Management Standards for Used Oil Transporters Guidance Document

Colorado Department
of Public Health
and Environment

Hazardous Materials and Waste Management Division
(303) 692-3300

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Purpose of this Guidance

This guidance document is intended to provide general guidance on the appropriate management of used oil and materials contaminated with used oil based on Colorado solid and hazardous waste statutes and regulations. The wastes described in this guidance may also be regulated under other statutes and regulations.

This guidance is not meant to modify or replace any adopted regulations, which undergo periodic revisions. In the event of a conflict between this guidance and the adopted regulations, the regulations govern. Some portions of the regulations are complex and this guidance does not go into the details of all situations. If a regulatory situation is not described in the guidance or clarification is desired, an official interpretation of a specific regulatory situation can be requested by writing to the Hazardous Materials and Waste Management Division at the address on page eight.

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What is Used Oil?

Used oil is any oil that has been refined from crude oil or any synthetic oil made from coal, shale or polymer-based starting material. As the name implies, it must have been used, and as a result of such use, it is contaminated with physical impurities (like metal fines, sawdust or dirt) or chemical impurities (like fuel, solvents, halogens or water). Common uses include lubricants and heat transfer fluids.

The used oil management standards were included as Part 279 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3), but used oil destined for recycling is generally not regulated as hazardous waste unless it is mixed with hazardous waste. Used oil that exhibits one or more hazardous characteristics by its own nature is managed as used oil, not hazardous waste, when recycled. If disposed, it would be regulated as hazardous waste.

Used oil does include:

- engine oil
- transmission fluid
- compressor oil
- metalworking oils
- hydraulic oil
- refrigeration oil
- oils used as buoyants
- electrical insulating oil

Used oil does not include:

- vegetable oil or animal oil, even when used as a lubricant
- virgin (unused) oil
- bottom clean-out waste from virgin oil storage tanks
- petroleum-derived products like antifreeze or kerosene
- petroleum-distillates used as solvents

Used Oil Specifications

Used oil burned for energy recovery and any fuel produced from used oil by processing, blending or other treatment is regulated as used oil until it is shown to meet the used oil specifications. Once used oil that is to be burned for energy recovery has been shown to meet the used oil specifications, it is no longer regulated as used oil. The person making this determination must have analyses showing that the used oil meets the specifications, must keep records of each shipment of oil to an on-specification used oil burner, and must notify the Department as a used oil fuel marketer and obtain an EPA identification number.

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 degrees F minimum
Total halogens	4000 ppm maximum (if successfully proven to not contain hazardous waste)

Used oil containing more than 1000 parts per million (ppm) total halogens is presumed to have been mixed with hazardous waste and is regulated as hazardous waste. This presumption can be challenged by

using analytical or other means to demonstrate that the used oil doesn't contain hazardous waste. The used oil specifications don't apply to mixtures of used oil and hazardous waste that are regulated as hazardous waste.

Management Standards for Used Oil Transporters

Used oil transporters are persons who transport used oil, persons who collect used oil from more than one generator and transport the collected oil, and owners and operators of used oil transfer facilities. The used oil transporter requirements do not apply to onsite transportation of used oil, generators of used oil that self-transport up to 55 gallons of used oil to their own aggregation point or to an approved used oil collection center, or to the transportation of household do-it-yourselfer used oil.

Allowed Processing

As a used oil transporter, you may consolidate loads for the purpose of transportation. Incidental processing that occurs in the normal course of transportation (e.g., settling and water separation) is the only processing you are allowed to do as a transporter. You may not conduct processing designed to produce, or make more amenable to produce, used oil-derived products unless you also comply with the requirements for used oil processors/re-refiners in Part 279 Subpart F of the Colorado hazardous waste regulations [6 CCR 1007-3].

Deliveries

You must deliver all of the used oil that you've received to another used oil transporter, to a used oil processing/re-refining facility, or to an off-specification used oil burner. These destination facilities must have EPA identification numbers valid for their used oil management activities in Colorado. You may also deliver the used oil to an on-specification used oil burner. If you are the first one to declare that the used oil meets the used oil specifications, however, you must meet the requirements for used oil fuel marketers in Part 279 Subpart H of the Colorado hazardous waste regulations.

Transportation

As a used oil transporter, you must comply with all applicable US Department of Transportation (US DOT) requirements. Used oil by itself is not classified as a hazardous material by the US DOT. If the used oil is mixed with something that causes it to be classified as a hazardous material by the US DOT (e.g., it is mixed with gasoline such that the flash point is below 141 degrees F), you must also obtain a hazardous materials transportation permit from the Colorado Public Utilities Commission. In all cases, you must notify the Colorado Department of Public Health and Environment of your used oil activities and receive an EPA identification number as a used oil transporter and/or transfer facility.

Before accepting a shipment of used oil for transport, you must determine if the halogen content of the used oil is below 1000 parts per million (ppm), generally by testing the oil. Used oil containing more than 1000 ppm halogens is presumed to have been mixed with hazardous waste and may be regulated as hazardous waste, not used oil.

If your vehicle was previously used to transport hazardous waste, you must ensure that it is adequately cleaned out prior to transporting used oil so that you are not mixing the used oil with residual hazardous wastes.

Storage Requirements for Used Oil Transfer Facilities

Used oil transfer facilities are transportation related facilities where shipments of used oil are held for more than 24 hours, but less than 35 days, during the normal course of transportation. This includes

loading docks, parking areas, storage areas, and other areas where shipments of used oil are held. If you store the used oil for more than 35 days, you must meet the requirements for processors/re-refiners in Part 279 Subpart F of the Colorado hazardous waste regulations.

Used oil cannot be stored in lagoons, pits or surface impoundments unless you have permitted them under the state hazardous waste program. As a used oil transporter, you are required to store your used oil in non-leaking tanks or containers that are in good condition (i.e., free of severe rusting and apparent structural defects). These should be located in an area where they are unlikely to be damaged or knocked over, and should have enough aisle space around them so that you can easily inspect them for leaks or damage.

You are required to take steps to prevent releases and spills of used oil and should take extra care when transferring used oil into and out of tanks or containers to ensure that you don't drip or spill the oil. Spigots and funnels are helpful in minimizing such releases. You should also perform regular preventative maintenance to repair or replace gaskets and dispensers before they become a problem. Used oil transfer facilities must have secondary containment systems for used oil storage containers and tanks that is sufficiently impervious to used oil in the event of a spill in order to prevent a release to the environment.

Used oil containers and aboveground storage tanks must be clearly labeled with the words "Used Oil." Fill pipes used to transfer used oil into underground storage tanks or remote aboveground storage tanks must also be labeled as "Used Oil." You can purchase pre-made labels, obtain them from your used oil recycler or create your own hand-written labels.

Do not label your used oil tanks or containers as "Waste Oil." Waste oil includes virgin oil, bottom cleanout waste from virgin oil storage tanks, and other oil wastes that have not been used. Waste oil is not used oil because the oil has never been "used" for its intended purpose.

Recordkeeping

You must keep records of each used oil shipment you've accepted for transport. These records should include the name and address of the one that provided the used oil for transport, their EPA identification number if they have one, the quantity of used oil accepted, the date of acceptance and the signature of an authorized representative of the one that provided the used oil for transport.

You must also keep records of each shipment of used oil delivered to another used oil transporter, used oil burner, or used oil processor/re-refiner. These records should include the name and address of the receiving facility or transporter, their EPA identification number, the quantity delivered, the date of delivery, and the signature of an authorized representative of the receiving facility or used oil transporter.

Records of analyses conducted to prove accepted used oil was less than 1000 ppm total halogens, used oil acceptance records and used oil delivery records must be kept for at least three years. These records are important during a compliance inspection to document that you are properly managing used oil.

Other Regulatory Requirements

If you store used oil in aboveground storage tanks with a capacity of 660 gallons or more, or in underground storage tanks with a capacity equal to or greater than 110 gallons, your tanks are also subject to the State petroleum storage tank regulations. These regulations are implemented by the Division of Oil and Public Safety of the Colorado Department of Labor and Employment, and include specific requirements for tank installation, registration, operation, release reporting and spill cleanup.

You may also subject to applicable US EPA Spill Prevention, Control and Countermeasures (SPCC) requirements if you have an aggregate aboveground bulk storage capacity of more than 1,320 gallons and/or an aggregate underground storage capacity greater than 42,000 gallons. This is based on capacity and it doesn't matter how much oil is actually stored in your tanks or containers. Bulk storage containers include tanks, containers, drums and mobile or portable totes with individual capacity equal to or greater than 55 gallons. When calculating total capacity for SPCC, the term oil includes petroleum, fuel oil, sludge, oil refuse, used oil, vegetable oil, animal oils and greases, synthetic oils and mineral oils. SPCC plans are intended to ensure that a facility has containment and other countermeasures in place that will prevent oil spills. This is in contrast to a contingency plan, which is directed more towards environmental cleanup after a spill has occurred.

Release Reporting

If you have a spill or release of used oil, you must determine if the release is subject to spill reporting requirements. Failure to report spills or releases of used oil may result in enforcement action and/or penalties.

Any spill that pollutes or has the potential to pollute waters of the state (including surface water, ground water, and ditches or storm sewers leading to surface waters), must be reported to the Water Quality Control Division at the Colorado Department of Public Health and Environment as soon as the release is discovered. Contacting the Department's 24-hour emergency spill reporting line will satisfy this reporting requirement. If the release causes a sheen on the surface of navigable waters, or an emulsion to be deposited beneath the water surface or on the adjacent shoreline, you may also have to report it to the National Response Center under the Clean Water Act.

Releases greater than 25 gallons from regulated petroleum storage tanks must be reported to the Division of Oil and Public Safety at the Colorado Department of Labor and Employment within 24 hours. If the release occurs after normal business hours, you should contact the Department of Public Health and Environment's 24-hour spill reporting line. A release of less than 25 gallons of used oil from a regulated petroleum storage tank does not need to be reported if it does not have the potential to impact state waters and if it is adequately cleaned up within 24 hours.

Hydraulic oils and lubricating oils are not specifically listed under Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA). However, local response authorities should be notified if there is an emergency situation and/or if emergency assistance is needed.

For non-emergency situations, petroleum releases greater than 25 gallons (rule of thumb) should be reported to the Solid Waste Unit of the Hazardous Materials and Waste Management Division. This is consistent with release reporting requirements from the Colorado State Patrol for highway accidents and with requirements for regulated petroleum storage tanks. Releases of less than 25 gallons of used oil do not need to be reported if the oil has not impacted, and does not have the potential to impact, state waters and if it is adequately cleaned up in a reasonable timeframe.

Release Reporting Numbers

Colorado Dept. of Public Health and Environment	
24-hour spill reporting line, statewide toll-free	1-877-518-5608
Colorado Dept of Labor and Employment	
Division of Oil and Public Safety (business hours)	303-318-8547
National Response Center (NRC)	1-800-424-8802

Release Response and Cleanup Guidance

Used oil transporters are required to take steps to prevent releases and spills of used oil into the environment. It is generally easier and less expensive to prevent a release in the first place than it is to conduct environmental cleanup after a spill occurs. You should analyze what types of releases could occur at your facility ahead of time to ensure that you know how to respond to potential release events, and plan on keeping adequate spill containment and cleanup materials readily available.

If a spill or leak does occur, you must take appropriate immediate action to protect human health and the environment by stopping the continued release of used oil by plugging the hole or transferring the used oil to another suitable tank or container, containing the used oil that was released, and repairing or replacing the leaking or damaged tank, container or piping prior to returning it to service. You are also required to conduct appropriate cleanup actions based on the size and location of the spill and the potential to cause environmental harm.

The Division of Oil and Public Safety at the Colorado Department of Labor and Employment oversees regulation of many underground and aboveground storage tanks and has specific reporting and cleanup requirements for used oil released from regulated storage tanks.

If the release is not from a regulated petroleum storage tank, cleanup of the used oil is overseen by the Solid Waste Unit of the Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment. The following cleanup guidance is applicable to any size release of used oil, though releases of less than 25 gallons of used oil do not require that a remediation plan be submitted if the release does not have the potential to impact state waters and if it is adequately cleaned up within a reasonable timeframe.

Whether or not remediation of a release is overseen by the Division of Oil and Public Safety or the Hazardous Materials and Waste Management Division, you should always keep adequate records of the release and any actions you have taken to remediate the contaminated area in your facility files. These may become important if at some point in the future you want to sell your property.

Cleanup of Used Oil on a Non-porous Surface

Releases on non-porous surfaces, such as a floor or paved area, are especially easy to cleanup if you respond promptly to the release. It's much better to capture as much of the free-flowing oil as possible directly rather than soaking it up with absorbent materials. Pans and trays can be placed under equipment to collect any oil that gets dripped or spilled. The recovered oil should be poured directly into your used oil storage tank or container for recycling. Large releases may require the use of a pump or vacuum truck to recapture as much of the free-flowing oil as possible. For less easily contained releases, you can use squeegees and mops designed for oil spill cleanup to scoop up the oil and pour or squeeze it out into your

storage tank or container. If necessary, the oil can be poured through a fine mesh, like window screening, to filter out debris.

If the spill is large and/or threatens to enter surface waters (including storm sewers), movement of the spill should be restricted by dikes, berms or absorbent booms designed for this purpose. If you have a floor drain that leads either to the sanitary sewer or storm sewer, you must have a way to prevent a release of used oil from entering the drain. Better yet, you should permanently block off floor drains in areas where you have the potential to have a release of used oil or other materials.

When direct capture of the used oil is not possible, the spill should be cleaned up with absorbent pads, blankets, socks, tubes, pillows or other sorbents that can be wrung out and the recovered oil transferred into your used oil storage tank or container for recycling. Extraction devices like centrifuges, wringers, or compactors can be used to recover used oil from sorbent materials. Granulated sorbents should be used as infrequently as possible, and only after all free-flowing oil has been recovered. These can often be swept up and reapplied several times before they need to be disposed.

Reusable sorbents like towels and wipes can be cleaned and used many times. Sorbents contaminated with used oil may also be burned for energy recovery. Sorbent materials that will be burned for energy recovery must be managed as used oil, regardless of the degree to which you've removed any free-flowing used oil. Contaminated sorbents may be disposed of as solid waste if they do not contain any free-flowing used oil and if they do not exhibit any hazardous waste characteristics. Since Colorado solid waste landfills are not allowed to take wastes containing free liquids for disposal, it is important to remove as much of the free-flowing oil from the used sorbents as possible.

Cleanup of Soil Contaminated With Used Oil

It's even more important to capture as much of the free-flowing oil as possible on permeable surfaces, as soon as possible. Movement of the oil should be restricted by dikes, berms or sorbent booms designed for this purpose and the free-flowing oil captured using vacuum trucks or pumps. If necessary, the oil can be poured through a fine mesh to filter out dirt and other debris before being poured into your accumulation tanks or containers. Residual soil contamination may require remediation based on the actual or potential risk to human health and the environment.

You will need to define the vertical and lateral extent of contamination in both soil and groundwater to determine if active remediation is necessary, and if so, to what degree. Samples should be collected from the areas where the highest levels of contamination are most likely to exist. From there, the vertical and lateral extent of contamination must be delineated to a level that is at or below the subsurface soil risk based screening levels of 0.26 mg/kg benzene, 200 mg/kg ethylbenzene, 170 mg/kg toluene and 1900 mg/kg total xylenes AND total petroleum hydrocarbons (TPH) in the oil and grease range less than or equal to 500 mg/kg. These values are consistent with the screening levels used by the Division of Oil and Public Safety for regulated petroleum storage tank releases.

If you know or suspect that your used oil contained other hazardous constituents, your sampling and analysis plan should include these potential contaminants. This is especially true of older used oil storage tanks. It was not uncommon for facilities to dispose of solvents and other wastes in with their used oil prior to the regulation of these tanks and containers. Used oil may also contain elevated levels of lead and other heavy metals. Heavy metals contamination associated with used oil is not exempted from the hazardous waste regulations, even for regulated underground storage tanks.

If initial laboratory analyses indicate that soil within the contaminated area is below the subsurface soil risk based screening levels for benzene, toluene, ethylbenzene and xylenes (BTEX) AND total petroleum hydrocarbons is less than 500 mg/kg, you may request that the contaminated soil be left in place for natural biodegradation to occur. In order for the Solid Waste Unit to concur with this proposal, you must include comprehensive analytical results documenting the levels and extent of residual contamination in the soil and a determination that no potential exposure pathways exist.

Except for spills less than 25 gallons that are cleaned up promptly, a remediation plan should be submitted to the Solid Waste Unit of the Hazardous Materials and Waste Management Division for all sites that do not meet the BTEX subsurface risk based soil screening levels AND TPH less than 500 ppm. The plan should include details of the remediation strategy that will be applied, how and when it will be implemented, and include verification sampling to demonstrate achievement of the cleanup levels. If groundwater has been impacted, a groundwater remediation and/or monitoring plan should be included.

Approval may be granted by the Solid Waste Unit to allow soils with total petroleum hydrocarbons (TPH) greater than 500 mg/kg to remain in place if the contaminant levels are below the BTEX subsurface soil risk based screening levels and polynuclear aromatic hydrocarbon (PAH) concentrations are below the screening levels as stated in the Division of Oil and Public Safety Owner/Operator Guidance Document Table 7-3 (http://oil.cdle.state.co.us/OIL/Technical/Guidance Documents/Guidancedoc.asp). In this case, your remediation plan may include a proposal to leave the contaminated soil in place with natural biodegradation as the remedial action. In order for the Solid Waste Unit to concur with this plan, you must include comprehensive analytical results documenting the levels and extent of residual contamination in the soil and a determination that no potential exposure pathways exist.

If your proposed remedial action includes soil excavation, you should remove all soil that has visible staining and/or odor. You will need to take confirmatory samples (discreet, not composite samples) from the limits of the excavation, including excavation sidewalls and bottom, to verify that the remaining soil is not contaminated above acceptable limits. It is up to you to determine how many soil samples are needed to be representative of the conditions remaining in the excavation. Confirmatory samples should be analyzed for total petroleum hydrocarbons (TPH) in the oil and grease range, BTEX and any other constituents reasonably expected to be present based on your knowledge of the origin of the used oil and initial sample results. When residual contaminant levels are at or below the target cleanup levels, you may request "No Further Action" status.

If the excavated soil is to be disposed of in a solid waste landfill, you should contact the landfill to find out what testing is required to meet their waste acceptance criteria. Most landfills require, at a minimum, TPH, BTEX, toxicity testing for heavy metals like lead, and the paint filter test for free liquids. If the soil is to be remediated on site, contact the Solid Waste Unit for site-specific guidance.

For a broader discussion of petroleum contaminated soils, refer to the "Information Regarding the Management of Petroleum Contaminated Soil" guidance document (http://www.cdphe.state.co.us/hm/pcsdoc.pdf).

Contact Information

Hazardous Materials and Waste Management Division	(303) 692-3300
toll-free	(888) 569-1831
Division Technical Assistance Program	(303) 692-3320
toll-free	(888) 569-1831 ext. 3320
Department Website	http://www.cdphe.state.co.us/
Division Website	http://www.cdphe.state.co.us/hm/
Division Internet e-mail	comments.hmwmd@state.co.us

Email questions or send questions in writing to:

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
HMWMD-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

OR

FAX (303) 759-5355

Please provide as much detail as possible regarding your question and the waste or process to which it applies.

Related Information

Management Standards for Used Oil Generators Guidance Document, February 2005

Used Oil Transporters Checklist

- **Do you have an EPA Identification Number as a used oil transporter that is valid for use in Colorado?**

- **If your vehicle was previously used to transport hazardous waste, has it been properly emptied and/or cleaned prior to transporting used oil?**

- **Do you routinely determine whether the total halogen content of used oil you transport is above or below 1,000 ppm?**

- **Do you restrict processing activities only to those incidental to the transportation process (consolidation, settling, water separation)?**

- **Do you deliver all used oil received to another used oil transporter, a used oil processor/re-refiner, an off-specification burner or to an on-specification burner within 24 hours?** *Note: If you hold used oil more than 24 hours, you must meet the requirements for used oil transfer facilities.*

- **If a spill or leak has occurred, did you report it?**

- **Have you taken the necessary corrective actions to clean up the release?**

  - Have you stopped further releases and contained the oil?

  - Have you removed, repaired or replaced the defective tank, container or piping?

  - Have you properly disposed of used absorbents, contaminated media (water, soil) and recovered oil?

- **Do you have records of each shipment of used oil accepted for transport?**

- **Do you have records of each shipment delivered to another transporter, burner, processor/re-refiner or disposal facility?**

- **Do you comply with the transportation requirements of the US Department of Transportation and Colorado Public Utilities Commission?**

Used Oil Transfer Facility Checklist

- **Do you hold shipments of used oil more than 24 hours but no longer than 35 days?** *Note: If used oil is stored more than 35 days, the facility is a used oil storage facility and subject to the standards for Used Oil Processors and Re-Refiners in 6 CCR 1007-3 Part 279 Subpart F.*
- **Do you have an EPA Identification Number valid for use in Colorado?**
- **Are you also a used oil transporter?** *Note: If you transport used oil, you must also meet the requirements of a used oil transporter.*
- **Is the oil stored in tanks or containers marked with the words "Used Oil?"**
- **Are fill ports leading to storage tanks labeled with the words "Used Oil?"**
- **Are all tanks and containers in good condition and not leaking?**
- **Do you have secondary containment for tanks and containers?**
- **Do you restrict processing activities only to those incidental to storage (consolidation, settling, water separation)?**
- **If your aboveground or underground storage tanks are also regulated by the Division of Oil and Public Safety at the Department of Labor and Employment, do you comply with those requirements?**
    - The Division of Oil and Public Safety regulates aboveground petroleum storage tanks with capacity between 660 gallons and 39,999 gallons and underground storage tanks with capacity greater than or equal to 110 gallons.
- **Do you have a Spill Prevention, Control and Countermeasure (SPCC) Plan, if required?**
- **If a spill or leak has occurred, did you report it?**
- **Have you taken the necessary corrective actions to clean up any releases?**
    - Have you stopped further releases and contained the oil?
    - Have you removed, repaired or replaced the defective tank, container or piping?
    - Have you properly disposed of used absorbents, contaminated media (water, soil) and recovered oil?
- **Do you have records of each shipment of used oil accepted at this facility?**
- **Do you have records of each shipment delivered to another transporter, burner, processor/re-refiner or disposal facility?**