

CHAPTER IV

SMALL ON-SITE WASTEWATER SYSTEMS

- 4.1 **Purpose:** The regulations in this chapter are enacted for the purpose of regulating the design, construction and modification of small on-site wastewater systems as the term is defined in these regulations in order to protect and promote the public health and to prevent the entrance of infectious, contagious, communicable or dangerous diseases into Boone County, Missouri.
- 4.2 **Authority:** These regulations are enacted under authority vested in the County Commission of Boone County, Missouri by Section 192.300 RSMo
- 4.3 **Definitions:** As used in this chapter, unless the context clearly indicates otherwise or the definition of the term is found in a regulation adopted by reference in this regulation, the following words and terms shall have the following meanings:
- 4.3.1 **Health Director** - Any person appointed by the Boone County Commission to supervise the administration of this chapter or such other person so designated on a temporary basis by order of the Boone County Commission.
- 4.3.2 **Health Official or Administrative Authority**- An employee of the Boone County, Missouri Health Department or any other person so appointed by the Health Director to administer or enforce the provisions of this chapter.
- 4.3.3 **Permit** - Written authorization issued by the Boone County Health Department which authorizes the permittee to construct or modify the small on-site wastewater systems regulated under this chapter. This permit is not intended to be construed to be a permit regulating the operation of a small on-site wastewater system after completion of construction or modification.

4.3.4 **Person** - Any natural person, business entity of any type, corporation, trust, association of any type, or any agent, officer or employee of any of the foregoing.

4.3.5 **Small On-site Wastewater System** - Any subsurface sewage treatment system, lagoon disposal system or other waterborne waste disposal method employing basic hydrologic or engineering principles which receives 1500 gallons or less of waterborne waste per day.

4.3.6 **Construction** - Any act of building and/or installing a new small on-site waste system in order to make it operational and functional or any act of repairing or replacing a small on-site wastewater system other than routine maintenance.

4.3.7 **Modification** - Any act or work upon an existing small on-site wastewater system which changes the design or function of system other than routine maintenance.

4.4 **Small On-site Wastewater System Design and Construction Standards:** All small on-site wastewater systems shall be designed, constructed or modified in accordance with the standards set forth in 19 CSR 20-3.060 **Minimum Construction Standards for On-Site Sewage Disposal Systems**, as amended, the same being incorporated by reference as if fully set out in this regulation verbatim and maintained on file in the office of the Boone County Health Department, Boone County Planning & Building Inspection Department and Boone County Clerk's office except to the extent the same is modified by these regulations.

4.4.1 **Exceptions to Design and Construction Standards** - The Regulations 19 CSR 20-3.060 **Minimum Construction Standards for On-Site Sewage**

Disposal Systems, as amended, are hereby amended for purposes of this chapter as follows:

4.4.1.1 **Soil Scientist** - The term "soil scientist" defined in 19 CSR-20 3.060(1)(A)61 shall be defined as follows - A soil scientist shall have a minimum of 15 semester credit hours of courses in soil sciences including a minimum of 3 credit hours in the area of soil morphology and interpretation as well as a minimum of 3 years field experience by employment or otherwise in interpreting soil texture, color, structural and stratigraphic properties relative to temporal fluxes of water in soil landscapes.

4.5 **Permit Required for Construction or Modification of Small On-site Wastewater Systems:** From and after the effective date of these regulations no small on-site wastewater system shall be constructed or modified except in accordance with the terms and conditions of a valid permit issued pursuant to these regulations. The issuance of a permit in accordance with these regulations does not relieve the permittee of the responsibility to properly plan, design, construct, install, modify, operate or maintain the system as may be otherwise regulated by law, rule or regulation, nor does issuance of such permit guarantee that the system will function in compliance with these regulations or other applicable laws, rules or regulations.

4.5.1 Permit Applications - Any person seeking a permit to construct or modify a small on-site wastewater system shall submit a written application for same on forms provided by the administrative authority; such application shall be accompanied by plans, including site plans indicating the location of percolation test holes or soil profile holes, test results, lot lines, proposed location of treatment systems in relation to buildings and lot lines, specifications, design data and other pertinent information required by the administrative authority. All plans and specifications shall conform to the design standards required under these regulations. All permit applications including site plans shall demonstrate in writing and graphically that the proposed small on-site wastewater system to be constructed or modified is in compliance with the requirements of these regulations.

4.5.2 Permit Application Processing Procedures - The administrative authority shall review all permit applications initially for completeness; incomplete applications shall be returned to the applicant for completion. The administrative authority shall take final action on all completed permit applications within fifteen (15) calendar days of submission by either approving the application and issuing the permit, issuing the permit with modifications necessary for compliance with these regulations, or denying the permit. Any permit issued with modifications or denied shall be accompanied by written reasons for such modification or denial and in the case of denial, the administrative authority at its discretion may recommend corrective action. Any applicant aggrieved by the issuance of a permit with modifications or denial of a permit may appeal such issuance or denial to the Board of Review within 30 days of such issuance or denial in accordance with the provisions of these regulations.

4.5.3 **Compliance with Permit** - No small on-site waste water system shall be constructed or modified except in compliance with the terms and conditions of the permit issued for same and approved application therefor; unauthorized changes, deviations or modifications shall constitute a violation of the permit and subject the permittee to permit suspension, revocation and/or prosecution.

4.5.4 **Operation of Small On-site Wastewater System** - No small on-site wastewater system shall be operated unless and until a final inspection of same is conducted by the administrative authority and the system is approved and found to be in compliance with these regulations. No final inspection shall be conducted or approval granted unless the system is exposed for inspection without backfilling so that the system can be examined for compliance with these regulations. Any small on-site wastewater system which has been backfilled in whole or part or otherwise covered such that a complete inspection for compliance cannot be conducted shall upon request of any representative of administrative authority be uncovered, re-excavated or otherwise exposed at the sole expense of the permittee such that a complete inspection can be conducted for purposes of determining compliance with these regulations. Any permittee who shall fail to expose a small on-site wastewater system for inspection under the provisions of these regulations shall be subject to permit suspension or revocation. Any permittee who shall fail to expose a small on-site sewage system to inspection after construction or modification within thirty (30) days after request of a representative of the administrative authority shall be subject to permit revocation.

4.5.5 **Permit Modification** - No small on-site wastewater system shall be

constructed or modified in deviation from the terms and conditions of the permit and approved application therefore unless a new application or amended application for such permit has been first filed with the administrative authority and approved by such authority or a waiver of permit modification has been granted pursuant to section 4.5.6.

4.5.6 Waiver of Permit Modification - Submission of a new or amended application for small on-site wastewater system permit may be waived by the administrative authority in cases where approved materials and/or procedures cannot be used under the terms and conditions of the existing permit and alternative materials or procedures will meet minimum standards without substantial change in the small on-site wastewater system approved under the existing permit and which will not result in any violation of these regulations. The administrative authority may grant such waiver orally upon oral request provided the request and waiver is documented on forms approved by the Administrative authority and signed by the permittee and a representative of the Administrative authority granting the waiver. Failure or refusal of the administrative authority to grant an oral waiver shall not entitle the permittee to appeal such decision to the Board of Review.

4.5.7 General Permit Conditions - The following general conditions shall be applicable to all small on-site wastewater system permits:

4.5.7.1 Expiration of Permit - All small on-site waste water system permits shall be valid for six months after date of issuance and the administrative authority shall record the expiration date on each such permit. Permits may be renewed for additional ninety (90) day periods after the initial period of validity for good cause provided there have been

no changes in the plans for construction or modification of the system under the initial permit and application for renewal is made prior to the expiration date of the permit. No small on-site wastewater system permit shall be renewed except by the administrative authority making a written endorsement of renewal upon the existing permit prior to the expiration date of such permit. Failure to request or obtain renewal prior to the expiration date shall require the permittee to submit an application for new permit.

4.5.7.2 Transfer of Permit - Small on-site wastewater system permits may be transferred only to successor property owners prior to completion of construction or modification for which the permit is issued by completion of ownership transfer documents issued and approved by the administrative authority. All terms and conditions of issued permits for construction or modification shall be automatically applicable to any successor property owner upon transfer of ownership.

4.5.8 Permit Denial - The administrative authority may deny an on-site wastewater system permit for any of the reasons enumerated in sections 4.5.8.1 through 4.5.8.3. In the event the administrative authority denies issuance of a permit the applicant shall be notified in writing of the reason or reasons for denial. An applicant denied a permit may request in writing a hearing before the Director of the Department of Health stating the grounds in support of the request within thirty (30) days of the notification of denial. The Director shall consider the application, the facts presented by the applicant at the hearing, the facts presented by the administrative authority at the hearing, and will render a decision on the application on the basis of the substantial and competent evidence adduced at the

hearing. The applicant shall bear the burden of proof to establish facts supporting the issuance of a permit. The hearing is not a review of the decision of the administrative authority. The hearing shall be for the purpose of the Director to render an independent decision on the application on the basis of the record. Such a determination after hearing shall be the final decision of the Department of Health on the application. The ruling of the Director shall be final; any further appeal or review of the decision shall be as provided by Chapter 536, RSMo.

4.5.8.1 Denial Due to Violation of Design and/or Construction

Standards - A small on-site wastewater system permit may be denied because application for such permit is incomplete or does not meet applicable minimum design and/or construction standards established by these regulations.

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4.5.8.2 Denial Due to Violation of Applicable Building, Subdivision or

Zoning Regulations - A small on-site wastewater system permit may be denied if the system to be constructed or modified will cause a violation of applicable building, subdivision or zoning regulations.

4.5.8.3 Denial Due to Location Within Reasonable Distance of Public

Sanitary Sewer - A small on-site wastewater system permit may be denied because the building lot upon which it is to be located is within a reasonable distance of a public sanitary sewer to which connection is

practicable and is permitted by the governmental agency or utility owning or operating the sanitary sewer, or in the case of a nonconforming on-site wastewater system under section 4.8, no such permit shall be issued where such a system constitutes a nuisance as otherwise prohibited in these regulations and the building lot upon which such system exists is located within a reasonable distance of a sanitary sewer to which connection is practicable. The administrative authority shall consider all relevant factors in determining if a public sanitary sewer connection is practicable and within a reasonable distance, including, but not limited to, the topography of the lot and surrounding land, the cost of connection, the cost of connection relative to an engineered on-site system (including cost estimates for ongoing maintenance), the watershed the lot is located within, and any other relevant factor bearing on the public health.

In circumstances in which an existing on-site wastewater treatment system has been declared a nuisance under the Code and due to lot size, topography, or other factors, it is impracticable to install an on-site wastewater treatment system which complies with these regulations, then in such circumstances it shall be presumed that connection to a public sanitary sewer is practicable. It shall be the responsibility of the person seeking a permit to investigate and demonstrate to the satisfaction of the Administrative Authority that no public sanitary sewer connection is available and/or practicable under these criteria as a condition of issuance of a permit.

4.5.9 Permit Suspension and Revocation - The administrative authority may suspend or revoke a permit before construction or modification of a small on-site

waste water system is completed due to noncompliance with the terms of the permit or these regulations, unapproved modifications in design or construction, false information submitted in the application for permit, changing site conditions which would result in a violation of one or more of the provisions of these regulations, submission of false percolation test data or false soil morphology/landscape data, permittee misrepresentation concerning compliance with these regulations, or any other reasons necessary for protection of the public health or safety. Except in cases where continued construction or modification under permit would present an imminent threat to human health, life or safety, a permittee shall be given at least five (5) days advance written notice of the administrative authority's intent to suspend or revoke a permit which shall contain a written statement of the reasons for the proposed suspension or revocation, duration of suspension (if applicable) together with notice of corrective actions (if applicable) necessary to authorize the permittee to retain the permit. The permittee may appeal a notice of suspension or revocation to the County Commission by submitting a written notice of appeal to the administrative authority on or before the date suspension or revocation is to take effect. An appeal shall not stay the suspension or revocation of a permit unless so ordered by the County Commission upon a showing of good cause or with consent of the administrative authority. The County Commission shall determine the appeal of any suspension or revocation as soon as reasonably practicable; the decision of the County Commission shall be final and any further appeal or review shall be as prescribed by Chapter 536 RSMo.

- 4.6 **Health Director Oversight; Variances and Appeals:** The Health Director shall review and determine applications for variances as authorized by these regulations

and hear and determine appeals from administrative authority decisions as are authorized and prescribed by these regulations. The Health Director may grant variances from the strict application of these regulations in cases where a property owner or occupant qualify for a permit to construct or modify a small on-site wastewater treatment system under section 4.5 of these regulations, would not otherwise be able to effectively or properly use a small on-site wastewater system, and the grant of a variance would not result in contamination of surface waters or ground water or present a nuisance or health hazard to any person and would not result in the discharge of treated or untreated domestic sewage or human waste off the property subject to the permit. No variance shall be granted on the condition of reduced water usage or maximum specified water usage. The Health Director may impose such conditions on a variance as deemed appropriate for purposes of preventing contamination of surface waters or ground water or preventing a nuisance or health hazard condition to other persons or preventing discharge of treated or untreated domestic sewage or human waste off the property subject to the permit.

- 4.7 **Certification of Small On-site Wastewater System Installers, Percolation Test Technicians and Inspectors:** No person shall construct or modify a small on-site wastewater system unless certified as an installer for such system by the administrative authority. No person shall administer a soil percolation test for purposes of complying with these regulations unless certified as a percolation test technician. No person shall perform or administer a soil morphology/landscape analysis for purposes of complying with these regulations unless qualified as a soil scientist as defined herein. From and after January 1, 1995, no person shall inspect any small on-site wastewater system for purposes determining compliance

with these regulations or any other law, rule or regulation if such inspection is performed for compensation or performed in order to report inspection findings to any person other than a governmental agency which regulates small on-site wastewater systems unless such person inspecting such system is currently certified as small on-site wastewater system inspector under these regulations by the administrative authority.

4.7.1 Certification Requirements for Installers - An individual may be certified as a small on-site wastewater system installer if such person has attended a training as required by the administrative authority consisting of instruction on the application of these regulations. The administrative authority is authorized to establish such courses of instruction and/or testing as it may deem appropriate from time to time to insure installer compliance with these regulations.

4.7.2 Requirements for Percolation Test Technician Certification - A natural person may be certified as a soil percolation test technician under these regulations who meets the criteria of any applicable state regulations and has a working knowledge of the proper procedure for administering soil percolation tests and the application of these regulations pertaining thereto. The administrative authority may provide training and require testing in proper procedure for administering soil percolation tests and these regulations as they apply to them.

4.7.3 Homeowner Exemption for Installer Certification - Any individual who owns real estate upon which a small on-site wastewater system is to be constructed or modified and who resides on such real estate or shall reside upon such real estate upon completion of construction of a residence may construct or modify a small on-site wastewater system pursuant to these regulations so long as such individual has obtained written exemption from the administrative authority

pursuant to this regulation and is primarily responsible for the actual construction or modification of the small on-site wastewater system constructed or modified on such real estate. Exemption from this certification requirement may be revoked by the administrative authority due to noncompliance with these regulations or permitting a non-certified person to assume responsibility for the actual construction or modification of the small on-site wastewater system authorized under such exempted person's permit.

4.7.4 Certification Requirements for Inspectors - A natural person may be certified as a small on-site wastewater system inspector under these regulations if such person receives instruction and meets minimum qualifications required of the administrative authority pertaining to the operation of small on-site wastewater systems and the application of these regulations to such systems. The Administrative authority is authorized to establish such courses of instruction and testing as it may deem appropriate from time to time to insure inspections are properly performed under these regulations and may issue exemptions from the training and testing requirements for persons it finds qualified as inspectors due to education and experience. It shall be the responsibility of the party requesting exemption to prove to the Administrative authority's reasonable satisfaction their qualification for exemption.

4.7.5 Records and Reports: All small onsite wastewater systems percolation test technicians, installers and inspectors certified under these regulations shall upon request of the administrative authority make available for inspection and copying all records which such persons prepare or retain with respect to work which is performed which is subject to a permit issued under these regulations. In addition, all inspectors certified under the provisions of these regulations shall

prepare a written report of any inspection performed and shall provide the administrative authority with all such written reports within 15 days after preparation unless the administrative authority requests a copy of any such report in writing within a shorter time.

4.7.6 Revocation of Certification - The administrative authority may revoke the certification of any small onsite wastewater system installer or soil percolation test technician or inspector who is found to intentionally violate any provision of these regulations or who after written warning of violation of a particular regulation is found to violate the same regulation on one or more subsequent occasions regardless of whether or not such person intended violation. The administrative authority may also revoke the certification of any small onsite wastewater system inspector who either intentionally or repeatedly fails to disclose any violation of these regulations in an inspection report or who intentionally or repeatedly makes any misleading or erroneous statement concerning the compliance or noncompliance of any small onsite wastewater system with these regulations in an inspection report. Any certification revoked by the administrative authority may be appealed in writing to the Board of Review within ten (10) days after notice of revocation has been served upon the person whose certification is to be revoked. The Board of Review shall hear and determine such appeal as soon as reasonably practicable and may for good cause shown stay revocation prior to hearing. The decision of the Board of Review shall be final and any appeal thereafter shall be as prescribed by Chapter 536 RSMo.

4.8 Nonconforming Small On-site Wastewater Systems: Except as provided below, all small on-site wastewater systems existing as of the effective date of this chapter shall be presumed to be in compliance with these regulations unless such

system is found to be public health nuisance or hazard under this Code, or is in violation of state law pertaining to wastewater systems. When any such condition exists the owner of the real estate upon which such system exists shall then be subject to the provisions of these regulations and shall be required to apply for a small on-site wastewater permit in order to modify the existing system or construct a new system within a reasonable time as prescribed by the administrative authority except in cases in which the Administrative Authority determines that a permit should be denied under section 4.5.8.3 of these regulations, in which case the Administrative Authority shall grant the property owner or occupant a reasonable time to connect to a public sewer as warranted under the circumstances. No small on-site wastewater system shall be presumed to be in compliance with these regulations which has not been operable or used for a period of one hundred eighty (180) or more consecutive days or for which a construction permit has been issued pursuant to these regulations. No on-site sewage treatment lagoon otherwise subject to these regulations which existed on or before the date these regulations were first enacted that has a minimum surface area of nine hundred square (900') feet and is surrounded by a thirty-nine (39") inch or taller fence or other fence designed to prevent animals and children from entering the enclosed area and that is without observable functional deficiencies shall be considered to be in violation of the foregoing sections or other applicable law, rules or regulations based solely upon size or location or general condition. No subsurface sewage treatment system otherwise subject to these regulations which existed on or before the date these regulations were first enacted that does not exhibit any chronic surface discharge shall be considered to be in violation of the foregoing sections or other applicable law, rule or regulation based solely

upon known or unknown design, components or configuration unless there is other evidence demonstrating one or more violations of said sections or other applicable law, rules or regulations.

4.9 **Discharge of Wastewater Off Property Prohibited:** No person or property owner may operate an on-site waste water treatment or sewage disposal system or transport and dispose of waste removed therefrom in such a manner that may result in the contamination of surface waters or groundwater or present a nuisance or imminent health hazard to any other person or property owner and that does not comply with the requirements of these regulations or sections 701.025 to 701.059 and the on-site sewage disposal rules promulgated under sections 701.025 to 701.059 by the department, whichever standards are higher. No person shall permit treated or untreated wastewater or effluent to discharge from the real estate upon which an onsite wastewater treatment or sewage disposal system exists or is required by these regulations or state law except that any person may discharge treated wastewater on to the property owned by another if such person has an easement or other lawful possessory interest in real estate which permits such person to discharge such treated wastewater on to such real estate within the boundaries described by such easement or possessory interest.

4.10 **Jurisdiction:** The regulations contained in this chapter shall be applicable to all unincorporated areas within Boone County, Missouri and by order of the Boone County Commission in incorporated municipalities which petition the Boone County Commission to be included and the Boone County Commission agrees to order their inclusion after public hearing thereon.

4.11 **Fees:** The County Commission may from time to time impose such user fees, such as permit fees or inspection fees, as it may deem appropriate so long as such

fees comply with the provisions of Section 192.300, RSMo, and are otherwise authorized by law.

To be added to our list of Approved On-site Wastewater Engineers, please complete the form on the next page.



Boone County Resource Management

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BILL FLOREA, DIRECTOR

PLANNING – INSPECTIONS – ENGINEERING

REQUEST TO JOIN BOONE COUNTY APPROVED ONSITE WASTEWATER ENGINEER LIST & ACKNOWLEDGEMENT

Name below must match License

Engineer Name: _____
Last First MI

Business Name: _____

Mailing Address: _____
Street City State Zip

Phone: _____ Email Address: _____

Professional License Number: _____

License Expiration Date: _____

By my signature, I acknowledge that I have read, understand, and agree to follow the Boone County Code of Health Regulations Chapter IV.

Engineer Signature

Date

State of Missouri

County of Boone

Subscribed and sworn to before me this _____ day of _____, 20____

Notary Public

(seal)

Printed Name