



Title: Construction Standards for Intermittent Sand Filters	Page 1 of 2
Number: [Administrative] Policy OS-13	Effective Date: March 17, 2025
Applies To: Design and Construction of Intermittent Sand Filters	Supersedes: N/A
Approved: Eric Evans, Assistant Environmental Health Director	Next Review: As Needed

A. Purpose

The purpose of this policy is to establish specific construction standards for Intermittent Sand Filters intended, or required, to protect onsite sewage systems.

B. Policy Statement

All design and construction of intermittent sand filters shall follow the guidelines of this policy.

C. Application Standards

1. Location Requirements
 - i. The minimum setback requirements for intermittent sand filters are the same as required for sewage tanks.
2. Installation Issues
 - i. If the containment vessel includes a 30-mil PVC liner, the liner must be protected by a three inch layer of sand beneath the liner.
 - ii. In order to prevent differential settling when the sand filter is put into service, the filter media must have a uniform density throughout.
 - iii. A geotextile filter fabric must be placed on the gravel bed. If cover soil is used, it must be capable of maintaining vegetative growth while not impeding the passage of air (sandy loam or coarser).
 - iv. Two observation ports must be installed in the sand filter. One observation port must be installed to the bottom of the drainrock/top of the media interface. A second observation port must be installed to the bottom of the underdrain. If the effluent exits the sand filter through a pumpwell, the pumpwell may be used as the second observation port.
3. Design Standards
 - i. Filter Bed
 1. Coarse Sand Media Specification-The filter media must meet items a, b and c below:
 - a. Particle Size Distribution

Sieve	Particle Size	Percent Passing
3/8 inch	9.50 mm	100
No. 4	4.75 mm	95 to 100
No. 8	2.36 mm	80 to 100
No. 16	1.18 mm	45 to 85
No. 30	0.6 mm	15 to 60
No. 50	0.3 mm	3 to 15
No. 100	0.15 mm	0 to 4

- b. Effective Particle Size (D10) > 0.3 mm.

