August 4, 2000

MEMORANDUM

SUBJECT: Guidance on Wastewater Treatment

FROM: Elizabeth A. Cotsworth, Director
Office of Solid Waste

TO: Samuel Coleman, P.E., Director
Compliance Assurance and Enforcement Division (6EN)
EPA Region VI

Thank you for your memorandum of June 11, 1999 regarding wastewater treatment activities at Re-Claim Environmental=s (ARe-Claim@) facility in Shreveport, Louisiana. In your memorandum, you express concern that Re-Claim may not necessarily be conducting wastewater treatment, and that the materials the company receives may not consist solely of wastewater. Additionally, you mention that a Regional inspection in 1998 revealed that Re-Claim received hazardous wastewaters, while the facility=s Louisiana Pollution Discharge Elimination System permit provides only for the receipt of nonhazardous wastewaters.

You request guidance on whether Re-Claim=s process constitutes wastewater treatment and whether some of the materials accepted by Re-Claim are wastewaters. You also ask certain questions regarding the nature of wastewater, and the status of certain units at the Re-Claim Facility. Your specific questions are listed below along with our responses.

1. Please provide a definition or some guidance on the definition of Awastewater@ and Anonwastewater@ and the maximum percentage of solids a material may contain while simultaneously remaining under the definition of a wastewater.

   The Agency has not formally defined Awastewater@ in the context of the wastewater treatment unit exclusion. However, in a July 31, 1981 letter from John P. Lehman to Richard C. Boyton (attached), the Agency described

wastewater by stating that wastewaters are A. . . not concentrated chemicals or non aqueous wastes. While we have not promulgated a formal definition, we are interpreting the term [wastewaters] to refer to wastes which are substantially water with contaminants amounting to a few percent at most.@ We have not addressed this issue in the context of the wastewater treatment unit exclusion since the July1981 letter.

2. Please explain whether the tanks where the sludge is heated are components of the wastewater treatment unit.

   Based on the description provided, the tanks in which sludge is heated could be part of a wastewater treatment facility. Sludge dewatering is often a component of wastewater treatment activities. The tanks could, therefore, be eligible for the wastewater treatment unit exemption provided that the tanks meet the criteria set forth in the definition of a wastewater treatment unit at 40 CFR 260.10.

3. Please explain whether the facility may be exempted as an oil recycling unit.

   Under the federal RCRA program, there is no specific classification or exemption for Aoil recycling units.@ However, a hazardous waste recycling unit that conducts recycling may be exempt from RCRA regulation according to ' 261.6(c). To meet the exemption, the recycling conducted in the unit must be legitimate recycling rather than some form of treatment called recycling in an attempt to evade regulation. This determination is site-specific and involves many factors, including whether there are any toxic constituents along for the ride. The factors used to evaluate legitimacy are discussed in a memorandum, titled "F006 Recycling," signed by Sylvia Lowrance on April 26, 1989 (see attached).

4. Does the wastewater material need to contain a certain percentage of oil in order for Re-Claim=s actions to qualify as oil recovery? If so, what percentage of oil is required?

   There is no minimum percentage of oil that a wastewater must contain for an activity to be considered recycling, as long as the other applicable recycling provisions of ' 261.6(c) are met.

   Please note that, related to our answer to question 3 above, there is not a specific federal RCRA classification or exemption for oil recovery at facilities other than petroleum refineries.

Thank you for the opportunity to respond to your request. Should you have any questions regarding the wastewater treatment unit exclusion, please contact Jeff Gaines at (703) 308-8655.

Attachments

cc:
Steve Heare, PSPD
Sonya Sasseville, PSPD
Dave Bussard, HWID
Charlotte Mooney, HWID
Brian Grant, OGC
Brian Maas, OECA
David Nielsen, OECA

JULY 31, 1981

Richard C. Boynton, Chief
Permits Development Section
U.S. Environmental Protection Agency
John F. Kennedy Building
Boston, Massachusetts 02203

Re: Suspension of Regulations for Wastewater Treatment Units

Dear Mr. Boynton:

This letter responds to your recent request for an interpretation of the regulations of November 17, 1980 (45 FR 76074) which suspended certain requirements of the hazardous waste regulations for owners and operators of wastewater treatment units where such facilities are subject to regulation under Section 402 or 307(b) of the Clean Water Act.

Your letter is correct in stating that there is nothing in the definitions, preamble, or regulations which precludes an off-site hazardous waste management facility from qualifying for a suspension of the hazardous waste requirements in 40 CFR Parts 122, 264 and 265. The Agency considered limiting the suspension and proposed amendments to on-site facilities but was unable to justify that this type of facility was inherently less hazardous than an off-site facility so as to necessitate different standards. Accordingly, EPA does not intend to distinguish between on-site and off-site facilities in this regulation.

Even under the terms of the suspension, hazardous waste shipped to an off-site facility will, of course, be subject to the manifest requirements. In addition, the treatment facility must be subject to regulation under either 402 or 307(b) of the Clean Water Act.

To be completely exempted for now (and ultimately subjected to the permit by rule) all units in a facility must meet the definition of "tank" in §260.10. Lagoons, incinerators, and other types of facilities are not eligible. It is, however, true that the definition of "tank" is rather broad, covering unit operations which are not obviously tanks such as presses, filters, sumps, and many other types of processing equipment.

The Agency also intends that the phrase "subject to regulation under either Section 402 or 307(b) of the Clean Water Act" should be given a broad interpretation. This phrase includes all facilities that are subject to NPDES permits and encompasses facilities subject to either categorical pretreatment standards or general pretreatment standards. It is <u>not</u> necessary that the permits actually be issued or that pretreatment standards actually be in force. It is sufficient that the facility be subject to the requirements of the Clean Water Act.

It should be noted that eligible facilities must in fact be treating "wastewaters" and not concentrated chemicals or non aqueous wastes. While we have not promulgated a formal definition, we are interpreting the term to refer to wastes which are substantially water with contaminants amounting to a few percent at most. It has been suggested that a formal definition would be helpful. We are considering adding such a definition to the final promulgation.

Public comments on the November 17, 1980 proposal also noted that some wastewater treatment units do not discharge a liquid stream and thus are not subject to the Clean Water Act. EPA is considering changing this "subject to" language to include such zero discharge facilities. We expect to finalize the proposed regulations for wastewater treatment units and elementary neutralization units within the next few months.

If you have any further questions, please do not hesitate to call me or Fred Lindsey, the Deputy Division Director at FTS 755-9185.

Sincerely yours,

John P. Lehman, Director
Hazardous & Industrial Waste Division

cc:

Dennis Heubner EPA, Region I	R. Stan Jorgensen EPA, Region VI
Ernest Regna EPA, Region II	Robert L. Morby EPA, Region VII
Robert L. Allen EPA, Region III	Lawrence P. Gazda EPA, Region VIII
James Scarbrough EPA, Region IV	Arnold R. Den EPA, Region IX
Karl J. Klepitach EPA, Region V	Kenneth D. Feigner EPA, Region X

9441.1989(19)

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

APR 26 1989

MEMORANDUM

SUBJECT: F006 Recycling

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: Hazardous Waste Management Division Directors
Regions I-X

It has come to the attention of EPA Headquarters that many of the Regions and authorized States are being requested to make determinations on the regulatory status of various recycling schemes for F006 electroplating sludges. In particular, companies have claimed that F006 waste is being recycled by being used as: (1) an ingredient in the manufacture of aggregate, (2) an ingredient in the manufacture of cement, and (3) feedstock for a metals recovery smelter. The same company may make such requests of more than one Region and/or State. Given the complexities of the regulations governing recycling vs. treatment and the definition of solid waste, and the possible ramifications of determinations made in one Region affecting another Region's determination, it is extremely important that such determinations are consistent and, where possible, coordinated.

Two issues are presented. The first issue is whether these activities are legitimate recycling, or rather just some form of treatment called "recycling" in an attempt to evade regulation. Second, assuming the activity is not sham recycling, the issue is whether the activity is a type of recycling that is subject to regulation under sections 261.2 and 261.6 or is it excluded from our authority.

With respect to the issue of whether the activity is sham recycling, this question involves assessing the intent of the owner or operator by evaluating circumstantial evidence, always

a difficult task. Basically, the determination rests on whether the secondary material is "commodity-like." The main environmental considerations are (1) whether the secondary material truly has value as a raw material-product (i.e., is it likely to be abandoned or mismanaged prior to reclamation rather than being reclaimed?) and (2) whether the recycling process (including ancillary storage) is likely to release hazardous constituents (or otherwise pose risks to human health and the environment) that are different from or greater than the processing of an analogous raw material/product. The attachment to this memorandum sets out relevant factors in more detail.

If the activity is not a sham, then the question is whether it is regulated. If F006 waste is used as an ingredient to produce aggregate, then such aggregate would remain a solid waste if used in a manner constituting disposal (e.g., road-base material) under sections 261.2(c)(1) and 261.2(e)(2)(i) or if it is accumulated speculatively under section 261.2(e)(2)(iii). Likewise, the F006 "ingredient" is subject to regulation from the point of generation to the point of recycling. The aggregate product is, however, entitled to the exemption under 40 CFR 266.20(b), as amended by the August 17, 1988, Land Disposal Restrictions for First Third Scheduled Wastes final rule (see 53 FR 31197 for further discussion). However, if the aggregate is not used on the land, then the materials used to produce it would not be solid wastes at all, and therefore neither those materials nor the aggregate would be regulated (see section 261.2(e)(1)(i)).

Likewise, cement manufacturing using F006 waste as an ingredient would yield a product that remains a solid waste if it is used in a manner constituting disposal, also subject to section 266.20(b). There is an additional question of whether the cement kiln dust remains subject to the Bevill exclusion. In order for the cement kiln dust to remain excluded from regulation, the owner or operator must demonstrate that the use of F006 waste has not significantly affected the character of the cement kiln dust (e.g., demonstrate that the use of F006 waste has not significantly increased the levels of Appendix VIII constituents in the cement kiln dust leachate). [NOTE: This issue will be addressed more fully in the upcoming supplemental proposal of the Boiler and Industrial Furnace rule, which is pending Federal Register publication.]

For F006 waste used as a feedstock in a metals recovery smelter, the Agency views this as a recovery process rather than use as an ingredient in an industrial process and, therefore, considers this to be a form of treatment that is not currently regulated (see sections 261.2(c) and 261.6(c)(1)). Furthermore, because this is a recovery process rather than a production

process, the F006 waste remains a hazardous waste (and must be

managed as such prior to introduction to the process), and the slag from this process would normally be considered a "derived from" F006 waste. However, for primary smelters, the slag may be considered subject to the Bevill exclusion provided that the owner or operator can demonstrate that the use of F006 waste has not significantly affected the hazardous constituent content of the slag (i.e., make a demonstration similar to the one discussed above for the cement kiln dust). [NOTE: In the supplemental proposal of the Boiler and Industrial Furnace rule noted above, the Agency will be proposing a definition of "indigenous waste" based on a comparison of the constituents found in the waste to the constituents found in an analogous raw material. Should the F006 waste meet the definition of an "indigenous waste," the waste would cease to be a waste when introduced the process and the slag would not be derived from a hazardous waste.]

Also, you should be aware that OSW is currently reevaluating the regulations concerning recycling activities, in conjunction with finalizing the January 8, 1988 proposal to amend the Definition of Solid Waste. While any major changes may depend on RCRA authorization, we are considering regulatory amendments or changes in regulatory interpretations that will encourage on-site recycling, while ensuring the protection of human health and the environment.

Headquarters is able to serve as a clearinghouse to help coordinate determinations on whether a specific case is "recycling" or "treatment" and will provide additional guidance and information, as requested. Ultimately, however, these determinations are made by the Regions and authorized States. Attached to this memorandum is a list of criteria that should be considered in evaluating the recycling scheme. Should you receive a request for such a determination, or should you have questions regarding the criteria used to evaluate a specific case, please contact Mitch Kidwell, of my staff, at FTS 475-8551.

Attachment

CRITERIA FOR EVALUATING WHETHER A WASTE IS BEING RECYCLED

The difference between recycling and treatment is sometimes difficult to distinguish. In some cases, one is trying to interpret intent from circumstantial evidence showing mixed motivation, always a difficult proposition. The potential for abuse is such that great care must be used when making a determination that a particular recycling activity is to go unregulated (i.e., it is one of those activities which is beyond the scope of our jurisdiction). In certain cases, there may be few clear-cut answers to the question of whether a specific activity is this type of excluded recycling (and, by extension, that a secondary material is not a waste, but rather a raw material or effective substitute); however, the following list of criteria may be useful in focusing the consideration of a specific activity. Here too, there may be no clear-cut answers, but, taken as a whole, the answers to these questions should help draw the distinction between recycling and sham recycling or treatment.

(1) Is the secondary material similar to an analogous raw material or product?

Does it contain Appendix VIII constituents not found in the analogous raw material/product (or at higher levels)?

Does it exhibit hazardous characteristics that the analogous raw material/product would not?

Does it contain levels of recoverable material similar to the analogous raw material/product?

Is much more of the secondary material used as compared with the analogous raw material/product it replaces? Is only a nominal amount of it used?

Is the secondary material as effective as the raw material or product is replaces?

(2) What degree of processing is required to produce a finished product?

Can the secondary material be fed directly into the process (i.e., direct use) or is reclamation (or pretreatment) required?

How much value does final reclamation add?

(3) What is the value of the secondary material?

Is it listed in industry news letters, trade journals, etc.?

Does the secondary material have economic value comparable to the raw material that normally enters the process?

(4) Is there a guaranteed market for the end product?

Is there a contract in place to purchase the "product" ostensibly produced from the hazardous secondary materials?

If the type of recycling is reclamation, is the product used by the reclaimer? The generator? Is there a batch tolling agreement? (Note that since reclaimers are normally TSDFs, assuming they store before reclaiming, reclamation facilities present fewer possibilities of systemic abuse).

Is the reclaimed product a recognized commodity? Are there industry-recognized quality specifications for the product?

(5) Is the secondary material handled in a manner consistent with the raw material/product it replaces?

Is the secondary material stored on the land?

Is the secondary material stored in a similar manner as the analogous raw material (i.e., to prevent loss?)

Are adequate records regarding the recycling transactions kept?

Do the companies involved have a history of mismanagement of hazardous wastes?

(6) Other relevant factors.

What are the economics of the recycling process? Does most of the revenue come from charging generators for managing their wastes or from the sale of the product?

Are the toxic constituents actually necessary (or of sufficient use) to the product or are they just "along for the ride."

These criteria are drawn from 53 FR at 522 (January 8, 1988); 52 FR at 17013 (May 6, 1987); and 50 FR at 638 (January 4, 1985).