

# **POLICIES & PROCEDURES**

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Number:	[Administrative] Policy OS-25	Effective Date: October 15 <sup>th</sup> , 2021
Applies To:	Remediation of Onsite Sewage Systems	Supersedes: 10/01/2021, 06/1/2011, & 03/16/2016
Approved:	Eric Evans, Assistant Environmental Health Director	Next Review: As Needed

### A. Purpose:

The purpose of this policy is to establish the procedures for performing prescriptive remedial actions to reduce biological loading to the infiltrative surface or to reconstruct broken components that are outside of the allowances of Policy 15 – Minor Repairs. Any remediation plan involving the modification of a permitted septic system beyond what has been previously approved (i.e.: addition of capacity, technology changes, etc.), shall be submitted as a Building Site Application – Repair or Modification, by a Washington State Licensed Septic Designer or Engineer.

- Biological Remediation A technology that provides a combination of biological augmentation and aeration to the wastewater in a continuous manner to help digest and break down the excess biomat. Any biological remediation must utilize a Washington State Department of Health approved product or additive.
- 2. Physical Remediation A process, excluding aeration, in which the broken component is replaced or repaired. (This may include reconstruction per the original design of a component). Systems with a soil interface plugged with biomat are not eligible to be physically remediated, a replacement system must be designed and installed.

#### B. Policy Statement

The following policy and procedures shall be adhered to when applying any remediation method to an onsite sewage system.

# C. <u>Implementing Procedures</u>

- 1. Refer to Figure 1 to determine if a prescriptive remediation application may be applied for.
- 2. Any onsite sewage system found to be in a state of failure shall be mitigated to the extent that the imminent public health hazard has been reduced prior to beginning any remediation activities.

- 3. Prior to beginning the remediating process, a remediation application submitted to the Health District for review and approval is required.
  - A. Prescriptive remediation options outlined within this policy may be submitted by a Kitsap Public Health District installer, or a Washington State Department of Licensing, licensed septic designer, or professional engineer with a failure diagnosis and supporting information.
  - B. Remediation plans not outlined within this policy may only be submitted by a Washington State Department of Licensing, licensed septic designer, or professional engineer.
  - C. The application must address the minimum setback requirements of Policy 10 (see Figure 1) and requires excavation to expose the problem (if applicable).
  - D. Remediation applications and approvals shall expire after 1 year.
  - E. Once the remediation plan is approved, a component permit must be purchased prior to the remedial work being performed. The permit can be purchased by the same installer who applied for the remediation application. A record drawing is not required, unless otherwise specified.
- 4. Technology specific remediation procedures.

# A. Concrete tanks.

- 1. Remediation applications for the repair of concrete septic or pump tank cracks below the water line must be submitted to the Health District for review.
- 2. Repairs of concrete septic or pump tank cracks may not result in tank capacity reductions which are less than the approved tank capacity requirements of the approved permit.
- 3. Upon completion of the remediation work, a 24-hour water test is required to be performed by the certified installer.
  - a. To conduct the 24-hour water test the installer must ensure that no effluent will come into the tank.
  - b. Once the 24-hour water test has been completed, the installer performing the water test must provide a signed statement indicating the results of the water test to the Health District.

#### B. Mounds, or bottomless sand filters.

1. Reconstruction of mounds, or bottomless sand filters may only propose the reconstruction of the media bed and/or distribution components.

2. The original approved design criteria for sizing must be utilized for the reconstruction of the component.

#### C. **Drip dispersal.**

1. Reconstruction of drip dispersal systems may only propose the reconstruction of the distribution components.

The original approved design criteria for sizing must be utilized for the reconstruction of the component.

#### D. Gravel trench reconstruction.

- 1. Reconstruction of gravel distribution trenches may only propose the reconstruction of the distribution trench within the same location.
- 2. The soil interface may not be disturbed (i.e.: the rock below the pipe must remain intact).
- 3. If biomatted soils are identified during the remediation process, the installer must stop immediately and contact the Health District to determine the appropriate corrective action.

#### E. Gravelless chamber reconstruction.

- 1. Reconstruction of gravelless chambers when the void space has filled with soil may be proposed when no other evidence of failure is identified (i.e.: biomat).
  - a. The existing chambers may be removed, and the trenches re-excavated.
  - b. If new trenches are proposed to be installed in-between the existing trenches, the remediation plan must be submitted by a Washington State Department of Licensing, licensed septic designer, or professional engineer.
    - i. Minimum required trench setbacks must be maintained.
    - ii. The vertical separation per the original design must be maintained.
    - iii. The septic designer or engineer must release the permit to an installer for installation.
    - iv. A new record drawing is required to be developed and submitted by a licensed septic designer, or professional engineer.
  - c. The reconstructed gravelless chamber installation may not exceed the original maximum trench depth installation specified on the original design.

d. Any previously permitted gravelless chamber system, which was originally installed with a sizing reduction without the addition of pre-treatment (i.e. 40% reduction for gravelless chambers) will require the installation of 100% of the originally required lateral trench length. This application must be submitted by a licensed septic designer or professional engineer.

#### F. Glendon BioFilter reconstruction.

- 1. Remediation plans for the reconstruction of Glendon Biofilters shall include at minimum, the following instructions to the installer:
  - a. Each pod shall be pumped out completely by a Health District certified septic pumper.
  - b. The sand media must be completely replaced down to the gravel interface.
  - c. New proprietary media shall be installed per the manufacturer's requirements, and per the original design.
  - d. If there is root infiltration around the rim(s), the sand outside of the tank must be removed to at least 12 inches below the tank rim(s) and all roots shall be removed.
  - e. Disposal or utilization of the old media must be addressed in the remediation plan.

#### G. Intermittent sand filter reconstruction.

- 1. Reconstruction of intermittent sand filters may be completed per the original intermittent sand filter design. Reconstruction of an intermittent sand filter shall include at a minimum:
  - a. The containment vessel shall be pumped out completely to perform the reconstruction.
  - b. All sand media shall be replaced to the sand / gravel interface.

# H. Biological remediation.

- Biological remediation / augmentation may be added to a previously approved onsite sewage system. Biological remediation / augmentation, must use a Washington State Department of Health approved product or additive.
  - a. The remediation plan must be submitted by a licensed septic designer or professional engineer.
  - b. If an aerobic treatment unit is proposed as a biological remediation device, a trash tank is not required per policy 32, so long as the aerobic treatment unit is

preceded by an approved septic tank.

- c. A record of construction is required to be submitted by the licensed septic designer or engineer.
- d. Depending upon the technology added, an annual monitoring & maintenance contract may be required.

Figure 1.

Guidelines for Determination of Minor Repair/Remediation/Replacement Correction for a Deficient or Failing Onsite Sewage System

