2022 Designated Representative
Continuing Education
Online Training
Surface Discharge Systems

- Verify the whole property is unsuitable or unusable
- Verify setbacks are met:
  - Property is 3 acres or larger
  - 100’ from discharge point to house being serviced by ATU
  - 150’ from property line
  - 200’ from property line in direction of flow
  - 300’ from discharge point to any neighboring house
Surface Discharge Systems

☐ Obtain NPDES permit after issuance of permit for construction
☐ System entered into CASST reporting system
☐ CASST record activated on date of installation
☐ Notify local EHS of issuance of NPDES permit
☐ If NPDES permit is not obtained after one year site information forwarded to ADEQ
Items critical to the review of EHP-19

• Appendix F page 59 in AR onsite rules

Click logo for link to updated rules
What Makes a Bad Benchmark?

A. Flag in Ground

B. Tree Sapling

C. Stake in Ground
What Makes a Good Benchmark?

A. Survey Pin Pedestal  
B. House Stub-Out  
C. Utility
Frequently missed items

#6 Distance from one point in the system to 2 adjacent property lines
Please include **DETAILED** vicinity maps with all permit submittals **PLUS** any necessary info for site (gates, no parking, etc.)
Frequently missed items

# 23 Calculations used to determine GPM & TDH

## Orifice Sizing

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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tbody>
<tr>
<td>10</td>
<td>Maximum Orifice</td>
<td>3/8 &quot;</td>
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<td>Drill Size 3/8 &quot;</td>
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<td>23</td>
<td>Total Flow</td>
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Frequently missed items

• Please include the property owners Name, Address and Phone numbers on all EHP-19s.

• Do not list your address or phone number in data box 1, 2, or 3 on the EHP-19.

• Also include the property address for the proposed system in box 5. If this is not available, do not leave this blank. “North of #35 Razorback Drive”

• The Arkansas Department of Health uses this information when conducting onsite wastewater system site surveys.
Frequently missed items

• Detailed drawing and/or instructions pertaining to the design and installation of system.
  • Electrical Controls
  • Distribution devices (K-Rain Valve, pressure manifold)
  • Trench media
  • Pump selection (type, voltage, discharge assembly)
Monitoring Requirements For Disputing Seasonal Water Tables

• The monitoring period shall be during the wet season (December 1\textsuperscript{st} through May 15\textsuperscript{th} of the following year) to verify the depth and duration of the seasonal water tables.

• The monitoring period shall be 8 consecutive weeks and 2 nonconsecutive days per week.

• A minimum of 16 recorded observations shall be conducted.
Serial Distribution

• The overflow point of the tee or hillside box shall be at the top of the trench media for the line(s) served.

• Sizing for both primary and secondary absorption area shall be increased by 25%.
Dosing Standard Systems

• Dosing systems that incorporate a reduction in the transport piping diameter at the final point of dispersal or the use of flow reduction orifices shall require the use of authorized effluent filter device.
Holding Tanks

• Holding tanks shall be manufactured with only an inlet pipe penetration.
• No outlet(s) or other means of discharge shall be cast into the tank.
Dose Tanks

- Pump system designs should include detail information of the routing of both pump discharge piping and electrical conduit through the tank riser.
- Grommets for both the pump discharge piping and electrical conduit should be indicated on the plans.
- Dose or Combo tanks can be specified to be constructed without precast outlets.
Rule Changes

• 2019 rule updates: clay % changes, low hydraulic conductivity chart, red soils (Appendix I)

• 2020/2021 rule updates:
  • Automatic licensing of recently discharged veterans and spouses
  • Reciprocal licensing in place of some requirements from states with similar programs
Rule Changes

• Soils with sandy clay, clay, or silty clay texture and are low shrink-swell will be considered to have moderate hydraulic conductivity. These residual soils have a hue of 5YR or redder and have typically formed over limestone and chert parent materials associated with the Ozark Highlands in northern Arkansas.

• See Appendix I for additional guidance for identification of soils meeting these criteria.
Rule Changes

• Hydraulic conductivity class shall be assigned based on the soil horizon with the minimum hydraulic conductivity in depth zone extending 6 inches above and 12 inches below planned depth to base of soil absorption trench.
Rule Changes

• Low hydraulic conductivity (40% – 60% clay).
• Included are soil horizons which have platy structure or are massive, and horizons which have been compacted by human activities, especially vehicle traffic and tillage operations.
• Also included are horizons with one of the following textural classes: sandy clay, clay, and silty clay; rock fragment content is less than 90%.
Rule Changes

• No loading rates are available for low hydraulic conductivity soils with greater than 60% clay.
• Clay not used for determining SWT
• SWT’s determined by redox features
• Clay percentage determines H.C. Table
Example from previous rules

• 41 % clay at 16 inches
• 6/3’s and 6/2’s at 20 inches
• MSWT based on clay at 16 inches
• Loading rate 10ft center 0.17 GPD/Sq. Ft.
• Moderate H.C. Chart
Example from new rules

• 41% clay at 16 inches
• 6/3’s and 6/2’s at 20 inches
• MSWT based on redox feature at 20 inches
• Loading rate 10ft center 0.24 GPD/Sq. Ft. Low H.C. Chart
• Low H.C. Chart has Max. loading rate of 0.30 GPD/Sq. Ft.
Local Issues

• Make notes on the permit if there is anything unusual about the site or the pit. Explain the reason for your system design or why you called the pits the way you did.

• On very small or limiting lots, we may request a blueprint for the proposed house or require all corners of the proposed house be flagged to verify all setback requirements can be achieved.
Local Issues

• Access to pits: no steps or very steep entry.
• Additional notes that may be useful on a permit submittal may include:
  • Water crossing/unalusual road conditions
  • Livestock,
  • Aggressive/territorial dogs
Local Issues

- Make a note to call if site has/will have locked gate.
- Direction and additional notes how to get to site if on large acreage
- Tanks installed with more than 2 Ft. of cover require certification from the manufacturer
- Please include specific instructions on unusual situations
Local Issues

• Some county governments have passed ordinances requiring a permit for all onsite wastewater system installation. This action by these county governments have eliminated the use of 10 Acre Exemption rule.

• At this time the following counties do not allow 10 Acre Exemption.
  • Benton
  • Washington
  • Marion
  • Baxter
  • Pulaski
This completes the 2022 DR training session.

Click the logo below to open the training certificate.

Print the certificate and return with your license renewal form.
Having Issues?

• Call or email

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2022 Designated Representative
Continuing Education
Online Training