

[https://www.capenews.net/falmouth/news/falmouth-board-of-health-says-urine-storage-tanks-have-minimal-regs/article\\_91b1bcb0-9eb1-5e8c-9677-99797e44a6ae.html](https://www.capenews.net/falmouth/news/falmouth-board-of-health-says-urine-storage-tanks-have-minimal-regs/article_91b1bcb0-9eb1-5e8c-9677-99797e44a6ae.html)

## Falmouth Board Of Health Says Urine Storage Tanks Have Minimal Regs

Standard Septic Haulers Can Pump The Tanks

By GILDA GEIST

Jul 5, 2023

[Home](#) / [Falmouth](#) / [Falmouth News](#)

1 of 2



Hilda Maingay of the Green Center in Hatchville advocates for flushless urine-diverting urinals in front of a packed crowd at a water quality meeting.

GILDA GEIST/ENTERPRISE

Urine-diverting toilet advocates were before the board of health last week to ask about regulations governing urine storage tanks. The board determined there are minimal regulations and no permitting is required unless the storage tank is underground.

“To store your own urine in your own location, I don’t see any problem with it,” board member George Heufelder said. “The board’s concern should be the final disposition spot [for the urine], that it’s safe and it’s in an approved place.”

At the request of local environmentalists, the water quality management committee recently announced that it will be soliciting a proposal from the Massachusetts Alternative Septic System Test Center for a urine diversion pilot project in Falmouth.

In Falmouth, advocates of urine diversion say the town’s nutrient loading in coastal waters could be mitigated if urine was kept out of the wastewater stream. Urine-diverting toilets collect urine, rather than sending it into a septic system or into the sewer. From there, the idea is that the urine could be transported somewhere to be pasteurized and then distributed to farmers and landscapers to use as fertilizer, instead of overloading Falmouth’s ponds and estuaries with nitrogen and phosphorus, which cause rampant algae growth and degrade water quality.

“It reduces pollution of all the water bodies in the town, it recovers and reuses nutrient resources which are now lost, it reduces the carbon footprint of wastewater treatment plants that exist and that might be built in the future, it conserves drinking water...and it provides social and economic equity and justice,” said Earl Barnhart of the Green Center, a sustainability research center in Hatchville. “We are doing this partially for people who have limited income and cannot afford to pay for sewers” or innovative septic systems, which remove nitrogen but are more expensive.

Mr. Barnhart presented three ideas for urine storage tank set-ups: a tank inside the house, an above-ground tank outside the house and an underground tank outside the house. The first two setups would use 55-gallon drums, which are strong and inexpensive, Hilda Maingay of the Green Center said.

“A tank in the house I don’t think is a big deal because they already do it with composting toilets,” Mr. Heufelder said.

He said he did not think there are any regulations that apply to such a tank and no permits would be required, either.

For the outdoor above-ground tank, board members said the 55-gallon drums should be in a box with a lid to control odor and should be secured to the ground so that the drum cannot tip over. Beyond these guidelines, the drum would not be subject to any other codes or regulations and would not require a permit, Mr. Heufelder said.

He noted that an underground tank, however, would be subject to the same regulations as a tight tank, which is a tank that receives sewage but has no outlet for it. That would mean the tanks would need to be at least 500 gallons, have an alarm system so the owner or operator knows when the tank is getting full, and be at least 10 feet away from any foundation, slab or property lines. A septic permit would also be required.

Mr. Heufelder said that under certain circumstances, the tanks could be subject to plumbing codes.

“As far as the plumbing code goes, it depends on whether you connect the tank as a fixture,” he said. “If you’re connecting to an approved device, and the approved device would be the piping that’s leaving your house, then you need to talk about the plumbing code.”

But for those collecting urine manually, plumbing codes do not apply, Mr. Heufelder said.

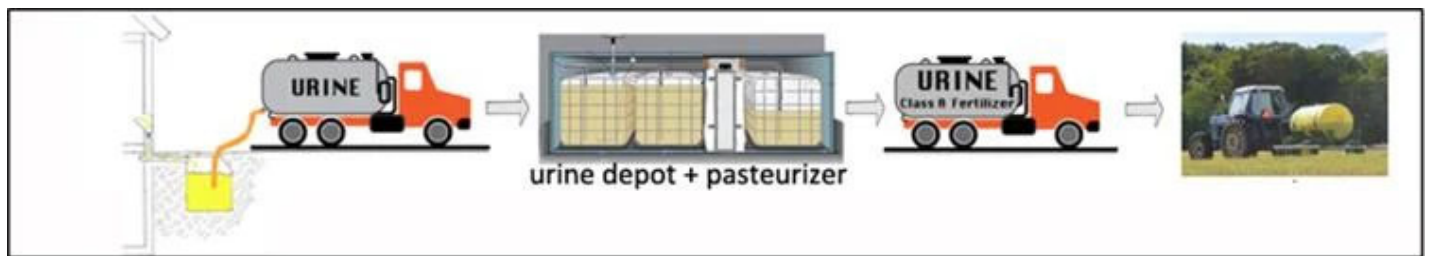
One audience member asked what happens when the tanks become full and the urine needs to be collected.

Ms. Maingay said a regular septic hauler could pump out the tank and bring it to the wastewater treatment plant in West Falmouth.



The “Cubie” is a low-tech, urine-diverting toilet developed in Brattleboro, Vermont, where community-scale urine diversion is practiced. Men aim into the red bowl and women squat over it. The collected urine can be poured into a larger tank or sprinkled on lawns. The device costs \$80.

ELIZABETH SAITO/ENTERPRISE



In a urine-diversion and nutrient-recovery system, a truck pumps urine out of a storage tank; the urine is then pasteurized and spread on crops.

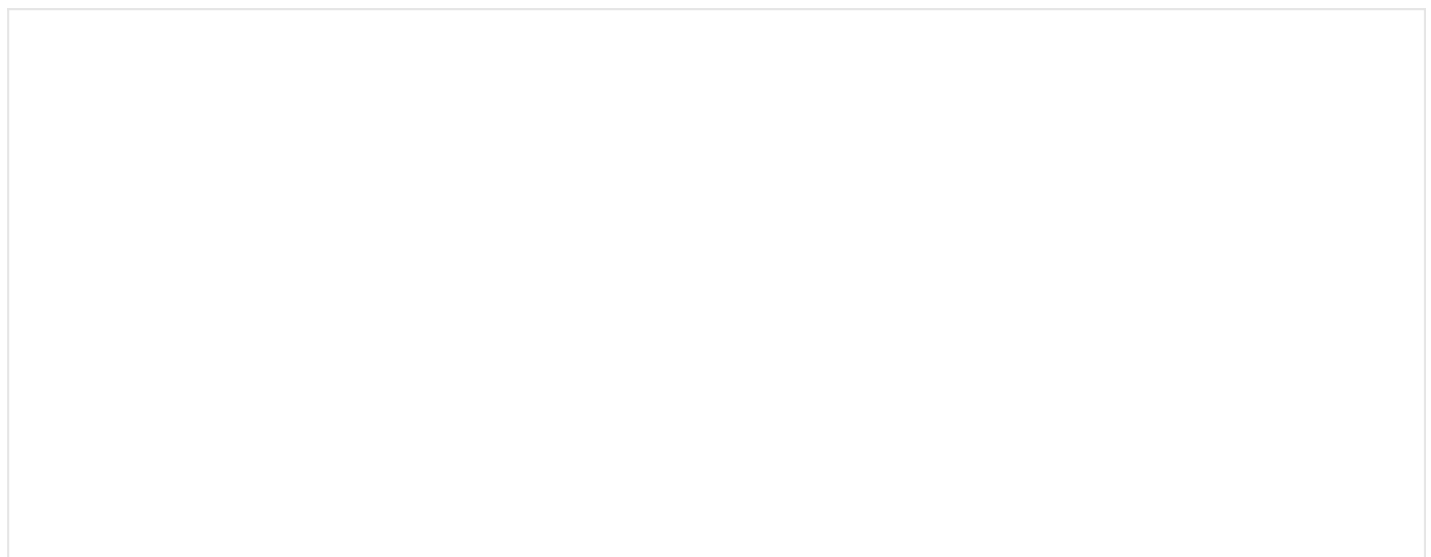
THE RICH EARTH INSTITUTE

But the goal, Ms. Maingay explained, is to eventually have a “designated urine truck” to pick up the urine and take it to a facility where it can be pasteurized for reuse as fertilizer. In the case of Falmouth’s upcoming urine diversion pilot, that facility will be the Massachusetts Alternative Septic System Test Center.

This appearance before the board of health is the latest step in a decades-long effort by Ms. Maingay and Mr. Barnhart to get the Town of Falmouth to consider urine diversion as an alternative to sewerage. The idea has gained significant traction after April Town Meeting members listened to multiple presentations by urine-diversion advocates and then voted down money for a sewer in Teaticket. Town officials will re-pitch the Teaticket sewer at November Town Meeting, but this time the proposal will come with a plan for a urine-diversion pilot program.

The state is requiring Falmouth to clean up all of its southern estuaries in the next two decades. Right now, the two main options before the town are sewerage and the installation of innovative septic tanks. Ms. Maingay and Mr. Barnhart hope to collect enough data from urine-diversion demonstration projects to convince the state that urine diversion is another legitimate method to clean up the town’s polluted coastal ponds.

**MORE INFORMATION**





**Urine-Diversion Enthusiast Prepares For Falmouth's Pee**