#### SEPTIC SYSTEM

# TIME OF TRANSFER INSPECTIONS AND OTHER INFORMATION CONCERNING SEPTIC SYSTEMS IN TAMA COUNTY IOWA

# EXCERPTS FROM CHAPTER 69 – PRIVATE SEWAGE DISPOSAL SYSTEMS AND TAMA COUNTY BOARD OF HEALTH RULES

## <u>THERE ARE NO "AS IS" SALES</u> WITH REGARD TO PRIVATE SEWAGE DISPOSAL SYSTEMS

Inspections of private sewage disposal systems are required, beginning July 1, 2009, prior to any transfer of ownership of a building where a person resides, congregates, or is employed that is served by a private sewage disposal system, the sewage disposal system serving the building shall be inspected.

A building that will be demolished without being occupied does not require an inspection. A legally binding document verifying that the building will be demolished shall be provided to the county and to the department for record. The abandoned septic tank shall be crushed and filled with sand or dirt to prevent a collapse of the structure at a later date and the creation of a dangerous and life threatening condition.

In the event that weather or other temporary physical conditions prevent the certified inspection from being conducted, the buyer shall execute and submit a binding acknowledgment with the county board of health to conduct a certified inspection of the private sewage disposal system at the earliest practicable time and to be responsible for any required modifications to the private sewage disposal system as identified by the certified inspection. Title abstracts to property with private sewage disposal systems shall include documentation of compliance with the requirements in this rule.

Inspection criteria: If a private sewage disposal system is failing to ensure effective wastewater treatment or is otherwise improperly functioning, the private sewage disposal system shall be renovated to meet current construction standards, either by the <u>seller</u> or, by agreement, within a reasonable time period as determined by the county or the department, by the buyer. If there is no permit on file, the system will need to be located to find out where the wastewater is going. It is illegal to dump into a ditch, field tile, an old cistern or surface discharge. A properly installed and legal septic system consists of three components, a

two compartment septic tank, a plastic distribution box and laterals or a leach field.

If the private sewage disposal system is properly treating the wastewater and not creating an unsanitary condition in the environment at the time of inspection, the system is not required to meet current construction standards. Proof that a secondary treatment system (laterals/leach field) is in place must be provided. However, in older systems, if it is found that the distribution box is concrete, it shall be replaced with a plastic distribution box which includes speed levelers and also must have "T" inlet. An outlet baffle shall be installed, if one is not present, and it shall be fitted with an effluent screen filter. If possible, a filter shall also be installed on the effluent (outlet) side of the septic tank if an outlet baffle is present but has no filter. Risers shall also be installed on the tank in order to bring tank access up to ground level. If the riser(s) is/are not water tight, it/they shall be replaced.

<u>Inspection validity:</u> An inspection is valid for a period of two years for any ownership transfers during that period.

Septic tank: At the time of inspection, any septic tank(s) existing as part of the sewage disposal system shall be opened and have the contents pumped out and disposed of according to 567—Chapter 68. In the alternative, the owner may provide evidence of the septic tank being properly pumped out within three years prior to the inspection by a commercial septic tank cleaner licensed by the department which shall include documentation of the size and condition of the tank and its components at the time of such occurrence. If the septic tank(s) is opened, the condition of the tank and its components shall be documented and included in the final report.

#### TAMA COUNTY PUBLIC HEALTH & HOME CARE

### SUMMARY OF IOWA'S TIME OF TRANSFER SEPTIC SYSTEM INSPECTION PROGRAM

#### **PURPOSE:**

Time of Transfer inspections will systematically eliminate illegal Septic systems

Illegal = No Secondary Treatment

Septic Systems – ARE NOT GRANDFATHERED!

Time of transfer inspections will get failing systems repaired

Inspections will protect home buyers

Inspections will protect the environment and public health

#### **INSPECTION LAW:**

Senate File 261 passed in April 2008 and in effect July 1, 2009

It is required that every building or home with a septic system have that system inspected <u>prior to transfer of the deed</u>

County Recorder cannot record the deed or conveyance document without proof of inspection or binding document for inspection

#### **TRANSFERS:**

Includes all types of ownership transfers not specifically exempted

Includes seller financed real estate contracts

Includes sales, exchanges, contracts of one, but not more than 4 homes

#### TRANSFERS EXEMPTED:

Transfer pursuant to a court order

Foreclosure or forfeiture

Transfer by trustee in bankruptcy

Transfer by eminent domain

Transfer by a fiduciary in the execution of a trust, estate or guardianship\*

Transfers made to a spouse or a person in the lineal line of consanguinity\*

Transfers between spouses resulting from divorce, legal separation or property settlement\*

Transfer of a property that will be razed or demolished (requires legally binding proof)\*\*

\* It is, however, recommended that the tank be pumped and inspected

\*\* The tank should be crushed and filled with sand or dirt to prevent any future accidents

#### **INSPECTION DELAYS:**

Inspections delayed by weather

Requires binding acknowledgement with Tama County Board of Health to do inspection ASAP

Also responsible for any required modifications

#### **GROUNDWATER HAZARD STATEMENT:**

**Document required for all property transfers** 

Identifies UST's, wells, landfills, burial sites, hazardous waste and now, septic systems

Disclosure of potential environmental problems to buyers

#### **ABANDONED WELLS AND CISTERNS:**

Not a part of Time of Transfer Inspection, but . . .

Grants to Counties funding for plugging and closure available in Tama County through Tama County Public Health

#### **GROUNDWATER HAZARD STATEMENT:**

#### Seller must:

Indicate whether property has a septic system

Attach a copy of the inspection report, or,

Attach a copy of the private sewage disposal system permit if the system has been installed within the past 2 years, or,

Attach a copy of the binding agreement for future inspection and any required repairs, or,

Attach a copy of the binding agreement that the building will be demolished

#### Must have one of these in order to transfer deed

#### **CERTIFIED INSPECTORS:**

SF 261 requires Time of Transfer Inspectors be Certified by IDNR

Law requires a uniform procedure and the use of a standard inspection form

#### SEPTIC TANK CAPACITY:

Minimum capacity: The minimum liquid holding capacity shall be as specified in the following table (capacity may be obtained by using one or more tanks):

Business with one bathroom	1,000 gallons
Up to and including 3 bedroom homes	1,250 gallons
4 bedroom homes	1,500 gallons
5 bedroom homes	1,750 gallons
6 bedroom homes	2,000 gallons

Presence of water softener, garbage disposal or Jacuzzi may add 250 gallons to tank capacity

#### **MINIMUM DISTANCES:**

All private sewage disposal systems shall be located in accordance with the minimum distances shown

	Closed Portion of Treatment System	Open Portion of Treatment System
Private water supply well	50	100
Public water supply well	200	200
Groundwater heat pump boreh	ole 50	100
Lake or reservoir	50	100
Stream or pond	25	25
Edge of drainage ditch	10	10
Dwelling or other structure	10	10
Property lines (unless a mutual easement is signed and r		10

Other type of subsurface treatment	5	10
system		
Water lines continually under pressure	10	10
Suction water lines	50	100
Foundation drains or subsurface tiles	10	10

#### Septic Tank

Minimum of 10 feet from house and 50 feet from any well Pipe into and out of tank must be schedule 40 plastic Double compartment tank

Plastic or fiberglass tank must be imbedded in sand (Special approval required if not concrete tank)

Any line under a driveway must be schedule 40 plastic Must have inlet and outlet plastic baffles (T design)

Must have filter at outlet baffle

#### **Distribution Box**

Must be plastic. No concrete boxes or lids Must be level Speed levels must be calibrated after leveling

Must have "T" in inlet

#### Laterals

Minimum of 100 feet from well and open water (lakes, ponds, etc.)

Level and similar lengths

No deeper than 3 feet to bottom of trench

At least 6 feet apart

Lines limited to 100 foot lengths

Chamber system preferred

Rock trench is to have 1 foot of septic rock with pipe in top 6 inches

Systems must be inspected before covered – 24 hour notice preferred

#### MAINTAINING YOUR SEPTIC TANK

#### Safeguarding Your System -

Your septic tank is the first step of the wastewater treatment process and must be properly maintained to work correctly. The best designed and operated septic tank system/disposal field eventually fails unless sludge is periodically removed from the septic tank. Inadequate maintenance can cause sewage to back up into the house and solids to overflow to the drainfield. Often the drainfield bust be abandoned and a new one constructed when solids clog the soil.

Tank Maintenance -

Most tanks need to be pumped every 3 to 5 years, depending on the size of the tank, daily flow of wastewater into the tank, and use of a garbage disposal. Septic tanks need to be pumped out when the sludge layer exceeds 24 inches in depth or when the bottom of the scum layer is less than 3 inches above the lower end of the submerged outlet. Information on how to measure the sludge accumulation in your septic tank is available at Tama County Public Health & Home Care.

#### Septic Tank Additives -

There are many septic tank additives on the market today that claim to improve the performance of your septic system: starters, feeders, and cleaners. To date, there is no conclusive evidence that these products will prevent septic system failure or will improve performance. Adding compounds to a septic tank will not eliminate the need for regular cleaning. Enzymes and yeast products will not harm your system, but there are plenty of bacteria already in the tank that will break down waste products. Other additives however, particularly degreasers, may contain cancer-causing agents that can end up in groundwater or surface water supplies.

#### Other Additions to the Tank -

Special additives are one thing, but what about the use of every day cleaning products? Most experts agree that the normal use of household cleaning products will not harm the system by stopping the action of bacteria in the tank. Large amounts of certain chemicals, however, may interfere with the breakdown of wastes in the tank or could clog the drainfield. You also need to keep in mind that the products you use may eventually find their way into local ground-water systems. Consider using biodegradable alternatives for routine cleaning chores. Oxidized bleaches, borax, vinegar and baking soda are less hazardous alternatives to common household cleaning products.

The use of a garbage disposal can also affect your septic system by adding to the amount of suspended solids entering the tank. Suspended solids can enter the drainfield and clog soil pores, reducing the soil's ability to treat wastes.

It is also important to not overload your system. The septic tank is designed to hold incoming wastewater for a certain time period so that solids have time to settle and lighter portions can rise to the top. Try to space out wash loads over the course of a week instead of running many loads in one day. Water-conserving devices such as low-flow toilets and faucets can also reduce the amount of wastewater that flows into your system. With some care and consideration for your septic tank, it should serve your household well for many years.

#### **CLEANING (PUMPING) SEPTIC TANKS**

It is highly recommended that a licensed commercial septic tank cleaner be hired to pump/clean the septic tank. A homeowner of a septic tank may clean his/her own tank without being licensed if all the requirements of 567—Chapter 68 are met (These rules are intended to implement Iowa Code section 455B.172). For a copy of Chapter 68, Commercial Septic Tank Cleaners please contact the office of Tama County Public Health & Home Care. HOWEVER, THE TAMA COUNTY BOARD OF HEALTH POLICY IS – NO HOMEOWNER MAY PUMP HIS/HER OWN SYSTEM.

#### The Role of Septic Tanks -

Onsite wastewater treatment (septic) systems normally include two parts: a septic tank, the first component of the system, followed by a secondary wastewater treatment component, such as a soil absorption leachfield. The septic tank acts as a settling chamber that allows wastewater to separate naturally into three distinct layers before liquid flows out of the tank. First, solid particles settle to the bottom of the tank to form a layer of sludge, where some of it is digested by anaerobic bacteria. Second, greases and fats float to the top of the wastewater in the tank and form a second layer, or scum layer. Third, a clearer layer of liquid wastewater develops in the middle – between the sludge layer at the bottom and the scum layer at the top of the wastewater in the tank. The liquid layer of wastewater eventually flows out of the tank to the secondary treatment component (usually the final treatment component) of the system.

A normally functioning septic tank provides primary treatment of wastewater, which includes the separation of wastewater into three layers and the partial digestion of sludge by anaerobic bacteria. With normal contributions of wastewater to the system, sludge continues to build up at the bottom of the septic tank over time, despite the anaerobic digestion of some solids. At the same time, the layer of scum on top of the wastewater continues to grow thicker. The continual growth of the two layers - the sludge at the bottom and the scum at the top - effectively reduces the storage capacity of the tank and shrinks the middle liquid layer of wastewater. As this happens, wastewater glows more rapidly through the tank, which means there is less time for the wastewater to settle out solids and separate scum from the liquid. Unless there is adequate space in the septic tank for wastewater to separate into layers. solids and scum will float out of the tank and into the secondary treatment component of the system. Eventually, the secondary treatment component will clog and the entire system will fail.

#### The Need for Regular Tank Pumping -

To help ensure the proper maintenance and long term functioning of the entire onsite septic system, the septic tank should be pumped out every three to five years, given normal household water usage. Pumping the tank helps prevent sludge and scum from flowing out of the septic tank and into the secondary treatment system.

Proper tank cleaning refers only to removing all the solids and scum from the tank by pumping, not by any other means. Adding septic tank "additives" to the system is not a proper substitute for tank pumping and may actually harm the system if it causes solids to become suspended and flow into the secondary treatment component of the system. It is also not necessary to add bacterial additives to the septic tank after tank pumping, since there is sufficient bacteria present in normal household wastewater for proper functioning of the system.

#### SEPTIC TANK PUMPING REMINDER CARDS -

Reminder cards are mailed out to Tama County Rural Property Owners every five years to remind the m to have the septic tanks pumped.

The mailing schedule is as follows:

2009 - Salt Creek, Richland, Columbia and Highland Townships

2010 - York, Otter Creek, Toledo, Tama and Indian Village Townships

2011 - Oneida, Carroll, Howard, and Carlton Townships

2012 - Clark, Perry, Crystal and Spring Creek Townships

2013 - Geneseo, Buckingham, Grant and Lincoln Townships

2014 - Salt Creek, Richland, Columbia and Highland Townships

Etc. . .

#### The Reminder Card States –

In order to assure that your lateral drain fields keep working properly, it is recommended that you have your septic tank pumped every 3 to 5 years after installation. If your tank has not been pumped recently, it should be pumped and checked to make certain it is functioning properly.

New systems which have filters in the outlet should have the filters rinsed off annually (rinse back into the tank) and placed back into the tank. The filters should be reused and not thrown away.

When a tank is pumped, pumpers should clean the filter and reinstall it in the tank. No homeowner may pump his own system. A pumper must be licensed to do this task. For a list of licensed pumpers, please call our office.

<u>Well Water:</u> Rural well water users should have their water tested every 2 to 3 years. If you would like to have your water tested, please contact our office. Water tests are \$20.00.

<u>Radon Test Kits:</u> Radon test kits are available through our office – Cost is \$6.00/kit.