261.2, and are the trimmings by-products or scrap metal? Would these materials be solid wastes under RCRA?

The unused circuit boards are secondary materials. Under 40 CFR 261.2, the Agency designates those secondary materials which are RCRA Subtitle C solid wastes when recycled. According to Section 261.2(c)(3), unused off-specification commercial chemical products listed in 40 CFR 26133 are not considered solid wastes when sent for reclamation. Although the Agency does not directly address non listed commercial chemical products in the regulations, their status would be the same as those that are listed (see 50 FR 14219, April 11, 1985). The unused circuit boards are considered to be non-listed commercial chemical products, and thus, are not solid wastes when reclaimed. If, however, the circuit boards had been used and were no longer fit for use, they would be considered spent materials and defined as solid wastes when reclaimed.

The trimmings are inherently unfit for end use and will be reclaimed. In the January 4, 1985 Federal Register (50 FR 625), the Agency defines by-products as materials "that are not produced intentionally or separately, and that are unfit for end use without substantial processing." The printed circuit board trimmings meet the definition of characteristic by-product rather than scrap metal, and are not solid wastes when reclaimed under Section 261.2(c)(3). Although the trimmings are physically similar to scrap metal, to meet the definition of scrap metal, the material must have significant metal content, i.e., greater than 50% metal. In

fact, examples given in the Preamble concerning scrap metal were virtually 100% metal. Materials defined as scrap metal under Section 261.1 are solid wastes when reclaimed, and, if hazardous, are presently exempt under Section 261.6(a)(3)(iv) from Subtitle C regulation. The Agency has deferred hazardous scrap metal from regulation until appropriate information on types of scrap metal and industry management practices is made available for study.