

## BATES COUNTY ON-SITE SEWAGE RULES AND REGULATIONS

**Applicability:** All equipment and devices necessary for proper conduction, collection, storage, treatment, and disposal of wastewater from a dwelling 3,000 gallons or less per day (designed flow). Included within the scope of this rule are building sewers, septic tanks, subsurface absorption systems (laterals), mound systems, intermittent sand filters, gravel-less systems, aeration unit wastewater treatment systems, privies, holding tanks, and wastewater stabilization ponds (lagoons). **Note:** A facility with a daily designed sewage flow rate of over 3,000 gallons per day, and any lagoons that are not for single family homes will need to contact the Missouri Department of Natural Resources. Also, any subdivision will need to contact DNR before applying for any approval or permits under this rule.

**Responsibilities:** The design, construction, operation, and maintenance of sewage treatment and disposal systems shall be the responsibility of the designer, owner, developer, installer, or user of the system. Actions of representatives of the administrative authority engaged in the evaluation and determination of measures required to effect compliance with the provisions of this rule shall in no way be taken as a guarantee or warranty that sewage treatment and disposal systems approved and permitted will function in a satisfactory manner for any given period of time.

**Permits:** Any single-family homeowner under 3 acres or commercial facility or schools, churches, renters, or any person or entity must get a permit before installing a new on-site sewage system or before major modification or repair of an existing system. **Note:** Major modification means the redesigning and alternation of on-site sewage system by relocation of the system or a part of the system, replacement of the septic tank or construction of a new absorption field. You may repair a crushed lateral without getting a permit. However, if you add laterals, you must get a permit. Also, an owner may have his/her tank pumped out without applying for a permit. **Note:** Single-family residences over 3 acres do not need a permit. They still need to install their on-site sewage system to county standards. Also, the second on-site sewage system on a track of land over 3 acres will have to get a permit unless that land is deeded in their name, and it is also over 3 acres.

### How To Get a Permit

First, obtain a permit application from the Bates County Health Department. Some installers or soil evaluators may also either get this permit application or even submit it for you. Return the completed application with a good drawing showing field locations with slopes, field layout, length, spacing, connection, pipe sizes, and cleanout details—trench plan, depth, and width details—set back distances to wells, property lines, utilities, etc. and any other information the administrative authority requires. Along with the completed application, submit either percolation test or soil morphology from a certified person and appropriate permit fee. **Note:** A permit is \$75.00 for a single-family residence and \$125.00 for a commercial facility. After reviewing the application, the Environmental Public Health Specialist will give a green construction permit, and construction can begin.

Before covering the system you must arrange for the Environmental Public Health Specialist to inspect and sign that your system is approved. Note: you may install the septic system yourself, but it is highly recommended that you use a certified county installer to install the system. A list of installers is available at the Health Department. Also a more detailed book on how to install a system is available at the Health Department.

### Standards and rules

**Sewage tanks:** Must be watertight and designed and constructed to withstand all lateral earth pressure under saturated soil conditions when the tank is empty. Most all tanks used are from Stewarts Concrete. If you use another company's tank or install the tanks yourself, call the Health Department to make sure they are approved to use in Bates County. No metal tanks are allowed.

#### Dwelling Septic Tank Capacity

Number of Bedrooms	Minimum Liquid Capacity
1-3	1000 gallons
4	1250 gallons
5	1500 gallons

Note: If you have more than 5 bedrooms or any commercial design you should contact the Health Department to determine how large the tank should be.

The pipe used between the house and the tank should be ASTM approved and should be the following specifications:

- A. Minimum of 4" in diameter.
- B. Slope with a minimum fall of 12" per 100 feet.
- C. Cleanouts should be provided every 100 feet or when the change in direction is more than 45 degrees and a cleanout should be provided between the house and tank.
- D. The pipe going into and out of the tank shall be schedule 40 PCV or cast iron and shall extend a minimum of two feet beyond the hole of excavation for the sewage tank. Note: If you will be driving anything in the area it is recommended the entire 4" pipe from the house to lateral field is schedule 40.
- E. A six-inch inspection port shall be provided over the inlet and outlet baffles of each tank and terminates at or above grade. A manhole cover at or above grade may also serve in place of inspection ports.

#### Absorption Systems (Laterals)

Since it is fairly difficult to determine how much absorption area is needed based on a perc test or soil morphology, you must submit your Percolation test or soil evaluation to the Environmental Health Specialist. He will determine the minimum amount of absorption area the soil evaluation calls for and if either a further soil evaluation is needed or if an alternative system is needed. Note: The Environmental Health Specialist cannot design your system, but will aid you in determining if minimum construction standards are met. The following standards are expected for your absorption system:

1. Each absorption trench system shall have a minimum of two trenches with no one longer than 100 feet unless approved by the Administrative authority on a case by case basis. The absorption trenches shall be located not less than 3 times the trench width on centers with a minimum spacing of five feet on centers.
2. Absorption trenches shall be at least 18 inches wide and not more than 36 inches wide. The 36-inch trench should not be utilized in soils with percolation rates slower than 45 minutes per inch. The bottom of standard absorption trenches shall be at least 18 inches and no more than 30 inches below the finished grade except as approved by the administrative authority.
3. The pipe used between the sewage tank and the absorption system shall be a minimum of four inches inside diameter and ASTM approved as mentioned earlier. The pipe shall have a minimum fall of not less than 1/8 inch per foot. All joints shall be of watertight construction.
4. Gravity-fed absorption field distribution lines should be at least four inches in diameter. Perforated distribution line shall have holes at least one-half inch and no more than three-fourths inches in diameter.
  - A. Pipe used for distribution lines shall meet the appropriate ASTM standard or those of an equivalent testing laboratory. Fittings used in the absorption field shall be compatible with the materials used in the distribution lines.
  - B. When four-inch or six inch diameter corrugated plastic tubing is used for distribution lines, it shall be certified as complying with applicable ASTM standards. The corrugated tubing shall have either two or 3 rows of holes, each hole between 1/2 inch and 3/4 inch in diameter and spaced longitudinally approximately four inches on centers. Coiled tubing shall not be used.
5. The absorption trenches shall be constructed as level as possible, but in no case shall the fall exceed 1/4 inch in ten feet. The ends of distribution lines should be capped or plugged, or when they are not equal elevations, they shall be connected.
6. Rock used in soil absorption systems shall be clean gravel or crushed stone and graded or sized between 1 1/2 and 3 inches. The rock shall be placed a minimum of twelve inches deep with at least 6 inches below the pipe and 2 inches above the pipe and distributed uniformly across the trench bottom and over the pipe. Limestone and dolomite shall be avoided when possible. Before placing solid backfill over the trenches, the gravel shall be covered with one of the following.
  1. Unfaced, rolled, 3 and 1/2 inch thick fiberglass insulation
  2. Untreated building paper
  3. Synthetic drainage fabric
  4. Other material approved by the administrative authority.

**Note:** You will need an inspection before you backfill the soil.

**BATES COUNTY HEALTH CENTER**  
**HOME HEALTH AGENCY**

P. O. Box 208  
501 N. Orange  
Butler, Missouri 64730

Phone: 816-679-6108  
FAX: 816-679-6022

We, the members of the Bates County Commission and the Bates County Health Center Board of Trustees are concerned about ground water quality. Due to the growth of Bates County, we feel that is vitally important for disease prevention to monitor and upgrade all waste water systems within Bates County. The Bates County Health Center would be responsible for the Administration of the program. This agreement entered into

10      9      96  
Day      Month      Year

Pam Hedger

Pam Hedger,  
Board of Trustee Chairman

Harold Weil

Harold Weil  
Presiding Commissioner

Phil Hess

Phil Hess,  
Board Member

Gloria Pyeatt

Gloria Pyeatt  
Northern Commissioner

Eugene Fenwick

Eugene Fenwick,  
Board Member

Everett Tourtillott

Everett Tourtillott,  
Southern Commissioner

**AN ORDINANCE ADOPTING REGULATIONS REGARDING THE  
ADMINISTRATION OF SEWAGE TREATMENT SYSTEMS STANDARDS BY THE  
BATES COUNTY HEALTH CENTER BOARD OF TRUSTEES.**

BE IT ORDAINED AS FOLLOWS:

Section 1: The Commission hereby promulgates and adopts regulations regarding the administration of sewage treatment systems standards as recommended and requested by the Bates County Health Center Board of Trustees. A copy of said regulations are attached hereto and made a part hereof by reference.

Section 2: The Bates County Health Center is hereby ordered to have the attached regulations printed and available in their office for distribution to the public.

Section 3: A copy of this order shall be published in a newspaper in this County on three successive weeks, with the first publication occurring not later than thirty (30) days after the passage of this order.

APPROVED THIS 10 DAY OF Sept. 1996.

Harold Weil  
HAROLD WEIL, PRESIDING COMMISSIONER

Gloria Pyeatt  
GLORIA PYEATT, NORTHERN COMMISSIONER

Everett Tourtillot  
EVERETT TOURTILLOTT, SOUTHERN COMMISSIONER

ATTEST:

Marlene Waincott  
MARLENE WAINSCOTT, COUNTY CLERK

**BATES COUNTY  
SANITATION ORDINANCE**

This ordinance shall be liberally construed and applied to promote its underlying purpose of protecting the public health.

An ordinance adopting regulations regarding the administration of sewage treatment systems standards by the Bates County Health Center Board of Trustees.

Be it ordained as follows:

(1) The Commission hereby promulgates and adopts regulations regarding the administration of sewage treatment systems standards as recommended and requested by the Bates County Health Center Board of Trustees. A copy of said regulations are attached hereto and made a part hereof by reference.

(2) The Bates County Health Center is hereby ordered to have the attached regulations printed and available in their office for distribution to the public.

(3) A copy of this order shall be published in a newspaper in this county on three successive weeks, with the first publication occurring not later than thirty (30) days after the passage of this order.

Approved this \_\_\_\_ day of  
August, 1995

/s/ Harold Weil  
Presiding Commissioner  
/s/ Gloria Pyeatt  
Northern Commissioner  
/s/ Everett Tourtillott  
Southern Commissioner

Attest:

/s/ Marlene Wainscott  
County Clerk