

#### **Septic System Upgrades**

Wood County has begun the implementation of an Operation and Maintenance (0 & M) Program, per 3701-29-02 (H) and 3701-29-09 (I)-(2) of the OAC governing private sewage treatment systems. For this reason when a realty inspection is conducted or when an investigation is performed due to a nuisance complaint, upgrades to the existing system are going to be required to be performed. These include but are not limited to the following:

- Installation of inlet and outlet risers on the septic tank
  - 1. Provides exact confirmation of the tank(s) location.
  - 2. Provides access to both front and back of the tank(s) for proper clean out.
  - 3. Provides access to the tank(s) for troubleshooting (plugged tile, cracked pipe, etc.)
  - 4. Allows for proper monitoring, maintenance and pumping.
- Installation of inlet and outlet baffles inside the tank
  - 1. Allows for the proper separation of solids, oils and greases within the tank(s).
  - 2. Prevents solids from entering the leach field.
- Installation of a riser and/or replacement of the distribution box
  - 1. Allows for proper monitoring & maintenance of the system.
  - Provides a "relief port" in the event that the leach starts to plug or experience problems.
     This riser will allow for effluent to surface outside the house instead of causing major backup inside.

#### The upgrade requirements are as follows:

- All required cuts on an existing septic tank (for baffles replacement, new risers, etc.)
  must be performed with a concrete drill or saw. Pounding or chiseling could damage a
  tank.
- 2. New risers must be secured to the lid of the tank with a Tank Adapter Ring (TAR) or with a minimum of two (2) L brackets secured properly to both the riser as well as the top of the tank. Concrete, mortar or hydraulic cement will then be required to secure the outside of the riser tank. NOTE: Installation of a riser to the tank with tar strips or mastic in not permitted.
- 3. All inlet and outlet lines from a septic tank must be properly secured with spray-on insulation foam. NOTE: Properly clean opening(s) of all dirt/debris prior to application. Hydraulic cement or mortar can be placed over the foam for added security but it's not mandated. The practice of using only concrete, cement, mortar or hydraulic cement is not permitted.
- 4. Risers placed on existing distribution boxes must be secured to the box with 100% silicon sealant (PVC-to-PVS) hydraulic cement (concrete to concrete) or L clamps bolted to the riser and distribution box secured with hydraulic cement (concrete to PVC). Distribution units have a two risers with a paddle valve will require that the risers be cut (notched) and covered with a SCH 40 or SDR 35 slide-on style lid (PVC-to-PVC) or otherwise properly secured (screwed-on, concrete cover, etc). depending on the type of lid that is being utilized.

### **Additional Upgrade Information**

#### 1. All work must be left open for an inspection.

Back filling any upgrades prior to an inspection is prohibited. We cannot inspect what we cannot see. This is a reminder that although no permits are required for upgrades, all work must be left open prior to final approval by this department. This includes the entire lid of the tank itself as well as the lines entering and exiting the tank.

- 2. Inlet and outlet baffles must be positioned so that they are clearly visible and accessible. Newly installed baffles must be positioned below the inlet and outlet openings of the tank. If an inlet or outlet baffle is not directly in line with the opening, 45° or 22° fitting must be used. This will allow for an easy inspection to be conducted and for any blockages that may occur to be easily cleared.
- 3. Spray on foam insulation must be used on the lines entering and exiting the tanks. Often times the lines entering and exiting the tank must be removed and replaced to allow for baffles to be installed. This often creates gaps around the pipe that must be sealed. Foam sealant applied around the entire circumference of the pipe will assure that a proper watertight seal has occurred. Hydraulic cement or 100% silicon can be used as a final sealant if you prefer. \*Reminder: The minimum flow line required in a septic tank is 2". Make sure this is confirmed prior to sealing lines entering and exiting the tank.

#### 4. Risers must be properly secured to the tank.

Risers installed on the top of the tank with mortar, concrete, hydraulic cement or mastic ONLY do NOT allow for proper adherence. The use of a tank adapter ring (TAR) or L brackets and stainless steel concrete screws positioned against the sides of the risers and the top of the tank will allow for the risers to remain secured. If L brackets are utilized, concrete, mortar or hydraulic cement must then be installed around the base of the riser to allow for both additional adherence and to prevent dirt and root infiltration form occurring.

#### 5. **Distribution upgrades**

Concrete distribution units often become deteriorated and must be completely replaced. Replacement of between 5' - 10' of lines exiting the distribution unit is typical. When securing new PVC to existing clay tile use a Fernco adapter (mechanical joint) or utilize a 4" to a 3" PVC reducer fitting and slide the 3" section into in the 4" clay tile. Sealing the outside circumference of pipe with spray on foam insulation is permitted however you must be careful not to allow the foam to penetrate the inside of the pipe. **Note:** If our records indicate that a leach field with a distribution unit is on site, the distribution unit (box) must be located. A "tee" with an inspection riser will not be acceptable in these cases since the flow into the system cannot be determined.

\*Note: Although no permits are required for these upgrades, all work must be left open and inspected prior to backfilling.

If you have any questions, please feel free to contact this department at (419) 354-2702.

# **SEPTIC UPGRADES**





New baffles & risers installed on an existing tank (both inlet & outlet shown)



**New Distribution Box** 



New Exterior Clean-Out

## **PICTURES OF SEPTIC UPGRADES**







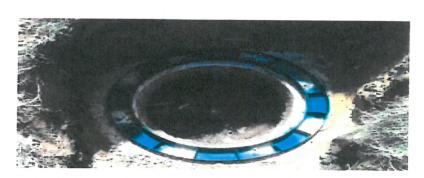
New Outlet Riser w/ New 4 Baffle



4" - 6" Conversion Tee (Inlet)



New Risers on Existing Tank



Tank Adapter Ring (TAR) w/ Tap-Cons