

### **Timeline of the Implementation of the Operation & Maintenance Program for HSTS in Shelby**

**John Harbeck, R.S. & Andrea Barnes, R.S.**

Shelby City Health Department

It is our intention to answer questions and communicate with the owners of household sewage treatment systems in the city of Shelby to help you understand our requirements for the implementation of the statewide sewage rules that were passed by legislature and effective January 1, 2015. We held a stakeholder's meeting on April 13, 2015 to inform you of the operation & maintenance program and to get your thoughts on timeframes and how to prioritize inspections and/or required documentation. ♦

### **Terms and Conditions**

In order to be issued an operation permit, the

*continued on page 2*

---

### **INSIDE THIS ISSUE**

- 1** Terms and Conditions
- 1** Septic Tank Pumping
- 2** Checking for Nuisance Conditions
- 2** Dye Testing & Sampling
- 2** Installing Sampling Ports
- 3** Time and Sequence for Issuing Permits
- 4** Procedure for Obtaining an Operation Permit

### **Septic Tank Pumping**

The Shelby City Health Department requires septic tanks to be pumped at least every five (5) years unless an alternative frequency is established.

In some cases, the septic tank does not need to be pumped every five (5) years and may be pumped less frequently. Some houses may have been vacant and some houses may have low use for other reasons and there are little solids (sludge and scum) in the tank.

If the scum layer in the tank is less than 6 inches and the sludge layer is less than 12 inches after 5 years, and if the pumping frequency recommended by the Ohio Department of Health\* is followed, the septic tank may be approved to be pumped at a frequency less than every 5 years. A garbage grinder/disposal in the sink will increase pumping frequency.

Also, if the scum layer in the tank is less than 6 inches and the sludge layer is less than 12 inches after 5 years and there are other mitigating circumstances (i.e. house has been vacant for extended time), the septic tank may be approved to be pumped at a frequency less than every 5 years.

A signed statement certifying an alternative frequency has been established or the record of pumping will need to be submitted to the Shelby City Health Department with the operation permit application when the time comes. Therefore, keep all records.

Without proper maintenance and good system design, your sewage could go into your neighbor's yard (and their sewage could come into your yard) contaminating the ground water with disease causing germs like E.coli, Salmonella, Shigella, polio, hepatitis, Cryptosporidium. In addition to the diseases themselves, mosquitoes and flies that spread some illnesses can breed in areas where liquid waste reaches the surface.

*continued on page 3*

homeowner must comply with the terms and conditions of the permit. The following are the terms and conditions:

- Septic Tanks shall be pumped at least every five (5) years unless an alternative frequency is established.
- Septic Tank must be maintained water tight, not showing signs of overflow/leakage.
- Septic Tank baffles must be maintained in place.
- Septic Tank risers over the front & back openings must be in place, water tight, at or above ground level, with intact lids  $\geq$  50lbs.
- Existing distribution box must be maintained at or above ground level, with the diverter device in place and lid intact.
- Sampling port must be maintained or installed for discharging systems if a nuisance condition is found in the area, the source of the nuisance is not known, and the STS could possibly be the source.
- Sewage Treatment System must not create a public health nuisance as defined by Ohio Revised Code 3718.011.
- Sewage Treatment System must be maintained in proper working condition.
- Effluent Samples must be taken from a discharging system if a visual and olfactory inspection indicates inadequate treatment.
- Sewage Treatment System shall not receive water from the roof, foundation, clear water pump, swimming pool, or other sources of non-wastewater.
- All wastewater must be directed into the STS including laundry water. ♦

### **Checking for Nuisance Conditions**

Between July 1<sup>st</sup> and September 31, 2015, the Shelby City Health Department will inspect the road ditches, streams, and other outfalls for sewage nuisances. If the source of the nuisance is readily identifiable, the homeowner will be notified and repairs must be made

before an operation permit is issued.

In some cases, the source of the nuisance will not be readily identifiable. If further investigation is needed to identify the source of a nuisance, homeowners in the area will be notified.

In many instances, more than one STS runs into a common collector tile and a sewage nuisance caused by one house will appear in the outfall of that tile. The source of the sewage nuisance cannot be identified unless each house exposes it's individual tile before it connects to the common tile. The Shelby City Health Department may need to run tests, take samples, and require the installation of sampling ports to determine the source of a sewage nuisance. ♦

### **Dye Testing and Sampling**

When the source of a sewage nuisance cannot be identified, a dye test may be needed. A dye test is done to determine where the effluent from an STS runs. Tracing dye is placed in the toilet, sink, or directly into the septic tank. The strong dye will run through the system and show up in the ditch, stream, tile outfall, or wherever the STS discharges. It may take as little as 15 minutes or as long as 3 days for the dye to show up. The tracing dye is not an indication of a failing system or a nuisance. It is only an indication of the source of the effluent.

If only one STS discharges to a tile, as demonstrated by the dye test, and a nuisance has been found discharging from that tile, it can be concluded that the source of the nuisance is that one system. ♦

### **Installing Sampling Ports**

A sample port is a box that allows for sampling of the effluent from a sewage treatment system after the sewage has been treated. The sample port is installed after the sand filter and before the effluent tile leaves the property.

If a nuisance has been identified in the area down slope from a house and a dye test demonstrates that the house discharges to the nuisance, the house will be required to install a sample port. This is the only way the source of the nuisance can be identified if there is more than one house discharging to the nuisance outfall. ♦

Continued from page 1

The problems of a failing septic system don't stop at your property line. Sewage and disease can impact the health of your neighbors and your community.

\*Ohio Department of Health Recommended septic tank pumping frequency

Tank Size (Gallons)	Number of People Living in House							
	1	2	3	4	5	6	7	8
750	9.1	4.2	2.6	1.8	1.3	1.0	0.7	0.6
1000	12.4	5.9	3.7	2.6	2.0	1.5	1.2	1.0
1250	15.6	7.5	4.8	3.4	2.6	2.0	1.7	1.4
1500	18.9	9.1	5.9	4.2	3.3	2.6	2.1	1.8
1750	22.1	10.7	6.9	5.0	3.9	3.1	2.6	2.2
2000	25.4	12.4	8.0	5.9	4.5	3.7	3.1	2.6
2500	31.9	15.6	10.2	7.5	5.9	4.8	4.0	4.0
<b>Pumping Frequency in Years</b>								

Adopted from OSU Extension AEX-740-98

- A garbage grinder/disposal on a sink will increase the frequency of pumping. ♦

## **TIME AND SEQUENCE FOR ISSUING OPERATION PERMITS**

### **WEST MAIN STREET**

- JANUARY 2016 MAIL DESCRIPTION OF TERMS & CONDITIONS OF OPERATION PERMIT TO HOMEOWNERS
- NOVEMBER 2016 MAIL OPERATION PERMIT APPLICATION. REMIT BEFORE JANUARY 1, 2017

### **MICKEY ROAD**

- JANUARY 2018 MAIL DESCRIPTION OF TERMS & CONDITIONS OF OPERATION PERMIT TO HOMEOWNERS
- NOVEMBER 2018 MAIL OPERATION PERMIT APPLICATION. REMIT BEFORE JANUARY 1, 2019

### **EVERYONE ELSE**

- JANUARY 2020 MAIL DESCRIPTION OF TERMS & CONDITIONS OF OPERATION PERMIT TO HOMEOWNERS
- NOVEMBER 2020 MAIL OPERATION PERMIT APPLICATION. REMIT BEFORE JANUARY 1, 2021♦

## **Procedure for Obtaining an Operation Permit**

The homeowners will be mailed a letter describing the terms and conditions of their sewage system operation permit in January. Twelve months will be given to comply with the terms and conditions, and if necessary, make repairs to the System. Records should be kept for the proof of compliance (i.e. inspection reports, receipts of repairs and maintenance, tank pumping receipts, effluent samples, service contracts, etc.) so a copy can be submitted with your application.

An application for an operation permit will be mailed to the property owner in November of that year. The property owner will be asked to submit the completed application along with the permit fee and proof of compliance with the conditions of the permit before the end of the year. ♦

### **WHO CAN PERFORM THE INSPECTION?**

THE INSPECTION OF YOUR SYSTEM MAY BE PERFORMED BY A SERVICE PROVIDER OR YOU AS THE HOMEOWNER IN LIEU OF THE HEALTH DEPARTMENT. THE SERVICE PROVIDER OR HOMEOWNER MUST BE REGISTERED WITH THE SHELBY CITY HEALTH DEPARTMENT AND MUST MEET THE REQUIREMENTS OF OAC 3702-29-03 WHICH MAY INCLUDE TESTING AND TRAINING.

THE INSPECTOR MUST USE THE INSPECTION FORM PRESCRIBED BY THE SHELBY CITY HEALTH DEPARTMENT. THIS FORM MUST BE SUBMITTED WITH THE OPERATION APPLICATION AS PROOF OF COMPLIANCE. ♦

### ***Website Link***

Visit the Shelby City Health Department website for a link to an excellent video on sewage treatment systems at:

<http://www.shelbyohio.org/index.php/visitors/health/environmental-health-services/9-uncategorized/205-sewage-treatment-systems>

SHELBY CITY HEALTH DEPARTMENT  
43 WEST MAIN STREET  
SHELBY, OHIO 44875

