



**Lorain County
Public Health**

For the Health of Us All

Household Sewage Treatment System Factsheet

NPDES System

What does “NPDES” stand for?

National Pollutant Discharge Elimination System.

I am receiving mail from the Ohio EPA, what is this for?

The Ohio Environmental Protection Agency (EPA) is the authority for overseeing the permitting of NPDES systems. You are required to renew an annual operation permit for an NPDES system with the Ohio EPA.

Am I required to have an operation permit from both the Ohio EPA and Lorain County Public Health?

Yes. The Ohio EPA and Lorain County Public Health have shared responsibility for ensuring NPDES systems do not create a public health nuisance. Both permits are required due to the nature of the system (discharging off-lot to waters of the state) and mechanical components that have the potential to fail.

What are the requirements for NPDES systems under the Ohio EPA permit?

The requirements of the Ohio EPA permit include maintaining a service contract with a **registered service provider and annual water sampling. Please contact the Ohio EPA's** Division of Surface Water with any questions you may have. The requirements of the NPDES permit can be found on the Ohio EPA's website www.epa.state.oh.us



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NPDES System- Operation and Maintenance

State and Local Requirements (*Ohio Administrative Code 3701-29*)

- A service contract is required with a registered service provider who meets all training requirements for the specific system components and manufacturers.
- An annual operation permit from the Ohio Environmental Protection Agency. For **any questions regarding the Ohio EPA's NPDES** program, please visit www.epa.state.oh.us. **All guidelines and requirements of the Ohio EPA's permit must be followed.**
- An annual Operation and Maintenance (O&M) permit from Lorain County Public Health is required. **For any questions regarding Lorain County Public Health's O&M** program, please visit www.LorainCountyHealth.com

Routine Homeowner Monitoring

System component	Monitoring
Aeration Treatment Unit	Ensure the aerator motor is running. You should hear it running as you approach the lid of the aeration tank that is vented (small cap). Do not enter the aeration tank, poisonous gasses may be present. Consult your service provider to determine the proper frequency to have your system pumped and cleaned. A typical frequency is 3-5 years, but varies based on usage.
High Water Alarm	On the control panel for the sewage treatment system, locate the toggle switch for the alarm. Move it to "Test" - you should see a flashing light and audibly hear the alarm. Move the toggle back to "On" or "Auto" when done. If the high water alarm is left on "Test" and then silenced, you will not know if a problem with the system is occurring.

Follow all manufacturer recommendations and guidelines of your service contract.

Do not attempt to service the system



NPDES System

Homeowner Responsibilities and Preventive Care

- **Maintain the Ohio Environmental Protection Agency's annual permit for the NPDES system. Follow all requirements of the Ohio EPA's permit.**

- Maintain a service agreement with a registered service provider and maintain the annual Operation and Maintenance Program permit from Lorain County Public Health.

- Keep all system components accessible for inspections, pumping, and service.

- Have the aeration tank pumped and system cleaned every 3-5 years, or at a frequency determined by your service provider.

- Contact your registered service provider with any problems with the system. Warning signs for a Spray Irrigation system include, but are not limited to:
 - Activation of the high water alarm light / audible warning
 - Aerator motor not running
 - Damaged risers or lids
 - Plumbing backups in the house
 - Foul sewage odors

(Continued on next page)



- Maintain all records of your sewage treatment system in a file
- Divert surface water, to the extent possible without damaging or disturbing the sewage treatment system, away from the tank area.
- Do not access the aeration tank for cleaning, pumping, or servicing. Poisonous gasses may be present and pose a serious health risk. Contact a registered sewage hauler or your service provider.
- Do not allow anyone to drive or park over any components of the sewage treatment system. Some, but not all, distribution pipes may be suitable to drive over if they are protected by a sleeve. Contact Lorain County Public Health for a diagram of your system if you are unsure.
- Avoid flushing the following items:

Coffee Grounds, Disposable Diapers, Sanitary Napkins, Tampons, Cigarette Butts, Condoms, Dental Floss, Cat Litter, Gauze, Fats Greases and Oil, Paper Towels, Paints, Varnishes, Thinners, Waste Oils, Photographic Solutions, Pesticides, and other hazardous or harmful chemicals that require special disposal.



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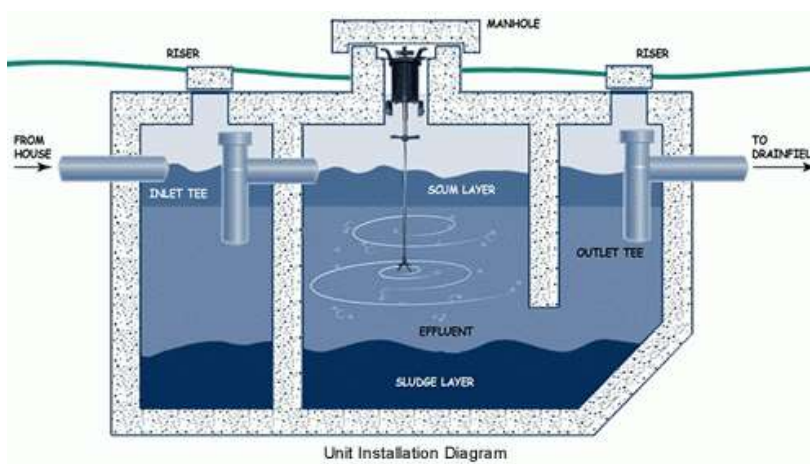
NPDES System Components & Functions

Models, Manufacturers, and Products will vary. Consult your Service Provider. LCPH does not endorse any particular manufacturer of sewage treatment system components.

Aeration Treatment Unit (Consists of Aeration Tank and Aerator)

- Traps scum and solids, provides treatment through retention time and aerobic bacteria digestion, settles solids before effluent enters the dosing chamber.

Tank: (Note the three lids. This is not three tanks. These are access ports for inspection and maintenance for the aeration tank. **DO NOT ENTER THE AERATION TANK.**)



Aerator:





Ultra-Violet Disinfection

- Treats sewage effluent with Ultra-Violet disinfection to meet state rules and regulations



Control Panel

- Electrical wiring, fuses, and toggles and switches for system operation and testing. Traditionally houses controls for the aerator, the pump, and the high water alarm.





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Dosing Chamber (Consists of Tank, Pump, and Activation Floats)

- Provides effluent retention volume, pumps effluent, and provides homeowner notification of improper drainage with high water alarm float.



Pump Lock / Telemetry

- This is not a visible component of the NPDES system, but provides a failsafe in the event of a failing component to prevent untreated effluent from being discharged from the system.

Contact your service provider with any questions
regarding your system's components and their
operation.