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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 8 1991

MEMORANDUM

SUBJECT: Regulation of Surface Impoundments that Exhibit the  
Toxicity Characteristics (TC)

FROM: Sylvia K. Lowrance, Director  
Office of Solid Waste

TO: Kristine A. M. Leopold  
Assistant Regional Counsel (6C-WT)

In your November 7, 1990 memorandum to our office, you conveyed the concerns of Ms. Paula Floeck of ENSR Consulting and Engineering, Houston, Texas, regarding the regulation of sludges within surface impoundments that may have the potential to become newly regulated units as a result of the Toxicity Characteristics (TC) rule. This memorandum responds to Ms. Floeck's and your concerns.

In Scenario one (1) of Ms. Floeck letter (see Attachment) she asked, if it were "true that the sludge becomes regulatory concern (sic) at the point it is intended to be discarded, that is, when the impoundment is cleaned or closed?" Before answering that question I would first like to address some specifics in her Stormwater Impoundment Scenario (#1). For example, Ms. Floeck stated that in determining whether the sludge (in the impoundment) would render the impoundment a hazardous waste management unit, we must first determine whether the sludge at this point is classified as a waste. According to 40 CFR 261.2, she states, a solid waste is defined as any discarded material that is:

abandoned;  
recycled; or  
considered inherently waste-like

She concludes that the sediment (sludge) within the impoundment does not meet any of these criteria and therefore should not be

defined as a solid waste.

The Agency disagrees with her interpretation of the above prescribed federal regulation with respect to sludge within an impoundment. The Agency interprets the federal definition of solid waste to apply to the sludge generated within an impoundment (unit), and believes that the unit would become regulated for these following reasons:

1. The RCRA regulation define a solid waste as any discarded material. This includes materials that are abandoned by being "accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated." (Emphasis added; see §261.2 (b)(3))

2. Our past interpretations include sludge as a solid waste.

"Any pollution abatement technique such as the land treatment, disposal, or storage of a wastewater will invariably generate a sludge. The mechanisms for sludge formation involve either precipitation, adsorption, or accumulation of biomass. These units would be subject to regulation ...if the sludges exhibit a characteristic..." (See enclosed July 17,1985 memo from Skinner to Scarbrough).

3. The Agency has always maintained that sludges are generated at the moment of their deposition at the bottom of the unit ("point of generation"). Note that deposition is defined as a condition where there has been at least a temporary cessation of lateral particle movement (See 55 FR 46380, November 2, 1990).

Therefore, in response to Ms. Floeck's question, the sludge does become of regulatory concern at the point it is intended to be discarded. However, "discarded" does not mean only when the impoundment is cleaned or closed. If sludge in an impoundment, which is considered to be a solid waste under 261.2, exhibits the TC, then the sludge and unit would become subject to Subtitle C requirements. Under the federal regulations accumulation and storage of TC-hazardous waste in a unit subjects that unit to the hazardous waste program. Note, however, that the solid waste determination in an authorized State is a State call. If State law is more stringent or broader in scope than federal RCRA regulations, then compliance with those regulations would also be

required.

In addition, on September 27, 1990 (55 FR 39409) an Agency clarification notice was published regarding a variety of TC-related issues, including the regulatory status of surface impoundments managing newly regulated TC waste. The third surface impoundment scenario discussed in the notice is clearly applicable to both of Ms. Floeck's situations (Scenarios #1 and #2). That is, a TC waste is generated from non-hazardous wastewater on or after the TC effective date. This could occur where hazardous constituents in wastewater become concentrated, or if a new TC sludge is formed by settling. Once the TC waste is generated and stored or disposed in the unit, the unit is subject to Subtitle C regulations. This clarification also confirms your stated reasoning as to why the sludge in the surface impoundment would be covered by the TC.

I hope this response clarifies the issues you raised. As noted previously, I encourage you to contact the appropriate State and local regulatory agencies for additional assistance or clarification. If you or Ms. Floeck have further questions regarding the TC rule, please contact Daryl Moore at FTS 475-8551 or (202) 475-8551.