

A close-up photograph of a power washer nozzle, with a bright stream of water spraying out from the tip, creating a misty spray.

Mobile Power Washing

Environmental Compliance Guidance

Many companies involved with mobile power washing in Michigan request information on environmental regulations that apply to them. Most are small businesses involved in power washing vehicles; equipment; residential, industrial, and commercial buildings; and parking areas. The discharges from the washing operations can contain oil, grease, detergents, solvents, metals, and other contaminants that could affect the environment. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has developed this guidance for small power washing business, and those who want to contract power washing services, to help identify Michigan's requirements for managing wastewater generated from mobile power washing.

The regulation of wastewater from mobile power washers will depend on the discharge destination. The three primary regulatory authorities that oversee wastewater include:

1. The local municipality that owns or operates the storm sewer
2. The municipal wastewater treatment plant (WWTP) and collection system
3. EGLE

Municipalities own/operate collection systems for wastewater and stormwater, WWTPs regulate wastewater that is directed to their facilities, while EGLE regulates wastewater that is discharged (released) into nearby rivers, lakes, streams, wetlands, and onto the ground where it can seep into groundwater.

Handling Wastewater

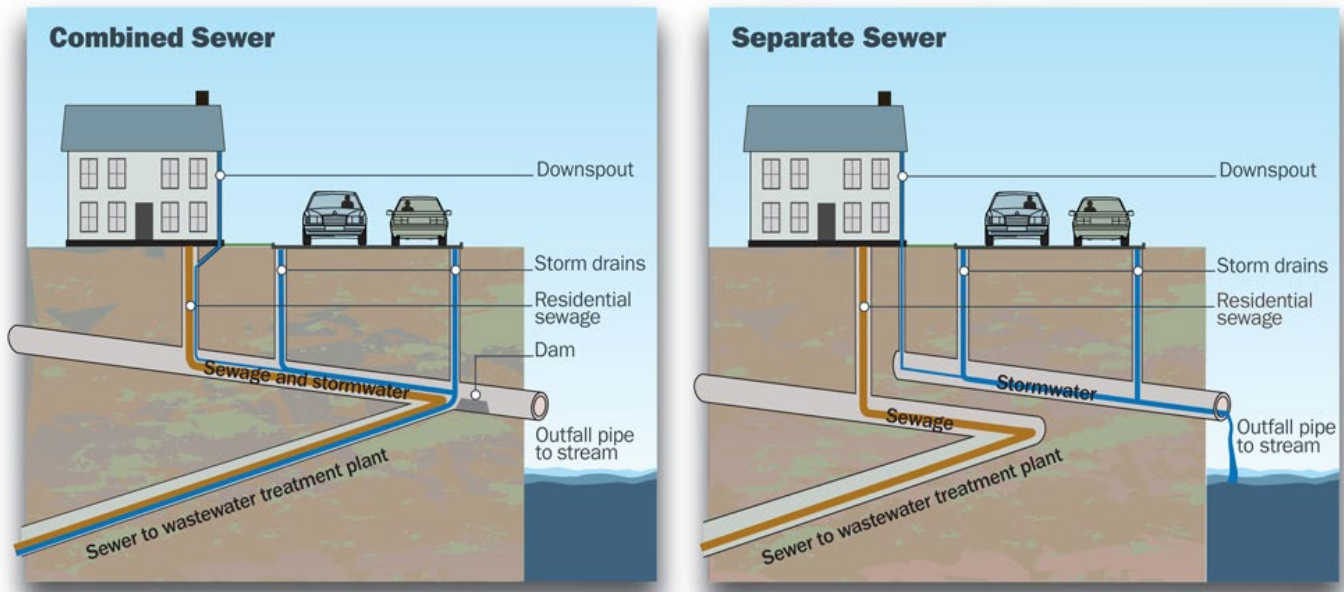
There are four potential options for handling power washing wastewater.

- Option 1. [Obtain permission to direct the wastewater to a WWTP through a sanitary sewer or combined sewer system](#)
- Option 2. [Collect the wastewater from the job site and arrange for disposal at a WWTP](#)
- Option 3. [Obtain authorization to discharge to the ground by meeting a groundwater discharge permit exemption or issuance of a groundwater discharge permit from EGLE.](#)
- Option 4. [Obtain a permit to discharge wastewater from the site to a creek, river, stream, or other surface water body from EGLE.](#)

Some options may be more practical than others depending on the characteristics of each job site.

Option 1: Obtain permission to direct the wastewater to a WWTP through a sanitary sewer or combined sewer system

Inspect the area to find out if there is access to a sanitary sewer or through a combined sewer. If a sewer destination is unknown, then contact the [local Public Works Department](#) to determine if there is nearby sewer access. The following graphic illustrates the design and function of the two common types of sewer collection systems, combined and separate.



Drains and gutters are typically found outside buildings, in parking lots, or along the streets and usually flow to separated storm sewers or storm drains that lead directly to a stream, lake or other water body. However, some cities, including some very large cities, have combined sewer systems, where storm water is combined with sanitary wastewater and flows to a WWTP. If you cannot verify the sewer destination, then you should not discharge to it.

If the area is served by a combined sewer or a sanitary sewer, then you must first obtain permission from the collection system owner. Written approval is recommended. Each WWTP is unique, and most are not designed to handle industrial wastes containing chemicals, metals, oils, etc. It is important to communicate all potential pollutants as part of requesting authorization to discharge to the collection system. In addition, many cities have strict ordinances against accessing the sanitary sewer by lifting manhole covers, so ensure all access to the collection system is in accordance with the approval.

Option 2: Collect the wastewater from the job site and arrange for disposal at a designated facility.

If there is no direct access to a sanitary sewer or combined sewer, you can collect the wastewater after arranging for disposal at sites that have notified EGLE's Materials Management Division (MMD) that they are a liquid industrial by-product designated facility.¹



A high-pressure power washing wand substantially reduces the amount of wastewater generated, which means lower transportation and disposal costs compared to washing with a low-pressure hose.

How to find a Liquid Industrial By-product Designated Facility:

1. Access EGLE's Waste Data System at EGLE.state.mi.us/wdspj/. Click on **Advanced Search** (located in the upper left corner of the screen below the EGLE logo).
2. Enter the desired search criteria:
 - a. Under "General Site Information" enter an address, county, or "[Michigan District](#)."
 - b. Under "Utilization Activities," click the drop down button to the left of "Hazardous and Liquid Industrial Waste Site Activity Information" to expand the search options.
 - c. Under the "Liquid Industrial Waste Activities" heading, select "Yes" next to "LIW Designated Facility" field.
 - d. Scroll to the top of the page and select the "Run Query" button to get a list of designated facilities. Click on the site name for more information about a facility. Some sites 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 WWTP](#) to see if they are interested in accepting your wastewater. Have the WWTP call your local [EGLE district office hazardous waste and liquid industrial by-products inspector](#) to discuss any questions about their requirement.

For details on liquid industrial by-product designated facility requirements, see the [Michigan Guide to Environmental Regulations, Chapter 2, Section 2.3.2](#).

¹ Liquid industrial by-product - formerly called liquid industrial waste before the law was amended in 2016.

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

Contact the disposal facility ahead of time to find out where wastewater should be taken and about other requirements you need to follow. The facility 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, pretreatment may be required (e.g., filtration, removal of metals, oil or grease, etc.) before it will be accepted.

Regulations Vary by Job Site

- **Wastewater from power washing homes or multiple residences** is exempted from the liquid industrial by-product and hazardous waste regulations. This includes used wash water from apartments, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic areas, and day-use recreation areas. As a result, it is not necessary for someone transporting household wastes to use a permitted and registered liquid industrial by-product transporter, nor are they required to prepare and keep a shipment document.
- **When a mobile power wash 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 or equipment cleaned and the company doing the cleaning are both responsible for meeting the waste requirements for proper collection, waste characterization, management, transport, and disposal. The service contract should clearly identify who will be ultimately responsible for properly managing the wastewater. If a customer is bringing items to the mobile power washer's location, then the mobile power washer company is considered the waste generator responsible for properly managing the wastewater.

Power Washing at Non-household Locations

Characterizing the Wastewater

Power washing wastewater must be characterized using knowledge or testing to determine whether it is classified as a hazardous or nonhazardous waste. Most power washing wastewater is nonhazardous, but there may be instances where it can be contaminated at levels that make it a hazardous waste. Examples include:

- **Old paint** stripped off commercial buildings or bridges may contain metals such as lead, chromium, cadmium, and mercury at levels that may make the wastewater hazardous waste. The paint chips need to be collected, evaluated, and disposed of properly. See EGLE's [abrasive blasting memo](#) and discuss requirements with the disposal company and your local [EGLE district office hazardous waste and liquid industrial by-products inspector](#).
- If **solvents** were used as a pretreatment to remove oils/greases, the wastewater may be a listed or characteristic hazardous waste depending on the product.
- When operating at a **hazardous waste cleanup site** or contaminated job site, the wastewater may need to be handled as hazardous waste.

See EGLE's [Waste Characterization Guidance](#) and [Example Record](#) with fillable form for more information on determining if the wastewater is a [liquid industrial by-product](#) or a hazardous waste. Keep a copy of the waste characterization record for at least three years. Contact your local [EGLE district office hazardous waste and liquid industrial by-products inspector](#) with questions.

Collecting the Wastewater

When collecting the wastewater:

- Vendors sell various types of portable wash water containment systems to collect 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 with a description of the contents, so people know what is in it. (e.g., “power washing wastewater” if it is nonhazardous. If it is hazardous waste, there are additional labeling and other waste requirements dependent on how much is generated. See the [Summary of Hazardous Waste Generator Category and Summary of Accumulation Requirements](#) for those details.
- See the “[Other Regulations to Consider](#)” section of this guidance.

Shipping the Wastewater

The requirements depend on who is transporting the wastewater:

1. When hauling your own generated nonhazardous wastewater or your own hazardous wastewater when the company is a [very small quantity generator \(VSQG\)](#) of hazardous waste:

- Create a shipping document (can be a log, invoice, bill of lading, or other record) that includes all of the following information:
 - Name and address of the generator.
 - Name of the transporter (same as the generator).
 - Type and volume of liquid industrial by-product in the shipment.
 - Date the liquid industrial by-product was shipped off site from the generator.
 - Name, address, and Site Identification Number of the liquid industrial by-product designated facility.
- Keep a copy of the shipping record for at least three years.
- Both the designated facility and the generator must manage the waste according to the liquid industrial by-product regulations to protect the environment and human health.

- Obtain insurance coverage as required by the [Hazardous Materials Transportation Act](#).
 - If using vehicles under 10,000 pounds gross vehicle weight, have fleet coverage of at least \$300,000.
 - 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 EGLE-MMD-Act138Applications@Michigan.gov or to:

EGLE MMD,
Attn: Transportation Program Technician
Warren District Office
27700 Donald Ct.
Warren MI 48092-2793.

2. When hiring commercial transporters to haul the waste:

- Select a transporter company with the appropriate waste hauling permit and registration. [Search the Waste Data System](#) to find transporters and their compliance information.
 - If wastewater is nonhazardous, hire liquid industrial by-products transporter.
 - If the wastewater is a hazardous waste and you are a VSQG of hazardous waste, you may hire a liquid industrial by-products transporter or a hazardous waste transporter. A VSQG generates less than 220 pounds of hazardous waste in a calendar month (approximately half a drum).
 - If the wastewater is hazardous waste and you generate more than 220 pounds of hazardous waste in a calendar month, meet the [hazardous waste requirement that apply based on your generator category](#) and hire a hazardous waste transporter.

Option 3: Obtain authorization to discharge to the ground by meeting a groundwater discharge permit exemption or issuance of a groundwater discharge permit from EGLE.

EGLE can authorize a discharge to the ground from a portable power washing operation by means of a permit exemption or issuance of a permit, depending on the nature of the discharge. The discharge of power washing wastewater may be conducted without a groundwater discharge permit (i.e., granted a permit exemption) if the washing is performed by the occupant of a household for washing buildings, vehicles, or other surfaces associated with the domestic occupation of the household. Discharge of portable power washing wastewater to the ground is also exempted from needing a groundwater discharge permit if the washing is performed by a commercial operator or in an industrial setting to remove **non-polluting** substances from vehicles and surfaces when no additives are used. “Additives” means any substance added to water to enhance its effectiveness for uses such as, but not limited to, cleaning and disinfecting soaps, degreasers, mold and algae removers, bleach, and acids. Biodegradable products are also considered additives. The wastewater from portable power washers used by a commercial operator or in a commercial or industrial setting that contains an additive may be discharged to

the ground with a valid groundwater discharge permit. The most common type of permit for this is a permit granted under the [Part 22](#) groundwater quality rules, specifically a Rule 2211(e) groundwater discharge permit.

Restrictions associated with a Rule 2211(e) groundwater discharge permit 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.
- Washing is limited to the removal of dirt and grime from the exterior of a vehicle, equipment, or stationary source. A vehicle's exterior does not include its undercarriage. Dirt and grime does not include a substance that was contained or transported in the vehicle as product or waste material.
- The discharge does not cause runoff of wastewater or the deposition of waste materials onto adjacent properties into a surface water body, or into a storm sewer system.
- The discharge does not cause the groundwater to exceed specified standards. These standards are set to protect the groundwater so that it remains fit for all its protected uses, including as a source of drinking water.
- The discharge is limited to 1,000 gallons of wastewater per month per acre of area in which the discharge occurs.
- A log is kept of discharges for a period of three years from the date of the discharge. The log shall include the date, location, the item washed, and the additive used (if applicable) for each discharge. The log shall be readily available for inspection and copying by an authorized representative of EGLE or local health department having jurisdiction.

Power washing operations that do not meet the requirements for either a groundwater discharge permit exemption or a Rule 2211(e) groundwater discharge permit (as described above) may be able to obtain a different type of groundwater discharge permit depending on the quality and quantity of the wastewater and the discharge location(s). Contact your local [EGLE district office groundwater staff](#) to discuss your particular circumstances and permitting options.

Option 4: Obtain a permit to discharge wastewater from the site to a creek, river, stream, or other surface water body from EGLE.

A company or individual wishing to discharge wastewater directly to a creek, river, stream, or other water body, directly or indirectly through a separate storm sewer or other conveyance, must obtain a permit from EGLE. This permit, called the National Pollutant Discharge Elimination System (NPDES) permit, must be issued before a discharge of wash water may occur. A permit would be necessary for each job site where there is power washing of vehicles or equipment and a discharge to a surface water body or a storm sewer. A separate NPDES permit is typically not

needed for power wash discharges from routine external building washdown (the removal of paint is not considered a routine washdown) or for pavement washing where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been previously removed) and detergents or other compounds are not used at sites covered under an Industrial Storm Water General Permit. Controls must be in place to address the potential discharge of sediment from these types of settings. There may instances where the only pollutant expected to be discharged is sediment. In this case, the wastewater must be filtered and discharged to the ground in accordance with Option 3 or approval must be obtained from the storm sewer system owner (usually a city or county) to discharge the filtered wastewater to the storm sewer.

All other power washing activities with discharge to a water body including vehicle/equipment washing must be authorized by an NPDES permit prior to discharge, which may not be practical considering that:

- The permitting process takes several months.
- A separate permit may be needed for each site of operation; each has a separate application fee and permit fee.
- The permit may require the wastewater to be treated remove oil, grease, detergents, solvents, metals, or other chemicals prior to discharge.
- The permit will require monitoring and analysis of the wastewater.
- Permits expire and must be reissued every five years.

Anyone with questions on NPDES permits or surface water discharges, should contact their local [EGLE district office NPDES staff](#).

Common Violations

These common power washing violations involve improper collection and disposal of wastewater:

- Discharging wastewater directly into waters of the state without proper authorization. This includes companies that pump or allow wastewater to run into ditches or storm sewers.
- 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 water body during a rain event.
- Failing to properly characterize the wastewater to determine if it's a hazardous waste, especially at sites with contamination or when paints are involved.

Other regulations to consider

- 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 WWTP or disposal facility needs to know about the chemicals that might be in the wastewater.
- 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 power washing products include:
 - Potassium hydroxide (detergents)
 - Sodium dodecylbenzenesulfonate, also called Sodium dodecylbenzene sulfonate (grease cutters and vehicle soaps)
 - Sodium hydroxide (detergents)
 - Trisodium phosphate, also called Sodium phosphate, tribasic (concrete and other cleaners)
- If you have met the threshold management quantities, visit Michigan.gov/Part5 for information on preparing a Pollution Incident Prevention Plan (PIPP), secondary containment, and release reporting requirements.
- Do not assume you are authorized to discharge your power washing wastewater into the storm sewer or directly to waters of the state if your company has been issued a storm water permit from EGLE. Questions about storm water permits and discharge activities that are authorized under the permit should be discussed directly with EGLE and the company's industrial storm water certified operator. If you are a consultant and have clients with Industrial Storm Water NPDES permits, consider getting certified. [Industrial Storm Water Certification training and exam information](#) can be found at Michigan.gov/IndustrialStormwater.
- Do not take your power washing 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 WWTP. The receiving location would also need to meet the liquid industrial by-product destination facility requirements. Discuss with your EGLE [District Hazardous Waste and Liquid By-products Inspector](#).

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. Learn more about the U.S. Department of Transportation requirements implemented by Michigan State Police in [Chapter 4](#) of the [Michigan Guide to Environmental Regulations](#).

Wastewater Collection Methods for Mobile Power Washers

EGLÉ does not require a specific type of containment method to be used for wastewater collection. However, if the system is being used to avoid obtaining a discharge permit or because the WWTP cannot receive the wastewater, then the system should be adequately designed to control and capture all the wastewater.

EGLÉ recommends that portable methods to capture wastewater be placed as far as possible from storm water conveyances or surface waters so that leaks can be detected and stopped before they discharge to the conveyance. The following are examples of collection methods:

- Pump systems range from a wet-dry vacuum to a sump pump. You can create a natural collection area to pump water from by setting up your containment system in an area that is slightly sloped. You need to ensure, however, that water does not wash over the berms (or under portable berms).
- Portable containment areas or wash pits can be made from waterproof tarps, heavy duty plastic or vinyl equipped with berms to prevent wastewater from running into storm drains or off-site. Materials that have been used for berms include sand bags or tubes, capped fire hoses, water filled tubing and PVC piping. Whatever containment material is used, it must seal tightly to the ground so that none of the wastewater can pass under it.
- Stationary and more permanent containment areas can be constructed of cement coated with an epoxy or other surface coating that is compatible with the additives and contaminants being washed off the items. Berms and pump systems may be used to contain wastewater and divert it to a holding tank or sanitary sewer.
- Containment devices when power washing smaller pieces of equipment include portable vinyl swimming pools, plastic 55-gallon drums on casters, and flat metal or plastic containment pads.
- Commercial wastewater collection systems are available for power washing. These systems can range from portable wash pits to self-contained water recycling systems. Contact your local vendor for more information.
- Storm drain covers. These are not recommended because a leak would result in immediate and undetected discharge to the storm sewer system.

Glossary

Groundwater: Water below the land surface in a zone of saturation.

Sanitary Sewer: A collection system that receives wastewater from restrooms, sinks, and floor drains in many homes and businesses (especially in cities). Some industries may also discharge treated wastewaters directly into sanitary sewers. Wastes travel through a system of pipes to a local WWTP. Some sanitary sewers are designed to carry storm water too. These may be called “combined sewers.”

Storm Sewer: A system for the collection and conveyance of rainwater. Storm sewers are often underground pipes with storm grates and catch basins for the water to enter the system. Roadside ditches and curbs and gutters along roads and parking lots are also storm sewers. Water collected in storm sewers travels directly into a stream, river, or other water body without being treated.

Industrial Storm Water Permit: A permit issued by EGLE’s Water Resources Division for certain regulated industrial activities and businesses that have processes, storage or material handling such that storm water has the potential to contact industrial materials. Such contact can cause pollutants such as metals, oils, chemicals, and solvents to be carried to streams, lakes, or other surface waters without treatment. As part of the permit, the business must develop a Storm Water Pollution Prevention Plan to reduce or eliminate pollutants in storm water runoff.

Surface Water: All waters of the state excluding groundwater but does not include drainageways and ponds used solely for wastewater conveyance, treatment, or control.

Waters of the State: Groundwaters, lakes, rivers, wetlands, and streams and all other watercourses and waters within the jurisdiction of the state and the bordering Great Lakes.

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