



Tennessee Department of Transportation

TO: TDOT Regional Environmental Coordinators-
Rick Noseworthy, Scott Medlin, Jason Baker, and Ken Miller

FOR: DISTRIBUTION ROUTING (District and County Facility Managers)

FROM: Ronnie Bowers

SUBJECT: Spent Antifreeze Re-classification Notice

DATE: January 31, 2001

As you may remember, TDOT spent antifreeze was sampled in 1999 and determined to be hazardous with constituents that were likely introduced by waste mixing. Since that time, TDOT waste management procedures have been modified to prevent waste stream mixing and to ensure that only clean containers are used to store the spent antifreeze from the point of generation to disposal.

With these new management practices in mind, TDOT petitioned TDEC (our state environmental authority) in November of last year to reclassify our spent antifreeze as non-hazardous. After their review, TDEC did re-classify our spent antifreeze as non-hazardous. This reclassification will consequently save TDOT ~\$12,000 per year in treatment costs.

By maintaining separation of waste streams and ensuring that the spent antifreeze is stored according to these management practices, our spent antifreeze can be handled as non-hazardous and may be shipped accordingly. **However, if at any time, personnel suspect contamination of spent antifreeze in storage, please notify me immediately for sampling and disposal coordination.** The spent antifreeze standard operating procedure is attached. Your help in ensuring that these management practices are followed is crucial. Thank you for your efforts.

Please feel free to contact me with any questions or concerns.

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STANDARD OPERATING PROCEDURE (SOP)

ANTIFREEZE

The District Garage Manager has overall responsibility for the management of antifreeze products and spent (used) antifreeze in compliance with this SOP and with Federal and State environmental regulations.

The District Garage Manager will meet with vehicle and facility maintenance personnel to review the requirements of this SOP, and will ensure that all personnel follow this SOP.

This SOP is organized into two parts. Part 1 outlines requirements for management of antifreeze products during vehicle maintenance activities. Part 2 lists the requirements for storage of spent antifreeze prior to offsite recycling.

Part 1. Management of Antifreeze Products

Antifreeze products will be managed to prevent discharges of new or spent antifreeze to the environment, and to prevent contamination of new or spent antifreeze with RCRA-listed hazardous wastes (see SOP for Hazardous Waste Characterization).

- 1) Antifreeze will be used only in vehicle radiators. No other use of antifreeze is allowed.
- 2) No solvents, additives, oils, or other products containing RCRA-listed constituents will be added to vehicle radiators or otherwise mixed with the antifreeze (see SOP for Hazardous Waste Characterization).
- 3) Antifreeze will be drained and replaced according to the vehicle manufacturer's specifications or once every two years, whichever is less.
- 4) Vehicle maintenance will be conducted so as to prevent any discharge of antifreeze to the ground, to open drains, septic systems, storm sewers, dry wells or drainfields, or to any pathway that could allow migration of the antifreeze to a drinking water well or a surface water system (for example, lakes, rivers, creeks, or streams).
- 5) Spent antifreeze will be recycled offsite and will not be reused.

Part 2. Accumulation of Spent Antifreeze for Recycling

Although not a hazardous waste, spent antifreeze that is accumulated for recycling will follow the TDOT SOP for Setup and Operation of Satellite Accumulation Areas. The following requirements apply to the accumulation and storage of antifreeze in drums prior to offsite recycling.

- 1) Antifreeze accumulation areas will be located indoors under roof and protected from the weather. Secondary containment (spill pallets) will be provided as a best management practice as required by this SOP. Spill pallets will be at least 30 inches apart to ensure adequate aisle space exists between the pallets.
- 2) Antifreeze accumulation areas will be segregated from RCRA-hazardous waste accumulation areas.
- 3) Only clean drums will be used for spent antifreeze accumulation. Reuse of empty product containers or drums used previously for other spent materials is not allowed.
- 4) All drums used for accumulation of antifreeze for recycling will be labeled with the words "Spent Antifreeze."
- 5) No spent solvents, additives, oils, sludges or other wastes containing RCRA-listed constituents will be mixed with spent antifreeze accumulated for recycling (see SOP for Hazardous Waste Characterization).

- 6) If a drum of spent antifreeze becomes inadvertently contaminated with RCRA hazardous constituents (see SOP for Hazardous Waste Characterization), the drum and its contents will be managed as hazardous waste pending sampling and analysis of the contents.
- 7) Drums used to accumulate or store antifreeze will be closed except when adding or removing antifreeze. A dedicated funnel with integrated lid will be used for transfer of spent antifreeze into storage drums.
- 8) All drums used in the accumulation or storage of antifreeze for recycling will be in good condition. Drums with signs of corrosion, bulging or denting will not be used. If drums in use are damaged or show signs of corrosion, the spent antifreeze will be transferred to a new container in good condition within 24 hours. Spent antifreeze in leaking drums will be transferred immediately upon discovery to a clean drum in good condition.
- 9) A spill kit will be in the immediate vicinity of the antifreeze storage or accumulation area for use in the event of a leak or spill. Any spill of 55 gallons or more of antifreeze or spent antifreeze will be reported to the Regional Environmental Coordinator.
- 10) Spill cleanup materials will be containerized and stored in a separate container in the accumulation area until disposed.