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How Do I Manage My Used Oil and Used Oil Filters?

Information presented in this publication is intended to provide a general understanding of the statutory and regulatory requirements governing used oil and used oil filters generated by small businesses. This information is not intended to replace, limit or expand upon the complete statutory and regulatory requirements found in the Illinois Environmental Protection Act and Title 35 of the Illinois Administrative Code. These requirements can be found on line at www.ipcb.state.il.us.

? What is Used Oil?

Used Oil is any petroleum-based or synthetic oil that has been contaminated with dirt, metals, water, or other chemicals such as solvents during use in a process. Used oil is not the same as waste oil. Waste oil includes oils which have not been used, such as virgin oil tank bottoms or cleanup residues from a product spill. In addition, used oil must be recycled or burned for energy recovery. Used oils commonly generated by small businesses include materials such as used motor oil, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, metal working fluid, and other lubricants.

The following materials are also regulated as used oil:

- Materials burned for energy recovery that contain or are contaminated with used oil such as oil-soaked rags or sorbent materials.
- Oil generated from abnormal operations. Substantial leaks of oil from pipes, pumps, and machinery such as an overflowing tank or ruptured pipe.
- Oil removed from wastewater such as through an oil water separator.

The following materials are not regulated as used oil:

- Oil containing polychlorinated biphenyls (PCB) – This type of oil is regulated as a special waste and is subject to certain transportation requirements. Also, if the PCB concentration exceeds 50 parts per million (ppm),

the oil is regulated as a toxic substance. Used oil containing 2 ppm or greater PCBs cannot be blended and may only be marketed to a qualified PCB incinerator when sent for burning. For more information on managing oil containing PCBs, contact the Illinois Environmental Protection Agency (IEPA) Office of Small Business.

- Permitted wastewater discharges – This type of discharge is regulated under the Clean Water Act and contains small amounts of oil from small pipe, pump, or machinery leaks during normal operations.
- Waste oil and materials derived from used oil that is disposed of in a landfill instead of burned for energy recovery – examples of this type of material include used oil-soaked rags and sorbent materials. In general, these materials are subject to the hazardous waste determination requirements. If any of the wastes are determined to be hazardous, these wastes should be handled as described in the fact sheet titled, "How Do I Manage My Hazardous Waste?"
- Used oil generated by farmers in amounts less than 25 gallons per month – this material is generated by farm vehicle and machinery use. This oil is still a waste and must be properly recycled or disposed of.
- Material reclaimed from used oil and beneficially used - this type of material includes re-refined lubricants.
- Used oil and fuel mixtures – when mixed by the generator and used in facility vehicles.

- Used oil generated by household “do it yourselfers.” This oil is still a waste and must be properly recycled or disposed.
- Material such as used animal or vegetable oils – these materials are generated in the production of food, pharmaceutical, and cosmetic products. These materials are a special waste but are not regulated as used oil.

TIP

It is a good practice NOT to mix your wastes, especially hazardous waste with used oil. The management of these mixtures becomes more complicated and some used oil recyclers will not accept the used oil even if it is done in accordance with the used oil regulations. By keeping your wastes separate, used oil can be managed as used oil.

? How Should I Store My Used Oil?

There are no time limitations on storage of used oil; however, if it is stored greater than one year and there doesn't appear to be any definite plan to remove the oil, it may be considered for disposal. Used oil should only be stored in tanks and containers that are not leaking, rusting, deteriorating, or having other defects. Used oil containers and above ground tanks should be stored on a surface that does not allow used oil to seep through, such as cement or asphalt. Containers, above ground tanks, and fill pipes for underground storage tanks (UST) of used oil should be marked with the words “Used Oil.” USTs that store used oil should also comply with the UST general operating requirements. For more information on UST general operating requirements, call the Office of Small Business.

? Can I Mix My Used Oil with Other Non-Hazardous Waste?

Mixing used oil with other non-hazardous wastes, such as wastewater or solvent, may make management of the mixture more complicated. Generally, these mixtures are regulated under both the used oil regulations and solid waste regulations. A receiving facility which accepts used oil for recycling may not have permits to accept other solid wastes. Mixing used oil and other waste may make disposal of the mixture more difficult and more expensive.

CAN I RECYCLE MY USED OIL ON SITE?

Used oil can be recycled on site by reconditioning the oil to remove contaminants so that the oil can be reused. One of the most common ways to recycle used oil is to filter it.

? Can I Mix My Used Oil with Hazardous Waste?

Regulations for mixture of used oil and hazardous waste depends on the hazardous waste generator status of your facility. To determine your generator status, see the fact sheet titled “How Do I Manage Hazardous Waste?” If you are a conditionally exempt, small-quantity generator (producing less than 220 pounds of hazardous waste per month) and you mix used oil with any hazardous waste generated on site, the used oil mixture is regulated as used oil. If you are a small-quantity generator (producing 220 to 2,200 pounds of hazardous waste per month) or a large-quantity generator (producing more than 2,200 pounds of hazardous waste per month), the used oil mixture is regulated as a hazardous waste if one or more of the following applies:

? Can I Burn My Used Oil on Site?

Used oil can be burned in oil-fired space heaters if:

- the heater burns only used oil generated on site or from a household “do it yourselfer,”
- the heater has a maximum capacity of 0.5 million British thermal units per hour,
- the combustion gases are vented directly to the outside air.

- The used oil is mixed with a listed solvent or other listed waste
- The used oil is mixed with a hazardous waste that exhibits the ignitability, corrosivity, reactivity, or toxicity characteristic and the mixture exhibits any of these characteristics.

IMPORTANT

Used oil with a total halogen concentration of 1,000 ppm is presumed to be a listed hazardous waste; however, if you can show that the used oil does not contain significant concentrations of halogenated listed solvents, the used oil is not regulated as a listed hazardous waste. This demonstration can be made by collecting a sample of used oil and analyzing it for the listed halogenated solvents.

To determine the type of hazardous waste that you generate, see the fact sheet titled "Do I Have a Special Waste?"

- Used oil spills should immediately be reported to the Illinois EPA 24 hour hotline at (800) 782-7860 or the National Response Center at (800) 424-8802.

? Used Oil Filters?

How Should I Handle Used Oil Filters?

A non-terne plated used oil filter that has been properly drained may be recycled as scrap metal or disposed of as special waste. Terne is an alloy of tin and lead. Special waste may be certified non-special in accordance with the procedures in Section 22.48 of the Illinois Environmental Protection Act. Once certified as non-special, the used oil filter may be disposed of as general refuse. Terne-plated filters may be hazardous waste because of their lead content. If you generate terne-plated filters, they may be subject to testing and other hazardous waste determination requirements. Contact the Office of Small Business for more information on managing terne-plated filters.

Draining used oil from your filters can be performed using one of the following methods:

- Puncturing the filter anti-drain back-valve contained in most automotive oil filters or the filter dome, and then hot draining; the anti-drain back-valve consists of a rubber flap that creates a vacuum to prevent oil from draining back into the engine
- Hot draining and crushing
- Dismantling and hot draining
- Any other equivalent draining method that will remove the used oil such as pressurized air draining

Used oil drained from filters can be combined with other used oil and managed as discussed earlier in this fact sheet.

TIP

Hot draining should occur for a period of at least 12 hours at or near the engine's operating temperature and always above room temperature (60°F). Filters that immediately drip oil when picked up have not been properly drained.

? How Should I Transport Used Oil?

You may transport up to 55 gallons of used oil in a self-owned vehicle to a registered collection center and you would not have to follow the used oil transportation rules. You may still have to be a licensed special waste hauler.

Any other type of shipment of used oil must be made by a Illinois licensed special waste hauler with both EPA and Illinois EPA identification numbers. Each shipment must be accompanied by a manifest. To obtain a manifest or information about how to fill out a manifest, contact the Office of Small Business.

TIP

Used oil can be transported to collection centers or processing facilities that have both EPA and Illinois EPA identification numbers or to a self-owned collection center.

? How Should I Handle Spills of Used Oil?

When used oil is spilled, the following actions should be taken:

- Steps should be taken immediately to stop the spill. If a pipe is leaking, shut off the flow to the pipe.
- The spilled oil should be contained using the appropriate sorbent materials such as pads or granular sorbents.
- Leaking containers, tanks, or piping should be promptly repaired or replaced. If a leaking drum cannot be repaired, its contents should be transferred to a new drum.

The drained filters should be placed in covered dumpsters or containers that prevent rain infiltration. In addition, the dumpsters or containers should be capable of holding any residual used oil that may escape from the filter.

For more information on how to handle used oil filters, contact the Filter Manufacturers' Council Regulatory Hotline at (800) 99-FILTER or the Office of Small Business.

- Recycle used oil filters. Although properly drained used oil filters can be disposed of as general refuse, it is recommended that these filters be recycled to reduce the amount of used oil that is ultimately landfilled.

IMPORTANT

After draining, a filter can contain 2 to 8 ounces of residual used oil. Over 400 million oil filters are used in the United States every year. Therefore, landfilling of 6.25 to 25 million gallons of used oil in the filters could occur annually.

? How Can I Reduce the Amount of Used Oil I Generate?

Reducing the amount of used oil that you generate is an important pollution prevention (P2) measure. In addition to environmental protection, P2 can reduce operating costs and improve efficiency. The following tips can help you reduce the amount of used oil you generate:

- Use longer lasting synthetic oils to minimize the amount of used oil and used oil filters generated.
- Reduce the amount of virgin oil purchased by reconditioning and then reusing used oil.
- Manage used oil safely. Do not mix it with other materials. Store the oil in leak proof containers and tanks in secure areas away from workers and the environment. Label all containers of used oil and other wastes to avoid inadvertent mixing.
- Use reusable oil filters.

? How Do I Obtain More Information?

For more information on used oil management, please call the Office of Small Business toll-free at (888) 372-1996. All calls are considered confidential and the caller can remain anonymous. For other information about environmental issues, see the Illinois EPA web page at www.epa.state.il.us.