Defiance County Public Health
STS Operation Permits
Why do Sewage Treatment Systems now require an operation permit?

• Under Ohio law which became effective in 2007, each owner of a sewage treatment system must apply to the health district for an Operation Permit.

• The permit does not require upgrades be made to a sewage treatment system, unless it is found to be creating a public health nuisance (definition on website).

• The system does need to function as originally intended.

• The permit does require that regular maintenance and/or inspections be done on the system.
The 1,000 foot view

• Studies done in the 1990’s found that around one third of Sewage Treatment Systems are failing.

• These failing systems cause public health issues locally and contribute to water pollution downstream.

• The state legislature was moved to action to:
  • Protect public health,
  • Improve water quality and
  • Protect our investment in rural infrastructure by requiring proper maintenance of what is already in place.
How was the fee arrived at?

• This is an unfunded mandate on local health districts. Rules were adopted to allow health districts to charge a permit fee to cover costs.

• The district looked at fees charged by other health districts who have already started this program.

• $15 per year was similar to other health districts.

• The program must be self supporting.
O & M program is an unfunded State mandate on local health districts.

By law the fees collected through the O & M program have to stay in the Sewage Treatment System Fund. They cover the costs of:

- Additional staff hours:
  - Mailings and Data entry,
  - Education programs,
  - Field consultations.

- Office supplies: Postage, envelopes, paper and printing services, computer equipment.

- Software-the department is updating its software to use GIS (geographic information systems) to locate sewage and water infrastructure.

- To date, the district has already invested $14,000 in labor and other costs.
Cost methodology

• Under Ohio law, the health district must use a formula, that is also in state law, to analyze costs and revenues.
• After the first cycle (4 years), the district will have better cost information.
• Based on the cost methodology, the permit fees will be adjusted upward or downward.
• All revenues must stay in the private sewage fund.
• The health district cannot make a profit on this or any other environmental program.
Operation & Maintenance Packet

- Each owner of an STS should be receiving a packet in the mail in a plain white envelope.
  - This packet contains:
    - The cover letter,
    - The application,
    - The terms and conditions of the permit,
    - A pumping frequency chart,
    - A current list of registered service providers and septage haulers in Defiance County.
Avoid scams

• Septage Haulers and Service Providers are required to register with the district annually.
• Septage Haulers and Service Providers are busy.
• They do not have time to be randomly calling STS owners to do work on their systems.
• Stick to the list included in the mailing, call the health district or check the district’s website for updated lists.
• Report suspected scams to the Defiance County Sheriff.
### Application to Operate a Sewage Treatment System (STS)

**Office Use:**
- Fee Paid
- Paid Date
- Permit No.

**Due June 30th, 2019** (applications received or postmarked after the due date will be assessed a 25% penalty)

<table>
<thead>
<tr>
<th>Location Address</th>
<th>Township</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Defiance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mailing address (if different from location)</th>
<th>Contact Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email address</th>
<th>Contact Phone</th>
<th>Alternate Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

A sewage treatment system is used to treat wastewater from a residence or building. The address above is (Check all that apply):
- Residential
- Commercial
- Noncommercial/Government
- No building present
- Abandoned building

How is the wastewater treated? (Check all that apply):
- Private sewage system
- Public Sewer*
- No wastewater is generated at this site*
- Unsure

* if all waste facilities are connected to public sewer, or no wastewater is being generated STOP HERE. Please contact the health district to find out how the property may be exempted from the operation permit requirement.

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Source of Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there multiple STS at the site location?
- No
- Yes

If yes, complete a separate application with $60.00 payment for each system.

Typical number of occupants: Full time | Part time
-  |  |

If a business is located on the site, please describe the nature of the business.

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Source of Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Three things we want you to know:
- Under Ohio law, each owner of a sewage treatment system must apply to the health district for an Operation Permit.
- The permit does not require upgrades to be made to a sewage treatment system. The system simply needs to function as originally intended.
- The permit does require that regular maintenance and/or inspections be done on the system.

Please fill out as much information as you can about the sewage treatment system. This information will help the department to provide advice to owners on the proper maintenance of the system and develop educational programs.

<table>
<thead>
<tr>
<th>Is the tank visible from the ground surface?</th>
<th>Do you know what type of tank the system uses?</th>
<th>What year was the tank last pumped?</th>
<th>Tank size - gallons</th>
<th>Name of pumping company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Septic</td>
<td>2018</td>
<td>1000</td>
<td>John Doe</td>
</tr>
</tbody>
</table>

Where does the tank effluent go after leaving the tank?
- Stream or Ditch
- Field Tile
- Leach bed
- Filter Bed
- Mound

The Defiance County Operation and Maintenance regulation requires at least one inspection of each sewage treatment system within the 4-year operational period (6-30-19 to 6-30-23). Tank pump reports from the 2-year period prior to the effective date of the permit are also accepted.

Owner Signature (sign or print) | Date
- |  |

Any inspections must be done by a registered contractor. We expect most STS owners to have their inspections done by a tank pumper or service provider. However, under local rules, homeowners may register to inspect the STS at their personal residence. To register a homeowner must take an on-line open-book test and attend training provided by the health district or manufacturer. The inspection may involve lifting the lid off the tank and measuring sludge levels, testing pumps and a visual inspection of ports and the property.

Are you interested in receiving training to become a registered service provider?
- Yes
- No
- Undecided at this time

The local rules and additional applications can be viewed at [www.defiancehealth.org/myseptic](http://www.defiancehealth.org/myseptic) or call 419-734-3318.
Appendix B
Defiance County General Health District
Operation Permit Terms and Conditions

Operation Permit - General Provisions
1. Each owner of an STS or GWRS in Defiance County shall operate and maintain their system so that a public health nuisance is not created.
2. Each owner of an STS or GWRS in Defiance County shall obtain an Operation Permit from the Board of Health.
3. Owners must apply for Operation Permits in accordance with Schedule A. The operation permit is valid for a maximum of four years from the due date.
4. If more than one STS or GWRS exists on a parcel or at an address, the property owner will be responsible for obtaining Operation Permits for each system.
5. If an STS or GWRS has a tank located on a parcel separate from the structure that it serves, the owner of the parcel on which the tank is located shall be responsible for obtaining the Operation Permit and performing system maintenance.
6. Failure of the Health District to contact the owner of an STS or GWRS does not negate the owner’s obligation to obtain an operation permit.
7. Permit fees are not refundable.
8. Permits are transferrable upon the sale of the property for which the permit was issued.
9. The Board of Health shall adopt fees and collect late fees in accordance with Revised Code 3709.09.
10. To be removed from the operation permit requirement, a dwelling must be connected to public sewer or be declared abandoned by the owner. Any STS or water system must be properly abandoned per OAC 3701-29 or 3701-28.

Inspection Standards
1. Each owner of an STS or GWRS shall have the system inspected and/or the tank pumped by a registered contractor during the period covered by the operation permit. An inspection occurring two years prior to the due date of the operation permit application shall be credited as occurring during the operation permit period provided it is properly documented.
2. Each owner of an STS or GWRS shall provide documentation of inspection or maintenance to the Board of Health within 60 days of the service.
3. Should an owner fail to provide evidence of inspection, the Health District shall inspect the system. The Health District shall bill the owner for the inspection and collect any fees adopted by the Board of Health. The Health District will issue a notice to the owner regarding any required maintenance or repairs.
4. Each owner of an STS or GWRS shall have their tank pumped by a Registered Septage Hauler in accordance with Schedule B. Any maintenance or repairs must be reported on documents to the Board of Health.
5. Reports shall include information on the condition of the tank; solid & scum levels in the tank; the operability of pumps and aeration motors, timers and filters; the any storm or surface water entering the system, nuisance conditions, blockages or safety concerns.

NPDES Systems
If an HSTS that is required to obtain an NPDES general discharge permit per revised code 611, the owner must do all of the following:
1. Maintain a service contract with a Registered Service Provider or become a Registered Service Provider.
2. Provide proof to the Board of Health that maintenance is being completed according to the manufacturer’s specifications.
3. Provide to the Board of Health copies of the lab reports documenting annual effluent tests.
4. Operate and maintain the system in accordance with the terms and conditions of the NPDES permit.
Next Steps

• Please return the permit either by mail or in person to the health district. You can also complete your application tonight.

• Once the application has been processed, the department will send a notification letter that the operation permit has been issued.

• As records come in and are reviewed, systems will be moved from a “pending” status to an “approved” or “disapproved” status.

• Those on a disapproved status after four years will be placed on a compliance schedule.
Required Activity's

Pumping
• Tanks will need to be pumped by a Registered Septage Hauler according to Schedule B of the STS Supplemental Regulations.
• This does not have to be done right away, just sometime during the permit period (4 years).

Evaluation
• Owners will need to contact a Registered Service Provider or the district to perform a system evaluation using the Evaluation form; or
• A homeowner may become registered to perform an evaluation of their own system using the Evaluation form.
Homeowner Registration as a Service Provider

• Local rules allow homeowners to register as service providers (without meeting the usual fee, bonding and insurance requirements) to evaluate their own residential systems.

• Homeowners will have to take the same online test covering the sewage rules that contractors take. The usual fee has been waived.

• Homeowners will be required to attend additional training provided by the district. Servicing aeration tanks may require additional training by a service provider (if available).

• Homeowners will have to register in the calendar year they wish to perform the evaluation.

• The district wishes to gauge interest in this option to guide the development of training programs.

• Like all registered contractors, work is subject to inspection by the district.
Evaluation of STS - Pending

- This can be completed by a Registered Service Provider, the health district or by a Registered Homeowner. Things that will need to be checked:
  - Inspect at the area around the tank looking for root intrusion, water intrusion, signs of collapse and safety hazards.
  - Inspect tile fields, mounds, inspection ports and other components of system for functionality, safety issues or seepage.
  - Inspect that no storm water is being directed into the system from sump pumps or gutters.
  - If the sludge level is being measured, those measurements need to be included on the inspection report.
  - If it is an aeration tank, the motor must be working. If not a service provider must be contacted to make repairs.
Option 1 – Take measurements inside the tank to determine if the tank needs to be pumped out. The tank needs to be pumped if any of the following occur:

• After taking measurements of the inside of the tank, the scum + sludge is $\geq 30\%$.
• The bottom of the scum layer is less than 3 inches from the bottom of the chamber baffle or outlet “T”.
• The top of the sludge layer is less than 12 inches from the bottom of the chamber baffle or outlet.
## Option 2 – Follow the pumping schedule below:

<table>
<thead>
<tr>
<th>Tank size gallons</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>250</td>
<td>2.9</td>
<td>1.3</td>
<td>0.75</td>
<td>0.5</td>
<td>0.25</td>
<td>0.14</td>
<td>0.12</td>
<td>0.10</td>
<td>0.09</td>
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<tr>
<td>500</td>
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<td>2.6</td>
<td>1.5</td>
<td>1</td>
<td>0.7</td>
<td>0.4</td>
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<td>1.3</td>
<td>1</td>
<td>0.7</td>
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<td>0.8</td>
<td>0.7</td>
<td>0.5</td>
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<tr>
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<td>3.5</td>
<td>3</td>
<td>2.6</td>
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</tbody>
</table>

### Septic Tank Service Frequency in Years

- Option 2 – Follow the pumping schedule below:
Typical Lift station and alarm

Aeration Tank lid and access

Septic tank inlet and concrete weir

Distribution Box

2-compartment septic tank
Maintenance costs

• Pumping a tank typically costs $150 – $300. Cost depends on:
  • The size of the tank – treatment plants charge the hauler a disposal fee on a per gallon basis.
  • Labor costs:
    • it takes longer to pump a tank that is packed with solids.
    • It takes longer to dig up some lids.
• Treatment plant fees vary.
The Importance of Septic Tank Cleaning

- Properly functioning tank.
- Scums and solids are retained.
- Waste has time to break down in tank.

- Help! The tank is filled with solids.
- Waste is completely untreated.
- Solids are leaving the tank, clogging the rest of the system or polluting the environment.
Should risers be installed on the tank?

• There are typically two lids that need to be accessed on the top of the septic tank for pumping and inspections.
• Risers can be made flush to grade to allow mowing.
• Risers should save money in the long term, by saving labor to dig up the yard to access the tank.
• Material costs runs $60 - $80 per riser.
• Labor would be extra.
What about tank filters?

• Tank filters are installed on the outlet of the septic tank.
• They prevent fines from entering a leach field or mound, preventing clogging of the soil.
• On tank only systems, they reduce pollution leaving the tank.
• Filters need to be cleaned on occasion.
• Cost is $50 - $100.
• It may be difficult to fit on tanks that don’t have a “T” on the outlet.
Aeration Systems

• Aeration systems use a pump to inject air into the tank. This provides enhanced treatment of effluent.

• Because of this enhanced treatment, many of these systems were installed in the 60’s and 70’s with no further treatment after the tank.

• Cost to get aerator pump working ranges from $1,500 to $5,000 depending on the extent of work.

• Aeration systems need a routine service check every 6 months. The pump must be cleaned and inspected to prevent premature failure.

• The pump installer can offer a Service Contract to check the system on a regular basis.
Aeration Tanks

• Aeration tanks, must have functional motors, alarms, timers and electrical controls.

• Any updates to the controls should be placed on the outside of the home.

• These units need to operate in accordance with the manufacturer’s specifications at the time it was installed.
Questions

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