# SEPTIC SYSTEMS RAISING A STINK?

# Sewage Management Programs Are Helping to Protect Townships

BY JILL ERCOLINO / MANAGING EDITOR



Onlot septic systems may be out of sight, but the state Department of Environmental Protection says they shouldn't be out of mind, especially if they're putting the public health and environment at risk. As a result, more and more townships are being required to enact and enforce sewage management programs to ensure that homeowners do the right thing: Maintain their onlot systems.

ot long ago, federal and state environmental officials considered the commonwealth's 1 million-plus onlot septic systems as short-term solutions to those situations when, you know, stuff happens.

However, faced with the fact that centralized sewer systems, which pipe wastewater to treatment plants, aren't feasible or affordable for many parts of Pennsylvania and elsewhere in the U.S., officials have started shifting their position.

"A study from the U.S. Environmental Protection Agency found that onlot systems could last indefinitely, but a lot of things, including proper testing, design, installation, and maintenance, have to happen to get them to that point," says Jeff Rachlin, owner of Chester County-based OnSite Management, Inc., and a board member of the Pennsylvania Septage Management Association.

Brad Hengst, a sewage enforcement officer for several townships and boroughs in York County, agrees that official attitudes are changing.

"Onlot systems are now seen as permanent infrastructure," he says. "They're a utility, and the thinking is



that we need to do them right or they're going to break down."

# SMPs: Who needs them?

When onlot systems fail due to age, neglect, or improper installation, that's not good for anyone.

The costs of these malfunctions add up for homeowners, who will spend up to \$25,000 to replace the system, and for communities, where seeping, untreated waste threatens drinking water supplies and property values and can cause disease, including cholera, hepatitis A, and typhoid.

John Diehl, chief of the state Department of Environmental Protection's

Malfunctioning septic systems threaten public health and the environment. To combat the problem in Pennsylvania, DEP is urging townships to initiate sewage management programs, which establish standards that require homeowners to repair, pump, and maintain their

Act 537 Section, says the answer to heading off widespread public health and environmental problems is pretty straightforward: Local officials need to adopt and enforce a sewage management program, or SMP.

onlot systems.

Recommended in Act 537, which requires townships to come up with a communitywide plan for getting rid of sewage, SMPs address a critical piece of the disposal puzzle — onlot systems — and establish routine inspection and maintenance requirements for homeowners with a septic system on their property.

"All townships should have [an SMP]," Diehl says. "Some do, but many do not."

That situation is changing, however,

# SEWAGE MANAGEMENT

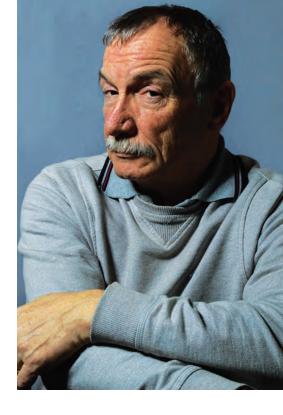
as municipalities update their Act 537 plans. DEP is moving away from *encouraging* sewage management programs to *requiring* them. "DEP realized it needed this kind of management [at the local level]," Rachlin says, "and its opportunity to mandate [SMPs] is when Act 537 plans come up for updates."

DEP contends that sewage management programs are a common-sense solution, one that prolongs the life of existing onlot systems, protects the environment and public health, and negates the need for townships to build a multimillion-dollar centralized sewage system.

"We realize that each township has different needs, demographics, and treatment systems, and we stress that this doesn't need to be an expensive proposition," Diehl says, noting that SMPs in Pennsylvania range from simple pumping and maintenance programs to more complex municipal inspection initiatives. "We just want to ensure that all onlot systems are properly functioning and maintained." (Note: To find help in establishing an SMP, see the sidebar on the opposite page.)

Startup costs for SMPs range from

Despite the benefits, sewage management programs are often greeted with skepticism. Local leaders and homeowners alike don't appreciate having to dig deeper into their pockets to develop and comply with SMPs.



"I've heard everything from, 'This [program] is wonderful,' to 'Get the hell off my property,' 'You can't regulate me,' and 'I don't care if I pollute my neighbor's water.""



# When developing an SMP, START WITH DEP

### **SEWAGE MANAGEMENT PROGRAMS**

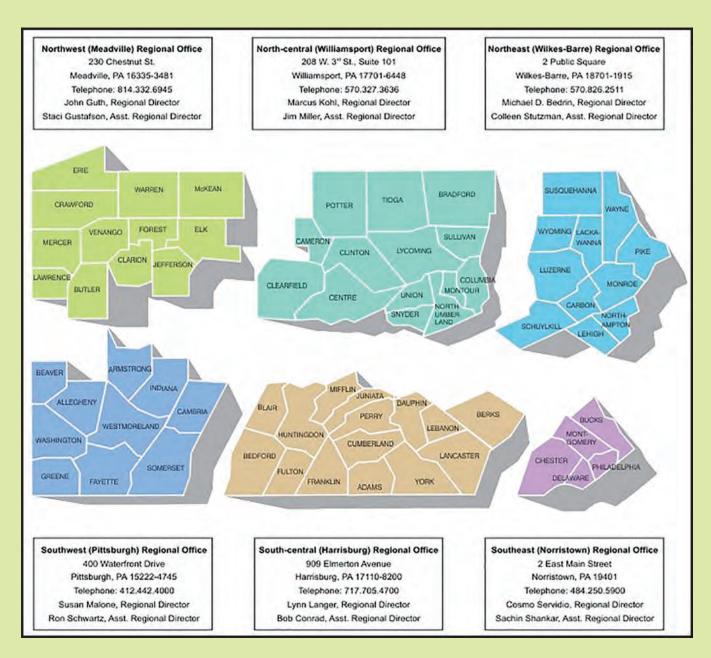
are a lot like townships: Each one has its own distinct character.

"We realize that each township has different needs, demographics, and treatment systems," John Diehl, chief of the state Department of Environmental Protection's Act 537 Section, says. Municipalities, therefore, are encouraged to tailor their SMPs to their specific situation.

To learn more about sewage management programs, DEP's website, www.dep.state.pa.us, is a good place to start. Go to "DEP Programs A-Z" and choose "Septic Systems" from the list. There, you'll find lots of information, including a link to a se-

ries of helpful fact sheets about onlot systems and sewage management programs.

Townships should also contact the staff in the regional DEP office that serves their county. **Contact information for each regional office appears below.** 



# SEWAGE MANAGEMENT

\$1,000 for a simple program to \$30,000 for higher-end efforts, DEP reports. On average, though, townships can expect to pay about \$9,000 to initiate a program and anywhere between \$1,000 and \$8,000 in annual administrative and management costs.

Whatever route your township takes, Hengst urges supervisors to be thorough and offer the best program that meets their needs and resources. "It's easy to cut corners," he says, "but those houses are going to be there for a while, and the septic systems should be, too."

### The sweet smell of success

Still, SMPs haven't been an easy sell to municipal officials, who recoil at the thought of another unfunded mandate (state reimbursements for programs like these dried up years ago), or to residents, who claim the programs give government another excuse to intrude in their lives and on their property.

"I've seen a lot of resistance from municipalities and the public," says Hengst, who has been a proponent of sewage management programs for three decades. "The last thing some people want is an inspector — a government inspector, at that — snooping around on their property."

"I've heard everything from, 'This [program] is wonderful,' to 'Get the hell off my property,' 'You can't regulate me,' and 'I don't care if I pollute my neighbor's water,'" says Walt Schneider, director of Centre Region Code Administration, which oversees the sewage management program for members of the Centre Region Council of Governments, including College, Ferguson, Halfmoon, Harris, and Patton townships in Centre County.

"It's been a challenge," he says, "but we try to make the inspections as positive as possible." Homeowners also don't appreciate the additional expenses that crop up when a township enacts an SMP. On average, property owners will spend a couple hundred dollars every three years or so to have their onlot systems inspected and pumped. They could, however, spend more if repairs are necessary.

Westtown Township in Chester County is one of those municipalities that is under an order from DEP to create a sewage management program.

Adopted in 2013 after years of back and forth with the department over its Act 537 plan, the condition of its 1,600 onlot systems, and the need for a public sewage line, the multi-layered program is one of the most thorough in the state.

The township requires homeowners to have their systems checked by a certified, third-party inspector — this ensures consistency — and pumped every three years.

In addition to the pumping and inspection fees, homeowners also pay

Septic systems are a puzzle to most homeowners. That means township officials need to educate them about what's on their property, how it works, and how to take care of it properly.



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\$100 a year to support the program, which is far less expensive to operate than a full-blown public sewer system, Travis DeCaro, the township's onlot management coordinator, says.

The program, he adds, is also helping the township pinpoint problematic onlot systems and work with homeowners to fix them. Depending on the seriousness of the problem, residents are given anywhere from 10 to 60 days to perform repairs.

"We've been able to identify some really unsafe conditions through the inspection program," says OnSite Management's Jeff Rachlin, who has checked a number of systems in Westtown Township. "We've seen metal tanks that look like Swiss cheese and opened up a lot of homeowners' eyes."

"It's a lot of work and a lot of enforcement," DeCaro adds. "I'm constantly following up and sending out letters, but the goal of the program isn't to punish anyone.

"Our goal," he says, "is to have everyone in compliance and have everything healthy and safe so we're flexible and extend whatever courtesy we can. You have to work with people."

That doesn't stop residents from grumbling, but DeCaro believes that the benefits of a sewage management program outweigh the headaches.

"You maintain your roof, your car...why not your septic system?" he wonders. "Besides, we try to get people to see that there are advantages to paying a little upfront for maintenance, rather than paying a lot later to replace the entire septic system."

Local officials should focus on the positive, too, Schneider says.

"The fact is, DEP is starting to mandate these things, and it's our responsibility at the local level to take what smells bad and make it smell like a rose," he says. "These programs are necessary."

### It's all about education

Therefore, whether you're choosing to develop a sewage management program voluntarily or are under DEP orders to start one, it's helpful to remember this: It's not what you do but how you do it.

In other words, your approach to the

# How does a septic system work?

**A TYPICAL SEPTIC SYSTEM** consists of a septic tank and drainfield, or soil absorption field. Below is a brief overview of how these systems work:

- 1) All water runs out of your house from one main drainage pipe into a septic tank.
- **2)** The septic tank is a buried, water-tight container usually made of concrete, fiberglass, or polyethylene. Its job is to hold the wastewater long enough to allow solids to settle down to the bottom, where sludge forms, while the oil and grease float to the top as scum. Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the drainfield.
- **3)** The liquid wastewater, or effluent, then exits the tank into the drainfield. If overloaded with too much liquid, the field will flood and cause sewage to flow to the surface of your lawn or create backups in toilets and sinks.
- **4)** Finally, the wastewater in the drainfield percolates into the soil, which naturally removes harmful coliform bacteria, viruses, and nutrients.

program is ultimately going to dictate its level of success and public support. Those who have been through the process say it's a good idea to be firm but flexible and keep the information flowing early and often.

Remember, too, that septic systems are a puzzle to most homeowners. Some take an out-of-sight, out-of mind approach to their systems. Some believe the maintenance myths; a popular one is that after a tank is pumped, a dead, decomposing animal needs to be dropped in to up the bacteria count. Others don't even realize they have an onlot system on their property.

That means someone representing the township, including the supervisors, SEOs, inspectors, and pumpers, should help them understand what's on their property, how it works, and how to take care of it properly.

Also, the township should be clear about the requirements of its sewage management program. In the Centre County region, which supports its program entirely through permit and inspection fees, onlot systems must be pumped every three years and inspected every six years.

"There's a lot of education that has to happen," SEO Brad Hengst notes.

Schneider agrees, adding that he learned this lesson the hard way: "When we started the program in the Centre region, we didn't do the best at education.

"Now," he says, "we use the inspections as educational opportunities because we're encountering lots of people who didn't grow up with septic systems. We'll take the time to explain the systems and what they should and shouldn't do."

In addition, Schneider's agency has developed brochures for property owners that are distributed and posted on its website. In York County, Dover and York townships each held public meetings to explain their sewage management programs to the public. In Chester County, Westtown Township sends a lot of postcards and letters.

"I'm learning that it's not a bad thing to remind people," onlot management coordinator Travis DeCaro says.

## Stay positive

He realizes something else, too: While penalties for noncompliance with the SMP are necessary, they should be a last resort.

"Our ordinance does give us the ability to issue fines, which range from \$300 to \$2,500 per offense," DeCaro says. "We don't have to impose them often, and frankly, I don't want to have to do it unless it's absolutely necessary because it gets us nowhere."

"You want this to be a positive experience," Schneider says, "but if you come in acting like a cop, you're not going to win any friends. Make your program about education, and things will work out much better."

"Ultimately," Hengst adds, "you have to make people understand that sewage management programs are to their benefit. Will it take time? Yes. Will it be worth it? Absolutely."

<sup>\*</sup> Information courtesy of the U.S. Environmental Protection Agency.