



**Minutes of the Community Outreach Meeting
Delaware's Revised Septic System Regulations
Saturday, November 22, 2014**

1. Call Meeting to Order

Mayor Bill Krause called the November 22, 2014 Community Outreach Meeting on Delaware's Revised Septic System Regulations to order at 11:04 AM in the downstairs meeting room of the Slaughter Beach Memorial Volunteer Fire Company. Council members present were Mayor Bill Krause, Vice Mayor Amy Parker, Treasurer Jackson Gingrich, Secretary Glenn Stieffenhofer, and Councilperson Kathleen Lock. Community members in attendance are shown on the attached sign-in sheet.

2. Welcome and Introductions

Mayor Krause welcomed everyone and thanked Vice Mayor Amy Parker for organizing today's meeting.

3. Introduction of Guest Speaker

Vice Mayor Parker introduced the guest speaker/presenter James Cassidy, Program Manager for the Groundwater Discharges Section of DNREC. Mr. Cassidy will review the key items in the Delaware revised septic system regulations passed by DNREC last January. He will explain how these changes and the subsequent changes that go into effect in January 2015 and January 2016 will impact us.

4. Presentation

*The DNREC presentation from the Outreach Meeting is posted on the Slaughter Beach website at:
<http://slaughterbeach.delaware.gov/files/2014/12/Septic-Regulations-Updates-Presentation-2.pdf>*

Additional reference information from DNREC's website:

Delaware's revised septic system regulations keep pace with changes in technology for large and small systems, protect public health and reduce pollution in groundwater, streams, rivers and bays, helping Delaware to meet its goal of achieving clean water. The changes correspond to regulations in effect for the past four years in Delaware's Inland Bays Watershed. They also protect homebuyers from acquiring malfunctioning septic systems.

*To view Delaware's Septic Regulations effective Jan. 11, 2014, copy and paste the following link into your browser:
http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Documents/DelawareFinalOnSiteRegulations_01112014.pdf*

The revised regulations include requirements for small residential septic systems of less than 2,500 gallons of

wastewater treated per day, as well as large community and commercial systems of more than 2,500 gallons of wastewater treated per day.

Several sections of the regulations include phase-in effective dates.

Among other changes, the regulations effective Jan. 11, 2014:

- Require inspection of all septic systems prior to property transfers
 - Most, if not all mortgage lending institutions currently require the inspection of a septic system prior to sale.
 - This requirement informs a buyer of a system's type and condition and protects a homebuyer from acquiring a malfunctioning septic system.
- Clarify the permitting process for siting, installing and maintaining all small systems
- Create new inspection protocols for system contractors and inspectors
- Allow homeowners to maintain their own innovative/alternative system, once certified through a homeowner training program
- Standardize the permitting process for spray irrigation and on-site systems
- Include procedures for distributing treated wastewater for agricultural use and other authorized purposes

Regulations effective Jan. 2015:

- Require the elimination of cesspools and seepage pits under certain situations
- Require the upgrade of all new and replacement systems within 1,000 feet of tidal portions of the Nanticoke River and Broad Creek, which will assist Delaware in meeting federal targets to clean up the Chesapeake Bay Watershed
- Establish statewide performance standards for all innovative/alternative systems
- Require all manufacturers of concrete system components (septic tanks, dosing chambers, etc.) to be certified through the On-Site Wastewater Accreditation Program

Regulations effective Jan. 2016:

- Require waste haulers to report septic tank pump-outs
- Create a new licensee category for construction inspectors

The regulations represent the culmination of more than five years of work by DNREC staff that included 13 workshops and three public hearings, answering questions and gathering input from homeowners, state legislators, realtors, businesses, the wastewater industry, and public utilities. After each workshop and hearing, the draft regulations were amended to reflect public comment.

Delaware's Septic Rehabilitation Loan Program (SRLP) is available to help eligible property owners meet regulatory requirements. The program provides low interest or no interest loans to assist homeowners with the costs of replacing malfunctioning septic systems or cesspools. The program is managed by DNREC's Financial Assistance Branch with technical assistance from the Ground Water Discharges Branch, in partnership with First State Community Action Agency of Georgetown/Dover. For more information contact, DNREC's Financial Assistance Branch at 302-739-9941 or visit their Septic Rehabilitation Loan Program Page at <http://www.dnrec.delaware.gov/fab/Pages/Septic-Rehabilitation-Loan-Program.aspx>.

Additional Notes from Jim Cassidy's Presentation:

- Jim Cassidy's works in the Wastewater Discharge Section of DNREC, and he is responsible for the site evaluation program, the septic permitting program, and the Class H Inspection program.

- *The portion of the presentation that will most interest Slaughter Beach residents is the Class H inspections and the FEMA requirements for V-Zones/Flood Zone information; other topics in the presentation are more relevant to other areas of Delaware.*
- *Revisions to the regulations were necessary to continue to protect the waterways of Delaware.*
- *They went into effect on January 11, 2014.*
- *Revisions were under review for over five years and included five public hearings, 28 public workshops, and additional public meetings with stakeholders such as the Delaware Association of Realtors, Delaware On-Site Wastewater Recycling Association.*
- *DNREC gave six weeks for everyone to get up to speed on the regulations and started enforcing them on March 1, 2014.*
- *The real estate industry was an instrumental partner in getting information on the amended regulations out to the public. They changed the verbiage on sales contracts to indicate that a Class H inspection was needed at least six months prior to the effective date.*
- *A Class H inspection is a comprehensive mandatory inspection of the system to check its functionality that has to be done at the time of a property transfer. There are extensions given for sheriff sales, auctions, short sales, and cash sales for a period not to exceed 90 calendar days from the date settlement date. The inspection report has to be submitted on forms supplied by the Department within 72 hours of inspection.*
- *There are three ways that you don't have to have a Class H inspection: 1) the certificate of completion for transfers of new property will suffice if issued within the past 24 months; 2) If an inspection has occurred within the previous 36 months and the property owner can provide proof of the pump out; 3) if the owner of an innovative alternative system provides proof of a licensed operator or has a service contract with a certified service provider.*
- *Since January 11, 2014 - 61% of Class H Inspections have been found to fall into the unsatisfactory category by inspectors; 34 cesspools have been identified and are in the process of being replaced; and 70 systems were found to have gray water lines.*
- *There are low interest loans available through the Septic Rehabilitation Loan Program (SRLP) for those that are financially burdened. The interest rate on these loans range from 1- 3%.*
- *For those that don't qualify for the low interest loan, a second option would be CFO – Septic System Extended Funding Option (SEFO). This is a zero percent loan with no monthly payments where the principal is due upon property title transfer or mortgage loan refinancing. SEFO loans are forgiven after 20 years.*
- *The homeowner has one year to replace a cesspool or seepage pit once it has been identified.*
- *The new regulations have an electrical code requirement. At a minimum, the electrical connections that have to do with the septic system must meet national and state standards.*
- *OSHA regulations must be followed.*

- *FEMA V-Zone requirements – If your property is located in a V-Zone, you need to look at the FEMA requirements for citing of on-site wastewater or wastewater systems while you are getting involved in the design of that system, and you need to deal with an engineer that is knowledgeable with that.*

5. Discussion and Final Questions

Q: Will we be able to get a copy of the presentation?

A: The presentation will be posted on the Town's website. <http://slaughterbeach.delaware.gov/town-council/town-meeting-agendas/>

Q: Who is qualified to do a Class H inspection?

A: A list of licensed Class H Inspectors is posted on the DNREC website: <http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargesLicensesandLicensees.aspx>.

Q: How much does a Class H inspection typically cost?

A: Usually in the ballpark of \$350 - \$400 and that includes having your tank pumped out, which is a mandatory component of the inspection. The average cost of pumping alone in this area is about \$185.

Q: Besides pumping it out, what else is part in the inspection process?

A: The mandatory inspection is a full comprehensive inspection that starts under your home looking at the lines that leave your house. The inspector will make sure the lateral lines go where they should and will look for extra lines such as a gray water line. Then the inspector will trace the line that goes to the septic system. Both lids to the septic system will be dug up to make sure the septic tank is acting properly and the inspector will make sure that the elevation of the water is where it belongs. The purpose of the tank being pumped as part of the inspection is to allow the inspector to see if there is a leak or a crack. In three years the tank will likely be 30% solids. The top and bottom sludge layers should never be more than 30%. Anything over that would carryover to the drain fields and plug the field causing premature failure. The inspection then continues to the drain field. The entire inspection takes approximately three or four hours.

Q: Could a gray water line go into an existing cesspool?

A: No. As soon as the Class H Inspector sees the cesspool, he will fail the system. Cesspools and seepage pits are no longer viable system in Delaware.

Q: How do you account for older homes having cesspools?

A: Regulation only went into effect in 1968 when DNREC was created. Most cesspools were installed prior to 1968.

Q: What is the average life expectancy of a septic system?

A: In Delaware, a system will typically last for 20 – 25 years if properly maintained. With the PSN3 technology, the system will last longer.

Q: Why do systems fail?

A: Systems fail because of buildup of a biological matter over time. Even with every three-year pumping, the nutrients will blind the bottom of the system to the point where the water will no longer percolate. In 2002, DNREC started to require an effluent filter on every septic system. When cleaned regularly/properly, the system has more longevity. If/when your system fails, the homeowner has to replace the whole system (brought up to the new standards), otherwise component replacement is allowed.

Q: Can you not replace the drain field separately from the tank?

A: No. Once a drain field is shot, you would have to replace the entire system.

Q: What is the average design or footage of a septic tank?

A: A regular 1000-gallon tank is 8' long x 5' wide x 64" high. You would have a separate dosing chamber, which is the tank that has a pump inside of it that lifts the water and pushes it out to the drain field.

Q: Will you be addressing "mounds" in your presentation? Why do we have them?

A: Every system in Delaware must have what is referred to as a vertical separation distance from whatever the limiting factor is in the ground. In Lower Delaware/Sussex County, the limiting factor is almost always the seasonal high water table. The mark in the ground is called a mound; this is an iron stain where the high water table is or was. We need 36" of separation above that which is the mound. The regulation requires a ratio of 4:1 length to width so oxidation can take place underneath the drain field.

Q: Many lots in Town are small – 50' x 150', so there isn't much room for these systems particularly if the home isn't elevated. What about alternative systems?

A: We do everything we can to fit something on that property. We can waive isolation distances; let you get closer to the house; the road; or to the side property lines. The other thing we let you do is downsize the system. The last resort is a holding tank that must be pumped and hauled when the tank is $\frac{3}{4}$ full.

Q: When does the every three-year pumping of systems go into effect?

A: It was in effect since 1985. The hauler is now responsible to report to the Department what he pumps quarterly. This is the mechanism for DNREC to finally regulate a policy that has been in place for nearly 30 years.

Q: Does this reporting identify what type of system was pumped?

A: No. We will already know that from the GIS mapping process that gives a crossover to the system type.

Q: Besides the three reporting requirements of the hauler, are they required to report a crack or other malfunction of the system?

A: They will use an online reporting system that only allows them to report: 1) the pumper's license number; 2) the 911 address where he pumped from; and 3) how many gallons were pumped. The pumper will be able to notify the homeowner of any issues and it is up to you to have it fixed.

Q: Does this apply if you are not a permanent resident?

A: Yes, it doesn't matter if you are a permanent resident or not.

Q: What is the difference between a peat bio filter system and a sand mound system?

A: Peat moss is an excellent filter, but peat systems don't get rid of nitrogen. Peat systems clean the water so well, the Department can allow a reduction in size of the drain field.

Q: I think I read that homeowners can examine their own innovative alternative systems.

A: You will be able to do this if you go to school and become a certified service provider for your own system type.

Q: Are regular sand mounds held to the same standard for homeowner self-inspection?

A: No, because regular sand mound systems aren't innovative or alternative.

Q: Are we going to have a choice as to which system we put in when replacing a system?

A: When a site evaluation is done, they will tell you which type of system has to go on that property.

Q: If we spend money to put in a new system and then we get a central sewer system, what happens?

A: You would have one year to hook to central sewer if it comes in.

Q: Are we looking at inspections soon?

A: Other than Class H inspections, no other random inspections should be expected.

Q: In a situation where land is a problem, could two houses tap into one system?

A: It can be done with cross easements. We do as much as we can to stay away from shared systems, but when allowed, it should always be a legal agreement between the two parties sharing a system.

Q: How many systems are compliant in Slaughter Beach?

A: Not sure - there are too many other things we need to do. I don't even know how many systems are in Slaughter Beach let alone how many compliant ones. If I were to come to your house, it was because someone called me. I've got 70,000 systems and only six inspectors.

Q: If I have a working certified legal septic system, why would I want to connect to a sewer line?

A: You have to do it if it offered to you. Of course, there would have already been a referendum with majority ruling.

Q: If we were to get a central sewer system, would we have to remove the existing septic system?

A: You would have to make it so the system was no longer operable. You wouldn't necessarily need to dig it out, but it should be filled with sand if you don't excavate it.

Q: Have you seen elsewhere where they bring in public sewer and water where the cost was disbursed over a number of years such that a resident doesn't have to lay out all of the money initially?

A: We wouldn't know the answer to that until we have results from the feasibility study.

Q: I've heard that salt-water intrusions due to flooding will cause your septic system to fail prematurely.

A: Periodic flooding and salt-water intrusion doesn't do anything good for your system. Sodium in the system will cause your septic system to fail prematurely.

Q: Is a composting toilet allowed?

A: Yes – some Delaware state parks use them. You can use them in your home if you want to, but they aren't very pleasant to use.

Q: I'm concerned that a developer would come here making a "backdoor deal" to force us to have sewer. What is the probability of that happening?

A: According to law, it can't be done that way.

Q: What can you tell if you come to a house and there is no vent pipe visible?

A: Most septic systems, even ones with a vent pipe, vent 80% of the gases back through the house. Gravity fed systems vent 100% back through the house and don't have to have a vent pipe. If you have a pressure system with a dosing chamber, you will get some venting from the vent.

Q: How many classes of inspections are there?

A: There is only one classification of inspector, which is Class H. There will be a second type of inspector starting in 2016, which will be Class I, which has to do with construction of new systems.

- Class A – Percolation Tester (authorizes the performance of percolation tests)
- Class B – Designer (authorizes the design of conventional on-site wastewater treatment and disposal systems which utilize gravity distribution systems for seepage beds and seepage trenches and certain standardized pressure distribution and disposal systems)
- Class C – Designer (authorizes the design of conventional, alternative and experimental on-site wastewater treatment and disposal systems and all pressure distribution systems)
- Class D – Site Evaluator (authorizes the performance of site evaluations)
- Class E – System Contractor/Installer (authorizes the construction and installation of wastewater treatment and disposal systems)
- Class F – Liquid Waste Hauler (authorizes the removal or disposal of the solid and liquid contents of septic tanks, cesspools, seepage pits, holding tanks or other wastewater treatment or disposal facilities as specified and required)
- Class H – System Inspector (authorizes the inspection, investigation and data collection to make determinations regarding the present operational condition of on-site wastewater treatment and disposal systems)

Q: Are outdoor showers legal?

A: No, though there are probably more outdoor showers in Delaware than there are septic systems. It's not one of those things we chase down.

Q: We have a commercial business with two buildings going into a holding tank. If we build another building, can we tap into that same holding tank?

A: It would be depend on the type of business, and the square footage of the building. You can contact me directly to discuss further.

Q: Is there any consideration for the size of a system for a house that is only occupied for a few weeks per season rather than full-time?

A: No. This is because the house can be sold at any time.

Q: Are outhouses illegal in the entire state?

A: Yes.

Q: Is there any legal way to have a gray water system?

A: Yes. You would have to go through permitting to get a gray water system. You would have your house plumbed in two different directions. Black water is collected and would go in one direction and gray water would go someplace else. The gray water would be processed.

Q: Is there a place to find out what alternative systems are available?

A: Not really, because you wouldn't know what system you need until the site evaluation. All of the systems are listed on the website, but it couldn't tell you when they are to be used.

<http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargesProductApproval.aspx>. Each system is hyperlinked so you can see what the system looks like. There is also a list of Class F Waste Haulers.

Q: Are there any moratorium areas in Delaware?

A: None right now.

6. Closing Statements

For additional information on Delaware's revised septic regulations, today's presentations, or septic permits, contact Jim Cassidy, DREC Program Manager for Sussex County. He can be reached by phone at 302-856-4561, or by email at James.Cassidy@state.de.us.

7. Adjournment

Mayor Krause adjourned the meeting at 12:48 PM.

Respectfully submitted,

Glenn Stieffenhofer
Secretary