

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

DEPARTMENT/AGENCY Arkansas Department of Health  
DIVISION Envioronmental Health  
DIVISION DIRECTOR J. Terry Paul, R.S.  
CONTACT PERSON J. Terry Paul, R.S.  
ADDRESS ADH, Slot 46, 4815 West Markham, Little Rock, AR 72205  
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NAME OF PRESENTER AT COMMITTEE MEETING J. Terry Paul  
PRESENTER E-MAIL jpaul@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  
Room 315, State Capitol  
Little Rock, AR 72201

**RECEIVED**

FEB 13 2012

\*\*\*\*\* BUREAU OF LEGISLATIVE RESEARCH \*\*\*\*\*

1. What is the short title of this rule? R & R Onsite Wastewater
2. What is the subject of the proposed rule? Domestic Sewage Disposal

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

5. Is this a new rule? Yes  No

If yes, please provide a brief summary explaining the regulation.

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Does this repeal an existing rule? Yes  No

If yes, a copy of the repealed rule is to be included with your completed questionnaire. If it is being replaced with a new rule, please provide a summary of the rule giving an explanation of what the rule does.

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Is this an amendment to an existing rule? Yes  No

If yes, please attach a mark-up showing the changes in the existing rule and a summary of the substantive changes. **Note: The summary should explain what the amendment does, and the mark-up copy should be clearly labeled "mark-up."**

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6. Cite the state law that grants the authority for this proposed rule?

If codified, please give Arkansas Code citation.

Ark. Code Ann. § 14-236-101 et seq. Act 402 of 1977

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7. What is the purpose of this proposed rule? Why is it necessary?

To regulate onsite wastewater systems. To update the rule for clarity and due to regulatory changes by other agencies.

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8. Please provide the address where this rule is publicly accessible in electronic form via the Internet as required by Arkansas Code § 25-19-108(b).

www.healthylarkansas.com

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9. Will a public hearing be held on this proposed rule? Yes  No

If yes, please complete the following:

Date: 03-13-2012

Time: 11 - 12 p.m.

Place: Room 2508, ADH Lab Training Room, 4815 West Markham, Little Rock, AR

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10. When does the public comment period expire for permanent promulgation? (Must provide a date.)

03-13-2012 at 1:00 p.m.

11. What is the proposed effective date of this proposed rule? (Must provide a date.)

09-01-2012

12. Do you expect this rule to be controversial? Yes  No

If yes, please explain. \_\_\_\_\_

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13. Please give the names of persons, groups, or organizations that you expect to comment on these rules? Please provide their position (for or against) if known.

Designated Representatives

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**FINANCIAL IMPACT STATEMENT**

**PLEASE ANSWER ALL QUESTIONS COMPLETELY**

**DEPARTMENT** Arkansas Department of Health  
**DIVISION** Environmental Health  
**PERSON COMPLETING THIS STATEMENT** J. Terry Paul, R.S.  
**FAX**  
**TELEPHONE NO.** 501-661-2171 **NO.** 501-661-2572 **EMAIL:** jpaul@arkansas.gov

To comply with Act 1104 of 1995, please complete the following Financial Impact Statement and file two copies with the questionnaire and proposed rules.

**SHORT TITLE OF THIS RULE** Rules and Regulation Pertaining to Onsite Wastewater

1. Does this proposed, amended, or repealed rule have a financial impact?      Yes       No
2. Does this proposed, amended, or repealed rule affect small businesses?      Yes       No   
If yes, please attach a copy of the economic impact statement required to be filed with the Arkansas Economic Development Commission under Arkansas Code § 25-15-301 et seq.

Attached

3. If you believe that the development of a financial impact statement is so speculative as to be cost prohibited, please explain.

4. If the purpose of this rule is to implement a federal rule or regulation, please give the incremental cost for implementing the rule. Please indicate if the cost provided is the cost of the program.

**Current Fiscal Year**

General Revenue \_\_\_\_\_  
Federal Funds \_\_\_\_\_  
Cash Funds \_\_\_\_\_  
Special Revenue \_\_\_\_\_  
Other (Identify) \_\_\_\_\_  
Total 0

**Next Fiscal Year**

General Revenue \_\_\_\_\_  
Federal Funds \_\_\_\_\_  
Cash Funds \_\_\_\_\_  
Special Revenue \_\_\_\_\_  
Other (Identify) \_\_\_\_\_  
Total 0

5. What is the total estimated cost by fiscal year to any party subject to the proposed, amended, or repealed rule? Identify the party subject to the proposed rule and explain how they are affected.

**Current Fiscal Year**

\$ 0

**Next Fiscal Year**

\$ 0

6. What is the total estimated cost by fiscal year to the agency to implement this rule? Is this the cost of the program or grant? Please explain.

**Current Fiscal Year**

\$ 0

**Next Fiscal Year**

\$ 0

**ECONOMIC IMPACT STATEMENT  
OF PROPOSED RULES OR REGULATIONS  
EO 05-04: Regulatory Flexibility**

Department Arkansas Department of Health Division Environmental Health  
Contact Person J.Terry Paul Date 01/31/2012  
Contact Phone 501-661-2171 Contact Email jpaul@arkansas.gov

Title or Subject Rules and Regulations Pertaining to Onsite Wastewater

**Benefits of the Proposed Rule or Regulation**

1. Explain the need for the proposed change(s). Did any complaints motivate you to pursue regulatory action?  
If so, please explain the nature of such complaints.  
Specific changes to Section 9.9.10.2 and 9.9.10.2 requires an effluent filter to wastewater systems with reduced orifice dispersal methods. The purpose of the effluent filter is to prevent large solids from exiting wastewater treatment tanks and clogging the small orifices. Yes, complaints indicate without an effluent filter the systems do not continue to perform as designed. It is also a requirement from the manufactures of other system components (i.e. hydro-splitters or manifolds).
2. What are the top three benefits of the proposed rule or regulation? Updates the current regulation to reflect changes in new ADEQ requirements, clarifies language, and will help system performance.
3. What, in your estimation, would be the consequence of taking no action, thereby maintaining the status quo? Without this change a duplication of efforts and requirements by two agencies would add costs to the homeowner for the same service.
4. Describe market-based alternatives or voluntary standards that were considered in place of the proposed regulation and state the reason(s) for not selecting those alternatives.  
Effluent filters are included as a Best Management Practice.

**Impact of Proposed Rule or Regulation**

5. Estimate the cost to state government of *collecting information, completing paperwork, filing, recordkeeping, auditing and inspecting* associated with this new rule or regulation.  
None
6. What types of small businesses will be required to comply with the proposed rule or regulation? Please estimate the number of small businesses affected.  
Designated Representatives (134)
7. Does the proposed regulation create barriers to entry? If so, please describe those barriers and why those barriers are necessary.  
No
8. Explain the additional requirements with which small business owners will have to comply and estimate the costs associated with compliance.  
No additional requirements are needed and the cost of an effluent filter can range from \$40.00 (residential) to \$140.00 (commercial).
9. State whether the proposed regulation contains different requirements for different sized entities, and explain why this is, or is not, necessary.  
No
10. Describe your understanding of the ability of small business owners to implement changes required by the proposed regulation. There should be little or no cost to small business owners because of this regulation update.
11. How does this rule or regulation compare to similar rules and regulations in other states or the federal government? There are states that exceed these requirements for effluent filters and other changes listed. Arizona, North Carolina and Michigan require all tanks to have effluent filters.

12. Provide a summary of the input your agency has received from small business or small business advocates about the proposed rule or regulation.

We have received comments from concerned include effluent filters in their designs and would appreciate a rule to enforce In fact, a Designative Representative recently stated he would not design another Low Pressure Distribution System until we required effluent filters.



## Onsite Wastewater Summary of Changes, January 2012

"Maintenance and Monitoring" have been removed from the document. The corrected version should read, "monitoring" of the systems. This correction is reflected multiple times throughout the document.

For the purpose of consistency, multiple corrections have been made in the document when referring to the "local health unit".

For the purpose of consistency, multiple corrections have been made to capitalize the "D" and "R" in Designated Representative throughout the document.

Table of Content numbering has been altered.

5.8.2.1. It shall be the duty of the holder of the Permit for Construction or the installer to notify the authorized agent or Designated Representative, when the installation is ready for inspection. It shall be the duty of the owner or occupant of the property to give the Department, its authorized agent or Designated Representative, free access to the property at reasonable times for the purpose of making the installation inspection. Within five (5) days, the installer shall certify submit the required documentation to the local county health unit that the system has been installed pursuant to the approved permit.

~~5.8.2.3 In the event an inspection is not made 2 working days from the date of notification to the Department of Health, its authorized agent or designated representative, that the installation is completed and ready for inspection, elevation shots will be recorded the permit and the system shall be deemed approved.~~

### 5.11.4 Sizing based on Percolation Test Data

~~5.11.4.1 A minimum of one soil pit in both the primary absorption and secondary absorption area is required. Soil pit information will include information of depth to rock, impermeable soil layers, and estimated depths to seasonal water tables.~~

~~5.11.4.2 If the soil is considered acceptable based on the information above, a minimum of one percolation hole in both the primary and secondary absorption areas is required.~~

~~5.11.4.3 Percolation rates used to size the primary and secondary site must be given.~~

~~5.11.4.4 Lots sized using percolation test data must not be smaller than that required by seasonal water table loading rates.~~

~~5.11.4.5 The corners of both the proposed primary and secondary absorption areas must be sized and flagged on each lot.~~

6.2.5. All facilities used for the collection, treatment, and renovation of wastewater must be at least 50 feet from any pond on the same property and 100 feet from any pond on adjacent properties. A minimum separation of 100 feet from any pond on adjacent properties, if in the pond watershed. In no case shall the minimum separation distance from any pond be less than fifty feet.

6.2.10. All facilities used for the collection, treatment, and renovation of wastewater must be at least 100 feet from any sinkhole.

8.8.3 Low hydraulic conductivity. Included are all soil horizons which have platy structure, or (clearly) fragipan horizons or horizons which have been compacted by the human activities, especially vehicle traffic and tillage operations. Also included are horizons with the following particle size classes: (No loading rates are available on Low Hydraulic conductivity soils.)

9.2 Many different designs may be used in laying out absorption trenches. The choice may depend on the size and shape of the available absorption area, the area required, and the topography of the absorption area. In all gravity flow designs, the septic tank flow line must be at or above the ground elevation of the highest trench. In all designs requiring five hundred (500) linear feet or more of absorption trench, mechanical dosing is recommended not required.

9.7.1 Serial distribution may be used when maximum storage can be achieved for all lines. The overflow point of the tee or hillside box must be at the ground level of the line served. However, when maximum storage cannot be achieved, Appendix G (Loss Storage Formula) must be used for sizing the system.

9.8.9 The fill material used must be a uniform loamy soil with maximum clay content of 27% and maximum sand content of 60%. The depth of fill above the original ground surface is measured after settling. Loamy soils can be expected to settle 25%.

9.9.8 Pre-cast dosing tanks shall meet the same construction and testing requirements for pre-cast septic tanks outlined in Section 11.6 of this regulation.

9.9.10.2 A filtered pump vault approved by the Department for use in septic tanks shall be incorporated into all systems designed to be dosed from a septic tank. All reduced orifice pressure manifolds will require an approved effluent filter.

9.10.2 Orifices may range in size from 0.125 (1/8) inch to 0.1875 (3/16) inch. All orifices shall be centered in the pipe, pointed up, and shielded. In situations where the discharge assembly is located at a lower elevation than the pump, 25% of the orifice should be turned down to allow the system to drain between doses. For soils with high hydraulic conductivity, the orifice spacing shall not exceed 24 inches. For soils with moderate hydraulic conductivity, the orifice spacing shall not exceed 48 inches. Orifices shall not be installed within twelve inches of the manifold pipe. All LPD applications require an approved effluent filter.

10.5.4 All ~~s~~Surface discharging systems are subject to National Pollutant Discharge Elimination System (NPDES) Permit requirements.

10.5.5.1 All ~~s~~Surface discharging systems must be adequately disinfected prior to discharge.

10.5.7 ~~O~~nsite Discharging Systems Requirements

10.5.7.1 ~~Some sites may be adequate in size to retain all effluent discharged to the surface onsite.~~ Sites considered for ~~onsite discharge~~ a surface discharging system shall meet the following minimum requirements in addition to setback requirements outlined in Section 6.2 of this regulation.

10.5.7.2 The lot size for all sites proposed for onsite discharge a surface discharging system shall be 3 acres or greater.

#### ~~10.5.8 Offsite Discharging Systems~~

~~10.5.8.1 Offsite discharging systems shall not be approved for new construction.~~

~~10.5.8.2 An N.P.D.E.S. Permit is required from the Arkansas Department of Environmental Quality for all Offsite Discharging systems.~~

10.6.4 The minimum capacity of any holding tank shall be ten times the estimated daily usage as outlined in Appendix C of this regulation or 1000 gallons, whichever is greater. When two or more tanks are required to meet the holding capacity, detailed plans shall be submitted.

10.6.7 Proof of a notarized contract with a licensed septic tank cleaner shall be ~~required before a permit to operate is issued.~~ submitted with the application for construction. The contract shall provide for cleaning within 24 hours of notification, and shall state where the wastewater will be deposited.

11.6.8 Service Risers. Access shall be provided over both the inlet and outlet tees or other devices, and to each tank compartment by means of a service riser. All maintenance ports must be sealed and watertight. Where the top of the tank is located below the finished grade, service risers shall extend to or above the finished grade. The extension can be made using risers of approved material and fitted with tight covers and secured to prevent unauthorized access. Proper attention must be given to the accident hazard involved when maintenance ports are extended close to the ground surface. Service risers shall be a minimum of 12 inches in diameter. Service risers providing access to a pump compartment or dosing tank shall be a minimum of 18 inches in diameter. Risers shall be installed by the manufacturer.

~~11.6.8.1 Service risers shall be available through the septic tank manufacturer. Risers may shall be installed on the tank by the manufacturer or set in place and sealed in a sanitary manner by the installer.~~

### 13 Onsite Maintenance and Monitoring Program

~~Owners of Onsite and Offsite Surface Discharging Systems, which include alternate systems discharging into reduced absorption areas or holding tanks or wastewater systems requiring secondary treatment that discharge into reduced absorption areas are required to maintain a Maintenance and Monitoring Contract with a Maintenance Monitoring Person registered by the Department for the life of the system. A Maintenance Monitoring Person shall be authorized by the manufacturer in order to provide a contract for the maintenance and monitoring of any proprietary system. No homeowner shall be allowed to monitor their own system.~~

13.2 ~~All Maintenance and Monitoring Contracts shall include the following minimum terms or services:~~

Frequency of system assessments

Assessment of system components

~~Assessment of discharge route for surface discharge systems~~

Measurement of free chlorine residual, if applicable

Assessment of proper servicing of grease interceptor, if applicable

Reporting to the Arkansas Department of Health

~~13.4 Free chlorine residual will be measured and recorded from the outlet end of the contact chamber. If the free chlorine residual is less than 0.1 parts per million, collection of a fecal coliform sample is required within acceptable limits, as specified the National Pollutant Discharge Elimination System (NPDES) discharge parameters, before returning to a routine schedule.~~

~~13.5 Where ozone, ultraviolet, or other disinfection methods that do not produce a chlorine residual are incorporated in the system, annual fecal analysis of the discharged effluent shall be required.~~

This will certify that the foregoing Rules and Regulations Pertaining to Onsite Wastewater Systems, Designated Representatives and Installers were adopted by the Arkansas Board of Health at a regular executive session of said Board held in Little Rock, Arkansas, on the    day of 2011.

#### **APPENDIX B**

Residential Strength Wastewater as the primary sewage effluent from a septic tank must not exceed the following parameters: Five-Day Biochemical Oxygen Demand (BOD<sub>5</sub>) of 300 mg/L; Total Suspended Solids (TSS) of ~~200~~ 300 mg/L; and Fats, Oil and Grease of 25 mg/L. Other contaminants may also be present in the wastewater; however, they shall not exceed the concentrations or quantities normally found in residential sewage.

#### **APPENDIX F**

##### **Requirements for Submission of an Onsite Wastewater System Permit Application**

17. The flow line elevation of the building sewer stub-out must be indicated on the plans. The flow line elevations of all tank inlets and outlets must be provided. The flow line elevation of the distribution box ~~or other~~ device must be provided. The elevation of each trench bottom must be provided.

#### **DR RESPONSIBILITIES IN APPLICATION SUBMITTAL**

The Designated Representative (DR) submits a completed Individual Sewage Disposal System Permit Application (EHP-19) along with detailed plans, specifications, and required fees. This application package is submitted to the appropriate ~~Environmental Health Specialist and/or~~ local health unit.

**These items shall be on or provided with the plot drawing.**

11. A bench-mark must be designated and elevation shots or rod readings must be shown for all parts of the sewage system. Ground elevation and flow-line elevations must be provided for all system components. ~~This includes the stub-out and the beginning, middle and end of each absorption trench in the primary and secondary disposal sites~~
14. The location of all percolation test holes on the property must be shown. ~~All percolation test holes used in determining the absorption field size must be within 10 feet of primary disposal field location.~~
16. The flow line elevation of the building sewer stub-out must be indicated on the plans. The flow line elevations of septic tank inlets and outlets must be provided. The flow line elevation of the distribution box or other device must be provided. The elevation of each trench bottom must be provided.

**Designated Representative Site Responsibilities**

2. The beginning, middle and end of all laterals shall be flagged in both the primary and secondary site. **Exception:** The secondary site ~~need not be flagged~~ shall have only the field corners flagged on grade provided the lot is 1.5 acres or larger in size; ~~the slope is less than 10 percent; or the secondary site is clearly acceptable provided the lot is 1.5 acres or larger in size.~~

