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Used Oil Fact Sheet # 8

USED OIL GENERATED IN INDUSTRY AND COMMERCE

This fact sheet describes how used oils generated at industrial and commercial facilities must be managed to ensure compliance with DEP's proposed used oil regulations.¹ Examples of facilities covered by this fact sheet include:

- manufacturers;
- machine shops; and,
- non-industrial operations that generate used oil, such as warehouses and utility facilities.

The following sections of this fact sheet provide detailed information on how these kinds of used oil generators should manage their used oils. While most used oils can be managed under the used oil regulations referenced above, some must be handled under the more stringent hazardous waste requirements, depending on how they are generated, stored, and managed.

Please note that this fact sheet is intended only as a helpful compliance aid. It is not intended to supersede the applicable regulations. It is always the responsibility of persons involved in the management of used oil to comply with all applicable laws and regulations.

What Types of Wastes Are Regulated under DEP's Used Oils Requirements?

Some examples of wastes that are regulated under used oil requirements include:

- used liquid and semi-solid gear, chain, and ball bearing lubricants;
- used hydraulic and compressor oils;
- used metalworking fluids and oils (including water soluble coolants);
- used drawing and stamping oils;
- used heat transfer oils (including quenching oils);
- used crankcase (engine) oil and other motor vehicle oils; and,
- used dielectric fluid (e.g. transformer oil).

¹The requirements which currently apply to the management of used oil in Connecticut may be found in Regulations of Connecticut State Agencies ("RCSA") Section 22a-449(c)-119. This RCSA Section incorporates the 2000 federal used oil regulations at 40 CFR 279, and includes a number of additional, Connecticut-only provisions. Used oils are also subject to the requirements of Connecticut General Statutes ("CGS") Section 22-454 with respect to persons engaged in the business of collecting, storing, treating, or disposing of used oil.

Used oil can also include oils that have become contaminated with air conditioning refrigerants (i.e., Freon). However, certain special requirements apply to this kind of used oil (in particular, it must be recycled for its Freon content).

Materials that contain or are contaminated with used oil can also fall under the definition of used oil. Common examples of these materials include items such as used oil filters, rags and wipers, absorbents (i.e., kitty litter, speedi-dri, absorbent pigs, etc.), oil-contaminated metal chips or turnings, and unwanted equipment, machinery, or parts that contain used oil. However, if the used oil is removed from these materials so that no visible free-flowing oil remains in them, they do not have to be managed as used oil any longer (unless they are burned for energy recovery, in which case they remain subject to used oil requirements). If properly de-oiled, tested, and found to be non-hazardous, these materials may be disposed of at a solid waste facility that is permitted to accept them. For more information on the management of these types of materials, please refer to DEP's Used Oil Fact Sheet # 4 entitled, "Materials Containing or Otherwise Contaminated with Used Oil." See the last section below for more information on how to obtain a copy of Used Oil Fact Sheet #4.

The following types of materials are **NOT** regulated under used oil requirements, and must be evaluated as potentially hazardous wastes:

- virgin fuel oils, virgin fuel tank bottoms, and virgin fuel spill cleanup residues;
- oils which are used as cleaning agents, or solely for their solvent properties;
- animal and vegetable oils (such as animal-fat-based drawing compounds); and,
- antifreeze and other non-oil-based vehicle fluids.

Do I Have To Test My Used Oil?

You need to take certain steps to make sure that your used oil does not have to be managed as a hazardous waste. Some of these steps require that you test your used oil. These steps are outlined below. Please note that these steps must be completed fully and in the proper order.

Step One: Checking for Listed Hazardous Waste.

The first step is to take a look at how you generate and store your used oil and determine if it is mixed with any listed hazardous wastes. Listed hazardous wastes can include any of the wastes listed in Sections 40 CFR 261.31 through 40 CFR 261.33 in the federal hazardous waste regulations.² These wastes have EPA waste code numbers beginning with the letters "F," "K," "U," or "P." Examples of listed hazardous waste include many common degreasing solvents (such as 1,1,1-trichloroethane, perchloroethylene, trichloroethylene, and methylene chloride), and many common paint solvents (such as acetone, methanol, MEK, toluene, and xylene). In addition, some specialty machining coolants (for example, older formulations of "Cool Tool" and "Tap Magic") may contain listed hazardous waste constituents.

²These regulations may be downloaded from the DEP website (www.ct.gov/dep), or obtained in hardcopy form by contacting DEP using the address/telephone numbers listed at the beginning of this fact sheet.

If your used oil has been mixed with listed hazardous waste, it cannot be handled as used oil. Instead, it must be handled as hazardous waste. The amount of listed waste that was mixed with the used oil does not matter. Any amount of listed hazardous waste added to used oil will make the used oil subject to regulation as a hazardous waste.

If your used oil has not been mixed with listed hazardous waste, proceed to Step Two below.

Step Two: Checking for Characteristic Hazardous Waste.

The next step is to determine if your used oil is mixed with any characteristic hazardous wastes. Characteristic hazardous wastes are wastes which are ignitable, corrosive, reactive, or toxic, as defined in Sections 40 CFR 261.21 through 40 CFR 261.24 in the federal hazardous waste regulations.³ These wastes have EPA waste code numbers beginning with the letter “D.” Common examples of characteristic hazardous wastes that might become mixed with used oil include waste parts washer solutions, paints, solvents, and ignitable fuels such as gasoline.

If your used oil has had characteristic hazardous waste added to it, you must have the mixture sampled and tested. If this testing indicates that the mixture is still hazardous, it cannot be managed as used oil. Instead, it must be managed as hazardous waste.⁴ However, if the mixture is no longer hazardous, it may be managed as used oil.

If your used oil has not been mixed with characteristic hazardous waste, or has been mixed but the mixture is no longer characteristically hazardous, proceed to Step Three below.

Step Three: Testing for Total Halogens.

The next step is to have your used oil sampled and analyzed for total halogens. Most environmental laboratories and commercial used oil facilities can perform this testing. Generators may also test their used oil for total halogens themselves, using EPA-approved test kits that are available through laboratory and safety-supply companies.

If this testing indicates that your used oil does not contain more than 1000 parts per million (ppm) total halogens, then the used oil may be managed under the used oil regulations. In addition, your analysis of the used oil would be complete, and you would not have to go to Step Four below.

However, if this testing indicates that your used oil contains total halogens of greater than 1000 ppm, it is presumed to have been mixed with listed hazardous waste. As a result, the mixture must be managed as a listed hazardous waste (and not as a used oil), unless you can prove that listed hazardous waste was not added. The process of proving that listed hazardous waste was not added

³These regulations may be downloaded from the DEP website (www.ct.gov/dep), or obtained in hardcopy form by contacting DEP using the address/telephone numbers listed at the beginning of this fact sheet.

⁴There is one exception to this rule: if the characteristic hazardous waste which is added to the used oil is hazardous only due to ignitability (i.e., has a flash point below 140°F), the resulting mixture is hazardous only if it is still ignitable (i.e., still has a flash point below 140°F).

to the used oil is known as a “rebuttal of the presumption of mixing,” and is described in Step Four below.

Step Four: Rebuttal of the Presumption of Mixing.

If your used oil tested at over 1000 ppm total halogens, but you believe that it was not mixed with listed hazardous waste, you may attempt to rebut the presumption of mixing. To do this, you must test your used oil for the presence of listed hazardous waste constituents (in particular, chlorinated solvents). As with total halogen testing, most environmental laboratories and commercial used oil facilities are capable of performing this test for you.⁵

If this additional analysis indicates that no listed hazardous waste solvent is present at over 100 ppm, then you would have successfully rebutted the presumption of mixing. However, if the additional testing reveals the presence of even one of these solvents at over 100 ppm, then your rebuttal would be unsuccessful, and the used oil must be handled as a listed hazardous waste.

May I Intentionally Add Hazardous Wastes To My Used Oil?

Hazardous wastes often become mixed with used oil unintentionally, due to unavoidable process design factors. Such mixtures occur prior to the point that the used oil is actually generated. However, some generators may consider mixing one or more hazardous wastes with used oil after they are generated. DEP advises against such intentional mixing, for the following reasons:

- Under used oil regulations, hazardous waste may be added to used oil only if it is for legitimate recycling purposes. An example would be an ignitable hazardous waste that will contribute fuel value when the used oil mixture is processed into a fuel. If the hazardous waste will not be recycled, and is simply being disposed of by being added to the used oil, it may not be mixed with used oil.
- As is clear from Steps 1-4 above, adding hazardous waste to used oil makes its testing much more complicated. This mixing may also turn the used oil into a hazardous waste, which makes its handling and disposal more difficult and costly.

If you would like more information on mixtures of used oil and hazardous waste, see DEP’s Used Oil Fact Sheet #5, entitled “Mixtures of Used Oil and Other Materials.” See the last section below for information on how to obtain a copy this fact sheet.

How Should I Manage My Used Oil while Storing it On-Site?

As long as Steps 1 – 4 above indicate that your used oil is not a hazardous waste, it may be handled under the used oil generator requirements outlined below. However, if Steps 1 – 4 above indicate that your used oil is hazardous, it must be handled in accordance with hazardous waste requirements.

⁵ One common cause of high total halogens is chlorinated paraffins, which are present in many virgin metalworking oils. While documentation of the presence of such additives can be used in part to rebut the presumption of mixing, testing is still necessary in most cases to confirm that contamination with listed hazardous waste has not occurred.

For more information on hazardous waste requirements, visit the DEP website (www.ct.gov/dep), or contact DEP at the address/telephone numbers listed at the beginning of this fact sheet.⁶

Used oil must be stored in either tanks or containers. These tanks or containers must be marked with the words “Used Oil,” and maintained in good condition (free of rust, dents, leaks and so forth). They must be located indoors on an impervious floor (that is, a good, solid floor, such as coated concrete, that leaks and spills of used oil cannot penetrate and pollute the underlying soil).

If you cannot store your used oil indoors, then you may store it outdoors on an impervious surface, as long as you also provide *secondary containment*, to be sure that any leaks or spills do not run off of the impervious surface onto surrounding soil. Secondary containment may be provided by installing a berm on top of and around the impervious surface. This berm must be high enough to contain any liquids that might accumulate inside it. In general, it is recommended that this berm be high enough to contain the maximum amount of used oil that could be stored in the storage area. And, unless the outdoor storage area is covered, you should not forget to factor in the build-up of rain and snow inside the area in selecting the height of the berm. Pre-fabricated secondary containment devices (such as containment pallets, sheds, etc.) are also available from commercial vendors.

If you ever have a leak or spill of used oil, you must do the following:

- (1) Stop the release;
- (2) Contain the released used oil;
- (3) Clean up and properly manage the released used oil and other materials; and,
- (4) Repair or replace any leaking used oil storage containers, tanks, or containment structures before using them again.

And, lastly, when you ship your used oil off-site for recycling, any haulers you use must have an EPA Identification Number for their used oil activities, and must have a permit from DEP to transport used oil. In addition, your used oil must go to a facility that is permitted by DEP (or, if it is sent out-of-state, to a facility that meets the receiving state’s requirements for used oil recyclers).

Who is Permitted by DEP to Transport and Recycle Used Oil?

There are a number of companies that are permitted by DEP to transport and recycle used oil. Lists of these companies are available on the DEP website (www.ct.gov/dep), or by contacting DEP at the address/telephone numbers at the beginning of this fact sheet. While DEP cannot recommend any one of these companies over any other, it is important that you be very careful in selecting them. If the firm you choose has a spill or contaminates the soil or groundwater at their facility, you could be held responsible for part of the cleanup cost even if the release was not your fault. In addition, the fees these companies charge for taking your used oil may vary greatly from one company to the next.

⁶This is only an *outline* of the applicable regulations. Generators of used oil should always be sure to have current copies of the regulations, read and become familiar with them, and ensure that their facility is in full compliance.

What If My Used Oil Is Disposed of Instead of Recycled?

DEP's used oil requirements only apply to used oils which are *recycled*. While most used oils can be recycled in some way, there are some that are difficult or impossible to recycle (such as oil-soaked absorbents or heavily emulsified oils), leaving the generator with no option other than to send them for *disposal*. In such cases, the used oil cannot be managed under used oil rules. Instead, a thorough hazardous waste determination must be performed on the waste, as required by Section 40 CFR 262.11 of the federal hazardous waste regulations⁷. This would at least require testing by the Toxicity Characteristic or Leaching Procedure (or TCLP) to determine if the used oil is characteristically hazardous for toxicity. Flash point testing, to determine if the used oil is an ignitable hazardous waste, would also be appropriate (especially if gasoline or flammable solvents have been added to the used oil). If any of this testing indicates that the used oil is hazardous, it must be handled and disposed as such. If the used oil is determined not to be hazardous, it may be sent to a non-hazardous industrial waste facility (such as a non-hazardous industrial waste incinerator) for disposal.

May I Use My Used Oil for Road Oiling, Weed Control, or to Keep Dust Down?

No – under DEP rules, used oil cannot be used for any of these purposes. You should be very careful not to put any amount of oil on the ground, since this can contaminate soil, groundwater, and surface water both on your property and on neighboring properties. Once this kind of contamination occurs, it can be very difficult and expensive to clean up, and can reduce the value of your property. It can also lead to your becoming the subject of a DEP enforcement action, which could include a substantial monetary penalty.

May I Burn My Used Oil?

Used oil rules allow a generator to burn used oil in an on-site oil-fired space heater, as long as the following requirements are met:

- (1) The space heater burns only used oil that the owner or operator of the facility generates, or used oil received from household do-it-yourselfer used oil generators;
- (2) The space heater is designed to have a maximum capacity of not more than 0.5 million BTU per hour; and
- (3) The combustion gases from the space heater are vented outside the building.

Please note that only used oil may be burned in these types of space heaters. Space heaters may not be used to burn hazardous waste, or used oil that has been mixed with hazardous waste so as to make it hazardous. In addition, used oil may only be burned in a space heater located in your workplace. It may not be burned in a residential space heater.

⁷For more information regarding hazardous waste determinations, please refer to the DEP fact sheet entitled "Hazardous Waste Determinations/Knowledge of Process." This document may be obtained on the DEP website (www.ct.gov/dep), or by contacting DEP at the mailing address/telephone numbers listed at the beginning of this fact sheet.

May I Accept Used Oil from Others?

As a generator of used oil, the only kind of used oil you are allowed to accept from off-site is household do-it-yourselfer used oil. You may not take in used oil from other businesses, unless you meet certain requirements for commercial used oil facilities. Also, in many cases, you must have a permit to accept used oil from other businesses.

Am I Allowed to Mix My Used Oil with Diesel Fuel, as Recommended by the Manufacturers of Certain Types of Vehicles?

The manufacturers of certain types of diesel-powered vehicles recommend that you add used oil to your diesel fuel. If you have vehicles of this type, you may mix your used oil with the diesel fuel per the manufacturer's instructions, and the resulting mixture would no longer have to be managed as a used oil. However, up until the point that the used oil is actually mixed with the diesel fuel, it must be managed in accordance with the on-site storage requirements described on pages 4 – 5 of this fact sheet.

Please note that this applies only to your used oil and to your own vehicles. You may not accept used oil from someone else to put in your diesel fuel. You may also not give your used oil to others to burn in their diesel vehicles.

Are there Other Requirements that I Should Know About?

There are some other laws and regulations that may affect how you manage used oil at your site. A few of the more important ones are listed below.

- Underground Storage Tank (UST) Regulations. You may already be subject to these regulations for any underground fuel tanks you have. These rules also apply to underground tanks used to store used oil. If you have questions about these rules, visit the underground storage tank page on the DEP website (www.ct.gov/dep), or call DEP's UST program at (860) 424-3374.
- PCB Regulations. If any of the used oils you generate contain polychlorinated biphenyls (or "PCBs"), you will have to comply with certain special handling and disposal requirements. If you have questions about these requirements, visit the PCB page on the DEP website (www.ct.gov/dep), or call DEP's PCB program at (860) 424-3368.
- Wastewater Discharge Permits. Certain types of devices (such as oil water separators) that discharge wastewater to the sewer or to surface water bodies require a permit from DEP's Water Management Bureau. If you have questions about these requirements, visit the water permitting page on the DEP website (www.ct.gov/dep), or call the DEP's Water Management Bureau, Permitting & Enforcement Division, at (860) 424-3018.

- Stormwater Discharge General Permit. Certain types of facilities (including many industrial and commercial operations) are required to obtain this permit. To obtain forms and other information relating to this permit, visit the water permitting page on the DEP website (www.ct.gov/dep), or call the DEP’s Water Management Bureau, Permitting & Enforcement Division, at (860) 424-3018.
- SPCC Requirements. If you store more than 1,320 gallons of used oil and other petroleum products in aboveground tanks or containers over 55 gallons in size, you must comply with the Spill Prevention Control and Countermeasure (“SPCC”) requirements. One of these requirements is to prepare a Spill Prevention and Countermeasures Plan. If you have questions about these requirements, see U.S. EPA New England’s SPCC Program website at <http://www.epa.gov/NE/enforcement/oilspills/index.html>, or call them at (617) 918-1768.
- Spill Reporting Requirements. If you have a spill of used oil or any other oil or petroleum liquids, or chemicals, or hazardous waste, you must report it immediately to DEP via DEP’s 24-hour spill reporting number. This number is (860) 424-3338. In addition, if the spill results in a visible oil sheen on a navigable waterway, or exceeds the reportable quantities for any CERCLA hazardous substances,⁸ you must also report the spill to the National Response Center at 1-800-424-8802.

How May I Get More Information?

If you would like more information on any of the used oil topics discussed above, DEP has prepared a guidance document which is much more detailed than this fact sheet. The title of this guidance document is Management of Used Oils in Connecticut, and it may be obtained by contacting DEP at the address/telephone numbers listed at the beginning of this fact sheet. DEP also has a number of other Used Oil Fact Sheets which are available. The fact sheets of greatest interest to industrial/commercial used oil generators are listed below:

- Used Oil Fact Sheet # 4: Materials Containing or Otherwise Contaminated with Used Oil
- Used Oil Fact Sheet # 5: Mixtures of Used Oil and Other Materials
- Used Oil Fact Sheet # 6: Management of Tank Bottoms
- Used Oil Fact Sheet # 9: Management of Household Do-It-Yourselfer Used Oil
- Used Oil Fact Sheet # 10: Used Oil from Boats, Ships, and Other Watercraft

If you have any questions, you may also contact DEP directly for assistance.

⁸ CERCLA stands for the Comprehensive Environmental Response, Compensation, and Liability Act. If you have questions about this federal law, or if you would like to request a listing of the hazardous substances that are regulated under this law, visit the U.S. EPA website at <http://www.epa.gov/superfund/resources/rq/index.htm>, or call EPA toll-free at 1-800-424-9346.

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