

Many companies involved with mobile power washing in Michigan request information on environmental regulations that apply to them. These companies include independent mobile power washers, janitorial services, municipalities, airports, fleet maintenance, parking lot maintenance, shopping malls, grocery stores, restaurants, military, property management companies, painting contractors, and many others. 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. Therefore, this publication was developed to assist these companies in the identification of the requirements for managing wastewater from mobile power washing in Michigan.

The regulation of wastewater from mobile power washers will depend on the discharge destination, with the two primary regulatory entities* being the publicly owned wastewater treatment plants (POTWs) and the State of Michigan Department of Environmental Quality (DEQ), Water Bureau (WB)¹. The POTW regulates wastewater that is directed to their facilities, and the WB regulates wastewater that is discharged (released) into nearby waters including rivers, lakes, streams, and into the ground, where it can seep into groundwater.

The DEQ offers four options for handling power washing wastewater. Some options might be more practical than others and will depend on the characteristics of each job site. Options are elaborated below, but if you have additional questions about managing this wastewater, then call the State of Michigan Environmental Assistance Hotline: 1-800-662-9278.

Option 1:
Obtain permission to direct the wastewater to a Publicly Owned Treatment Works (POTW) through a sanitary sewer or combined sewer system at the job site.

Inspect the site to find out if there is access to the POTW through a public sewer collection line (sanitary sewer) or through a combined sewer. If sewer destination is unknown, then contact the local Public Works Department to learn sewer destinations at a facility. The graphic on the next page will help provide basic terminology relevant to this inquiry through an illustration of the two common types of sewer collection systems.

¹ The regulatory entities responsible for regulating this wastewater have various legal mandates for their programs. The relevant State of Michigan statutory requirements as related to discharges into state waters are found within Section 3109 and 3112 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); MCL 324.3109 and MCL 324.3112. For surface water discharges, the wastewater discharge program was delegated to the State of Michigan from the federal government. Therefore, these wastewater discharges must also be consistent with the Federal Water Pollution Control Act, 33 U.S.C. 1251, et seq. and regulations enacted pursuant to this law (Title 40 Code of Federal Regulations, Part 122, EPA administered Permit Programs: The National Pollutant Discharge Elimination System). The legal basis for discharges to the POTW will be found in local sewer use ordinances.

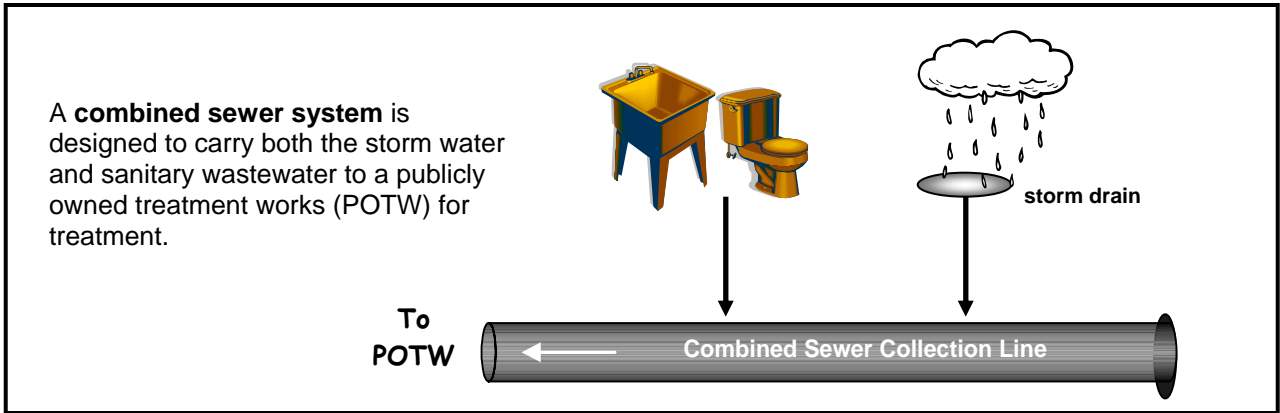


Figure 1: Combined Sewer System

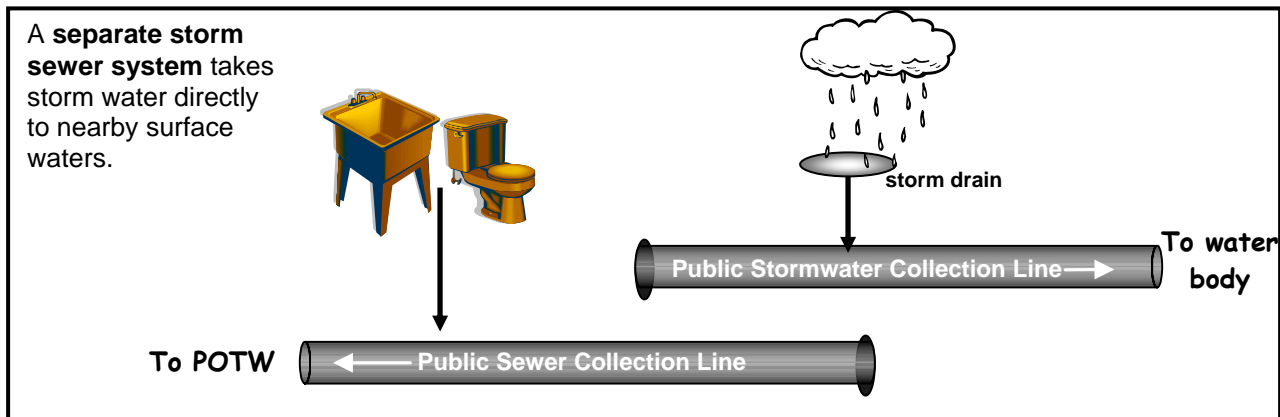


Figure 2: Separated Sewer System

Drains and gutters found outside buildings, in parking lots or along the streets are usually storm sewers or storm drains that lead directly to a stream, lake or other water body; (regulations related to discharges to the storm sewers is detailed in Option 4). However, some cities, including some very large cities have combined sewer systems, where storm water leads directly to the POTW. If you cannot verify the sewer destination, then you should not discharge to it.

If the facility has a combined sewer or you wish to discharge to a sanitary sewer, then you must first obtain permission from the POTW; written approval is recommended. Each wastewater treatment plant is unique and most are not designed to handle industrial wastes containing chemicals, metals, oils, etc. So it is important that they know what and when you are discharging. A large wastewater treatment plant may easily handle the wastewater from your power washing activities, while a smaller treatment plant may have some special requirements. In addition, many cities have strict ordinances against accessing the sanitary sewer by lifting manhole covers; so learn about proper sanitary sewer access with the POTW. This is usually done at the site by running wastewater into a utility sink or floor drain connected to the sanitary sewer.

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

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

1. Select advanced search in the Waste Data System at www.deq.state.mi.us/wdspi/
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 “Contact DEQ”)
 - 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 to accept liquid industrial waste.

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

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 power washing 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 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 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. If a customer is bringing items to the mobile power washer’s location, then the mobile power washer company is considered the waste generator.

The wastewater management requirements from power washing activities depend upon whether the wastewater is hazardous or non hazardous waste. Most power 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:

- Old paint stripped off commercial buildings 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 off the ground, evaluated and disposed of properly. Discuss requirements with the solid waste disposal company.
- 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.
- When operating at a hazardous waste cleanup site or contaminated job site, the wastewater may need to be handled as hazardous waste.

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:

- 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 so people know what is in it. (E.g. “power washing 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 power wash?”

When shipping the wastewater:

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

Shipping Option 1: 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 or call 517.336.6580.

Shipping Option 2: 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 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/deqwaste.
- 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.

Shipping Option 3: 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 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.
 - If wastewater is non hazardous, hire uniform liquid industrial waste transporters.
 - If it is hazardous waste and you are a conditionally exempt small quantity generator (CESQG) of hazardous waste, you may 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.
 - 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.

**Option 3:
Obtain authorization to discharge to the ground by means of an exemption,
notification or permit from the Water Bureau.**

Depending on the type of discharge, the MDEQ can authorize a discharge to the ground from a power washing operation by means of an exemption, notification, or permit depending on the nature of the discharge. The discharge of power wash water may be exempt if the washing is done by the occupant of a household for washing buildings, vehicles, or other surfaces associated with the domestic occupation of the household. It is also exempt if the washing is done by a commercial operator or in an industrial setting to remove non-polluting substances from vehicles and surfaces when no additives are used. The wastewater from portable power washers used by a commercial operator or in a commercial or industrial setting that contains an additive may qualify to be authorized by notification. The WB will provide the appropriate notification form that needs to be completed and returned.

Some of the restrictions on notification are as follows:

- 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.
- 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.

Power wash operations that do not meet the requirements for either an exemption or authorization via notification may be able to obtain a groundwater discharge authorization depending on the quality and quantity of the wastewater and discharge location. **Any portable power washer discharge greater than 1,000 gallons per month per acre in which the discharge occurs must be authorized by a groundwater discharge authorization issued to the owner or operator of the vehicles, equipment or stationary source being washed. Under these circumstances a commercial portable power washer must not be the applicant.** Contact the WB to discuss your particular circumstances. For further information contact the district office in your area that is listed at the end of this fact sheet or contact the [Groundwater Permit Program](#).

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

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 WB. 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 there is power washing of vehicles or equipment and a direct discharge to a surface water body or a storm sewer. An NPDES permit is generally not needed for power wash discharges from routine building washdown without the use of detergents or other compounds, or 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. For anything other than routine building washdown (use of power washing to remove paint is not routine building washdown), pavement washdown, vehicle or equipment power washing, or if you have any other questions about managing wastewater, you should discuss your options with a staff member of the WB. Applying for an NPDES permit may not be a practical option for mobile power washers.

Consider the following:

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

Anyone still seeking to apply for an NPDES permit, or for questions on surface water discharges, contact your [local district office](#) and request to speak with a staff member of WB.

What are some violations that MDEQ sees?

Common power washing 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 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 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 or when paints are involved.

Glossary

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

POTW: a publicly owned treatment works. A municipal treatment plant that handles sewage and wastewater from homes and businesses. Wastewater is treated at the POTW and then discharged according to a permit to a stream, river, lake or groundwater.”

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 POTW. 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.

Storm Water Permit: a permit issued by the MDEQ Water Bureau for certain industrial activities and businesses that have processes, storage or material handling such that storm water is likely 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. As part of the permit, the business must develop a Storm Water Pollution Prevention Plan to control 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, and streams and all other watercourses and waters within the jurisdiction of the state and also the Great Lakes bordering the state.

What else should I consider?

Other regulations might apply to your job site.

- ✓ 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 wastewater treatment plant 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 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 meet the threshold planning quantities, see the [Part 5 rule website](#) at 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.
- ✓ Do not assume you are authorized to discharge your power washing wastewater into the storm sewer or directly to waters of the state if you are working at a company that has been issued a 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 WB and the company’s industrial storm water certified operator. If you have many clients with Industrial Storm Water NPDES permits, then consider getting certified. Industrial Storm Water Certification is free and is good for 5 years. Materials and information along with the exam schedule can be found [online](#).
- ✓ 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 POTW. The receiving location would also need to meet the liquid industrial waste destination facility requirements. Discuss with the Waste and Hazardous Materials Division [District Office](#).
- ✓ 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 “Specialized Divisions” “Motor Carrier Division” “Hazardous Materials” “Hazardous Materials Bulletins”. Direct chemical transportation questions to Sgt. Susan M. Fries at 517/336-6580.

What methods can be used to collect power washing wastewater at a job site?

MDEQ does not require that a specific type of containment method be used for wastewater collection. However, if the system is being used to avoid obtaining a discharge permit or because the wastewater treatment plant cannot receive the wastewater, then the system should be adequately designed to control and capture the wastewater. MDEQ 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. Some of the following collection methods have been employed by power washers:

- ✓ Pump systems range from a wet-dry vacuum to a sump pump. You can create a natural catch basin 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). Besides the following, there may be other methods you can use to manage wastewater at the site.
- ✓ 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. A listing of firms selling this type of equipment can usually be found in the telephone book yellow pages under *Pressure Washing Services and Equipment*.
- ✓ Storm drain covers. These are not recommended because a leak would result in immediate and undetected discharge to the storm sewer system.

Where can I get more information?

Most, but not all requirements have been discussed in this publication. Refer to the regulations or discuss your requirements with the agency staff. Referenced publications can be downloaded from the Internet as linked within this document or you may call 800-662-9278 to request a copy.

- For **surface water discharge questions** contact the WB District Office for your area. Surface water (NPDES) regulations, application forms, publications and staff listings can be accessed from the Internet at www.michigan.gov/deqwater
- For **groundwater discharge questions** contact either the WB District Office for your area or the WB [Groundwater Discharge Program](#) at (517) 241-2151. Groundwater discharge regulations, forms and other information can be accessed [online](#).
- If you are unsure who to contact in MDEQ, call the Environmental Assistance Division at 800-662-9278 or Email at deq-ead-env-assist@state.mi.us

For discharges to publicly owned treatment works contact the local facility operator.

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