 <p><b>THURSTON COUNTY</b> Washington Est. 1852</p> <p><b>Public Health &amp; Social Services POLICY</b></p>	<b>Policy Title</b> REQUIREMENTS FOR REBUILDING MOUNDS, INTERMITTENT SAND FILTERS, SAND-LINED TRENCHES/BEDS AND GLENDON BIOFILTERS	
	<b>Number</b> ONST.20.POL.853	<b>Effective Date</b> 02/01/2024
	<b>Latest Approval Date</b> 09/12/2012	<b>Approved By</b> Art Starry
	<b>Next Review Date</b> 06/21/2029	
<b>POLICY INTENT</b>		
<b>Purpose</b>	This policy describes the conditions when a mound, intermittent sand filter, sand-lined trench/bed or Glendon Biofilter may be rebuilt in an attempt to restore it to its originally approved condition.	
<b>Scope</b>	<input checked="" type="checkbox"/> Internal Only <input type="checkbox"/> Direct Impact to Citizens	
<b>Are Office/Department Documents on this subject permitted?</b>	<input checked="" type="checkbox"/> Yes, the policy clarifies regulations used only by the Environmental Health Division (Article IV and WAC 246-272A)	<input type="checkbox"/> No
<b>POLICY STATEMENT</b>		
<p><b>1. Only mounds, sand filters and sand-lined trenches/beds designed and constructed after September 1993 can be rebuilt.</b></p> <p>Only Wisconsin style mounds, sand filters and sand-lined trenches/beds designed and constructed in accordance with the September 1993 or subsequent State of Washington Technical Review Committee Guidance or Technical Advisory Group Guidance for Mound Systems, Intermittent Sand Filters or Sand-Lined Trench Systems can be rebuilt. All others shall be replaced in a different location.</p> <p>Glendon Biofilters are proprietary with their own media specifications and may be rebuilt according to Glendon® Biofilter Technologies Design and Installation Manuals.</p> <p><b>2. A complete failure analysis required before on-site sewage systems (OSS) are rebuilt or repaired.</b></p> <p>The design proposal must assess and address the factors that contributed to the failure. The proposal shall include the results of a diagnostic evaluation. At a minimum, diagnostics must evaluate:</p> <ul style="list-style-type: none"> <li>a. Leaking plumbing fixtures</li> <li>b. Ground water intrusion to any OSS Component</li> <li>c. Daily flows not to exceed design parameters</li> <li>d. Biomat buildup in the mound / sand filter</li> <li>e. Waste strength - Completed by a County-Certified Monitoring Specialist, Licensed Sewage System Designer, or Professional Engineer. Analysis of effluent samples used to evaluate waste strength must be performed by a Washington Department of Ecology certified laboratory.</li> </ul> <p>The strength of the septic tank effluent must be at or below the following values:          TSS: ~ 80 mg/L          BOD5: ~ 150 mg/L          O&amp;G: ~ 20 mg/L</p> <p><b>3. Complete OSS replacement is required if the failure of a mound or Glendon Biofilter is at the sand-native soil interface.</b></p>		

- 4. A Licensed Sewage System Designer, Professional Engineer, or Certified Installer must submit a complete rebuild or repair proposal. The installer must be certified by Glendon® Biofilter Technologies to propose a rebuild of a Glendon pod.**

A complete sewage system rebuild proposal must be submitted with a scaled site plan that includes the component (s) being rebuilt or replaced (mound bed, sand filter, Glendon pod etc.) a construction plan, and the applicable fees and repair application.

The original design may be used to rebuild the OSS if there is no need to change the original design. The written proposal must be based on the original approved design or the accepted record drawing.

- 5. A proposal to completely relocate a mound, sand filter, sand-lined trench/bed or Glendon Biofilter requires a full repair design prepared by a Licensed Designer or Professional Engineer, and a complete permit application and fees.**

Exception: A Certified Installer may propose the replacement of a sand filter with an aerobic treatment unit.

- 6. A new record drawing and pressure test results are required when mound, sand filters, sand-lined trenches/beds and Glendon Biofilters are rebuilt or repaired.**

Record drawings and pressure test results are required for any system rebuild or repair, including when:

- a. The sewage tank or pump chamber is relocated,
- b. Unplanned relocation or replacement of a system component occurs during the repair or rebuild.

- 7. The existing pump chamber serving the mound, sand filter or sand-lined trench/bed must have or be retrofitted for timer-controlled dosing and the minimum pump chamber sizing as per the current pressure distribution guidelines.**

- The timer must be proposed to be set at operating capacity to be consistent with Article IV Section 8.1.4.3.3 and implemented at time of construction.

- 8. Gravelless chambers can be used to replace drainrock in the existing mound, sand filter or sand-lined trench/bed provided that the originally required square footage is installed.**

If the cause of failure is suspected to be due to loading rate, the bed can be widened in a mound to facilitate the common width of gravelless chambers if the soil depth supports it. For example, in a 5-foot wide gravel bed, a 6-foot wide gravelless bed is allowed. Alternatively, in a 7.5-foot wide gravel bed, an 8-foot wide gravelless bed is allowed. In no case shall the bed be widened more than one foot.

- 9. If a proprietary device is added to the on-site sewage system, a Certified Monitoring Specialist will be required as per policy ONST.20.POL.605.**

#### DEFINITIONS AND ACRONYMS


OSS	On-site Sewage System
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#### RELEVANT LAWS AND OTHER SUPPORTING INFORMATION

County Code	Article IV, Sections 4, 8 & 17 of the Thurston County Sanitary Code
State Law	
State Rule	
Other Sources	
	WAC 246-272A-0280

Superseded Documents	ONST.12.POL.853
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Supporting Documents	N/A
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<b>Related Documents</b>	ONST.20.POL.605	
<b>Communication and Implementation Strategy</b>	<p>The Policy Owner will:</p> <ul style="list-style-type: none"> <li>• coordinate the review of the Office/Department Documents to ensure consistency</li> <li>• Send signed updated policy to OSS Professionals and Staff through Constant Contact e-mail</li> <li>• Post signed updated policy to Division's OSS Professionals Webpage and PHSS intranet site.</li> </ul>	
<b>POLICY ADMINISTRATION</b>		
<b>Policy Owner</b>	Steve Petersen, Program Manager, EH Division	
<b>Contact Person</b> (if different from above)		
<b>Roles and Responsibilities</b>	Laura Blakely	Policy Administrator
<b>REVISION HISTORY</b>		
<b>Effective Date</b>	<b>Approved By</b>	<b>Modifications</b>
06/21/2023	 _____ Art Starry/Environmental Health Director	<ul style="list-style-type: none"> <li>• Policy Updated</li> <li>• Added: Technical Advisory Group which has replaced TRC</li> <li>• Added Glendon Biofilter pods and sand-lined trenches/beds to policy.</li> <li>• Added that only a Glendon certified installer may make proposals on Glendon pods and mentioned the proprietary media.</li> <li>• Added timers to be set at operating capacity in Item 7.</li> <li>• Added exception to #5.</li> </ul>
.Xx/xx/xxxx	_____	
	Name/Title	
<b>Reviewers of the Current Revision</b>	<u>Brad Sangston/Environmental Health Specialist II</u> Name/Title	_____
	<u>Steven Davies /Environmental Health Specialist II</u> Name/Title	_____
	<u>Wendy Jonas /Environmental Health Specialist II</u> Name/Title	_____

<b>FURTHER INFORMATION</b>	
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<b>Keywords for search engine</b>	Gelndon, mound, sand filter, sand-lined trench, on-site sewage system, proprietary device