

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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Ms. Adele S. Buchman
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Dear Ms. Buchman:

Thank you for your letter of April 15, 1991, requesting the Environmental Protection Agency's (EPA's) determinations regarding the regulatory status of two cases that result in mixtures of petroleum product and water.

Some of the responses to the questions you asked require a case-specific factual determination, which can be more appropriately made by the authorized state regulatory agency or the EPA regional office. However, based on federal law, I have answered the generic questions in the enclosure to this letter. Please note that states may have different determinations based on a state program authorized to implement the requirements of the Resource Conservation and Recovery Act (RCRA) or on other state laws. Therefore, you will also need to check with the appropriate state authorities.

As a general assessment, both Case 1 and Case 2 lend themselves to case-specific determinations. The recovery of an off-specification commercial product is not subject to RCRA because the material itself is excluded from the definition of "solid waste." However, this is not the case when intentional mixing or the purposeful non-separation of product and hazardous waste waters is conducted to avoid regulation of the waste waters. To the extent that the mixing of product and water is unavoidable and the recovery of the product is a standard practice in the management of the off-specification product, RCRA does not apply. However, because RCRA is applicable to the management of hazardous waste waters, EPA would be concerned that the mixtures are generated to avoid RCRA regulation. Therefore, a case-specific determination is required to ascertain the intent of the management scenarios described in your letter. This determination should consider historical management practices and the manner in which the product/water mixtures are managed (i.e., product-like or waste-like).

Thank you for your interest in the regulations applicable to the recovery of product from product/water mixtures. If you have any further questions, please contact Mike Petruska at (202) 475-8551.

Sincerely yours,

Don R. Clay
Assistant Administrator

Enclosure

CASE ONE

1. **“Where the product in the product/water mixture is to be recovered, is the mixture a solid waste under RCRA after withdrawal from the product tank but before product recovery?”**

To determine whether a material is a solid waste, one must know how the material is to be managed (will it be “discarded”) and what the material is (is it a spent material, by-product, sludge, or commercial product?). In general, the product/water mixture would be considered an off-specification product that is intended to be recovered (i.e., after withdrawal and before recovery), and this would be excluded from the definition of “solid waste.” However, in the event of an enforcement action, any party claiming that a material is not a solid waste must be able to demonstrate that the conditions of the exclusion being claimed are met. For example, in this case, a party may be required to demonstrate that the off-specification product can and will actually be recovered. Also, a demonstration that the mixture of product and water was not generated to avoid regulation of the water alone as a hazardous waste may be required.

2. **“Is the water portion of the withdrawn product/water mixture a solid waste under RCRA before product recovery? After product recovery?”**

In determining the regulatory status of the petroleum product/water mixture before recovery, EPA would not generally differentiate between the two individual components. Rather, the mixture, as a whole, would be considered the off-specification product (unless, of course, either the water or the petroleum product were, for some reason, already considered to be a solid waste before the mixing, or the petroleum and water were mixed solely to avoid regulation of the water).

After the product has been separated and recovered from the water, the water would be evaluated on its own merit (unless the product is a listed hazardous waste (see 40 CFR 261.33), in which case, the water must be managed as the listed hazardous waste because it contains the hazardous waste). Assuming the contaminated water will be treated and/or disposed of, the water would become a solid waste once the product has been recovered. And, if after recovery of the product, the water exhibits a characteristic of a hazardous waste (i.e., ignitability, toxicity, corrosivity, or reactivity), the water would be subject to management as a hazardous waste.

3. **“If less than the total amount of water is withdrawn from the product storage tank so that only hydrocarbon-contaminated water and no free product is withdrawn, is the withdrawn water a solid waste?”**

Assuming that the contaminated water will be discarded, the water would be a solid waste. The key consideration in making this determination is whether the material in question will be discarded. For example, even if only free product were withdrawn and discarded, the product would be a solid waste by virtue of being a discarded material.

4. “Is there any requirement or guidance concerning the particular percentage of free product which should be in the product/water mixture in order for the mixture to be considered a non-waste until after product recovery? If so, what is that requirement or guidance?”

In general, a determination regarding the regulatory status of the product/water mixture must be made by the appropriate state regulatory agency or EPA regional office. However, the determining factor is not necessarily a generic percentage level of product, but rather a case-specific determination that indicates whether the material is more product-like or waste-like. This determination must include consideration of whether the recovery of the product is a legitimate recycling operation, as well as how the material is managed.

For example, the combination (prior to recovery) of a product/water mixture that has very low or unrecoverable levels of product with a product/water mixture that has high or economically significant levels of product would not generally be considered legitimate recycling (i.e., the product/water mixture with low or unrecoverable levels of product would be considered a solid waste). Likewise, even if the product/water mixture has economically recoverable levels of product but is not managed in an environmentally sound manner (i.e., is managed as a waste rather than as a valuable commodity--for example, is placed in a surface impoundment or stored in tanks for an extended period of time), the product/water mixture may be considered a solid waste.

EPA would certainly encourage the legitimate recovery of the product from the product/water mixture. However, EPA would be concerned if the product/water were generated by intentionally combining the product with the water to avoid regulation of water that otherwise would be sent off site for treatment and disposal. For this reason, and for a number of other reasons that require case-specific analyses, case-specific determinations are, as a matter of policy, made by the regulating state or regional hazardous waste program personnel.

5. “If the fee charged by the recycler includes the cost of treatment/disposal of the hydrocarbon-contaminated water generated following product recovery, and that cost is greater than the value of the product recovered, is that legitimate recycling?”

As indicated earlier, the determination of whether a particular process is legitimate recycling is more appropriately made by the regulating agency (either authorized state agency or EPA regional office). In general, however, the relative profitability of the processing of a specific material is not the determining factor, although it certainly is one consideration. Rather, the key focus is whether the material being processed has recoverable levels of the constituent intended for recovery and the extent to which other hazardous constituents are being treated, however incidental to recycling that treatment may be. These factors indicate the legitimacy of the claimed recycling process and whether the intent is actually to treat or otherwise dispose of non-recoverable hazardous constituents.

CASE TWO

1. **“If separation occurs at the loading facility, as described, is the water leaving the separator a solid waste?”**

As a material that is being sent for a treatment and disposal, the water would be considered a solid waste.

2. **“If the separated water is a solid waste and tests OTC hazardous, is the water collection tank, which receives the water flowing out of the separator, a hazardous waste tank under RCRA?”**

In general, if the water collection tank is used for managing a hazardous waste, the unit would be considered a “hazardous waste tank,” assuming it meets the definition of “tank” found at 40 CFR 260.10. This determination, and whether a RCRA storage permit is required, must be made on a site-specific basis by the regulating agency.

3. **“Is the unseparated product/water mixture a solid waste?”**

There is not enough information in your letter to determine whether the mixture is a solid waste. If the mixture is determined to be an off-specification product and is intended to be recovered, it would not be a solid waste. However, if the product/water mixture is not to be recovered, if the "recovery" is an incidental process that does not actually recover usable product, or if the mixture was intentionally generated solely to avoid regulation of the hazardous water before its treatment and disposal, the mixture would be determined to be a solid waste. This determination must be made on a case-specific basis by the regulating agency.

4. **“If the onsite separator is bypassed, can the product/water mixture be transported to an offsite recovery facility for product recovery and wastewater treatment without a RCRA manifest?”**

Whether the separator is bypassed has little impact on determining whether a RCRA manifest is required. The determining factor is whether the mixture sent off site is a hazardous waste. If so, a hazardous waste manifest is required. However, if the separator is being bypassed solely for the purpose of avoiding regulation of the contaminated water, the regulating agency may determine this scenario to be a sham recycling situation in which the main intent is to avoid the regulation of the transportation and storage of a hazardous waste water under the guise of a recycling operation.

5. **“Does the facility receiving the product/water mixture require a RCRA TSDF permit to do so if it a) recovers product and b) treats the separated water in a system which meets all the requirements of the wastewater treatment exemption under RCRA?”**

This determination must be made by the regulating agency. In general, if the product/water mixture is not a solid waste when received at the recycling facility, then no storage permit is required. In addition, the recovery process itself is generally exempt from permitting requirements. However, the hazardous water that is separated from the product would be subject to regulation as a hazardous waste. If the water is treated in a wastewater treatment unit that is exempt from RCRA permitting requirements, then no RCRA permit is required.