



Management of Petroleum and Other Materials from Damaged Boats

Environmental Services Program fact sheet

1/2007

Natural disasters occurring near bodies of water can damage docks and marinas and cause boats to become submerged. This fact sheet is a guide for managing petroleum and solid wastes when removing damaged boats. Users of this information may be boat owners, marina owners or anyone providing service to them.

Petroleum Material

Federal law requires the responsible party to report any release of petroleum material if the petroleum material reaches or threatens any waterway (National Response Center, 1-800-424-8802.) Also, you must contact the department's 24-Hour Environmental Emergency Response Hotline at (573) 634-2436, if you have a petroleum product release to soil of more than 50 gallons (25 gallons, if the release is from an underground storage tank at a marina) or a release of any quantity of petroleum material into any waterway.

The petroleum material (gasoline, diesel fuel, lubricants), or any water mixture of the petroleum material from inside the boats may be hazardous because of one or more of the following characteristics:

- Ignitability - flashpoint of 140 degrees Fahrenheit or less.
- Benzene - 0.5 milligrams per liter or more when tested according to the Toxicity Characteristic Leaching Procedure (TCLP).
- Lead - 5 milligrams per liter or more as shown by a TCLP.

In general, hazardous wastes must be managed according to the Missouri Hazardous Waste Management Law and Regulations. The regulations state how the materials must be packaged, marked and labeled, how long they may be stored on-site, and how they must be transported and disposed. For more information see *Hazardous Waste Information Sources* at the end of this fact sheet.

The petroleum material inside the boats must be removed and characterized for use or disposal. If this is not done and the material in the boat is hazardous, you will be in violation of hazardous waste regulations. If the fuel lines or tanks appear to be damaged, the petroleum material should be removed from the boat prior to transport.

For wastes from inside fuel tanks, some management options and alternatives to disposal exist and are explained below:

1. Use or Recycle

Raw Product

If raw product is used for its intended purpose without interim processing, it is not a waste. Some processing of the waste may be necessary to recover product for use. A hazardous waste permit is required to treat hazardous waste. However, if option a, b, or c below is done at the damaged boat location, no hazardous waste permit is needed:

- a. Gravity separation.
- b. Simple filtration to remove particulates.
Note: The filter media may become hazardous waste.
- c. Use of an oil and water separator.
Note: The water may be hazardous waste.

After any of the activities described above, the recovered product may be resold if it meets Missouri Department of Agriculture fuel specifications; may be used in your own boat or vehicle if you choose to do so; or it may be sent to a petroleum refinery or terminal if the refinery or terminal accepts it for use in the petroleum refining process. In addition, recovered product may be sent to a fuel blender provided that no further reclamation or separation is necessary by the blender.

If it is necessary to store the water phase generated from the activities described above, the water should be stored in closed containers in good condition and be clearly marked "Petroleum Contaminated Water" until a hazardous waste determination can be made. If the wastewater is determined to be hazardous, it must be stored in accordance with all applicable hazardous waste rules and regulations until appropriately disposed or discharged. For information about managing the water phase, see management option numbers 2, 3, 4 or 6.

2. Petroleum Refinery/Terminal

Petroleum Wastes

If each of the following conditions are met, petroleum wastes are exempt from solid and hazardous waste regulations:

- The petroleum refinery or terminal accepts the waste for reuse or recycling.,
- The transporter takes it from the generator's location directly to the refinery or terminal (no interim storage or treatment facilities used except for transfer facilities meeting hazardous waste regulations) and
- The material is reused in the petroleum refining process.

The generator (boat owner, marina owner, etc) must follow Department of Transportation regulations when shipping the material to the refinery or terminal. To properly claim this exemption, the tank or property owner must keep documents showing his or her agreement with the refinery with records showing when the waste was generated and taken to the refinery or terminal.

3. Domestic Sewage Exemption

Tank Water and Rinsate from the boats

If the generator has connections to a sanitary sewer on-site and has written permission from the Publicly Owned Treatment Works (POTW) operator to place the waste into the sewer, the waste is exempt from solid and hazardous waste regulation once it is discharged.

Be aware that not all sewer systems go to a POTW system. Hazardous wastewater must be managed in accordance with all applicable hazardous waste rules and regulations until it is discharged. If the material cannot be discharged as is, the treatment plant operator may agree to accept it after it has first been gravity separated, filtered or run through an oil and water separator. The recovered product may then be used if it meets fuel specifications or may be sent to a refinery or terminal.

Note: The filter media may be hazardous waste.

You should also take care to avoid spills and releases that would have to be cleaned up. Any material contaminated by a spill would have to be tested prior to disposal and appropriately disposed.

Contact the department's Water Protection Program to ask if the process you intend to use requires a permit. Installing and operating systems to treat hazardous wastewater requires a permit from the Water Protection Program. A general permit for treatment and discharge of "Fuel Spill Cleanup" wastewater is available for many such projects. Site specific permits may also be required if necessary to protect waters of the state, which includes groundwater.

4. Permit by Rule POTW

Tank Water and Rinsate from the boats

The wastewater may be transported to a POTW using a licensed hazardous waste transporter and manifests. The POTW must be in compliance with all terms of the Permit by Rule found in 40 CFR 270.60(c). At the time this document was printed, there were no POTWs in Missouri that met the Permit by Rule standards. There are POTWs in other states that meet the Permit by Rule standards.

5. Sanitary Landfill

Non-hazardous Waste from the boats

If petroleum waste inside the boat is tested and found to be nonhazardous, it may be disposed in a permitted sanitary landfill subject to special waste disposal requirements.

Note: Landfills cannot accept waste with free liquid. The generator may add nonhazardous absorbents.

The generator must contact the individual landfill(s) to determine what conditions are placed on special waste and in what form the landfill may be willing to accept it.

6. Treatment, Storage or Disposal Facility

Hazardous Wastes from the boats

If the waste is hazardous and none of the above mentioned management options are available or possible, the waste must be sent to a Missouri certified resource recovery facility or to a Treatment, Storage or Disposal facility permitted to accept the hazardous waste. Cement kilns or fuel blenders that are permitted to accept hazardous waste may be used. The waste must be managed in accordance with all applicable hazardous waste rules and regulations.

A list of commercial Hazardous Waste Treatment, Storage and Disposal facilities in Missouri is available from the Department's Hazardous Waste Program or visit www.dnr.mo.gov/env/hwp/permits/facilities.htm.

Do's

- Use petroleum products for their originally intended use if possible.
- Recycle reclaimable petroleum by returning it to a petroleum refinery or terminal if possible.
- Avoid spills and releases. Containment booms, absorbent booms and pads should be used as a precaution if any petroleum material is removed from the boats while on the water.
- Clean up any spills and releases immediately. Dispose of product-contaminated soil, debris, booms, and pads at a sanitary landfill as soon as possible. Obtain the landfill operator's approval before taking the material off site. Under certain conditions soil may be thermally treated with prior approval of the department's Air Pollution Control Program and Hazardous Waste Program.
- Keep copies of shipping papers and agreements with POTWs, petroleum refineries or treatment storage and disposal facilities that document your management of the waste.

Don'ts

- Don't consider waste gasoline, diesel, lubricants, water, sludge and scale to be "used oil". It does not meet the regulatory definition of "used oil."
- Don't assume wastes from the fuel tanks are nonhazardous. In most cases laboratory analysis will be required to prove the wastes are nonhazardous unless the wastes are exempt from hazardous waste regulation by proper management under options 1, 2 or 3 in this fact sheet.
- Don't dispose of petroleum contaminated materials in storm sewers or septic tanks.
- Don't dispose on soil or in surface water.
- Don't use for vegetation control.
- Don't use to start brush pile fires or tire fires.
- Don't treat by air sparging, bubbling, agitation or otherwise driving air through the waste to lower the benzene concentration (i.e., illegal without a hazardous waste treatment permit).
- Don't deliberately dilute the waste or add material to it for the purpose of making it nonhazardous.
- Don't take the waste to another site for storage or treatment before sending it to the refinery or terminal.
- Don't remove a tank that has not been properly cleaned, purged and made inert from the site.
- Don't use engine exhaust to inert a fuel tank. This is not effective and can be dangerous.
- Don't store hazardous waste greater than 90 days (180 days if small quantity generator).

Test Methods

Flashpoint - Pensky-Martens Closed Cup Tester, Method in ASTM - Standard D-93-79 or D-93-80, or as determined by an equivalent test method approved by the Administrator under procedures set forth in 40 CFR 260.20 and 260.21.

Test for Free Liquids - Paint Filter Liquids Test - Method 9005 - Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, Publication SW-846 of the U.S. Environmental Protection Agency.

Toxicity Characteristic Leaching Procedure (TCLP) – Method 1311. Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods Publication SW-846 of the U.S. Environmental Protection Agency.

Boats and Related Material

All solid waste originating from damaged docks or boats must be removed from the water and properly salvaged, recycled or disposed per Section 260.210.1 of the Missouri Solid Waste Management Law. Also, per Water Quality Standards of 10 CSR 20-7.031, waters shall be free from oil, scum, floating debris, used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste. In summary, sunken or damaged boats cannot be abandoned in the water.

The department encourages salvaging and recycling of waste wherever possible. Scrap metal may be taken to a scrap metal yard. Unencapsulated dock foam may be recycled, or disposed of in a permitted landfill or transfer station. Remaining solid waste must be taken for disposal at a permitted landfill or transfer station. For more information on recycling dock foam or other waste management questions or options, contact the department's Solid Waste Management Program. Permitted landfills and transfer stations are listed on the program's Web site at www.dnr.mo.gov/env/swmp/facilities/sanlist.htm and www.dnr.mo.gov/env/swmp/facilities/tranlist.htm.

Hazardous Waste Information Sources

Missouri Secretary of State

The Missouri Hazardous Waste Management Law and Regulations are available from the Missouri Secretary of State's Office. Call (573) 751-4015.

Missouri Department of Natural Resources publications

www.dnr.mo.gov/pubs/index.htm

- *Hazardous Waste in Missouri* fact sheet -- PUB919
www.dnr.mo.gov/pubs/pub919.pdf
- *Does Your Business Generate Hazardous Waste?* fact sheet -- PUB117
www.dnr.mo.gov/pubs/pub117.pdf
- *Management of Conditionally Exempt Quantities of Hazardous Waste* - fact sheet -- PUB128
www.dnr.mo.gov/pubs/pub128.pdf

For More Information

Missouri Department of Natural Resources
Hazardous Waste Program

P.O. Box 176

Jefferson City, MO 65102 0176

1-800-361 4827 or (573) 751-3176

(573) 751-7869 fax

www.dnr.mo.gov/env/hwp/index.html

Missouri Department of Natural Resources
Air Pollution Control Program

P.O. Box 176, Jefferson City, MO 65102-0176

1-800-361-4827 or (573) 751-4817 office

(573) 751-2706 fax

www.dnr.mo.gov/env/apcp/index.html

Missouri Department of Natural Resources
Solid Waste Management Program

P.O. Box 176, Jefferson City, MO 65102-0176

1-800-361-4827 or (573) 751-5401

(573) 526-3902 fax

www.dnr.mo.gov/env/swmp/index.html

Missouri Department of Natural Resources
Water Protection Program

P.O. Box 176, Jefferson City, MO 65102-0176

1-800-361-4827 or (573) 751-1300 office

(573) 751-9396 fax

www.dnr.mo.gov/env/wpp/index.html

Transportation Questions

Missouri Department of Economic Development - Division of Motor Carrier and Railroad Safety.

Call (573) 751-7117.