

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

JULY 13, 1995

Ms. Lynn L. Bergeson
Weinberg, Sergeson, and Neuman
1300 Eye Street, N.W.
Suite 1000 West
Washington, D.C. 20005

Dear Ms. Bergeson:

Thank you for your letter of October 14, 1994 requesting clarification of the regulatory requirements under the Resource Conservation and Recovery Act (RCRA) applicable to the collection, transportation and recycling of spent antifreeze generated at automobile service centers, in particular, at what point spent antifreeze becomes a solid waste.

This request was posed in order in the context of a spent antifreeze recycling program, wherein spent antifreeze generated from radiator flushes done at automobile service centers (specifically, Valvoline Instant Oil Change stores) is collected, stored and sent for recycling at Union Carbide's Glycol Recovery Unit in Institute, West Virginia. The specific questions you raised relate to the practical difficulties of generating and characterizing spent antifreeze, where one radiator flush may be hazardous and the next flush nonhazardous. Please forgive the delay in responding to your request.

The following discussion of the RCRA regulations applicable to the spent antifreeze recycling program that your clients, Union Carbide Corporation and Ecogard, Inc., plan to establish comes after careful consideration of this recycling program and extensive phone conversations between Tom Ovenden and my staff.

At this time, EPA has not determined what point of generation will be applied to "like wastes" (wastes of a similar composition) through any future Agency rulemakings. As you know, the Agency has solicited comment in its Land Disposal Restriction (LDR) Phase III proposed rule on different options to designating the point of generation for like-wastes. See 60 FR 11702, 11715-11717 (March 2, 1995). The three specific options presented in the preamble would view the collection of many streams as a single waste for purposes of identifying a point of generation.

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As an alternative to designating a point of collection of many streams, the Agency could establish a point of generation for like-wastes upstream of the collection point of like-wastes (e.g., an automotive radiator in the case of spent anti-freeze). However, at least with respect to anti-freeze, we are not certain that this represents the most practical way to approach antifreeze management when anti-freeze is routinely aggregated and collected in drums and tanks and the characteristic of the antifreeze in those containers is the best indicator of potential environmental risks if the material were released to the environment.

Given the facts of the situation, we also realize that it would be impractical to require each individual radiator flush to be tested for a hazardous characteristic. We also realize that assuming that each radiator flush is characteristically hazardous may limit the volume of spent antifreeze that automobile service centers will store and this make available for recycling and, ultimately, may impact on the cost-effectiveness of the overall spent antifreeze recycling program.

Bearing this in mind, even if the Agency were to determine that the point of generation should be at the radiator, we believe that it would be appropriate for a generator to rely on “knowledge” of the waste (as per 40 CFR 262.11(c) (2)) based on studies done to characterize the frequency of “hazardous” spent antifreeze generated (relative to the generation of “nonhazardous” spent antifreeze), in order to characterize the total volume of hazardous waste generated. Study data may also be used to characterize the consolidated volume of spent antifreeze. As you cite in your letter, data collected by various parties indicate that up to 40 % of the spent antifreeze flushed from radiators may be hazardous, primarily due to lead. Thus, the Agency believes that, absent facility-specific data to the contrary, it would be appropriate for a spent antifreeze generator to characterize the total consolidated volume of spent antifreeze generated as being 40% hazardous and 60% nonhazardous. Note, however, that facility-specific data gathered by spent antifreeze generators or authorized regulating agencies could override this 40% presumption and show higher or lower percentages of hazardous wastes.

This use of “knowledge” of the wastestreams, as applied to the total volume of spent antifreeze generated, would be an appropriate alternative to testing the spent antifreeze. And, just to clarify, this approach would be appropriate for determining the volume of hazardous waste generated for the purposes of being eligible for special regulatory provisions for small quantity generators.

We agree with you that commingling “40% hazardous” spent antifreeze with “60% nonhazardous” spent antifreeze in a common tank or container by the generator prior to the recycling of the spent antifreeze (and the subsequent treatment and disposal of the residues from recycling in compliance with Part 268) would not constitute impermissible dilution under 40 CFR 268.3. Given that this mixing would be done to facilitate proper treatment – recycling and subsequent treatment which destroys, removes or immobilizes hazardous constituents before land disposal – the dilution would not be impermissible.

In response to your inquiries regarding the application of the dilution prohibition to the burning of metal-bearing wastes and the burning of the still bottom residues of the spent antifreeze recycling process, the Agency would consider the still bottoms to be newly generated wastes. Assuming that the

still bottoms were hazardous, they could appropriately be burned for energy recovery in a regulated unit provided that they have sufficient BTU value. Therefore, the Agency would not consider the burning of the metal-bearing/high BTU bottoms to be impermissible dilution.

As for your inquiries regarding the applicable notifications and certifications for the purposes of the land disposal restrictions, insofar as the generator mixes hazardous and nonhazardous spent antifreeze such that the resultant mixture is no longer hazardous and meets the applicable treatment standards, the generator must comply with the notification and certification requirements of section 268.9.

In summary, if the Agency were to determine the radiator to be the point of generation for spent anti-freeze, we believe that one possible scenario for the spent antifreeze program is where an automobile service center could commingle each individual radiator flush in a tank or container, assuming (absent facility-specific data to the contrary) for the purposes of waste characterization and quantity of hazardous waste generated that 40% of the total volume generated in a month is hazardous (D008). The generator could also consider the accumulated total volume of spent antifreeze to be nonhazardous.

The generator would comply with the one-time notification and certification requirements of section 268.9(d). And, because the commingled mixture of the spent antifreeze is no longer hazardous, no hazardous waste manifest would be required.

The recycler receiving the nonhazardous spent antifreeze would not require a hazardous waste storage permit or be subject to other hazardous waste management requirements for this wastestream.

The recycler should characterize any residues from the distillation/recycling of spent anti-freeze to determine if they are hazardous wastes. If any of the residuals are hazardous, the recycler must comply with the applicable land disposal restrictions requirements of Part 268 (e.g., notification and certification).

Assuming, as discussed in your letter, that the residues are hazardous metal-bearing/high BTU wastes, these residues may be transported (with a hazardous waste manifest, and land disposal restrictions notification) to a permitted hazardous waste combustion unit for treatment. The final treatment facility would certify compliance with the applicable treatment standards prior to disposal of the residues. You should note, however, that this would be pursuant to the Federal regulatory program. As you know, States that are authorized for RCRA program may have more stringent requirements.

Thank you for your interest in the development of a recycling program to manage a common, and somewhat problematic, wastestream in an environmentally sound manner.

Sincerely,

Michael Shapiro, Director
Office of Solid Waste