WE24, Step by-Step Guide to Locating and Recording the Condition of Treatment Field and Treatment Components

Butch Strait Inspections PLC
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And WasteWaterEducation.org
ADVANCED INSPECTIONS

- Pump systems
- Advanced treatment systems
- Community systems
- No records
- Multiple systems
- Inspections to determine conditions for increased use
TOOLS

• Camera
• Shovel
• Measuring Tape
• Probe
• Driveway markers
• Tarps
• Sludge checker
• Gloves
• Glasses  Safety and reading
• Paperwork for data collecting
• Pen or pencil
• Business card
• Long pry bar with flat on one end
• 8’ hand auger

ADVANCED TOOLS

• Sewer Camera
• Extra Shovel
• Extra long Probe
• Dye
• Metal detector
• Remote camera on extendable rod
• Sonde with locator
• Hoist For stuck lids
• Power screwdriver (drill) with bits
• Water Probe  with garden hose
• Laser measure device
• Amp /Volt checker
• Float lifting tool
• Clear Pipe for head pressure
• Large slip joint pliers
• Witching sticks (if you can do that)
KNOW THE RULES

- Be up to date on the code for the area that you are inspecting
- Be aware of any ordinances from local authority Over lay districts
SEIZING REQUIREMENTS:
1. Excavation Size: $30' \times 30' \times 48''$
2. Stone Pipe Diameter: $\frac{1}{2}''$

TYPE MANIFOLD:
- Central

SIZE MANIFOLD 2x2

<table>
<thead>
<tr>
<th>Lateral Length</th>
<th>Lateral Size</th>
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<tbody>
<tr>
<td>96''</td>
<td>1/2''</td>
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<table>
<thead>
<tr>
<th>Hole Size</th>
<th>Hole Spacing</th>
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<tr>
<td>3/4''</td>
<td>1''</td>
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<table>
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<tr>
<th>No. of Laterals</th>
<th>Lateral Flow</th>
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<tr>
<td>5</td>
<td>9 gpm</td>
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Minimum Discharge Rate: 40 gpm
Minimum Dosage: 150 gallons

On/Off flow switch set to pump 10'' inches of tank volume while keeping pump submerged after dose.

Friction Loss in Connecting Piping: 5 ft.
Elevation Head: 10 ft.
Pressure Head: 5 ft.
Total Pumping Head: 15 ft.

* Pump shall be capable of pumping 40 gpm at 15 ft. head.
* Install a ball valve in force main within pump chamber for adjusting pressure head.
* All wiring shall comply with electrical codes.
* Pump shall be placed above bottom of pump chamber on 2 x 6 inch solid concrete blocks.
* A float water alarm shall be installed in pump chamber.

Diagram

See Details on Diagram
SIZE UP PUMP CHAMBER

- Length x width x 7.48
- Gallons in 1 foot of the tank
- Divide by 12 to get per inch gallons
- $8 \times 4$ is about 15 gallons per inch check dose by adding water until pump is activated by float measure from point on riser. When pump turns off then measure again to get dose in inches compare to permit dose.
CHECK THE PUMP

• Lifting the float to check operation
• Checking the amp draw of the pump will give you an idea of how it is working. This can be done while the pump is running for the dose check.
• Lift alarm float to activate alarm, verify that it is operating properly and the location of the alarm.
VIDEO walk through
VIDEO walk through

THERE ARE DIFFERENT ALARMS: Inside and Outside
ADVANCE TREATMENT SYSTEM

- These are used in areas that have a high ground water issue
- The local entity will usually have a portion of the code to cover when these can be used
- There are many different types.
WRITE REPORT

- Report should have pictures and explain what they are
- Make sure the client understands the report
- Most people do not know crap about the septic until it fails then they are experts
GATHER INFORMATION

- Has the local entity completed a site survey
- When was it completed
- Why was it completed
VIDEO walk through
This concludes the education portion of this presentation.

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