

9441.1994(20)

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

August 2, 1994

Ms. Michelle T. Fisher
Attorney
General Motors Corporation
New Center One Building
3031 West Grand Boulevard
P.O. Box 33122
Detroit, Michigan 48232

Reference: Classification of Wastewater
Treatment Sludge from the Revised
"Zinc Cobalt Alloy Plating on Carbon
Steel" Process

Dear Ms. Fisher:

This letter is in response to your April 12, 1994, letter requesting a regulatory interpretation as to whether or not the F006 hazardous waste listing exemption for "zinc plating on carbon steel" includes the zinc-cobalt alloy plating used in one of your plants. Since this request is site-specific, the Hazardous Waste Management Division of EPA Region V has been provided with a copy of your letter and has deferred the interpretation to our office.

Your request is based on a proposed change in the electroless plating process at your Inland Fisher Guide plant in Columbus, OH, from the current zinc-based operation to one using a zinc-cobalt alloy process. According to your letter, this zinc alloy process will combine a very small amount of cobalt (60 ppm) with the conventional zinc in the plating bath. Hence, the rinse water from the rinse water tanks which follow the plating bath will contain a small amount of cobalt, which will eventually precipitate out into the wastewater treatment sludge.

Based on a previous regulatory interpretation request, the Agency concurred, in a letter dated June 30, 1987, that the sludge from the current zinc plating operation is not a listed hazardous

RO 11861

waste. The interpretation was based on the Interpretative Rule on F006 which was published in the Federal Register on December 2, 1986 (51 FR 43350). Your current request for interpretation pertains to whether or not the exemption for "zinc plating on carbon steel on a segregated basis" would apply to zinc alloy plating, which would result in the new sludge being considered nonhazardous. You recommend that the sludge resulting from your proposed zinc alloy process should be included within the exemption for zinc plating for the following reasons:

- "1. The process remains basically "zinc plating." Cobalt is added at 60 ppm to the bath to enhance the performance characteristics of the plated product.
2. There are currently no land disposal regulations regarding cobalt. Cobalt is not listed under toxicity characteristic parameters per 40 CFR 261.24.
3. Given that cobalt is not subject to land disposal regulations or currently listed in TCLP standards, the addition of cobalt to an already nonhazardous sludge should not cause that sludge to become hazardous."

Our interpretation based on current RCRA regulations is that wastes from your proposed zinc-cobalt alloy plating process would not be included in the F006 hazardous waste listing. The basis for our interpretation is as follows:

- The revised plating process is still considered to be "zinc plating on carbon steel." The small amount of cobalt (60 ppm) used in the process does not alter this interpretation.
- Cobalt is not included in the list of toxic metals in the original F006 listing (chromium, cadmium, and nickel). See the November 14, 1980 RCRA Background Document, Subtitle C - Identification and Listing of Hazardous Waste, Sections 261.31 and 261.32 - Listing of Hazardous Wastes (Finalization of May 19, 1980 Hazardous Waste List), page 106.
- Cobalt is not included in the list of contaminants for the toxicity characteristic (40 CFR 261.24) and is not included in the list of hazardous constituents of

Appendix VIII, 40 CFR 261.

Hence, the resulting wastewater treatment sludges would not be hazardous provided they do not exhibit any of the characteristics for a hazardous waste as specified at 40 CFR Part 261 Subpart C.

Please note that the above is an interpretation of the current F006 hazardous waste code. This interpretation in no way limits the Agency's authority to take regulatory action to list alloy-metal plating in the future.

Please be aware that under Section 3006 of RCRA (42 U.S.C. Section 6926) individual States can be authorized to administer and enforce their own hazardous waste programs in lieu of the Federal program. When States are not authorized to administer their own program, the appropriate EPA Regional office administers the program and is the appropriate contact for any case-specific determinations. Please also note that under Section 3009 of RCRA (42 U.S.C. Section 6929) States retain authority to promulgate regulatory requirements that are more stringent than Federal regulatory requirements.

I hope that this letter sufficiently responds to your questions and concerns. If you have any further questions or comments, please contact Max Diaz of my staff at (202) 260-4786.

Sincerely,

Michael Shapiro
Office of Solid Waste

cc: Waste Management Division Directors, Regions I - X

Attachment

General Motors Corporation
Legal Staff
New Center One Building, 3031 West Grand Boulevard,
P.O. Box 33122, Detroit, Michigan 48232
(facsimile) 313-974-7770 (telephone) 313-974-1552

April 12, 1994

Ms. Sylvia Lowrance
Office of Solid Waste and Emergency Response
U.S. EPA Headquarters
401 M Street, S.W.
Washington, D.C. 20460

Dear Ms. Lowrance:

The Inland Fisher Guide plant in Columbus, Ohio currently produces a nonhazardous wastewater treatment sludge. This classification is based on the exemptions from the original F006 listing in 1981 and a December 2, 1986 clarification of this listing. The 1986 clarification specifically exempted electroless zinc plating and phosphating on steel. U.S. EPA concurred that the Columbus sludge is nonhazardous in a June 30, 1987 letter (attached). Furthermore, continued testing has shown that the waste is not a characteristic waste.

A change is being considered in the "zinc plating on carbon steel" process. This plater will be revised to a zinc alloy process which combines a very small amount of an alloy metal with zinc in the plating bath. In this case, the alloy metal would be cobalt, present in the plating bath at 60 ppm. The rinse water from the tanks which follow the plating bath would contain very small amounts of cobalt. This small amount of cobalt would eventually precipitate into the sludge during the wastewater treatment process.

It is not clear that the exemptions for "zinc plating on carbon steel on a segregated basis" would apply to zinc alloy plating. We believe that the sludge resulting from zinc cobalt plating should be included within the exemption for zinc plating for the following reasons:

RO 11861

1. The process remains basically "zinc plating." Cobalt is added at 60 ppm to the bath to enhance the performance characteristics of the plated product.
2. There are currently no land disposal regulations regarding cobalt. Cobalt is not listed under toxicity characteristic parameters per 40 CFR 261.24.
3. Given that cobalt is not subject to land disposal regulations or currently listed in TCLP standards, the addition of cobalt to an already nonhazardous sludge should not cause that sludge to become hazardous.

Based on the above information, it is our conclusion that the sludge generated by the proposed zinc cobalt process should remain nonhazardous. We request a clarification that the "zinc plating on carbon steel" exemption includes zinc cobalt alloy plating.

Very truly yours,

Michelle T. Fisher
Attorney

c: William Collinson
Carl Messenheimer
David Tackman