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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AUG 15 1990

Mr. Ted A. Hopkins Environmental Specialist III Department of Environmental Quality Willamette Valley Region 750 Front Street, Northeast Suite 120 Salem, Oregon 97310

Dear Mr. Hopkins:

This is in response to your letter of May 2, 1990 regarding an electroplating plant inspection and how the facility's treatment processes are regulated. You described the facility as a circuit board manufacturer which conducts common metal electroplating, precious metal electroplating, etching, stripping and sulfuric acid anodizing. The facility also treats and stores the wastewaters from these processes in tanks and containers.

In responding to your questions related to the status of various containers, the units are addressed in the order that they occur in the process. That is, the wastewater containers (the subject of your second and third questions) will be discussed first.

Containers are used initially to store process wastewater prior to introduction into a 500 gallon round tank used for pH adjustment and settling. You wanted to know whether the containers were "ancillary equipment" to the tank which you classify as either an elementary neutralization unit or a wastewater treatment unit. It was never EPA's intent to include containers in the definition of "ancillary equipment", which is defined in 40 CFR 260.10. Also, since the containers are apparently not used for elementary neutralization, they are not exempt from regulation as elementary neutralization units. The containers used for rinsewater storage prior to treatment are, therefore, subject to generator standards including the accumulation time limits under 40 CFR 262.34, provided that these

rinsewaters are hazardous. These standards require, among other things, labelling and dating of the containers.

This interpretation also applies to the second container area (item #3 of your description of system #1), used for additional settling of sludges which are generated in the round 500 gallon tank. As stated above, these containers are not ancillary equipment and are not exempt elementary neutralization units. Note that the generator accumulation time limits began when the rinsewaters were placed in the first containers used for storage prior to tank treatment (if these rinsewaters are hazardous). Thus, a storage permit would be needed for either container area used for storage or sludge settling should the rinsewaters remain in the containers for more than 90 days.

Your remaining questions relate to wastewater treatment and elementary neutralization. First, you asked whether the Agency has ever formally defined "wastewater." The Agency has never defined "wastewater" in the Subtitle C regulations.1 Typically, EPA has used a very broad interpretation in other regulatory programs (e.g., the Effluent Guidelines Division's Development Document for Electroplating Pretreatment Standards defines wastewater as "any water that has been released from the purpose for which it was intended to be used"). The "few percent source contaminant" criterion reflected in your question is not a regulatory definition of wastewater and, thus, not part of the definition of a wastewater treatment unit. While at the time that the referenced memorandum was issued we intended to modify the wastewater treatment tank definition, we never finalized that definition.

Next, you requested the definition of wastewater treatment sludge and asked whether a wastewater treatment sludge can be generated in an elementary neutralization unit. "Sludge" is defined at 40 CFR 260.10 as "any solid, semi-solid, or liquid generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant." Thus, wastewater treatment sludge is any material that precipitates or otherwise is separated from wastewater during treatment.

The identity of wastewater treatment sludge, for the purpose

of the hazardous waste listings, is independent of the permitting status of the unit in which the sludge is formed. Accordingly, sludge generated from the treatment of electroplating wastewaters in an elementary neutralization unit meets the definition of F006.

1 The Agency has defined wastewater under the Land Disposal Restrictions program for the purpose of establishing BDAT treatability groups; however, this definition is not pertinent to this issue.

Your next question dealt with whether a unit could be a wastewater treatment unit one day and an elementary neutralization unit the next. The definitions of "elementary neutralization unit" and "wastewater treatment unit" differ primarily in the type of waste that is influent to the unit. Influent to an ENU meets the hazardous waste characteristic of corrosivity (or is listed due solely to corrosivity) whereas influent to a WWTU either is hazardous or forms a hazardous waste upon treatment. Thus, the two definitions are not mutually exclusive (a unit that neutralizes a corrosive wastewater could potentially meet either definition). Further, the same unit could meet different definitions at different times, depending upon the influent. However, it is important to keep in mind that the unit is exempt from permitting if it meets either definition, but the sludge, upon removal, is subject to all applicable regulations.

Your next question related to the treatment of a specific type of waste. Generally, you cannot treat a waste that is both corrosive and otherwise hazardous (due to listing or by exhibiting a different hazardous characteristic) in an ENU since the influent must be corrosive only in order to meet the definition of an ENU. Units that treat wastes such as that mentioned in your example are likely to meet the "wastewater treatment unit" definition, so long as they meet the remainder of the 40 CFR 260.10 stipulations regarding Clean Water Act regulation and the definition of tanks.

You next asked about the status of tank systems related to treatment units. Tank systems used to treat to store wastewater are excluded if they meet the definition of wastewater treatment unit in 40 CFR 260.10 and are dedicated for that purpose. If

these wastewater tank systems are ever used for hazardous waste storage or treatment prior to off-site disposal, they would not be excluded units and would be subject to storage and treatment standards for hazardous waste tanks (see 53 FR 34079, September 2, 1988).

With regard to the manufacturing of printed circuit boards, you correctly note that, although the industry is no longer specifically included in the listing, the processes used (e.g., chemical etching) still cause the wastes to meet the F006 listing. The F006 reinterpretation, which was published in the December 2, 1986, Federal Register was essentially a correction to reflect the Agency's policy of referring to "processes" only rather than a specific industry (e.g., printed circuit board manufacturing) in the "non-specific source" F listings. The notice did not otherwise change the scope of the listing with respect to this industry.

As to sludges from sulfuric acid anodizing, these wastes do not meet the F019 listing since anodizing is not considered to be a "conversion coating" process. Anodizing is an electrical process wherein the part is made anodic, whereas conversion coating uses non-electrical processes.

Should you have any further questions, please feel free to contact my staff. Contact Dave Topping for electroplating questions at (202) 382-7737 and Chet Oszman or Bill Kline on wastewater treatment and tank issues at (202) 382-4499 and (202) 475-9614 respectively.

Sincerely,

Sylvia K. Lowrance Director Office of Solid Waste