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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

DEC 7 1988

Mr. Phillip D. Stapleton  
Stapleton Company  
1350 West 12th Street  
Long Beach, California 90813

Dear Mr. Stapleton:

This letter is in response to your letter dated September 26, 1988 in which you asked several questions pertaining to you OMEGA EN Process.

In general, industrial plating operations vary greatly in layout and processes utilized. Identifying wastes generated from plating operations requires specific details on the individual process steps, which usually include pretreatment of the metal, application of the coating, and post treatment. Identifying applicable RCRA regulations for materials generated from reclamation of plating wastes is directly dependent upon waste identification at the point of generation, as well as specific information about further processing and the end use of the reclaimed material. Determining the RCRA status of units and facilities receiving the material is largely dependent on similar information.

Your letter did not provide sufficient information to specifically answer you questions. Even if you had provided the requisite information, the Agency could only give you hypothetical answers as to the general application of RCRA regulations. For each individual facility, the appropriate Region or RCRA authorized State will have to make the final determination as to the applicability of RCRA regulations based on an analysis of the actual facilities and processes. Regardless of their RCRA authorization status, States may impose regulations more stringent or broader-in-scope than those in 40 CFR Parts 260-270 as a matter of State Law.

The following discussion outlines RCRA regulations that might apply to the OMEGA EN process. Where crucial information was not provided, I have made certain assumptions, which may not properly characterize you process, and discuss the applicable RCRA regulations for each assumption.

RO 11385

Whether the filter cake from the APU330 unit meets the F006 listing depends upon the particular plating process or processes at a generator's facility. Assuming that the APU330 device receives only wastes (such as bath solutions and/or rinse waters) from an electroless plating operation, the filter cake will not meet the listing for F006 or any other waste currently listed in 40 CFR Section 261.31 (51 FR 43351, December 2, 1986). However, if the APU330 device also receives bath solutions and/or rinse waters from an electroplating process, the filter cake may meet the F006 listing description, and its subsequent management is regulated under Subtitle C of RCRA. Further, the filter cake may be a listed hazardous waste if the cake meets other listing descriptions or is derived-from listed hazardous waste per 40 CFR Section 261.3(c)(2)(i) (e.g., F008 plating bath residues). The generator of these hazardous wastes must comply with Part 262 for each shipment of waste to Unit 2, and the Unit 2 facility is subject to a RCRA storage permit for hazardous waste storage prior to reclamation in Unit 2 as specified in Section 261.6(c)(1).

#### Solid Waste Identification

In order to determine whether or not the filter cake is a solid waste under Section 261.2, I have assumed that the filter cake is either a sludge or a spent material. Each of these assumptions is discussed below. Additional details are needed to address the regulatory status of the filter cake.

a. Assume the filter cake is a sludge. If the APU330 unit treats "dragout tank" wastewater, the filter cake, may be a wastewater treatment sludge. Sludge is defined in Section 261.10. If the sludge meets a listing description or is derived from a listed waste, it is classified as both a solid waste and a listed hazardous waste. Listed sludges are solid wastes even when reclaimed, per Section 261.2(c)(3).

Assuming that the sludge (filter cake) exhibits a hazardous waste characteristic but is not listed, it is classified as a solid waste and is subject to RCRA Subtitle C regulation except when it is being reclaimed (Section 261.2(c)(3), Table 1).

No information was provided as to whether the filter cake exhibits a RCRA characteristic. If the filter cake exhibits no characteristic of a hazardous waste and is not listed, RCRA Subtitle C is not applicable. More stringent and broader-in-scope State laws and applicable Subtitle D regulations, however, will apply to the waste. Reclamation of

the filter cake in Unit 2 will generate new materials (other than products) that may need to be tested to determine whether Subtitle C applies.

b. Assume that the filter cake is a spent material. If the APU330 unit filters the plating bath and not the rinse waters, the filter cake may more properly be classified as a spent material than a sludge. The bath solutions being filtered are spent materials and the filter cake is derived from the spent materials. If the solutions were listed hazardous wastes, the cake would also be a listed hazardous waste (50 FR 619, Note 7, January 4, 1985). Again, if no RCRA characteristic is exhibited and no listing applies, RCRA Subtitle C regulations are not applicable. If the spent material does exhibit a characteristic, or is listed, and is sent for reclamation, it is identified and regulated as a hazardous waste (Table 1, Section 261.2(c)(3)).

#### Regulation of Unit 2

If Unit 2 is a legitimate recycling unit, it will not be regulated under Subtitle C when reclaiming sludges or spent materials, unless the reclamation process is analogous to land disposal or incineration (see 40 CFR 264.1(g)(2), 264.1(c)(6), and 50 FR 643, January 4, 1985). If Unit 2 is an incinerator and material is being recovered from a destruction process, Unit 2 is subject to the incinerator standards in Subpart O of Part 264 or 265 and to the requirement to obtain a RCRA permit, Part 270. Generators and transporters of recyclable materials are subject to the requirements of 40 CFR 261.6(b). Assuming that Unit 2 is a recycling unit, Section 261.6(c) specifies the RCRA requirements for the owner/operator.

#### Status of Calcium Phosphite/Calcium Sulfate

The regulatory status of the calcium phosphite/calcium sulfate reclaimed from Unit 2 will depend upon whether further processing of the calcium phosphite/calcium sulfate must be provided and whether it is a product (40 CFR Section 261.2(e)(ii)). Assuming that a fertilizer market exists, a calcium phosphite/calcium sulfate fertilizer product generated from Unit 2 would result in classifying the recycled materials as solid waste by Section 261.2(c)(1) (use constituting disposal). If Unit 2 were reclaiming a hazardous waste, the waste-derived commercial fertilizer produced for the general public's use out of Unit 2 would not presently be regulated per 40 CFR 266.23(a), provided they met the conditions of Section 266.20(b) (including any applicable treatment standards under 40 CFR Part 268).

If the calcium phosphite/ calcium sulfate from Unit 2 were converted to a cooling/heating system corrosion inhibitor, the status of the calcium phosphite/calcium sulfate would depend on whether the material requires further processing. (On the distinction between a product and a waste see 50 FR 634, January 4, 1985.) If the calcium phosphite/calcium sulfate has only been partially reclaimed and must be reclaimed further, the calcium phosphite/calcium sulfate may still be considered a solid waste and a recyclable material. The recyclable materials reclaimed (or partially reclaimed) to form the calcium phosphite/calcium sulfate should be analyzed as described above for the filter cake.

#### Status of Nickel Hydrate

Based on data provided, the nickel hydrate is partially reclaimed material that may or may not be a waste. If it has been reclaimed and only needs to be refined in the cook unit to form a commercial product, it may be more like a product than a waste (see 50 FR 634, January 4, 1985) and, thus, may not be subject to Subtitle C requirements unless used in a manner constituting disposal or incinerated. If the nickel hydrate is a waste, you may be able to apply for a variance from the definition of a solid waste under Section 260.30

The above discussion was intended to provide the context in which the RCRA regulations may effect the operation of the OMEGA EN process. Because insufficient information was provided to make accurate determinations, a number of different assumptions had to be made to address each of the relevant issues. In addition, you asked that I respond to the following specific questions:

1) Can EPA issue a document stating that the material is a solid waste?

I have answered this question as best I can based on the information provided.

2) Will each generator of this filter cake require a delisting from each State with more stringent regulations than EPA?

The answer to this question depends on the individual State's requirements and their RCRA authorization status.

Questions about the delisting process can best be answered by referring to an EPA publication entitled Petitions to Delist Hazardous Wastes--A Guidance Manual (EPA 530/SW-85-003). This publication can be obtained by calling the National Technical Information Service (NTIS) at (703) 487-4650 and asking for publication number PB85-194488. Specific questions can be answered by contacting Terry Grogan, Chief, Delisting Section at EPA Headquarters, at (202) 382-4206.

3) What are the provisions for the filter cake to be shipped as a hazardous waste to our facility in Illinois, which is not required to have a hazardous waste treatment permit?

If the filter cake is identified as a hazardous waste, shipment of a hazardous waste off-site for recycling will subject the generator to 40 CFR Part 262 requirements (40 CFR Section 261.6(b)). The Illinois facility (Unit 2) will not be required to have a treatment permit if Unit 2 is a recycling facility ( and not an incinerator or an industrial furnace). However, if there is any storage of the hazardous waste received from off-site prior to entering Unit 2, the facility will have to obtain a RCRA storage permit under Section 261.6(c).

4) Will Stapleton be required to become a hazardous waste treatment facility if it only processes it electroless nickel material and returns all the nickel box to the process?

Again, facilities that recycle recyclable materials are not subject to RCRA treatment permit requirements. The storage of hazardous waste prior to recycling, however, subjects the facility to the requirement to obtain a RCRA permit (40 CFR Section 261.6(c)). If storage does not occur, then the general rule is that reclamation is regulated while recycling (without reclamation) is not.

Return of all nickel back to the process is a significant effort in waste minimization/reduction but does not affect the application of RCRA regulations in this instance. State regulations that are more stringent or broader-in-scope than the Federal regulations discussed herein should be addressed by the implementing State agency.

-6-

In closing, I would like to reiterate that the final determination as to the applicability of RCRA regulations for any specific facility must be made by the appropriate State and/or EPA Regional Office.

If you have any further questions or need additional information, please contact Steve Cochran at (202) 475-8551.

Sincerely,

Original Document signed

Sylvia K. Lowrance  
Director  
Office of Solid Waste

RO 11385