



POLICY REGARDING: Aerobic Treatment Units and Disinfection Methods

PURPOSE

To allow use of alternative onsite sewage disposal system technology in full compliance with Snohomish Health District (SHD) Sanitary Code, Chapter 8 and the applicable Washington State Department of Health (DOH) Recommended Standards and Guidance (RS&G) document; and,

To protect public health by establishing local alternative onsite sewage disposal system design, installation and operation and maintenance standards which take into consideration local conditions and concerns.

BACKGROUND

The Washington State Department of Health Recommended Standards and Guidance documents set forth standards for the design, installation, operation and maintenance of Aerobic Treatment Units (ATU) and Disinfection Methods and Equipment. While the guidelines provide a comprehensive set of general standards, they lack specific standards and procedures that take into consideration local conditions and concerns. Issues of concern are:

- (a) Standards for assuring Operation and Maintenance (O&M) for the “life of the system”.
- (b) Bypass of the treatment process.
- (c) Assurance of timely repair of the treatment system malfunction.
- (d) Potential environmental impacts from introducing disinfection chemical residuals into the soil and groundwater.

Aerobic Treatment Unit and Disinfection Methods and Equipment Procedure

This procedure applies to all devices for which a DOH RS&G has been established and are included on the most current version of the DOH List of Approved Systems and Products. The issues of concern identified above must be addressed in the application process through provision of supplemental mitigation measures in addition to the general design and installation standards contained in the applicable RS&G, and at a minimum must include the following:

- 1) The system shall be designed and installed in accordance with the most current version of the Department of Health RS&G.
- 2) The system shall be designed and installed to include a method for automatic shutoff of effluent discharge from the treatment component to the final treatment/disposal unit of the system should an event occur that compromises the treatment process. For example, the treatment component treatment process is compromised during power outages and treatment component alarm events resulting in the disposal of

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- 3) untreated effluent. This mitigation measure is intended to address public health concerns regarding untreated effluent passing to the disposal component and serves to mitigate concerns regarding timely repair and/or maintenance service.
- 4) Treatment components incorporating chemical disinfection are not allowed because of concerns for public health and safety, potential environmental impacts, and the high level of operation and maintenance needs.
- 5) Prior to issuance of an installation permit, a Declaration of Covenant shall be filed onto the property title setting forth responsibilities of the involved parties for maintaining the systems O&M commitments. Attachment A contains minimum required conditions and reservations and practices to be contained within the Declaration of Covenant.
- 6) An initial service contract for the provision of O&M for the entire treatment and disposal system for a minimum two-year period. O&M service for the non-proprietary components of the system shall be provided by a State Licensed Designer, SHD Certified Installer or qualified Professional Engineer,
- 7) Operation and Maintenance requirements as set forth in SHD Policy Regarding Operation and Maintenance; Alternative Systems Meeting Treatment Standard 1 and/or 2.

This policy is effective immediately.

Robert A. Pekich, Director
Environmental Health Division

Date

Attachment