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Policy for the Management of Used Oil Filters

Summary

DEP recommends the recycling of used oil filters as the preferred waste management option since it is the most environmentally protective alternative, minimizes to the greatest extent possible a generator's CERCLA liability, and furthers the goals of waste reduction, reuse and recycling. However, filters that are not destined for recycling are exempt from hazardous waste regulation if, as a minimum, the filter is punctured and hot drained for a minimum of twelve hours. Otherwise undrained used oil filters are a fully regulated hazardous waste.

Regulatory Background

In March of 1990 the USEPA promulgated the Toxicity Characteristic Rule (TC) which expanded the number and type of hazardous waste constituents beyond those that were regulated under the existing E.P. Toxicity Rule. The TC Rule includes twenty-five new hazardous waste constituents, and a new leaching procedure called the Toxicity Characteristic Leaching Procedure (TCLP). In November of 1991 the DEP promulgated the TC Rule verbatim and codified it in 310 CMR 30.125(B).

With addition of the twenty-five hazardous waste constituents the TC Rule brought into regulation as hazardous waste many previously unregulated wastes including some types of used oil and some items contaminated with used oil. During its initial implementation, the regulatory status of used oil filters came into question since limited testing indicated occasional failure for lead and benzene. However, it remained unclear as to whether used oil filters would fail categorically.

On May 20, 1992, EPA issued its Final Rule on the Listing of Used Oil in the Federal Register (57,FR,21524). EPA stated that based upon analytical testing results, non-terne plated filters that are first punctured and hot drained for twelve hours will categorically pass the Toxicity Characteristic Leaching Procedure (TCLP), and are therefore categorically exempt from management as a RCRA hazardous waste. "Hot drained" means the filter is drained at a temperature ranging between near engine operating temperature and room temperature (60F). Data obtained by EPA indicates that the optimum drain time is twelve hours, since draining for a longer period will not significantly increase the amount of oil removed. This procedure will typically result in the removal of approximately fifty percent of the liquid oil.

In addition, EPA further ruled that terne-plated filters are categorically hazardous waste since they will always fail the TCLP for lead. Terne plated filters have a metal casing composed of an alloy of lead and tin, and as a category represent a minority of the filters annually manufactured. EPA has indicated that manufacturers will phase-out terne plated filters during the 1993 calendar year. In practice it is very difficult to differentiate non-terne plated filters from terne plated filters since there are no apparent physical differences.

Furthermore, in its May 20, 1992 ruling EPA states that this exemption is a conditional exemption based upon compliance with specific disposal management practices. Specifically, these practices are puncturing the filter anti-drain back valve or the filter dome end and hot draining; hot draining and crushing; dismantling and hot draining; or any other equivalent of hot draining method that will remove oil. This exemption and the required management practices are codified in 40 CFR Part 261.4(b)15, effective July 1, 1992.

Regulatory Approach

Since a typical used oil filter contains approximately twelve ounces or more of free flowing waste oil, the filter and oil in its entirety is a listed state-regulated hazardous waste pursuant to 310 CMR 30.131(i.e., waste oil (MA01)). According to 310 CMR 30.140(2)(a) a hazardous waste once generated remains a hazardous waste irrespective of constituent concentration, or, in other words, there is no "deminimus" concentration below which a listed hazardous waste ceases to be a hazardous waste. However, DEP may exercise regulatory flexibility with "state-only" waste, as provided in M.G.L. c.21C, S4: "(c) provisions for waiver by the department for any waste which the department determines is insignificant as a potential hazard to public

health, safety, welfare or the environment." The approach presented today utilizes this flexibility to define "deminimus" as applied to used oil filters in an attempt to strike a balance between environmental protection and regulatory management that is consistent with the degree of risk posed by the wastestream and that is enforceable across a broad spectrum of used oil filter generators.

Recently, both the DEP and the EPA have been evaluating management options for various types of what can be called "consumer items" that do not typically warrant the full control of RCRA hazardous waste management system, but do require some level of environmentally protective management standards. The approach that is generally evolving is one of "contingent" management. That is, when certain management practices are followed, the waste in question will be considered exempt from hazardous waste regulation; however if the prescribed management practices are not followed then the "contingent" management exemption does not apply and the waste must be managed as a hazardous waste. In the case of used oil filters, if the prescribed management practices aimed at minimizing the final concentration of waste oil are followed, then the "deminimus" concentration has been reached and the used oil filter is no longer a hazardous waste.

Accordingly, it is DEP's policy that used oil filters managed according to any one of the following contingent management practices are non hazardous waste and therefore can be managed as solid waste. However, used oil filters that are not managed according to the contingent management procedures are hazardous waste and must be managed according to the requirements of 310 CMR 30.000. The following are prescribed contingent management options: (a) puncture the anti drain-back valve or dome end of filter and hot drain for twelve hours, (b) drain and crush filters to a point where no free flowing oil remains in the crushed filter, (c) drain and dismantle filters. To the greatest extent possible waste oils shall be collected in their liquid form for subsequent reuse, recycling, treatment or disposal in accordance with 310 CMR 30.000. If any one of the procedures described in (a) through (c) above is followed, then the filter or its parts can be disposed of as a solid waste.

The above notwithstanding, the DEP strongly recommends the recycling of used oil filters. Full recycling is the most environmentally protective waste management option, minimizes to the greatest extent possible, the generator's long term CERCLA liability, and furthers the goals of waste reduction, reuse and recycling. Many of the largest used oil filter generators currently dispose of their filters via established used oil

recyclers in a belief that the "up front" costs for proper waste management are minimal in comparison to potential CERCLA site cleanup costs. In fact, several Massachusetts companies have recently gotten into the business of used oil filter recycling, and, based upon DEP inspectional review, offer a very well documented waste tracking and disposal process that appears to be both environmentally protective and legally defensible. For additional information about these companies call the Hazardous Waste Information Line at (617) 292-5898.

This policy does not relieve generators of used oil filters from regulatory responsibility contained in any other applicable State or Federal law or regulation. It is incumbent upon the generators of used oil filters to handle their waste at all times in a manner that is protective to public health, safety and the environment, and including appropriate cleanup of any releases to the environment or workplace caused by the handling of used oil filters.

Please direct any questions regarding this policy to James D. Miller, (617) 292-5574.

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