Office of Environmental Stewardship Environmental Investigation Unit Used Oil Management

Contact Information:

Environmental Investigation Unit

Mark Vogel: 651-366-3630 Jackie Klein: 651-366-3637

Summer Allen-Murley: 651-366-3635

This guidance document is prepared by MnDOT personnel and is intended only for use on MnDOT projects, including partnership projects, and MnDOT Maintenance Operations.

The intent of this guidance document is to provide general procedural information for MnDOT personnel to ensure proper handling of used oil. Any deviation from procedures contained in this document must be discussed with Environmental Investigation Unit (EIU) personnel prior to implementation.

This document should not be construed as a full description of all regulations pertaining to the subject matter. Contact the EIU in the MnDOT Office of Environmental Stewardship (OES) for additional information or legal requirements.

Background

The following guidance is intended to ensure that MnDOT manages used oil in accordance with regulations and in a manner that is protective of the department's long-term liability. Procedures are provided for used oil recycling with MnDOT approved vendors and for use as heating fuel in MnDOT facilities equipped with a used oil burner system.

General Requirements

Definition: For the purposes of this guidance document, used oil must meet all of the following requirements:

- Used oil includes engine oil, transmission fluid, lubricating oil, hydraulic oil, power steering fluid, brake fluid and gear oil.
- The used oil must be generated from MnDOT maintenance activities. Used oil must not be accepted from public or private parties.

- The used oil cannot be mixed with any cleaning product or waste material including but not limited to the following: antifreeze, solvents, gasoline, degreasers, paint thinners or aerosol cleaning products. Mixing chemicals with used oil may produce the following adverse results:
 - This sets a precedent for illegally disposing of wastes/materials by mixing with used oil.
 - The chemical mixture may adversely react with the used oil burner.
 - The used oil mixture may not pass the on-specification test required for burning as energy recovery and may have to instead be disposed of as a hazardous waste.
 - The Fire Marshal may require additional measures to reduce storage container fire potential.

Management of Used Oil

The two options for managing used oil are to recycle through an approved vendor or to burn as energy recovery.

1) Recycling Used Oil

Used oil can only be recycled by MnDOT approved vendors (see link http://www.dot.state.mn.us/environment/regulatedmaterials/wastemgmt.

2) Burning Used Oil as Energy Recovery (to heat a facility)

Oil Burner Requirements

Used oil may only be used to heat a facility if the oil burner is:

- rated at less than 500,000 BTU's per hour,
- vented to the outdoors,
- designed to burn used oil and
- only when the oil is burned for energy recovery. (Burning for purposes other than to heat the facility is not allowed.)

Contact the local Fire Marshal to inquire about any additional requirements.

Used Oil Requirements

Used oil burned for energy recovery must meet the following requirements:

Laboratory Analysis:

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Used oil can only be burned for energy recovery if laboratory analysis has demonstrated that the oil is on-specification (on-spec). On-spec determination is required for used oil generated from each individual facility that will be burned for energy recovery. Once used oil from a facility has been tested and proven to be on-spec, no further testing is required unless the used oil source changes. (Our process includes used oil analysis every 5 years.)

- A copy of the on-spec test results must be kept on file at each facility that generates used oil burned for energy recovery. (These are available at the following webpage: http://www.dot.state.mn.us/environment/regulatedmaterials/pdf/on-spec-analysis.pdf
- Each facility must notify the United States Environmental Protection Agency (EPA) to obtain an EPA ID # or to complete a one-time notification if the facility already possesses an EPA ID #. To complete the notification, check item 4 in box "C" of section VIII of the MPCA's "Notification of Regulated Activity" form. This can also be done online on the MPCA website. See website at: https://www.pca.state.mn.us/sites/default/files/w-hw5-12.pdf.
- Contact OES to request sampling for on-spec analysis of used oil.
- If laboratory analysis indicates that the used oil is off-specification,
 OES will determine if the used oil can be recycled by a MnDOT
 approved vendor or if it must be disposed of as a hazardous waste.
 All efforts will then be made to determine why the used oil failed the
 on-spec analysis.

Storage

- Store used oil in leak proof drums or storage tanks that can easily be pumped. The drums or storage tanks must be clean of other chemicals (such as other products or waste materials) that could contaminate the used oil and thus require more costly disposal.
 Segregate used oil containers from solvents and other wastes to prevent accidental mixing.
- Secure all bungs and lids after placing used oil in the container.
- Label drums or storage tanks as "USED OIL".
- Drums and single-walled tanks should be located indoors and within secondary containment to capture any spills. Double-walled storage tanks may be located either indoors or outdoors.
- Storage containers with a volume greater than 500 gallons must be registered with the MPCA Aboveground Storage Tank Program. Contact Summer Allen-Murley with OES for assistance with tank registration.

Transportation

MnDOT personnel can transport used oil with MnDOT vehicles.

• The facility that transports used oil that is burned for energy recovery must notify the United States Environmental Protection Agency (EPA) to obtain an EPA ID # or complete a one-time notification if the facility already possesses an EPA ID #. To complete the notification, check item 1 in box "C" of section VIII of the MPCA's "Notification of Regulated Activity: form. This can also be done online on the MPCA website. See website at: https://www.pca.state.mn.us/sites/default/files/w-hw5-12.pdf.

Recordkeeping

Facilities generating and receiving used oil for recycling or energy recovery/burning must create a document containing the following information (log can be found under "Waste Handling" at http://www.dot.state.mn.us/environment/regulatedmaterials/wastemgmt.html):

- 1. Name and address of the facility shipped from (MnDOT facility);
- Name and address of the facility shipped to (facility accepting the used oil for recycling or MnDOT facility accepting the used oil for energy recovery/burning);
- 3. Quantity shipped; and
- 4. Dates of shipment and acceptance at recycling or energy recovery/burning facility.

Records shall be maintained at MnDOT generating facility for a minimum of three years. After three years, the records should be sent to OES for permanent storage.

Additional Recordkeeping Requirements

- Facilities with used oil burners shall permanently maintain on-site proof that the used oil is on-specification.
- Facilities located in the seven-county metropolitan area shall record annual totals of used oil burned to meet reporting and licensing requirements for management of used oil. (This is not required outside the seven-county metropolitan area.)
- Storage tank registration and monthly inspection log (if applicable), shall be permanently kept on-site or at a centralized location (example: District Headquarters). This is required for all tanks greater than 500 gallons.

Note: Retaining a copy of the shipping paper containing the above information would be sufficient to meet record keeping requirements.