

Restaurant Grease: Know Your Environmental Regulations

Are fats, oils or grease from your restaurant causing environmental problems? Grease vented to kitchen exhaust hoods or sent down the drain can cause environmental problems and result in violations or penalties. It's important to know the environmental regulations that may apply to your restaurant so you can better manage grease to avoid potential problems.

How can kitchen exhaust hoods cause an environmental problem?

Kitchen exhaust hoods are used to remove heat, smoke and grease from ovens, stoves, grills and fryers. As the grease goes up the hood, it cools and condenses on the exhaust ductwork and fan. While some grease collects on the exhaust ductwork, grease can drain out of the exhaust fan enclosure.

If you don't maintain your fan's grease collection system, grease will eventually drain onto your roof. For example, if your exhaust fan collects four quarts of grease every three months, and you only change the absorbent pads (which can hold four quarts) when the fire inspector comes for their annual inspection, 12 quarts of grease could be on your roof!

And, unfortunately some of this grease will not stay on your roof. Over time, grease that collects on your roof will wash into the rain gutters and storm sewer. Grease can also flow down the side of your building onto a parking lot and into a storm sewer. Grease that enters the storm sewers will eventually make its way to the nearest stream or river where it may discolor the water, kill plants and fish, or cause an obnoxious odor.

Are there Ohio EPA regulations concerning grease-contaminated storm water?

Grease is considered a pollutant. Under Ohio's water pollution control laws, a business cannot discharge any pollutant into waters of the state without obtaining a permit from Ohio EPA. Waters of the state include streams, rivers, lakes, ponds, marshes, watercourses, waterways and springs. The requirement also applies to conveyances, such as ditches and storm sewers that drain to waters of the state. Therefore, unauthorized discharges of grease-contaminated storm water into storm drains or waters of the state are illegal.

Grease that gets into storm water can draw attention to your business. Your neighbors or customers might notice the grease on your building, in the parking lot or in a nearby waterway, and complain to Ohio EPA or the health department. Inspectors may trace the grease back to your restaurant and will require you to perform any needed clean-up. You may also have to pay an environmental penalty.

Is it enough to comply with the NFPA 96 standard?

The National Fire Prevention Association (NFPA) developed the 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations. This standard is good at preventing fires, but it's not enough to prevent environmental problems. The NFPA 96 Standard does outline some good criteria for a grease collection system, but you need to ensure that grease doesn't wash off your roof. Cleaning equipment as required by the NFPA 96 Standard can also cause environmental problems if done improperly. You need to be especially careful when washing equipment outside.



Grease from this restaurant exceeded the exhaust fan's collection capacity and eventually entered the storm water drain. DON'T let this happen at your business.

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How can cleaning my equipment create an environmental problem?

Washing your exhaust system, filters, storage containers, areas around the storage container and other items can cause environmental problems if wash water is not managed properly. Just like any grease that gets washed to a storm sewer from the roof, wash water from cleaning equipment can cause environmental problems if allowed to enter a storm drain. In addition to grease, this wash water carries cleaning chemicals, which can cause serious pH or foaming problems in streams, lakes, ponds and other waters.

You or your contractor cannot clean equipment outside, or clean the area around a storage container in any way that will allow the wastewater to drain to a storm sewer, stream or other water of the state. This type of process wastewater discharge requires a permit from Ohio EPA. If you don't have a permit, you must properly manage this wastewater. This may include sending it to your grease trap (with the approval of the local wastewater treatment plant) or collecting it and having it hauled off site for proper disposal. You can obtain more information from the Office of Compliance Assistance and Pollution Prevention's (OCAPP) fact sheet on mobile power washing, available at epa.ohio.gov/portals/41/sb/publications/powerwash.pdf or by calling the OCAPP at (800) 329-7518.

What about wastes and wastewater from food preparation, dishwashing or floor washing?

Wastewater from food preparation, dishwashing, and floor washing are considered process wastewaters and are subject to Ohio EPA's regulations. The regulations that apply depend on whether your restaurant has a direct or indirect discharge.

Direct Discharges to Waters of the State

Any discharge of process wastewater to waters of the state requires an NPDES permit from Ohio EPA. Direct dischargers are usually required to treat wastewater to remove harmful contaminants (for example, chemicals, oil or grease) before the wastewater is discharged.

If treatment is required, you may also need a permit-to-install (PTI) from Ohio EPA to construct any wastewater treatment or storage unit. A PTI may be required for your grease trap, depending on factors such as the location, size and design of the trap.

Discharges to a Municipal Sewer System (Indirect Discharges)

If your restaurant is connected to a public wastewater treatment plant (POTW), you may be able to discharge your restaurant wastewater to the POTW. However, POTWs generally are not designed to handle wastewater with contaminants like fats, oils and grease. Before you discharge any wastewater to your local POTW, you need to contact the POTW directly for permission. You may be required to obtain a permit before you can discharge your wastewater to the POTW. You may also be required to conduct pretreatment to remove contaminants like fats, oil and grease before discharging your wastewater. If you are required to install wastewater treatment or storage units, this activity may require a PTI from Ohio EPA. For indirect discharges, a PTI from Ohio EPA is usually not required for grease traps because they are typically constructed under building code requirements. More information about grease traps is available in the next section.

Contact your local wastewater treatment plant to discuss their requirements. Ohio EPA has a list of wastewater treatment plants available at epa.ohio.gov/dsw/pretreatment/index.aspx. If your area is not listed or you are unsure of who to call, call your local water or utilities office to get contact information

Food Service Operations and On-Site Sewage Treatment Systems

Ohio law prohibits discharging process-related wastes and wastewater into on-site treatment systems such as septic tanks and leach fields (called injection well systems). On-site systems like these are designed to handle sanitary wastes from restrooms and sinks. Putting other materials through the system such as food waste, fats, oils, chemicals or other contaminants can clog up the system and damage the helpful bacteria that break down wastes.

If you want to locate a restaurant in an area with no access to public sewers, it is very important that you contact Ohio EPA's Division of Surface Water to discuss options to manage your waste and wastewater. You may be unable to use or construct an on-site system to handle food waste and wastewater. To help avoid problems, contact Ohio EPA before you purchase property. If you live in an unsewered area and want to convert all or part of your home to a food service operation, contact Ohio EPA first to talk about your options.

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What about requirements for grease traps?

It is important that your grease trap is properly sized, installed and maintained. Proper maintenance will help ensure that your grease trap is functioning properly, minimizing the amount of grease that ends up in your wastewater. However, grease trap maintenance often is neglected, so be sure to have the trap inspected and cleaned out regularly.

You should follow the manufacturer's recommended maintenance and clean-out schedule. Check on any local requirements, including sewer use ordinances and health department requirements. In the absence of these, it's generally recommended that you clean your grease trap when the accumulated grease and sediment make up 25 percent of the total liquid volume of the trap.

Building codes set design standards, and require the installation of grease traps for all grease-bearing wastewaters except those from garbage disposals. Grease trap inspections are usually done by your local health department. Ohio EPA regulations apply to the wastewater discharge.

Larger grease traps or fats, oils and grease (FOG) interceptors not required as part of the building codes require a permit-to-install (PTI) from Ohio EPA's Division of Surface Water (DSW). There is an exception to the PTI requirement, but the FOG interceptor must meet specific requirements spelled out in the PTI rules. For more information on the PTI requirements contact your local district office DSW.

How can I ensure that my grease trap works most effectively?

First, you can use scrapers or other dry cleanup practices to reduce the amount of grease that goes down the drain. Other ideas to ensure good operation of your grease trap:

- Don't pour fats, oil or grease down the drain.
- Educate your staff about proper cleaning procedures.
- Don't let food waste go through the grease trap. It can reduce the trap's effectiveness.
- Regularly inspect and clean out your grease trap.
- Use a grease recovery device to remove grease from sources that adds large amounts of grease to your wastewater, such as pot wash sinks.
- Use low-temperature automatic dishwashers to minimize the amount of emulsified grease that will pass through the grease trap, or minimize the amount of grease on dishes going to an automatic dishwasher.

What should I do with my grease waste?

Properly managing grease waste is important. Grease waste stored on site must be stored in a proper container, away from storm drains. The container should not allow rainwater to enter or grease to leak.

Waste fats, oils and grease might be valuable to a rendering company. A renderer will use your waste fats, oils and grease to make other products. The renderer may take your waste at no cost. Whether a rendering company will take your grease waste depends on the quality of your grease and oils. A rendering company may not take waste from your grease traps if it is heavily contaminated by foods, other solids or detergents.

If you do not work with a rendering company, a grease collection service or a grease trap cleaning service can haul away your grease waste. It is important, however, that you work with a reputable company that will properly manage your grease waste. You can find companies in the yellow pages under rendering companies, grease collection services or grease trap cleaning services.

What should I do about the grease that accidentally spills outside?

You need to clean up any grease that spills or is released outside as soon as possible. But, preventing spills should be your first priority. You can prevent spills by emptying containers before they are full, covering containers and providing the proper equipment to transport grease waste. Use dry cleanup methods, like a scraper or an absorbent pad, if a spill occurs. DO NOT wash the spill or spill residues into a storm drain.



DON'T have poor grease waste management that will allow grease and other waste to accumulate on the parking lot and reach the storm drain.

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You are required to report the spill to Ohio EPA at (800) 282-9378 if the spill: 1) causes a film, sheen, or discolors the water; 2) causes a sludge or emulsion in the water or upon the shoreline; or 3) 25 gallons or more is released into the environment.

More Information

If you have questions or need help in understanding Ohio EPA's regulations, you can contact Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) for help. OCAPP is a non-regulatory office of Ohio EPA with a goal of helping businesses comply with environmental regulations and permitting requirements. For more information, contact OCAPP at (800) 329-7518, or visit epa.ohio.gov/ocapp.



Central Office

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, OH 43215
(614) 644-3020

Central District Office

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, OH 43215
(614) 728-3778
(800) 686-2330

Northwest District Office

347 N. Dunbridge Rd.
Bowling Green, OH 43402
(419) 352-8461
(800) 686-6930

Southeast District Office

2195 E. Front Street
Logan, OH 43138
(740) 385-8501
(800) 686-7330

Northeast District Office

2110 E. Aurora Rd.
Twinsburg, OH 44087
(330) 963-1200
(800) 686-6330

Southwest District Office

401 E. Fifth St.
Dayton, OH 45402
(937) 285-6357
(800) 686-8930

Toll-free numbers are for citizens with questions or concerns about environmental issues.

The regulated community should use the business line for routine business.

Spills and emergencies should be reported to (800) 282-9378.