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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

JAN 8 1991

Frank Dixon
President
Thermal Waste Management
237 Royal Street
New Orleans, Louisiana 70130

Dear Mr. Dixon:

This letter responds to your August 9, 1990, letter to Mr. Bob Holloway, as well as to phone conversations between Mr. George Lane of Thermal Waste Management (TWM) and Mr. Mitch Kidwell, of my staff. Your principal intent in writing to EPA is to seek confirmation of your assessment that the fuels TWM produces are exempt from hazardous waste labeling requirements. You also ask for clarification of the regulatory provisions that govern the production of fuels from oily hazardous petroleum refinery wastes (i.e., 40 CFR 261.6(a)(3)) and the impact of various court opinions on these regulations.

As I understand your letter, TWM has a process that produces marketable liquid and solid fossil fuel products from oily hazardous petroleum refinery wastes. The liquid portion is reinserted into the petroleum refining process and the solid portion is marketed as a fuel. You assert that the TWM process is unique because it leaves no residues that would require subsequent treatment or disposal (aside from the wastewater, which is further managed in the refinery's wastewater treatment system) and use this as a basis for drawing a "significant difference" between the TWM process and typical oil reclamation processes that recover a liquid component, yet leave a solid residue requiring disposal.

Regulatory determinations such as the one you seek (i.e., specific to your process or products) are made by the appropriate State regulatory agency or EPA Regional Offices. I am able to respond to your questions regarding which Federal regulations may be applicable, clarifying the intent and meaning of various terms used in the regulations, and provide some of the pertinent

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factors to consider in determining the regulatory status of the TWM process and the fuels produced; however, the determination must be made on a case-specific basis by the regulating agency.

Under the Federal regulations, there is no regulatory basis to draw a distinction between secondary materials processed by an oil recovery process that does not generate a residue and secondary materials processed by an oil recovery process that does generate a residue. The emphasis you apply to the phrase "no element of discard" as it describes the TWM process suggests a misunderstanding of the Agency's use of the phrase in its January 8, 1988 proposal (see 53 FR 525) on the definition of solid waste. (This definition is used to determine whether a secondary material is subject to hazardous waste regulations promulgated under the Resource Conservation and Recovery Act (RCRA).)

In the January 8, 1988 preamble discussion, the phrase "no element of discard" is used to indicate that where there is an element of discard evidenced in the management of a hazardous petroleum secondary material (e.g., placement in a surface impoundment) prior to reinsertion into the petroleum refining process, the very element of discard indicates that the secondary material is a solid waste subject to RCRA regulation.

Conversely, if a secondary material is managed prior to reinsertion into the petroleum refinery process that generated it such that there is no element of discard (e.g., by managing the materials solely in tanks), the secondary material is considered to be part of an ongoing continuous production process, and thus, outside the scope of RCRA regulation. Whether or not the processing of the secondary material (in this example, by reinsertion into the petroleum refining process) results in a residue that must be disposed of is irrelevant to determining whether the secondary material, prior to reinsertion, is a solid waste subject to regulation.

The January 8, 1988 preamble discussion, as well as the exclusion proposed for oil-bearing hazardous secondary materials that are reinserted into the petroleum refinery process (proposed 40 CFR 261.4(a)(10)), is neither relevant nor applicable to such materials that are inserted into an oil recovery process other than the petroleum refinery process that generated the secondary material (regardless of whether the recovery process generates a residue). Rather, fuel that is produced (and oil that is

reclaimed and used as a fuel) from hazardous wastes resulting from normal petroleum refining, production, and transportation by processes other than normal petroleum refining operations are eligible for an exemption from hazardous waste regulation under 40 CFR 261.6(a)(3)(viii).

Your first four questions indicate a concern regarding whether the ownership of the unit, the operator of the unit, the characterization of the unit's operation as intermittent (i.e., batch) rather than continuous, or the unit's characterization as mobile rather than stationary has an impact on whether the products produced are exempt from regulation. In general, under Federal regulations such aspects of a process have little impact on the regulatory status of the products produced or the residues generated.

The applicable regulatory provisions (40 CFR 261.6(a)(3)) explicitly state the conditions which must be met for fuels produced from hazardous secondary materials from petroleum refining to be exempt from regulation. (For example, in 261.6(a)(3)(V), "refining of oil-bearing hazardous wastes along with normal process streams"; and in 261.6(a)(3)(viii)(A), "reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specifications under § 266.40(e).")

In another question, you refer to the proposed 40 CFR 261.4(a)(10) (53 FR 529, January S. 1988) which excludes:

"Oil-bearing hazardous secondary materials from petroleum refining that are generated onsite and reinserted into the petroleum refining process along with normal process streams, provided that the materials are not stored in a manner involving placement on the land, or accumulated speculatively, before being so recycled. (Fuels produced from such recycling activities are not solid wastes.)"

You ask for EPA's concurrence that TWM fuels are not solid wastes, since the feed materials meet all of the above requirements. Such an evaluation would need to be made on a case-specific basis by the regulating agency.

It should be clear from the January 8, 1988 proposal preamble discussion regarding RCRA jurisdiction that the

exclusion applies only to those secondary materials that are reinserted into the petroleum refining process (rather than being "inserted" into an onsite "recovery" process), thereby being part of an ongoing, continuous production process. (This language is taken from the statutory provision in section 3004(r).)

Materials that are processed by processes other than "the petroleum refining process" would not be excluded under this proposed provision (although, as stated above? there is an existing rule that exempts fuels produced by such other processes, provided the fuels meet the used oil specifications). Please keep in mind that the Agency has not finalized the 1988 proposal, nor has any State, to our knowledge, adopted such a provision in a final regulation. Conditions for meeting the exclusion could change at promulgation.

A number of your questions refer to the January 8, 1988 preamble discussion and make an assumption that the TWM process is a "petroleum refining process." EPA described what it means by a petroleum refinery process (i.e., petroleum refining facility) in a November 29, 1985 rulemaking that promulgated the exemptions for fuels derived from petroleum refinery wastes (see 50 FR 49169). (This description was reiterated in the January 8, 1988 proposal preamble discussion, and is consistent with the statutory language in section 3004(r).) As Footnote No. 11 in the November 29, 1985 FEDERAL REGISTER notice states, the Agency does not consider used oil-based processes that produce fuel to be refining operations "(in spite of the use of distillation) because they do not produce fuels from crude oil." This footnote further explains that if such processes use ". . . oilbearing petroleum refining hazardous waste as a feed material, the resulting fuels would be exempt if they meet the used oil specification . . ." (emphasis added). By requiring that such fuels meet the used oil specifications of 266.40(e) to be exempt from regulation as a hazardous waste fuel (assuming that the fuels are derived from listed hazardous wastes or exhibit a hazardous characteristic), the Agency clearly did not intend for used oil distillation processes (and, by extension, other oil recovery processes) to be considered petroleum refining processes, even when oil-bearing petroleum refining hazardous wastes are used as a feedstock in the used oil distillation process.

The TWM process does not appear to meet the Agency's definition of a petroleum refining operation because it: 1) does

not use crude oil as a feedstock, 2) recovers a liquid fraction that must be rerefined in the petroleum refining process (and therefore, is not itself a refined hydrocarbon product), and 3) exhibits no evidence that the solid fuel produced is a typical petroleum refining product rather than a hazardous waste fuel (i.e., if there is no removal of contaminants in the processing - - as would be the assumption if such fuel meets the used oil specifications found at 40 CFR 266.40(e) -- then there is no basis on which to conclude that such fuel is a refined petroleum product rather than a petroleum refining waste recovery residue with recoverable energy (BTU) value, or rather, a hazardous waste fuel). Since it does not appear that the TWM process is a petroleum refining operation, many of your questions are moot or are otherwise unanswerable because there is insufficient information on which to base a response.

In two questions you ask whether the January 8, 1988 proposal has been finalized and whether the Agency has considered recent court opinions regarding the jurisdiction of RCRA in responding to your questions regarding the status of the fuels produced by the TWM process. EPA has not yet finalized the January 8, 1988 proposal; however, insofar as the proposal and relevant court opinions address the scope of RCRA, particularly in relation to secondary materials that are part of an ongoing continuous petroleum refining processes, these considerations were taken into account in responding to your questions.

In another question, you cite the Standard Industrial Classification (SIC) 2911 for petroleum refining and ask whether the TWM process is the "redistillation of unfinished petroleum derivatives." While the TWM process does appear to be the redistillation of an "unfinished petroleum derivative," the main focus of the SIC classification seems to be the actual production of petroleum products. Because the SIC description includes the phrase "other processes," the emphasis does not appear to be on the type of process involved, but rather on the feed materials and the products produced. The TWM process is best characterized as a recovery process that processes hazardous petroleum refining wastes to recover a liquid component which is reinserted into the petroleum recovery and a solid component which, assuming it meets the used oil specifications of 266.40(e), is a hazardous waste fuel that is exempt from regulation. If the solid fuel produced by the TWM process does not meet the used oil specifications at 266.40(e), it is subject to regulation as a hazardous waste fuel.

In describing a petroleum refining process, EPA sought to distinguish between actual petroleum production processes and ancillary recovery processes. However, exemptions were also promulgated to address fuels produced by recovery operations where the contaminants were removed from the fuels, thus ensuring that the use of the fuels would not pose an increase in risk to human health and the environment over the use of normal petroleum refining fuel products. You have provided no data indicating whether the solid fuel produced by the Twm process meets the 266.40(e) used oil specifications; therefore we are unable to determine the regulatory status of the solid fuel.

You specifically asked whether the Agency agrees that the TWM process is a refining process. For the purpose of the regulatory exemptions found at 40 CFR 261.6(a)(3), the TWM process does not appear to be a refining process in the same way that a used oil distillation process is not a refining process. Rather, the TWM process appears to be a recovery process.

In summary, I reiterate that EPA Headquarters is not the appropriate entity to make a determination on the regulatory status of the TWM process as it operates at a particular facility or on the products it produces. There is no basis on which to conclude that the Twm process is a petroleum refining process, and no information was supplied to make a regulatory determination on the status of either the liquid or solid portions recovered (i.e.; no data on whether the fossil products meet the used oil specifications). If the liquid portion is sold for direct use as a fuel, the fuel would be exempt from regulation as a hazardous waste fuel only if it meets the used oil specifications of 40 CFR 266.4-0(e). If the liquid portion (i.e., oil) is reinserted into the petroleum refining process along with normal process streams, it would be exempt from hazardous waste regulation under 261.6(a)(3)(vi). If the solid portion is marketed as a fuel, or further used to produce a fuel, it would likewise not be regulated as a hazardous waste fuel only provided that it meets the used oil specifications (assuming that it meets other relevant criteria for a hazardous waste fuel). If the recovered portions that are marketed as fuel do not meet the used oil specifications, such fuels are hazardous waste fuels (assuming that they are derived from listed hazardous petroleum wastes or are themselves hazardous-by exhibiting a characteristic of a hazardous waste).

If you have further generic questions regarding the regulatory status of recovery processes or fuel products derived from hazardous petroleum wastes, you should contact Mr. Mitch Kidwell, of my staff, at (202) 475-8551. For specific questions regarding the application of RCRA regulation to the TWM process or TWM fuel products, you should contact the appropriate State regulatory agency or EPA Regional Office.

Sincerely,

Original Document signed

David Bussard
Director
Characterization and Assessment
Division

bcc: Allyn Davis, Director
Waste Management Division, Region VI

Bob Holloway, Chief
Combustion Section