



Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

Governor Sarah Huckabee Sanders

Renee Mallory, RN, BSN, Secretary of Health

Jennifer Dillaha, MD, Director

PUBLIC COMMENT REPORT **Proposed Rules for Onsite Wastewater Systems**

PUBLIC COMMENTS:

A public comment period was open from August 14th, 2023 through September 15th, 2023.

The respondents included the following Designated Representatives.

Ron Kingston

Sam Dunn

Robert Goff

Tim Tyler

Peggy Daley

Shayna Brooks

Jimmy Don Daley

Piper Satterfield

Richard D Daley

Mike O'Connor

Kaitlyn Daley

Tate O'Connor

Proposed Changes:

2.25 Interceptor Drain. A subsurface drain line usually constructed upgrade five to ten feet from the absorption area to divert seasonal groundwater. A minimum of a 6 mill plastic barrier shall be placed the entire depth on the field line side of the trench. Interceptor drains shall be located between the absorption area and any upslope direction where subsurface flow could influence the drain field.

A few commenters indicated the plastic barrier should not be required. Evidence is clear that a physical plastic barrier has been in the rule on the curtain drain/interceptor drain drawing for many years. Evidence is also clear that a barrier prevents the movement of ground water into the area of the field lines. The Barrier would also restrict movement of effluent into the drains when hydraulically stressed and it will deter arthropods that can “short-circuit” the flow of effluent.

2.50 Similarly Qualified Individual. An individual with bachelor’s degree with 30 hours of natural science, engineering and/or math, or 3 years’ experience verified by the Department in the design of onsite wastewater systems or who has completed an 18-month training plan approved by the Department with a licensed Designated Representative.



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Commenters suggested the effort to decrease the time required for training is insufficient. The public demand for Designated Representatives in the rapidly growing population of parts of the state has property owners waiting months for a design. Many Designated Representatives have indicated that they are scheduled out for three to four months or more. The Department will specify the requirements of a shorten training plan.

5.4 No surface discharging systems shall be allowed in subdivisions for new construction until all requirements of the Division of Environmental Quality under the Department of Energy and Environment and the Department of Health are met.

This language was added based on a previous comment. Stating this in the rule does not change the requirement that all systems are subject to state regulation depending on size, source, and discharge.

5.5.1 Capping fill systems may be used to overcome separation to bedrock; Interceptor drains may be used as a good management practice. On lots less than three acres in size proposed for subdivision development, all undisturbed soils shall have a minimum depth of 13 inches or greater to a brief seasonal water table, and/or a depth of 18 inches or greater to an adjusted moderate seasonal water table, and/or a depth of 24 inches or greater to an adjusted long seasonal water table.

5.5.2. Interceptor drains may be used for the purpose of determining minimum lot size when soils exhibiting a brief seasonal water table between the surface and 13 inches of depth that an interceptor drain can effectively reduce the depth of the seasonal water table.

5.5.3. Lots less than three acres that require interceptor drains in subdivision approval shall include a complete permit submittal to establish siting of the primary and alternate areas including the interceptor drain. Lots that do not meet the above minimum soil criteria shall be three acres or larger and sized on natural soil conditions. Good management practices shall not be used for the purpose of determining minimum lot size.

Commenters offered support of allowing curtain drains in subdivision review. Some were not supportive due to concerns of overdevelopment of property.

8.1 A standard onsite wastewater system consists of a field of perforated pipe surrounded by gravel, or other conventional trench media product authorized by the Department and installed in such a manner that the clarified effluent from the septic tank or pretreatment unit will be distributed with reasonable uniformity into the natural soil. The individual absorption trench should not be more than 100 feet without mechanical dosing, and the trench bottom and perforated pipe or gravel substitute should be installed at a grade of 0 to 2 inches per 100 feet. In



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order to ensure even distribution of the effluent, all onsite wastewater systems utilizing a distribution box shall have absorption trenches of the same length.

Commenters were confused by this change. Historically most states have had a line length maximum of 100 feet. Research indicates this to be an arbitrary number. Many states have dropped the line length maximum. The Rule requires design elements that properly distribute the effluent at the designed daily maximum flow per square foot.

Section 12 Owners of holding tanks, or alternative wastewater systems are required to maintain a Monitoring Contract with a Monitoring Person registered by the Department for the life of the system. A Monitoring Person shall be authorized by the manufacturer in order to provide a contract for the monitoring of any proprietary system. All systems discharging treated sewage shall be maintained at all times by an individual or company trained in the operation and maintenance of that system. No homeowner shall be allowed to monitor their own system.

Commenters did not realize this wording is directly from the Rules and Regulations Pertaining To General Sanitation. The wording will be cited accordingly.

APPENDIX A CHANGES

Reduced RV usage rate per space to 120 gallons.

Footnotes:

Waste Wastewater from food service operations is commercial high strength wastewater in nature and may require special system sizing and treatment/disposal considerations. For food service operations, kitchen wastewater flows are normally to be calculated at 66% of the total wastewater flow. Wastewater flows should include estimated flows from drains from all drink dispensers including soda, tea, coffee, juice, and ice cream. * Recreational Vehicle wastewater is characterized as High Strength Wastewater. The wastewater strength can be reduced to residential strength when pretreated to reduce the Five-Day Biochemical Oxygen Demand (BOD5) below 300 mg/L. The wastewater usage rates in Appendix B per RV space can be reduced by 50% when calculations of BOD5 reduction can be verified by a qualified engineer, or verified by the engineering data provided by the manufacturer of the treatment unit. The department may request sampling to verify wastewater parameters are met.

Reduction of the gallons per day requirement for treated effluent was misinterpreted. This will be reworded to properly convey the design criteria.



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NOTE: Amendments will be made based on the public comment received. The Section will update and proceed as prescribed by the Arkansas Administrative Procedure Act.

All comments are following this page.

Public Comment for Onsite Wastewater Rule Revision

*Section numbers should remain the same even after revisions. Being able to reference something is important and changing the section number each year makes it difficult.

2.26/2.25 Interceptor Drain. A minimum of a 6 mil plastic barrier shall be placed the entire depth on the line side of the trench. Interceptor drains shall be located between the absorption area and any upslope direction where subsurface flow "COULD" influence the drain field.

Tate – *In the new definition I noticed the word "could". Why use the word could?*

2.51/2.50 Similarly Qualified Individual. ~~3 years' experience verified by the Department in the design of onsite wastewater systems.~~ An individual who has completed an 18-month training plan approved by the Department with a licensed Designated Representative.

Tate – *What proof has shown that 3 years' experience is far too much and that only 18 months is enough to become a Designated Representative? I find this insulting that some may feel this profession can be learned in such a short time. Being a Designated Representative for several years now I can confidently say 18 months is laughable.*

5.5.2 Interceptor drains may be used for the purpose of determining minimum lot size when soils exhibiting a brief seasonal water table between the surface and 13 inches of depth that an interceptor drain can effectively reduce the depth of the seasonal water table.

Tate – *Why? Interceptor Drains have only been used in the past as a last resort, **NOT** as a loophole to make more money for the subdivision Developer. There are subdivisions that are 15 to 25 years old approved by Health Department that we are still dealing with to this day. Lots that NEVER should've been approved. All this will do is take us back and it'll be the Designated Representatives trying to explain to owner who bought a lot thinking they had a lot approved by the Health Department while the Developer will have zero obligation.*

5.5.3 ~~Lots less than three acres that require interceptor drains in subdivision approval shall include a complete permit submittal to establish sitting of the primary and "alternate" areas including the interceptor drain. Lots that do not meet the above minimum soil criteria shall be three acres or larger and sized on natural soil conditions. Good management practices shall not be used for the purpose of determining minimum lot size.~~

Tate – *It is next to impossible to make a complete permit. In fact, it's extremely unrealistic to make a permit when there isn't an actual plan on that lot itself.*

8.1 The individual absorption trench should not be more than 100 feet without mechanical dosing.

Tate – *What's the maximum length when mechanical dosing? Also, why?*

High Hydraulic Conductivity

Tate – *Why is this still in the Rules and Regulations when nobody in the Department will allow me to use it?*

Quantities of wastewater flow for various types of establishments

Recreational Vehicle wastewater is characterized as High Strength Wastewater. The wastewater strength can be reduced to residential strength when pretreated to reduce the Five-Day Biochemical Oxygen Demand (BOD5) below 300mg/L. The wastewater usage rates in Appendix B per RV space can be reduced by 50% when calculations of BOD5 reduction can be verified by a qualified engineer or verified by the engineering data provided by the manufacturer of the treatment unit. The department may request sampling to verify wastewater parameters are met.

Tate – *If pretreatment can reduce it by 50% then shouldn't that mean pretreatment for residential wastewater will do the same? In fact, pretreatment and discounting should be a method in subdivision reviews before interceptor drains.*

Bonus Comments:

**Public commenting should also have a in person session. Professionally I feel my email will not be taken seriously whereas my voice in person may have a better influence and I would know for sure I'm being heard.*

**An Onsite Wastewater Committee would help those who need guidance, not changing rules and regulations.*

**The costs of septic systems can potentially cost far more down the road if we make minimum lots with poor soil. On paper anything can work but in practice it is more likely that Drip systems will be required rather than just using a interceptor drain.*

Terry Paul

From: Sam Dunn <sdunn2401@gmail.com>
Sent: Tuesday, September 12, 2023 11:04 AM
To: ADH EHP Rules Comments
Subject: Septic Rule comments

You don't often get email from sdunn2401@gmail.com. [Learn why this is important](#)

- 2.25 Interceptor Drain: construction details about the drain should be moved to Section 8. Details on construction should not be part of the definition for this term. You have more room for detail construction and usage if under a section of the rules instead of the definition section.
- 2.50 "An individual with" should be changed to "An individual holding" or "An individual with bachelor's degree that includes 30 hours of natural science, engineering and /or math."
- 5.4 what are the requirements? Are you saying that if the requirements are met surface discharge is allowed. The way this sentence reads the message sure sounds that way. The meaning is left in the air.
- 5.5.1 Capping Fill Systems, I would add after the word bedrock, " and not for adjustment to seasonal water table depths"
- 5.5.2 change the 13 inches to 18 inches, this is more in line with 7.4.4.1 I would also reference this section number at this point. Slope or clay content may render the use of drain a nonstarter.
- 5.5.3 a complete permit submittal may not be necessary. System layout along with the foot print of the house staked out on the proposed lot. also, the submitted plat shall include on any lot that will use some form of modification, cap fill or interceptor drain, a notation that the lot in question is sized for a specific size house with a set number of bedrooms. any changes in house foot print or number of bedrooms may render said lot permit status as void.
- Opinion any option that allows for reduction of a lot size can and has caused harm to the homeowner. I have seen the use of drip systems as both the primary and secondary treatment method for subdivision review end up with lot that have failed in one way or the other. Some of these modification may advance the plans for the developer with increased lot size, but at what price.
- 8.1 what will be the maximum length for a mechanical dosed system; 120 ft. or 150 ft or no restriction for line length?
- 9.9.7 drop the requirement for notarized contract. The owners of property using holding tank will call any septic cleaner who is available at the time. when the alarm goes off, the property owner is on the phone to whoever he/she can find. With today's technology, the notification that a tank needs to be pumped is transmitted by either email or text messaging to a number of individuals. Some of contract that I have used have the pumping on a scheduled route, the alarm is not going off since the tank is pumped out on a schedule. The permit still calls for a contract just not notarized.

Sitewise LLC

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501-617-1046

September 14, 2023

Arkansas Department of Health

Comments/Slot 46

4815 West Markham

Little Rock, AR 72205

RE: Comments to the Proposed Amendments to the Rules Pertaining to Onsite Wastewater

Listed below are our comments to the proposed rule changes.

Section 8.1

The proposed change limits the absorption trench to 100ft unless mechanically dosed. No limit appears to be set for mechanically dosed absorption trenches. Thus, it appears a mechanically dosed system could have absorption trenches with no limit on the length.

Section 9.3

Requirement for a Memorandum of Agreement has been removed. The Memorandum of Agreement sets the requirement of ongoing monitoring of an Alternate System. Without the Memorandum of Agreement, upon the expiration of the contract required to be included in the permit, there would appear to be no binding agreement for continued monitoring. How will ADH require and/or enforce continued monitoring if that is still desired by ADH? Should this be the case, how will this impact those who have signed a Memorandum of Agreement in the past? Will they be required to pay for ongoing services not required by those with newer permits, thus unequally burdening them?

Section 12

An addition of: ***All systems discharging treated sewage shall be maintained at all times by an individual or company trained in the operation and maintenance of that system*** is proposed to be added to this section. This appears to require that maintenance of the system be tied to the Monitoring Contract (issued by a CMP). Thus, it would appear that anyone wishing to fulfill a Monitoring Contract (CMP) would also be required to provide all maintenance services. Additionally, the system owner would be required to have all services performed under that contract, with no opportunity for competitive bidding. This seems either unclear in that it is simply stating a general requirement not tied to the Monitoring Contract or it is a potential avenue for onerous contracts ripe for abuse.

Terry Paul

From: Mike O'Connor <mike@arkansasseptic.com>
Sent: Friday, September 15, 2023 3:25 PM
To: ADH EHP Rules Comments
Subject: Feed Back

You don't often get email from mike@arkansasseptic.com. [Learn why this is important](#)
To whom it may concern :

in reference to 2.51/2.50 This is an insult to all DR's. In no form or fashion should the Department lessen the time required to become a DR. Not only should it remain for three years but one should train with two different DR'S, 18 months each! We need more training now for our recent batch of DR'S

in reference to 5.5.2 Interceptor drains don't work. They should not be used in Subdivision Review.

in reference to 5.5.3This is a waste of time and will only confuse potential buyer's.

Subdivision review already confuses city folk who have no clue.

in reference to 50% reduction of RV waste by using a treatment unit. Why not use this for ALL applications?

Mike O'Connor

Terry Paul

From: Piper Satterfield <piper@bbbseptic.com>
Sent: Friday, September 15, 2023 4:35 PM
To: ADH EHP Rules Comments
Subject: comments

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Re: 2.50: since ADH does not really provide training programs to new DRs, what is an example of an acceptable 18 month training plan? Attend a tech transfer? Partner with a PSC/DR? Assist on X number of permits?

Re: 5.4: What requirements are you referencing? To this point it has just been said to get a permit from both ADH and ADEQ. Please include ADEQ requirements. And in the past it has been allowed for the surface discharging system to go ahead and be installed and inspected by ADH before ADEQ approves the permit. If that is still the policy, that should stop.

Re: 5.51: Does this mean that capping fill can be used to ermine minimum lot size whereas in the past it could not?

Re: 5.53: Why require a permit submittal for a lot that would utilize a curtain drain but not a capping fill or any other reason? How are you going to approve a permit for a lot when the subdivision hasn't been approved? Instead just require that it be shown on the plat along with construction specs, the house proposed house location, etc.

If you are going to allow capping fill, interceptor drains, etc to be allowed for subdivision review, then really need to establish a minimum lot size of at least 1 acre.

Re: 8.1: This implies that greater than 100 ft laterals will be allowed but with no other context. Will there be a maximum length?

Re: 9.3. Good. The MOA should be eliminated. It is no longer useful.

Re: 9.9.7: No other contract is required to be notarized. A signature and letterhead should suffice as it does for everything else.

Re: 9.9.8: Should be able to land apply holding tank contents if from a domestic waste source (typically small offices) and does not contain industrial process water, etc. Could also require it be blended with other septic tank waste. Same for portable toilet waste that do not use formaldehyde based deodorants. Wastewater treatment plants are increasingly not allowing pumper waste of any sort to be discharged at a WWTP.

Re Section 12: Reword the statement to be clear about what constitutes treated.

Terry Paul

From: Robert Goff <rg.earthtechinc@gmail.com>
Sent: Friday, September 15, 2023 6:09 PM
To: ADH EHP Rules Comments
Subject: Public Comment

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All approved systems should be allowed in subdivision review lot sizing.

Similarly qualified DR's should have no less than 3 years of training under another DR.

The term "alternate area" should not be brought into the regulations again. That was changed to secondary area a long time ago.

RV park flows should not get a 50% reduction in design flow for using pre-treatment. Are you going to give a 50% reduction for all systems using pre-treatment? This is not a scientific or data-based approach. If you think the design flow can be 60 gpd, then make it 60 gpd and require treatment to lower the BOD if you have data to back that up. I haven't seen any data to support a daily flow larger than 30 gpd.

Robert L. Goff
(501) 472 - 1624
<https://earthtechar.com/>
EarthTech, Inc.
PO Box 73
Vilonia, AR 72173

Terry Paul

From: Shayna Owen <tardybluemax@gmail.com>
Sent: Friday, September 15, 2023 7:31 PM
To: ADH EHP Rules Comments
Subject: Comments on Rule Change

You don't often get email from tardybluemax@gmail.com. [Learn why this is important](#)

To Whom It May Concern,

My name is Shayna Brooks. I am a Designated Representative, Installer, CMP and owner of Emery Pump Service located in Saline County. I previously worked for ADH as a wastewater Environmental Health Specialist in Craighead County 2016 through 2018. I have reviewed the rule changes and have a few comments.

1. Section 2.5 Changing DR licensure process from 3 years to 18 months
I have had my license since 2015 and was able to qualify due to my education. I currently have two people training under me in the 3 year DR program. I am heavily against cutting the required training time in half. Having been an EHS, growing up in the wastewater industry, and having a license for 8 years, I STILL come across situations that I need either health dept input from or I have to contact an engineer to make sure it is going to be designed adequately and will renovate to acceptable levels. I have designed slaughterhouses, RV parks, subdivisions, drip systems, surface discharge, convenience stores, and multiple residential systems, including creative repairs. After 18 months, the trainees should have a good grip on the regulations but sending someone out to an unsuspecting homeowner, with less than 2 years experience in an ever changing industry, it's hazardous. Wastewater systems are expensive, ranging between \$7000-\$20,000, and when designed at a less than adequate level, which unfortunately most new designers are less than educated, sets the homeowner up for failure. It would be irresponsible of the health dept to license people who are not qualified to design systems with such a high price involved. The 3 year span also weeds out people who are not serious about creating a business. It keeps those who are just "doing it for extra" out of the industry and prices at an acceptable level.
2. Section 8.1
The added explanation of installing 100' trenches without mechanical dosing. Unless a system has consistent flow (drip), lines should not be over 100' long whether they are dosed or not. There have been multiple studies done showing the most acceptable length for a fieldline is 80'. The biomat build up prevents most liquids going past 100'. It would be a waste of material and cause more failures further down the road to extend lines past 100' unless they are under consistent flow.
3. Section 12
There is new language explaining a surface discharge system shall be maintained at all times by an individual or company trained in the operation and maintenance of the system. Homeowners can become knowledgeable in their systems and should have the option to maintain them. Most homeowners do not want a surface discharge system to begin with and are extremely put off by the thought of having to pay someone to maintain it. I have personally come across several systems that have lacked maintenance due to financial issues and considering most service companies only service what type of system they sell, it limits

Terry Paul

From: tim@tylergroup.net
Sent: Sunday, September 17, 2023 6:44 AM
To: ADH EHP Rules Comments
Subject: proposed rule changes

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To whom it may concern

I have reviewed the proposed changes to the waste water rules

My comment's are as follows

2.25

Curtain drains do not need a plastic barrier in the trench

First of all it is almost impossible to install it in a trench if a 4 or 6 inch ditch which is used to dig the trench which is done in most cases

With a 4 inch pipe in the bottom and the trench filled to the surface with washed gravel

Water always follows the path of least resistance

It will take care of it self

Curtain drains are great tools to have

2.50

18 months is not long enough to learn the business' in the field with no degree

To be able to design a system you need years of training to understand septic systems and 18 months is just not long enough

5.4

As long as ADEQ qualifications are met and permitted the health department should not stand in the way of any surface discharge system
ADH rules are almost imposible to meet , ADEQ rules are pretty strait forward and can be meet in most all cases

Section 12 Home owners if qualified should be aloud to maintain and monitor their own systems

RV park 120 gal per day is still way to much to have to design RV parks on

The US government forest service uses less than 50 gallons per day

This has to come in line with what is reality usage

If a waste water BOD reducer can be used to reduce the calculations by 50 % then in residential use it should be allowed also ?

For years I and others have asked why is ADH not allowing home owner and designers to spec less than 1000 gal septic tanks ?

Terry Paul

From: Ron Kingston <ronkkdisaster@yahoo.com>
Sent: Wednesday, September 27, 2023 9:38 AM
To: Terry Paul
Subject: Rule Changes

Mr. Paul,

I read the proposed rule changes. The only comment I have is, not being able to use drip systems in sizing subdivisions. I do like being able to use curtain drains. But if we can use those, I think we should be able to other approved systems.

Thanks

**Ron Kingston
D.R. #1132520**

Sent from my iPhone