

SUBJECT: Onsite Wastewater Rules and Regulations

DESCRIPTION: The Onsite Wastewater rule's stated purpose is to establish minimum standards for the design and construction of onsite wastewater "septic" systems in suitable soils for the renovation of wastewater and the return of the renovated wastewater into the hydrologic cycle. The rule details the various system designs, soil criteria, construction, subdivision requirements, product requirements, installation, and maintenance of the system types.

PUBLIC COMMENT: A public hearing was held on November 16, 2018. The public comment period expired on November 16, 2018. The proposed effective date is pending legislative review and approval. The Department provided the following summary of the comments that it received and its responses thereto:

Tim Tyler- Comments

1. Section 2.4 Bedrock: Backhoe, Mini-X. Can be dug with a spade or hand digging. Not as good as a backhoe. Spades are not practical small shelf of bedrock. Needs to be standard equipment and not anything special.

ADH Reply: No change.

2. Appendix B- Recreational Vehicle Park: Reduced the water. Left it the same. Needs to be corrected. Don't see the reduction in the draft. 65 Gallons.

ADH Reply: Change will be made.

3. Footnotes: Taking out the designers. This needs to be left in. Many times establishments such as a Mexican restaurant should be able to pull data other similar and use that data to help establish or any commercial est. We as designers ought to be able to pull similar data.

ADH Reply: Experience in this area has shown major inconsistencies in data. Therefore the determination was made to remove the wording.

Larry T. West, Ph.D., AR Registered Professional Soil Classifier, DOH Designated Representative- Email comments received

1. Section 7.3.2.1: I fully support recognition of soil with high clay content (>40%) and with low shrink-swell in the moderate hydraulic conductivity class. Because of their parent material and stage of soil development, red soils (Munsell hue of 5YR or redder) developed from residual limestone and chert parent materials in the Ozark Highlands uniformly have low shrink-swell and will move water at an acceptable rate for installation of an onsite system drainfield. Their blanket inclusion in the moderate hydraulic conductivity class is proper.

I suggest, however, that "residual" limestone and chert be specified in the statement. Red soils developed from colluvial limestone or chert may or may not have low shrink-swell and an acceptable moderate hydraulic conductivity, but rather may limit vertical water/effluent movement.

Additionally, red soils with high clay content in other regions of the State and that have developed from other parent materials also may have low shrink-swell and should be included in the moderate hydraulic conductivity class upon submission of appropriate documentation. All red clayey soils outside the Ozark Highlands do not have low shrink-swell, however, and thus, should not be included in the blanket red soil inclusion outlined in this section.

To recognize that red, clayey soils with low shrink-swell occur outside the Ozark Highlands, I suggest a provision be added to Section 7.3.2.1 that would allow a Designated Representative who is also a registered Soil Classifier to present data from soil samples analyzed by a reputable laboratory or otherwise collected by acceptable methods to indicate the soil at the site has low shrink-swell and should be assigned a moderate hydraulic conductivity. There are laboratory and field measurements that can be used to indicate a soil's shrink-swell potential and hydraulic conductivity that are relatively low cost and that can be generated relatively quickly. Specific data and limits could be identified with input from Soil Scientists at universities in the State, Federal and State Agency Soil Scientists, Soil Classifiers, and Designated Representatives and included in Appendix I.

ADH Reply: After direct discussion with Dr. West on this letter, the additional modifier of "residual" will be added to the section.

Excerpt from above letter: "I suggest, however, that "residual" limestone and chert be specified in the statement. Red soils developed from colluvial limestone or chert may or may not have low shrink-swell and an acceptable moderate hydraulic conductivity, but rather may limit vertical water/effluent movement."

Comments received from Lex Dobbins, Peggy and Don Daley unrelated to the initial proposed changes were also considered.

1. Mr. Lex Dobbins's comment was to remove and simplify the lost storage formula.

ADH Reply: Appendix G was removed and direction was added in Section 8.6.1 and 8.6.2.

2. Peggy and Don Daley requested reduced sizing for pretreated effluent.

ADH Reply: The comment was considered, but no change was made.

FINANCIAL IMPACT: There is no financial impact.

LEGAL AUTHORIZATION: Arkansas Code Annotated § 20-7-109 provides that the State Board of Health may promulgate rules to protect the public health and safety. Additionally, Arkansas Code Annotated § 14-236-107 grants the Department rulemaking authority regarding onsite wastewater systems "in order that the wastes from the systems will not pollute any potable water supply, or source of water used for public or domestic supply purposes, or for recreational purposes, or other waters of this state, and will not give rise to a public health hazard by being accessible to insects, rodents, or other possible carriers which may come into contact with food or potable water, or by being

accessible to human beings, and will not constitute a nuisance due to odor or unsightly appearance[.]”

RECOMMENDATION

- 1. The proposed project is consistent with the applicable zoning ordinance and the Comprehensive Zoning Ordinance.
- 2. The proposed project is consistent with the applicable zoning ordinance and the Comprehensive Zoning Ordinance.
- 3. The proposed project is consistent with the applicable zoning ordinance and the Comprehensive Zoning Ordinance.
- 4. The proposed project is consistent with the applicable zoning ordinance and the Comprehensive Zoning Ordinance.

Director of Planning
 Director of Public Works
 Director of Transportation
 Director of Community Development
 Director of Economic Development
 Director of Environmental Services
 Director of Health Services
 Director of Human Resources
 Director of Information Technology
 Director of Legal Services
 Director of Public Safety
 Director of Social Services
 Director of Utilities
 Director of Parks and Recreation
 Director of Senior Services
 Director of Youth Services

1. What is the purpose of the proposed project?
 2. What is the location of the proposed project?
 3. How does the proposed project fit with the community's needs and goals?

4. How does the proposed project fit with the community's needs and goals?
 Yes No

5. How does the proposed project fit with the community's needs and goals?
 Yes No

6. How does the proposed project fit with the community's needs and goals?
 Yes No

7. How does the proposed project fit with the community's needs and goals?
 Yes No

**QUESTIONNAIRE FOR FILING PROPOSED RULES AND REGULATIONS
WITH THE ARKANSAS LEGISLATIVE COUNCIL**

DEPARTMENT/AGENCY Arkansas Department of Health
DIVISION Center for Local Public Health/Environmental Health Protection
DIVISION DIRECTOR J. Don Adams
CONTACT PERSON J. Terry Paul
ADDRESS Slot 46, 4815 West Markham, Little Rock AR, 72205-3867
PHONE NO. 501-661-2171 **FAX NO.** 501-661-2572 **E-MAIL** jpaul@arkansas.gov
NAME OF PRESENTER AT COMMITTEE MEETING Laura Shue, Chief Counsel
PRESENTER E-MAIL Laura.Shue@arkansas.gov

INSTRUCTIONS

- A. Please make copies of this form for future use.
- B. Please answer each question **completely** using layman terms. You may use additional sheets, if necessary.
- C. If you have a method of indexing your rules, please give the proposed citation after "Short Title of this Rule" below.
- D. Submit two (2) copies of this questionnaire and financial impact statement attached to the front of two (2) copies of the proposed rule and required documents. Mail or deliver to:

**Donna K. Davis
Administrative Rules Review Section
Arkansas Legislative Council
Bureau of Legislative Research
One Capitol Mall, 5th Floor
Little Rock, AR 72201**

1. What is the short title of this rule? Onsite Wastewater Rules and Regulations

2. What is the subject of the proposed rule? Onsite Wastewater "Septic" System

3. Is this rule required to comply with a federal statute, rule, or regulation? Yes No
If yes, please provide the federal rule, regulation, and/or statute citation. _____

4. Was this rule filed under the emergency provisions of the Administrative Procedure Act? Yes No

If yes, what is the effective date of the emergency rule? _____

When does the emergency rule expire? _____

Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act? Yes No

FINANCIAL IMPACT STATEMENT

PLEASE ANSWER ALL QUESTIONS COMPLETELY

DEPARTMENT Department of Health

DIVISION Center for Local Public Health

PERSON COMPLETING THIS STATEMENT J. Terry Paul

TELEPHONE 501-786-9144 **FAX** 501-661-2572 **EMAIL:** jpaul@arkansas.gov

To comply with Ark. Code Ann. § 25-15-204(e), please complete the following Financial Impact Statement and file two copies with the questionnaire and proposed rules.

SHORT TITLE OF THIS RULE Onsite Wastewater Rules and Regulations

- 1. Does this proposed, amended, or repealed rule have a financial impact? Yes No
- 2. Is the rule based on the best reasonably obtainable scientific, technical, economic, or other evidence and information available concerning the need for, consequences of, and alternatives to the rule? Yes No
- 3. In consideration of the alternatives to this rule, was this rule determined by the agency to be the least costly rule considered? Yes No

If an agency is proposing a more costly rule, please state the following:

(a) How the additional benefits of the more costly rule justify its additional cost;

(b) The reason for adoption of the more costly rule;

(c) Whether the more costly rule is based on the interests of public health, safety, or welfare, and if so, please explain; and;

(d) Whether the reason is within the scope of the agency's statutory authority; and if so, please explain.

4. If the purpose of this rule is to implement a federal rule or regulation, please state the following:

(a) What is the cost to implement the federal rule or regulation?

Current Fiscal Year

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

Total na

Next Fiscal Year

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

Total na

- (5) a list of alternatives to the proposed rule that were suggested as a result of public comment and the reasons why the alternatives do not adequately address the problem to be solved by the proposed rule;
- (6) a statement of whether existing rules have created or contributed to the problem the agency seeks to address with the proposed rule and, if existing rules have created or contributed to the problem, an explanation of why amendment or repeal of the rule creating or contributing to the problem is not a sufficient response; and
- (7) an agency plan for review of the rule no less than every ten (10) years to determine whether, based upon the evidence, there remains a need for the rule including, without limitation, whether:
 - (a) the rule is achieving the statutory objectives;
 - (b) the benefits of the rule continue to justify its costs; and
 - (c) the rule can be amended or repealed to reduce costs while continuing to achieve the statutory objectives.

**ARKANSAS DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH PROTECTION
Summary of Proposed Changes to the Onsite Wastewater Rules
(2019)**

Table of Contents

- Removed Section 4 (Sewer Connection) and re-numbered Sections 4-19.
- Changed “Subdivision Review” into Section 5. It had been a sub-section.
- Moved Section 7 (Minimum Lot Size) into Section 5 (Subdivision Review).
- Added Section 16 “Code of Ethics”
- Removed “Lost Storage Formula” (Appendix G) **[Pursuant to PC]**
- Added “Soil Textural Triangle” (Appendix H)
- Added “Red Soil Chart” (Appendix I)
- Added “Metric Conversion Table” (Appendix J)

Definitions

- Changed: Bedrock (Section 2.4)
- Moved: Soil Qualified Designated Representative to (Section 2.9.1)
- Changed: Fragipan (Section 2.19) and
- Moved: Fragipan to Section 2.44
- Changed: Hydraulic Conductivity (Section 2.23)
- Added: Licensees (Section 2.27)
- Added: Pedon (Section 2.31)
- Added: Perched Water Table (Section 2.32)
- Changed: Redoximorphic Features (Section 2.42)
- Changed: Relic Redoximorphic Features (Section 2.42)
- Changed: Restrictive Soil Layer (Section 2.44)
- Added: Claypan (Section 2.44.1)
- Added: Pressure or Induced Pan (Section 2.44.3)

Removed the Lost Storage Formula from the regulations [Pursuant to PC]

Removed the “preferred trench length of 60 feet” from the regulations.

Section 10

Added a requirement that holding tanks shall be constructed with no outlet (Section 10.5)

Added the requirement that only vacuum testing will be allowed during the inspection of a concrete septic tank manufacturing facility Section 10.6.3.8).

Section 11

Removed the single pass sand filter from the regulations (Section 11.4)

Section 15

Added requirement that septic tank manufacturing facility be inspected at least 60 days prior to the renewal date.

Appendix

Changed Appendix B-Water usage chart-

Camps-Reduced water usage w/central comfort station

Grocery Stores-Reduced the water usage for per 100 square feet of floor space.

Country Clubs-Large reduction in water usage

Dental and Doctor office-Changed design criteria from “chairs” to “practitioner” and reduced the water usage.

Added Appendix C-Loading rates for low hydraulic conductivity soils

Reduced the water usage for Recreational Vehicle Parks [Pursuant to PC]

Removed “Institutions” from the charts

Footnotes

Removed demonstrable flows for water usage determination

Added a list of counties in the Salem Plateau

Added a Soil Textural Triangle

Added a U.S. to metric conversion table