

May 2001
Number 20

Restaurant Grease: Knowing Your Ohio EPA 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 duct work and fan. While some grease collects on the exhaust duct work, grease can drain out of the exhaust fan enclosure.

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.

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 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 will trace the grease back to your restaurant, and you will be required to clean up your mess. You may also have to pay an environmental penalty.



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.

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.

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.

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 an NPDES 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 Small Business Assistance Office's fact sheet on mobile power washing, available on the Web at www.epa.state.oh.us/other/sbao/pwfinal.html or by calling the SBAO at (800) 329-7518.

What About Other Wastewater Discharges from Activities Such as Food Preparation, Dishwashing or Floor Washing?

Wastewater from food preparation, dish washing, 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

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 (e.g., 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 of the trap and whether it is considered part of the building sewer. If Ohio EPA authorizes the use of an on-site treatment system, the installation of grease traps will be reviewed by Ohio EPA with the plans and application for the on-site 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. They are designed to handle sewage-related wastes and wastewater only.

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 (e.g., 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.

NOTE: Under Ohio EPA's regulations, there are specific permitting requirements and prohibitions against discharging contaminated fluids into on-site treatment systems such as septic tanks and leach fields (injection well systems). Ohio EPA generally discourages the use of on-site treatment systems such as septic tanks for disposal of non-sanitary wastes. Unauthorized discharges may cause violations, and the discharged materials (chemicals, solids, oil, etc.) could damage your on-site system. If your restaurant is connected to an on-site treatment system, contact Ohio EPA's Division of Surface Water to discuss options to manage your wastewater.

For indirect discharges, a PTI from Ohio EPA is usually not required for grease traps because they are typically constructed under building code requirements.

You can contact your local Ohio EPA district office, Division of Surface Water for more information on the wastewater discharge and permitting requirements, or to get assistance to identify your local POTW contact.

I Generate Other Waste Grease at My Restaurant. Can This Go Down the Drain?

Your fats, oils and grease waste can also cause environmental problems. Disposing any fat, oil or grease down a sink or floor drain can cause serious problems for you and your drainage system.

Wastewater treatment plants are designed to treat sanitary wastes only, not other contaminants such as fats, oil and grease. If you discharge a large amount of fats or grease to your local POTW, this can disrupt the treatment plant and cause significant operational problems. Also, fats, oil and grease can congeal in sewer pipes, pumps and other equipment. Blocked sewer pipes or pumps can quickly lead to significant environmental problems. In both cases, your restaurant will be responsible for treatment plant upsets and clogged collection pipes.

You should NOT dispose of any fats, oils or grease down any drains that lead to an on-site septic system. This can cause your septic system to fail.

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 is often neglected, so be sure to have the trap inspected and cleaned out regularly.

Your maintenance and clean-out schedule should follow the manufacturer's recommendations and 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.

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 on 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 waste water, 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?

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.

Properly managing your 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 rain water 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 the waste is heavily contaminated by foods, other solids and 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*.



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.

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.

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.

Where Can I Get More Help?

This fact sheet is a starting point to help you understand and comply with the environmental regulations that apply to your restaurant. If you have any questions or need more information, please contact Ohio EPA's Small Business Assistance Office at (800) 329-7518 or (614) 728-8573 for *free* and *confidential* help. You can also contact your local Ohio EPA district office, Division of Surface Water for assistance. See the map for the district office that covers the county where your business is located.

Restaurant Grease: Knowing Your Ohio EPA Regulations

Fact Sheet

Central District Office (CDO)
3232 Alum Creek Drive
Columbus, Ohio 43207
tel: (614) 728-3778

Southeast District Office (SEDO)
2195 Front Street
Logan, Ohio 43138
tel: (740) 385-8501

Southwest District Office (SWDO)
401 East Fifth Street
Dayton, Ohio 45402
tel: (937) 285-6357

Northeast District Office (NEDO)
2110 E. Aurora Road
Twinsburg, Ohio 44087
tel: (330) 963-1200

Northwest District Office (NWDO)
347 N. Dunbridge Road
Bowling Green, Ohio 43402
tel: (419) 352-8461

