

## Troubleshooting Solutions

### Part A: Disposal Bed

Cause	Solution
<b>A.1. Clean water is visible on ground surface or is ponding in the disposal bed.</b>	
Disposal pump ON time is too long.	<ol style="list-style-type: none"> <li>1. If demand, check tether length of control float; should be 2" – 2.5", not more</li> <li>2. If timed, check timer ON time of pump in control panel: reduce ON time and reduce OFF time for small frequent doses</li> </ol>
Pressure trench is sloped causing uneven effluent distribution	<ol style="list-style-type: none"> <li>1. Plug some holes in low end of pressure pipe to try and even out the distribution</li> <li>2. Excavate the trench and place 'dams' at 10 foot intervals to contain the water flow</li> <li>3. Reconstruct the trench by removing pressure pipe and leveling out the trench floor</li> </ol>
Distribution box is not level	<ol style="list-style-type: none"> <li>1. Excavate around the distribution box and make it level</li> </ol>
Area Bed pipe is excessively sloped	<ol style="list-style-type: none"> <li>1. Excavate the stone layer and make the pipe more level</li> </ol>
Property has been re-graded, modified, or there is no management of surface water.	<ol style="list-style-type: none"> <li>1. Add swales to redirect surface water around the disposal bed.</li> <li>2. Make sure eavestroughs and neighbouring water sources are directed away from bed.</li> </ol>
There is too much water going through the system due to a leaky faucet or toilet	<ol style="list-style-type: none"> <li>1. Get homeowner to fix leaky fixture.</li> </ol>
There is too much water going through the system due to sump pump, eavestroughs, or water softener connected to septic tank	<ol style="list-style-type: none"> <li>1. Disconnect from septic system and direct it to another disposal.</li> </ol>
There is too much water going through the system due to excessive water use	<ol style="list-style-type: none"> <li>1. Educate homeowner to proper water use with a septic system (i.e. space out showers, laundry, dishwasher, etc.)</li> <li>2. Give homeowner a Waterloo Biofilter® pamphlet with proper usage tips</li> </ol>
<b>A.2. Septic water is visible on ground surface or is ponding in the disposal bed.</b>	
Check Waterloo Biofilter® unit & septic tank for healthy activity.	<ol style="list-style-type: none"> <li>1. Go over all Troubleshooting Solutions in parts B and D.</li> </ol>
<b>A.3. Disposal area not grassed or deep rooted trees planted</b>	
Disposal bed is not grassed	<ol style="list-style-type: none"> <li>1. Tell homeowner to seed the bed area so disposal will work best</li> </ol>
Deep rooting trees planted too near distribution pipes	<ol style="list-style-type: none"> <li>1. Have homeowner relocate deep-rooting trees so disposal pipes will not be interfered with</li> </ol>

<b>A.4. Spray height of Shallow Pressure Trench is less than 60 cm.</b>	
Pump was undersized or wrong pump installed	1. Replace with higher performing pump. 2. Plug a couple holes at the beginning of the run with stainless screws to increase pressure at end of pipe
Too many distribution holes were drilled	1. Plug some holes with stainless screws
Forcemain diameter installed was too small	1. Try a higher performing pump. 2. Replace with larger diameter pipe

**Part B: Waterloo Biofilter® Treatment Unit**

<b>Cause</b>	<b>Solution</b>
<b>B.1. Insufficient air flow into the Biofilter unit</b>	
Sealed lid was installed	1. Drill air holes 1/2" diameter into the lid
Side vents covered by backfill	1. Remove soil in vent locations
<b>B.2. Foam colour is brown or excess sludge build-up on top cubes</b>	
Septic tank is unhealthy or dead	1. Go over all Troubleshooting Solutions in part D.
<b>B.3. Spray distribution doesn't cover entire basket</b>	
Plugged nozzle	1. Remove the nozzles and clean them; if spray still doesn't cover basket, use next solution.
Manufacturer supplied wrong nozzles	1. Contact manufacturer and get larger spray angle nozzles – Troubleshooting Solution F.1.
<b>B.4. Spray distribution overshooting basket</b>	
Spray manifold suspended too high	1. Lower manifold to within 6" of the top of the basket, or rest it directly on the basket.
Manufacturer supplied wrong nozzles	1. Contact manufacturer and get smaller spray angle nozzles – Troubleshooting Solution F.1.

**Part C: Pump Tank**

<b>Cause</b>	<b>Solution</b>
<b>C.1. Float tree is not secure</b>	
Attachment means came loose	1. Reattach float tree to wall or basket
<b>C.2. Float tethers too long</b>	
Float attachment means came loose	1. Reattach float with a 2" – 2-1/2" tether length
<b>C.3. Pump is not working properly</b>	
Pump operation is intermittent	1. Check that control floats or timer are working properly 2. Check power connections

Pump doesn't turn on at all	<ol style="list-style-type: none"> <li>1. Check that control floats or timer are working properly</li> <li>2. Check power connections</li> <li>3. If replacement pump required, contact manufacturer [Troubleshooting Solution F.2.]</li> </ol>
<b>C.4. Float switch is not working properly</b>	
Float switch is not connected properly	<ol style="list-style-type: none"> <li>1. Check float switch connections</li> </ol>
Float switch is not operational	<ol style="list-style-type: none"> <li>1. Contact manufacturer for replacement float [Troubleshooting solution F.2.]</li> </ol>

#### Part D: Septic Tank

Cause	Solution
<b>D.1. Septic tank is dead</b>	
Homeowner is using detergent with bleach, bleach pucks, excessive cleaning with disinfectant soaps & bleaches, or other additive which kills bacteria	<ol style="list-style-type: none"> <li>1. Remove bleach pucks</li> <li>2. Educate homeowner to proper use of bleaches &amp; disinfectants</li> <li>3. Change to regular bleach with separate bleach only addition</li> <li>4. Give homeowner a Waterloo Biofilter® pamphlet with proper usage tips</li> </ol>
Homeowner is on chemotherapy or other medical drugs	<ol style="list-style-type: none"> <li>1. None, or increase recirculation</li> </ol>
<b>D.2. Effluent filter is unseated</b>	
Homeowner removed filter	<ol style="list-style-type: none"> <li>1. Inform owner to hazards of coming into contact with sewage</li> <li>2. Report action to the CBO</li> <li>3. Give homeowner a Waterloo Biofilter® pamphlet with proper usage tips</li> </ol>
Excess slime build-up and water level moved filter	<ol style="list-style-type: none"> <li>1. Clean filter by dipping into septic tank or washing with a hose back into septic tank</li> </ol>
<b>D.3. Excessive solids accumulation and/or grease clogging effluent filter</b>	
Homeowner using a lot of oils/grease in cooking or flushing grease down drain	<ol style="list-style-type: none"> <li>1. Educate homeowner to proper food use with a septic system (i.e. no grease down drain, use compost for food solids, etc.)</li> </ol>

#### Part E: Alarms

Cause	Solution
<b>E.1. Alarm does not go off</b>	
The alarm switch in the control panel is not on 'normal'	<ol style="list-style-type: none"> <li>1. Position the alarm switch at normal</li> </ol>
The alarm float switch is not functioning (alarm can be triggered manually at the	<ol style="list-style-type: none"> <li>1. Check float switch connections to control panel</li> </ol>

control panel but is not triggered by the float)	2. If replacement float required, contact manufacturer [Troubleshooting solution F.2.]
The control panel is not functioning (alarm cannot be triggered)	1. Check electrical connections 2. If replacement panel required, contact manufacturer [Troubleshooting solution F.2.]

## Part F: Contacting the Manufacturer

Cause	Solution
<b>F.1. Problem with a Biofilter® basket</b>	
Manufacturing defect	1. Contact Waterloo Biofilter Systems Inc. at 519-856-0757; info@waterloo-biofilter.com www.waterloo-biofilter.com;
<b>F.2. Part failure; replacement part required</b>	
Part is still under warranty	1. Contact WBS and inform them of the failure and that the part is still under warranty.
Outside warranty	1. Send Purchase Order to WBS to buy new part and charge homeowner