

## CARPET CLEANING WASTEWATER

The discharges from carpet cleaning can contain sediment, oil, grease, detergents, solvents, and other contaminants that could affect the environment. This publication outlines the requirements for managing wastewater from these activities in Michigan.

### How is carpet cleaning wastewater regulated in Michigan?

The regulation of wastewater from mobile sources depends upon the wastewater discharge destination. The publicly owned wastewater treatment works (POTWs) are responsible for regulating wastewater that is directed to their facilities. The Water Bureau of the Michigan Department of Environmental Quality (MDEQ) regulates discharges directed to either the groundwater or surface water (rivers, lakes and streams) under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The Waste and Hazardous Materials Division regulates waste management on-site and disposal under Part 111, Hazardous Waste Management, and Part 121, Liquid Industrial Waste, of Act 451.

### What are the options for handling wastewater from carpet cleaning?

Several options for handling wastewater are available to carpet cleaners. Some options might be more practical than others and may depend on the characteristics of the job site and depending upon whether the activity is conducted by a commercial operator or a homeowner. Wastewater management questions and options can be discussed with MDEQ staff. For your convenience, MDEQ has an Environmental Assistance Hotline: 1-800-662-9278.

#### Option 1: Obtain authorization to discharge to the ground by means of an exemption, notification or permit from the MDEQ Ground Water Discharge Permit Program.

Depending on the type of discharge, the MDEQ can authorize a discharge to the ground from a carpet cleaning operation by means of an exemption, notification, or permit depending on the nature of the discharge. The discharge of carpet cleaning wastewater to the ground is likely exempt if the washing is done by the occupant of a household, and the wastewater is associated with the domestic occupation of the household.

Commercial carpet cleaners more often are authorized through a notification procedure. In this case an application will need to be submitted to the MDEQ, Water Bureau, Groundwater Discharge Permit program. If the discharge requires notification, then you will be provided with a form to complete and return to the MDEQ per project site.

Some of the restrictions regarding notifications include:

- The source of the water supply must meet specific water quality standards.
- If any additive is used other than a household soap or detergent, the additive must be used for its intended purpose and according to manufacturer's recommendations and label directions.

- The discharge does not cause runoff of wastewater or the deposition of waste materials onto adjacent properties.
- The discharge does not cause the groundwater to exceed specified standards.
- The discharge is limited to 1,000 gallons of wastewater per month per acre of area in which the discharge occurs.
- If the discharger is a commercial operator who discharges at various locations, a log is kept of discharges for a period of 3 years from the date of the discharge. The log shall include the date, location, and additive used for each discharge and the item washed and shall be readily available for inspection and copying by an authorized representative of the MDEQ or local health department having jurisdiction.

**Commercial carpet cleaning operations that do not meet the requirements for either an exemption or authorization via notification may be able to obtain a site specific exemption or a groundwater discharge permit depending on the quality and quantity of the wastewater and discharge location. Any discharge greater than 1,000 gallons per month per acre in which the discharge occurs must be authorized by a site specific exemption or a groundwater discharge permit issued to the owner of the site. Contact the Groundwater Discharge Program to discuss your particular circumstances.**

**Option 2: Obtain permission to direct the wastewater to a Publicly Owned Treatment Works (POTW) through a sanitary sewer at the job site.**

Inspect the site to find out if there is access to the POTW through a sanitary sewer or combined sewer system. Drains and gutters found outside buildings, in parking lots or along the streets are usually storm sewers (not sanitary sewers). These storm sewers or storm drains lead directly to a stream, lake or other water body. Discharges cannot be directed to a storm sewer or storm drain unless the facility has a wastewater discharge permit from the Water Bureau (Option 4).

Other storm sewers may be connected to a combined sewer system. This means that both the storm water and the sanitary water are directed to the POTW. In some instances, the POTW may give permission for wastewater to be released into a combined sewer system. Contact the local Office of Public Works to get more information about the sewer system in the area.

If the site has sanitary sewer access then obtain permission, preferably in writing from the POTW to discharge wastewater into the sewer. Wastewater treatment plants are designed to handle sewage related wastewater rather than industrial or commercial wastes so it is important that they know what and when you are discharging. Learn the POTW requirements and proper access before discharging to the POTW. Sanitary sewer access is usually gained by running wastewater into a utility sink connected to the sanitary sewer; many cities have strict ordinances against accessing the sanitary sewer by lifting manhole covers.

**Option 3: Collect the wastewater from the job site and arrange for proper disposal**

If there is not direct access to a sanitary sewer system, another option is to collect the wash water after arranging disposal at sites that have notified the Waste and Hazardous Materials Division (WHMD) about their waste operations. To find these liquid industrial waste designated facilities:

1. Select advanced search in the Waste Data System at [www.deq.state.mi.us/wdsp/](http://www.deq.state.mi.us/wdsp/)
2. Enter search criteria in desired fields
  - a. Under “*General Site Information*” “*Location Address*” heading, enter desired geographic criteria like county or Michigan district (map of districts is available at [www.michigan.gov/deq](http://www.michigan.gov/deq) “Contact DEQ”)

Consider using [low moisture carpet cleaning systems](#) to reduce the amount of wastewater.

- b. Click to expand the “*Hazardous & Liquid Industrial Waste Site Activity Information*”
  - c. Under the “*Liquid Industrial Waste Activity*” heading select Yes next to Designated Facility
  - d. Select the Search button either on top or bottom of form to get list of designated facilities. Click on the site name for more information about a facility. Some sites listed will not accept waste from another company so contact potential facilities to see if they will accept your waste.
3. If there are no facilities listed within your initial search area, change your search criteria or contact the local wastewater treatment plant to see if they are interested in accepting your wastewater. Have the wastewater treatment plant authority call the WHMD district office or the Environmental Assistance Center at 800-662-9278 to discuss their requirements and about submitting a notification.

Some facilities have designated locations for dropping off trucked wastewater (usually called a trucked waste disposal site or receiving station). Other sites may require that trucked wastewater be delivered directly to the treatment plant.

Contact the disposal facility ahead of time to find out where wastewater should be taken and about other requirements you need to follow. The treatment plant may ask for sample results to confirm that wastewater does not contain high levels of contaminants that could harm the treatment system. In some cases, POTWs may require pretreatment (e.g. filtration, removal of metals, oil or grease, etc.) before the POTW will accept it.

Different waste regulations apply to various types of job sites.

1. Wastewater from carpet cleaning at homes or multiple residences is exempted from the liquid industrial waste and hazardous waste regulations so it is not necessary for someone transporting household wastes to be a permitted and registered liquid industrial waste transporter or to use waste manifests. This includes used wash water from apartments, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic areas, and day-use recreation areas. Meet the disposal facility requirements.

2. When a carpet cleaning business is cleaning at another company’s location, the wastewater is considered to be a co-generated waste. That means the company having their facility cleaned and the company doing the cleaning are both responsible for meeting the waste generator requirements regarding proper collection, waste characterization, management and disposal. The service contract should clearly identify who will be ultimately responsible for properly managing the waste.

The wastewater management requirements will depend upon whether the wash water is hazardous or non hazardous waste. Most carpet washing wastewater is non hazardous but there can be instances where it can be contaminated at levels that makes it a hazardous waste. Examples include:

- Using carpet spot removal products that contain hazardous chemicals like [tetrachloroethylene](#) (also called [perchloroethylene](#) or [perc](#))
- Carpet had chemicals spilled on it. For example mercury from a broken thermometer. See mercury cleanup information at [www.michigan.gov/deq/mercuryp2](http://www.michigan.gov/deq/mercuryp2).
- If solvents had been used as a pretreatment to remove oils/greases, the wastewater may be a listed or characteristic hazardous waste depending on the product.

See the WHMD [Waste Characterization](#) guidance for more information how to determine if the wash water may be hazardous waste. Contact your local [WHMD District Office](#) with any questions about how to evaluate wastes or other waste requirements that might apply.

#### **When collecting the wastewater:**

- Use containers compatible with the wastewater.
- Keep the containers closed unless you are adding waste to it or removing waste.
- Label the containers so people know what is in it. (E.g. “carpet wash wastewater” if it is non hazardous. If it is hazardous waste, there are additional labeling and other waste requirements dependent on how much is generated. See related [WHMD hazardous waste guidance](#) or discuss requirements with the [WHMD District Office](#).)
- See the section “What else do I need to consider when I clean carpet?”

## When shipping the wastewater:

The requirements depend on the amount and the type of wastewater and who is transporting the wastewater.

- I. When hauling 55 gallons or less of your own generated non hazardous wastewater or hazardous wastewater when the company is a [CESQG](#) (a CESQG generates less than 220 pounds of hazardous waste in a calendar month):
  - Take a record where the wastewater was from, how much is being hauled, and where it is being taken with the waste shipment. It is not necessary to use a waste manifest if all these requirements in this section are met.
  - Obtain a signature from the designated facility acknowledging receipt of the waste and provide them with a copy of the record.
  - Keep a copy of the shipment record for at least three years.
  - Have adequate insurance coverage (check that your insurance company will cover potential accidents).
  - Both the designated facility and the generator must manage the waste according to the liquid industrial waste regulations to protect the environment and human health.
  - Meet federal and state transportation requirements if it is hazardous material. Discuss those requirements with the Michigan State Police Motor Carrier Division. Information is at [www.michigan.gov/msp](http://www.michigan.gov/msp) or call 517.336.6580.

### II. When hauling more than 55 gallons of non hazardous wastewater:

- Notify the WHMD that you are transporting your own liquid industrial waste and are a liquid industrial waste generator. Notify by either using the MiTAPS online system at [www.michigan.gov/mitaps](http://www.michigan.gov/mitaps) or by submitting the Michigan Site Identification form [EQP5150](#). It is not necessary to become a permitted and registered transporter.
- Obtain a site identification number from the WHMD. This number is issued when you notify WHMD of your waste activities (see above). There is an application fee to obtain a site identification number.
- Use the uniform hazardous waste manifest which is also used for liquid industrial waste shipments or use a consolidated manifest. If consolidated manifests are used, meet the requirements listed in the Operational Memo 121-3. Manifest information is available at [www.michigan.gov/degwaste](http://www.michigan.gov/degwaste).
- Obtain insurance coverage as required by the Hazardous Materials Transportation Act.
  - i. If using vehicles under 10,000 pounds gross vehicle weight, have fleet coverage of at least \$300,000.
  - ii. If using vehicles equal to or over 10,000 pounds gross vehicle weight, have fleet coverage of at least \$750,000.
- Get a copy of the form MCS-90 from your insurance company and send it to DEQ WHMD Attn: Transportation Program Technician, Southeast MI District Office, 27700 Donald Ct, Warren MI 48092-2793.

### III. When hiring commercial transporters to haul the waste:

- Notify the WHMD about your waste activities (e.g. you are a liquid industrial waste or hazardous waste generator). Notify by either using the MiTAPS online system at [www.michigan.gov/mitaps](http://www.michigan.gov/mitaps) or by submitting the Michigan Site Identification form [EQP5150](#).
- Obtain a site identification number from the WHMD. This number is issued when you notify WHMD of your waste activities (see above). There is an application fee to obtain a site identification number.
- Select a transporter company with the appropriate waste permit and registration. You can search the [Waste Data System](#) to find transporters and their compliance information.
  - i. If wastewater is non hazardous, hire uniform liquid industrial waste transporters.
  - ii. If it is hazardous waste and you are a conditionally exempt small quantity generator (CESQG) of hazardous waste, hire uniform liquid industrial waste transporters or uniform

hazardous waste transporters. A CESQG generates less than 220 pounds of hazardous waste in a calendar month.

- iii. If the wastewater is hazardous waste and you generate more than 220 pounds of hazardous waste in a calendar month, hire uniform hazardous waste transporters.
- Meet the manifest or consolidated manifest requirements. Most commercial transporters and disposal companies will provide the “Uniform Hazardous Waste Manifest” which is used for both liquid and hazardous waste shipments. If consolidated manifests are used, meet the requirements listed in the Operational Memo 121-3. Manifest information is available at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste).

#### **Option 4: Obtain a National Pollutant Discharge Elimination System (NPDES) permit to discharge wastewater from the site to a creek, river or other surface water body.**

A company wishing to discharge wastewater directly to a creek, river or other water body, directly or through a storm sewer or other conveyance, must obtain a permit from the Water Bureau. This permit, called the National Pollutant Discharge Elimination System (NPDES) permit, must be received before the business can discharge. A permit would be necessary for each job site where the wastewater is generated. In many cases applying for an NPDES permit has not been a practical option. Consider the following:

- Since the receiving water body must be evaluated to assure that the wastewater discharge will not impact uses made of the water body, the permitting process will take several months.
- A separate permit will be needed for each site of operation.
- The permit may require the holder to treat the wastewater to prevent water pollution.
- The permit will likely require monitoring and analysis of the wastewater.
- The permit application will be denied if the contaminants in the wastewater are expected to vary widely from one discharge to the next.

Anyone still seeking to apply for an NPDES permit, or for questions on surface water discharges, contact the local Water Bureau District office or call 1-800-662-9278.

#### **What else do I need to consider when I clean carpet?**

Other regulations might apply to your job site.

- ✓ It will be necessary to determine if you generate hazardous waste. If it is possible that hazardous materials will end up on the wastewater at the job site, then contact the local Waste and Hazardous Materials Division District Office for guidance. They can provide information on how to evaluate wastes and provide information as to whether other waste requirements apply.
- ✓ If chemicals (like solvents or acids) are added to the washing solution, additional precautions may be needed when using the chemicals and disposing of the wastewater. The local POTW or disposal facility needs to know about the chemicals that might be in the wastewater. In addition, you may be subject to the health and safety standards overseen by the Department of Consumer and Industry Services, Occupational Health Division. Call that agency at 517-322-1608.
- ✓ If you use products containing one percent or more of chemicals referenced in the Part 5 administrative rules under Part 31 of Act 451, there are additional requirements when you have 220 pounds stored outside or 2200 pounds stored indoors. If you have these amounts, look at the chemicals listed on the Material Safety Data Sheets (MSDS) for your supplies and compare those to the list of chemicals in the rules. Some Part 5 chemicals in carpet cleaning products include:
  - Ammonium Chloride (cleaners)
  - Formaldehyde (restoration mildewcides and disinfectants)
  - Glycol ethers like 2-Butoxy Ethanol (solvents used in maintenance cleaners and in hot water extraction products)
  - Hydrofluoric acid (rust remover)
  - Sodium Hydroxide (cleaners and degreasers)
  - [Tetrachloroethylene](#) also called [perchloroethylene](#) or [perc](#) (spot remover)

- Tributyltin (mildewcides and disinfectants)

For more information about chemicals in products and tips on using less of them, see the "[Safe & Effective Carpet Cleaning](#)" fact sheet at [www.wrppn.org/Janitorial/factsheets/carpetcleaning.htm](http://www.wrppn.org/Janitorial/factsheets/carpetcleaning.htm). If you meet the threshold planning quantities, see the [Part 5 rule website](#) at [www.michigan.gov/deqwater](http://www.michigan.gov/deqwater) "Emergency Response for Releases to Water" regarding preparing a Pollution Incident Prevention Plan (PIPP), having secondary containment, and meeting release reporting requirements.

- ✓ If you transport cleaning chemicals that are a DOT hazardous material, either stay below the limit set for [Materials of Trade](#) or meet all the transportation requirements. See the Michigan State Police Motor Carrier Division information at [www.michigan.gov/msp](http://www.michigan.gov/msp) "Specialized Divisions" "Motor Carrier Division" "Hazardous Materials" "Hazardous Materials Bulletins."
- ✓ Carpet cleaning wastewater is **not** authorized to be discharged to any storm sewer or directly to waters of the state under a general industrial storm water permit from MDEQ. Questions about storm water permits and discharge activities that are authorized under the permit should be discussed directly with the Water Bureau District Office.
- ✓ Do not take wastewater to another location for discharging, such as a car wash, unless you have obtained permission for this activity from that business and the local POTW.
- ✓ If you have unwanted cleaning supplies, the disposal options will depend on if they are hazardous waste or nonhazardous. See the related waste information under Option 3.

### **What are some violations that MDEQ sees?**

Common carpet cleaning violations involve improper collection and disposal of wastewater. These include:

- Discharging wastewater directly into waters of the state without proper authorization. This includes companies that pump or allow wastewater to run directly into storm sewers or open ditches.
- Allowing wastewater to pool and evaporate, especially in such areas as parking lots, driveways or catch basins. By allowing wastewater to sit in these areas, contaminants can accumulate and run into a storm drain or body of water during heavy rainfall.
- Failing to properly characterize the wastewater to determine if it's a hazardous waste, especially at sites with contamination.

### **Where can I get more information?**

For questions related to wastewater discharge to storm sewers or to the ground, contact the Water Bureau District Office for your area. Regulations, application forms, publications and staff listings can be accessed from the Internet at [www.michigan.gov/deqwater](http://www.michigan.gov/deqwater). For questions related to discharges to the POTW, contact the facility operator.

Referenced publications can be downloaded from the Internet at [www.michigan.gov/deq](http://www.michigan.gov/deq) or you may call 800-662-9278.

This online publication is intended for guidance only. Regulations are subject to change. Reliance on information from this document is not usable as a defense in any enforcement action or litigation. Refer to the regulations or discuss your requirements with the regulating agency staff.

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