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## Ohio EPA's Wastewater Regulations and Home-Based Businesses

### Do You Want to Start a Business From Your Home?

Are you thinking about operating a business from your home? Ohio has seen a growing number of home-based businesses, including auto repair shops, beauty salons, equipment repair, medical/dental offices, kennels, bakeries and others. One important thing to consider in determining if your home location is suitable for a business, is how wastewater and sewage from the business will be handled.

As a first step, it is important to know what kind of sewage treatment system you have and what effect the business operation may have on that system. It is also important for you to understand Ohio EPA's wastewater regulations and how these would apply to your business activities.

### Does Your Home Have an On-Site Sewage Treatment System?

Your home may have its own on-site treatment system (called a "residential treatment system") for handling sewage and wastewater. These systems are common for homes in small communities and rural areas. However, there are also areas within large cities that are "unsewered," where homes and small businesses still have their own on-site treatment systems.

An on-site residential treatment system usually consists of a buried septic tank or aeration tank and a drainfield (also called a leach field or leach bed) in the front or backyard. Wastes from the kitchen, bathrooms and laundry areas flow into the septic tank where solids are trapped and wastewater flows from the tank to the drainfield. The soils surrounding the drainfield help to gradually remove contaminants from the wastewater as it moves through the ground.

If you want to expand or use a portion of your home as a business or if you want to construct a building on your property your existing on-site sewage treatment system may NOT be adequate to handle waste from the business. The system may not be large enough or adequately designed to handle the type of waste or increased volume of sewage and wastewater discharged from the business, particularly if you plan to add restrooms, sinks or kitchen facilities.

On-site treatment systems are designed mainly to handle domestic sewage and wastewater. Discharging higher amounts of solids like dirt, food, fats or oils into the on-site treatment system can quickly fill up a septic tank or clog a drainfield.

In addition, chemicals like paint thinners, acids, detergents, automotive wastes and others can kill the important bacteria that helps the system break down wastes and function properly. These chemicals can also travel through the septic tank into the drainfield, making their way directly into underground sources of drinking water. Because of this, Ohio EPA has strict regulations against the use of on-site treatment systems for the disposal of process water or industrial-related wastes from a business.

### If I Have a Residential Sewage Treatment System, Does This Mean I Can't Run a Business From My Home?

Not necessarily. It's important that you first know what kind of system you have and its limitations. However, this doesn't mean that running a business from your home is impossible. The existing system may be adequate for the proposed business. It might be possible to expand or modify the existing on-site sewage treatment system to handle sanitary waste from the business. This might mean adding an additional septic tank to the system, increasing the size of the drainfield or building a new drainfield.

Local health departments are responsible for regulating private residential sewage treatment systems. However, when all or part of a home is converted to a business operation, the sewage treatment system is regulated by Ohio EPA. Ohio EPA's requirements for a sewage treatment system servicing a business can be quite different from the requirements of a residential system.

Before you modify the existing sewage treatment system to accommodate your new business, you will have to get a permit-to-install (also called a "PTI") for those modifications from Ohio EPA's Division of Surface Water. If your sewage treatment system discharges water to a creek, river, ditch or other body of water, you will need another permit for this discharge from Ohio EPA (called an "NPDES" permit). In addition, you would very likely be prohibited from using the on-site treatment system for disposing of process or industrial wastewater.

## **Help Avoid Problems. . . Talk to Ohio EPA Before Making Any Changes to Your On-Site Sewage Treatment System**

Before you set up your business at home, contact your local health department or talk to someone from the district office of Ohio EPA's Division of Surface Water. The division staff can help you evaluate how your proposed business will affect the operation of the existing on-site sewage treatment system. In addition, they can tell you if changes to the system will be needed, the permitting process for those changes and the possible limitations on the use of the system.

A professional consultant specializing in the design of sewage treatment systems can also help you evaluate an existing on-site system. This information will give you an idea of the cost and time involved in changing your system for business use and let you make a better decision on whether to set up your business at home or explore other alternatives. The consultant can also help you prepare the necessary plans for modifications and represent you in inspecting the contractor's installation of the modifications.

It is important to remember that Ohio EPA's regulations will likely require that you submit an application and obtain a "permit-to-install" (PTI) BEFORE you make any changes to the sewage treatment system. The PTI application is reviewed and approved by Ohio EPA before construction can proceed.

To ensure that your system can be used and to avoid costly mistakes, it is important to discuss your proposed activities with your local health department and Ohio EPA beforehand. Contact your Ohio EPA district office, Division of Surface Water with any questions that you have.

## **Is Your Home Connected to a Sanitary Sewer?**

If you are unsure, contact your local municipal engineering office or sewer department for verification. If your home is connected to a public wastewater treatment plant through a sanitary sewer, the process of converting to business activities may be easier. Often, the local wastewater treatment plants (also called "POTWs") are responsible for regulating the companies that discharge wastewater to them. A large public wastewater treatment plant may easily be able to handle the additional wastewater from your business.

However, even large wastewater treatment plants are not generally designed to handle industrial wastes like chemicals, metals, oils, etc. They are designed to handle sewage-related wastes and wastewater. Because of this, the treatment plant authority may require you to perform "pretreatment" (to reduce or remove metals, oils, grease or other substances) before discharging your wastewater to them.

Again, is it important that you talk to the treatment plant authority about your proposed business activities beforehand. Permission to discharge to the POTW and /or obtaining a permit may be necessary. In addition, you may also be required to comply with other requirements by Ohio EPA's Division of Surface Water. For example, if you need to construct any units for wastewater storage or treatment, you will be required to obtain a "permit-to-install" from Ohio EPA.

## **Are There Other Options for Handling Industrial or Process Wastewater From My Business?**

Yes, there may be another option if you have an industrial wastewater that you can't discharge to your on-site sewage treatment system, or if you can't gain access to a sanitary sewer in your area. You may be able to collect industrial wastewater from your business in a separate holding tank. In this situation, the tank would need to be emptied periodically by a waste hauler and sent to a disposal facility. Disposal of wastewater can be arranged with your local POTW. If your industrial wastewater is classified as a hazardous waste, disposal at a permitted hazardous waste facility may be required.

The holding tank option would only apply to the collection of industrial wastewaters (e.g., process washwaters, wastewater from equipment cleaning, etc.). This option would NOT be approved by Ohio EPA for collection of septic (sewage) related waste or wastewater.

If you want to install a separate holding tank to collect industrial wastewater, it is important to discuss this activity with Ohio EPA's Division of Surface Water first. You may be required to submit an application and obtain a "permit-to-install" for the holding tank. The permit would specify the requirements for wastewater disposal and record keeping.

If the wastewater collected in the tank is considered a hazardous waste, you must meet tank system requirements under Ohio EPA's hazardous waste regulations. If you have questions about the hazardous waste regulations, contact the Division of Hazardous Waste Management at your local Ohio EPA district office.

It's important for you to know that you CANNOT discharge wastewater directly into creeks, rivers, wetlands or other surface waters (called "waters of the state") without obtaining a permit from Ohio EPA. This includes discharging industrial wastewater into conveyance systems (storm sewers and field tiles, for example) that lead to surface waters. Also, you CANNOT discharge wastewater from the business onto the ground outside of a building. By doing any of these activities, your company could be found in violation of the Clean Water Act or other environmental laws.

## Where Can I Get More Information?

Selecting the right business location is an important decision for many reasons, including minimizing unexpected costs of managing sewage and wastewater. If you have additional questions or need more information, contact your local health department or Ohio EPA's Division of Surface Water at your local district office. [See Map.]

## Glossary of Terms

### NPDES permit

Called the National Pollutant Discharge Elimination System permit. This permit is issued by Ohio EPA to anyone who wants to discharge wastewater into "waters of the state." Applications for this permit must be approved by Ohio EPA before the discharges can occur.

### POTW

Called a Publicly Owned Treatment Works. It is a treatment plant that handles sewage and wastewater from homes and businesses. Most POTWs are owned and operated by a village, city or county. Wastewater is treated at the POTW and then discharged, usually to a stream, river or lake.

### Residential treatment system

A septic or aeration system designed to treat sanitary waste/wastewater generated from a one, two or three family dwelling. Septic systems are commonly found in homes where sanitary sewers are not available.

### Sanitary sewer

Rest rooms and sinks in many homes and businesses (especially in cities) are hooked up to a sanitary sewer. Wastes travel through a system of pipes to a local POTW. Wastewater is treated at the POTW and then discharged, usually to a stream, river or lake.

### Storm sewer

A collection system for rainwater and snow melt run-off. These types of sewers may include the gutter systems that you see along streets and roads. Run-off collected in storm sewers travels directly into a ditch, stream, river or other water body without being treated.

### Waters of the state

Water bodies like rivers, lakes, wetlands and creeks. Other systems that convey water, like ditches or storm sewers can also lead to waters of the state.

### Unsewered Areas

This is an area of a community that does not have access to municipal sanitary sewers. These areas are served by private residential or commercial sewage disposal systems.



## DISTRICT OFFICES

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1-800-686-2330

**SEDO** Southeast District Office  
2195 Front Street  
Logan, Ohio 43138  
(614) 385-8501 FAX: (614) 385-6490  
1-800-686-7330

**NEDO** Northeast District Office  
2110 E. Aurora Road  
Twinsburg, Ohio 44087  
(216) 425-9171 FAX: (216) 487-0769  
1-800-686-6330

**SWDO** Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911  
(937) 285-6357 FAX: (937) 285-6249  
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**NWDO** Northwest District Office  
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