An Application Guide for

Granting Waivers from State On-Site Sewage System Regulations, Chapter 246-272A WAC

July 1, 2007 (Revised July 1, 2012)

Washington State Department of
Health
Division of Environmental Health
Office of Shellfish and Water Protection

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Introduction

As a result of State Board of Health rule (Chapter 246-272 WAC) adoption in 1995, and the incorporation of the waiver requirements into statute (RCW 70.05), the Department of Health (DOH) developed a process by which waivers may be granted from the state on-site sewage regulations. The revision to the on-site sewage system rules in 2005 (WAC 246-272A) retains the same waiver process to assure that all waivers granted by the local health officer are consistent with the standards in, and intent of, the state board of health rules. The procedural framework maintains public health protection at least equal to the level established by the provisions in Chapter 246-272A WAC On-Site Sewage Systems.

This manual is furnished to serve as a guide to local health department staff who are involved in evaluating and granting waivers from state regulations, and to clarify the review process and reporting requirements. The standards that are referenced in the manual for approved mitigation measures are performance-based or design-specific technical specifications and related management practices for on-site sewage systems and their components. These standards are intended to provide, as far as practicable, uniformity of practice. They are based on standard engineering practice, and are deemed the best technical documents based on available information.

Technical questions pertaining to DOH waiver requirements, as well as questions regarding waiver process contact:

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Section 1: Background

Brief History

Waivers from the state on-site sewage system regulations have been considered in the same manner since the State Board of Health (SBOH) passed an emergency rule revision on December 14, 1994. The emergency rule was passed in response to a specific request the SBOH received from three Washington State Senators concerning issues expressed by some constituents in their legislative districts. The current language has gone from the adopted 1994 rule, into law (RCW 70.05.072 on May 5, 1995) and back to rule (WAC 246-272A on July 13, 2005).

In 1994, these parts of the rule were kept:

- The local health officer has the authority to grant waivers.
- Waivers must be consistent with the purpose and objectives of the rules to meet the public health intent.
- DOH has to concur with the local health officer's decision on the waiver.
- DOH does the waivers for Large On-Site Sewage Systems (systems with design flows over 3,500 gallons per day).
- Waivers are still considered on a "Site-by-Site" basis.

The emergency rule added:

- Local health officers must report to DOH every three months on the waivers they have approved or denied.

These things were removed:

- A Site-by-Site Waiver processing procedure that directly involved the citizen applicant, the local health officer and DOH, and the payment of a fee to cover the cost of the departmental review and concurrence.
- A waiver could no longer be granted that would cover multiple sites at once, each site had to be considered separately.

On May 5, 2005, enacted legislation placed the waiver provisions found in rule into statue (RCW 70.05). The statue paralleled waiver language in WAC 246-272, although not including reference to DOH "concurrence", it clarified the process, which involves DOH oversight and technical assistance, which is currently followed to assure concurrence. It also provided suspension of waiver authority if problems are not corrected after DOH technical assistance is provided.

On July 13, 2005, the SBOH adopted revisions to the on-site sewage systems rules (WAC 246-272A). The rule revisions incorporated the waiver statue language into the rules so that the waiver rule provisions are consistent with the statue. Section 5, Appendix A- RCW 70.05.072 and WAC 246-272A-0420 is the exact language of the law and the rule that are being used now.

Section 2: Basic Concepts

Key Elements

The Department's of Health's process for granting a waiver is consistent with the basic concepts and general direction provided in the rules and statue (See Appendix A- RCW 70.05.072 and WAC 246-272A-0420). These key elements provides a framework to understand the process:

- The local health officer has the authority to grant waivers.
- Waivers may be considered and granted only on an individual, "site-by-site" basis.
- Only those waivers that are consistent with the public health protection provided by the state rules may be granted.
- The local health officer must report each quarter to DOH about any waivers approved or denied
- The local health officer's authority to grant waivers may be suspended if inconsistencies are not corrected after DOH technical assistance is provided.

Statewide Standards for Public Health Protection

The Washington State Board of Health (SBOH) On-Site Sewage System rules (Chapter 246-272A WAC) encompasses the minimum statewide standards for public health protection. Implemented by local health jurisdictions and by the state department of health, these rules are developed for statewide application.

The on-site sewage system rules provide minimum standards and operational framework for on-site sewage treatment and effluent dispersal, including technical specifics for siting, use, design, installation, permitting, repair of failures, minimum land area, and operation and maintenance. These standards and requirements are established to assure safe treatment and dispersal of sewage, providing protection of public health and water quality. As it is unlikely that the rules apply equally well to all sites encountered in the state, DOH has developed the process with assurance and oversight in this manual so that the rules may be waived.

Mitigation-Based Waiver

Waivers of state regulations may be granted only when the local health officer determines that the requested waiver is consistent with the standards in, and the intent of, the public health protection purpose and objectives of the rules. As the rules provide the minimum standards for public health and water quality protection, any waiver, or "set-aside" of any portion of the rules must provide a corresponding mitigation measure(s) to assure that public health and water quality protection at least equal to that established by the rules, is provided. Only in rare instances, where the resulting risk to public health or water quality is not increased, is waiving minimum standards allowed without appropriate mitigation measures.

Conceptual Framework for Waiver Process

The following conditions must be met by the local health jurisdiction to maintain consistency between the waivers granted and the standards in, and intent of, WAC 246-272A:

- **Site-by-Site application of the state rules, review and granting of waivers.** (Each site and proposed design / development must be considered independently. Local waiver judgment is to be made on a site-by-site basis, as opposed to, for example, “all 45 lots in this subdivision”).

- **Local waiver decisions made by qualified and authorized personnel.** (These persons must have knowledge of the principles, and the state / local processes for “mitigation-based” waivers, and specific written authorization by the Local Health Officer.)

- **Waivers based on the criteria established, and guidance materials provided by DOH.** (This will help assure that an equal level of protection of public health and water quality is provided throughout the statewide network of 34 local health jurisdictions).

- **Timely, complete, and accurate reporting to DOH.** (Local record keeping and documentation of waiver activity, needs to be filed for easy retrieval and open to local program quality assurance review by DOH).

Functional Framework for Waiver Process

In overview, the process for granting waivers from state on-site sewage system regulations involves the following steps (See Figure 1 for a schematic of the process):

- The local health officer reviews a waiver request for a site / development, and decides whether the proposed waiver request is consistent with the public health protection intent of the rules.

- The local health officer chooses a waiver from one of three classifications established by DOH (See Section 3, Classes of Waivers):

  Class A - DOH has specific evaluation criteria and mitigation measures already in place for state-wide use.

  Class B - The local health jurisdiction, with agreement by DOH, has established how the waiver will be evaluation and what mitigation measures are necessary to protect public health under local conditions in a jurisdictional area.

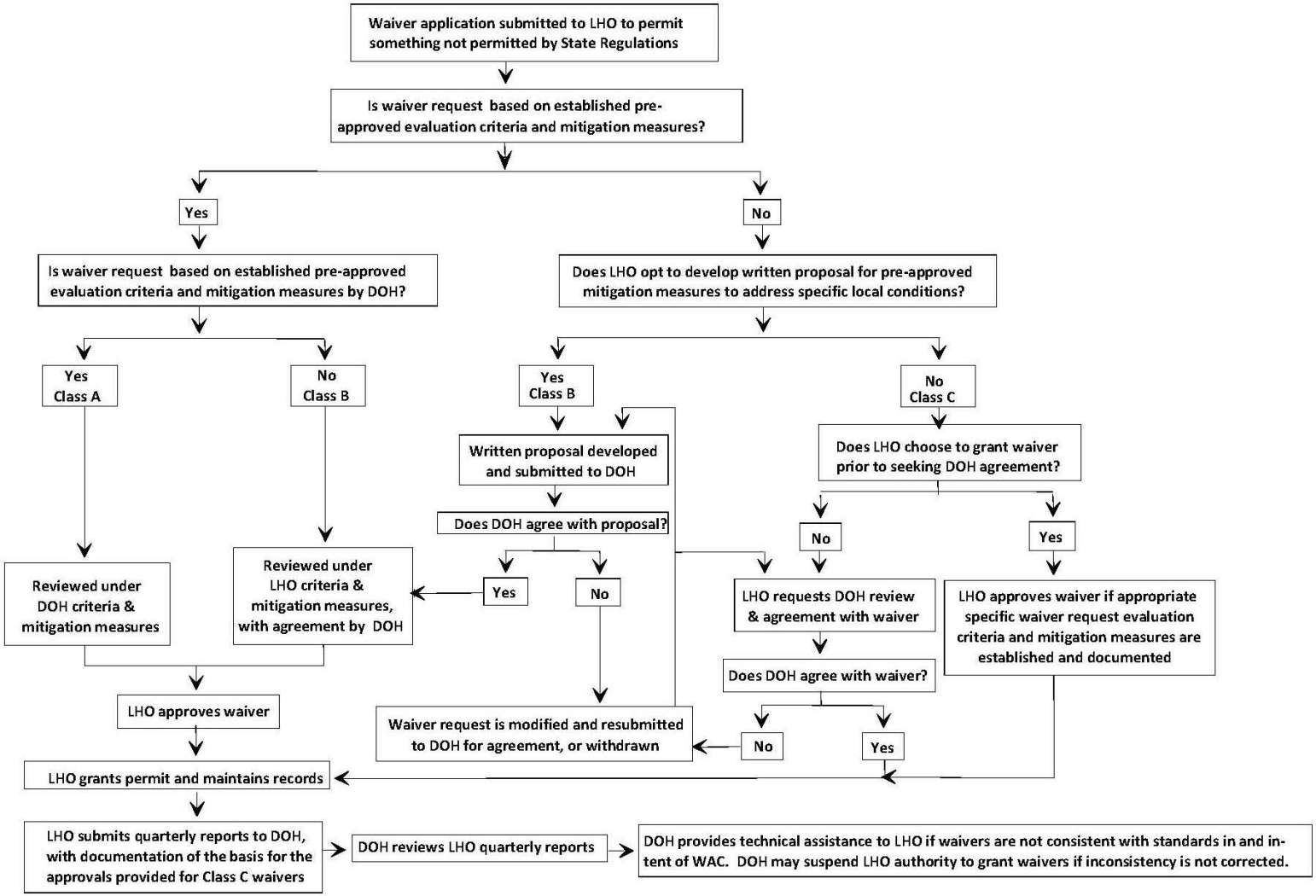
  Class C - There are no pre-approved standards that cover the situation. Before a Class C waiver request is decided, the local health officer must establish appropriate specific waiver request evaluation criteria against which proposed mitigation measures are judged. While not required, local health officer consultation with DOH prior to granting a Class C waiver is strongly recommended.

- The local health officer assures that local waivers will be consistent with the rules by applying specific evaluation criteria and mitigation measures. All local health jurisdiction staff who reviews waiver requests should have wastewater management training and maintain continuing education in this area. At a minimum, this includes ensuring staff that are involved in reviewing waivers complete this Application Guide for Granting Waiver from State On-Site Sewage Systems Regulations, and hold an Inspector Certificate of Competency from the Washington State Department of Licensing.

- The local health officer provides quarterly reports to DOH on the waiver of state regulation activity in his/her jurisdiction. DOH provides waiver forms to ensure that all local health jurisdictions are reporting information in the same format and at the same time. (See Section 5, Appendix B - Waiver Forms). The reports are reviewed by DOH with technical assistance provided for oversight and assurance of local waiver activities.

- If DOH finds any inconsistency between the waiver grants and the state standards, the department will provide technical assistance to the local health officer. If the inconsistencies are not corrected, the department may suspend the authority of the local officer to grant waivers. Once the inconsistencies have been corrected, DOH has the option to allow the local health officer to grant waiver again.

Figure 1. Evaluation of Site-By-Site Waiver Requests of State Regulations



Section 3: Classes of Waivers

Class A

A waiver for which review criteria and mitigation measures have been pre-approved by the Department of Health on a statewide basis (See Tables 1-4. Class A - Pre-Approved Review Criteria and Mitigation Measures on pages 9-14).

- DOH agreement with individual waivers approved by qualified/authorized local health department practitioners can be assumed if pre-approved review criteria and mitigation measures are applied.
- Records of Class A waivers will be maintained by local health agencies and made available to DOH upon request.
- Local health departments will submit quarterly reports concerning all Class A waivers requests and the review criteria and mitigation measures applied.

Class B

A waiver for which a local health agency and DOH have established pre-approved review criteria and mitigation measures to address specific local conditions or issues in an individual county or jurisdictional area.

- DOH agreement with individual waivers approved by qualified /authorized local health agencies practitioners can be assumed if pre-approved review criteria and mitigation measures are applied.
- Class B Waivers, with their review criteria and mitigation measures, are proposed by a local health agency and reviewed and approved by DOH, prior to their application,
- DOH wastewater program staff are available for consultation to assist the development of Class B Waivers and appropriate review criteria and mitigation measures. The amount of proposal-support documentation will vary with the complexity of the issues surrounding the specific waiver. Prior to DOH approval and local health agency application of a Class B Waiver, a written proposal is developed by the local health agency and submitted to DOH.

A proposal must describe the specific requirements to be waived, the review criteria to be used and site/design/administrative mitigation measures to be employed to provide an equal level of public health protection, and technical / public health protection justification for the proposed actions. Also, provide, if applicable, the anticipated methods of verification that the mitigation measures proposed/used provide the level of public health protection needed.

- Based on discussions with the local health agency and review of the written proposal, DOH will either agree with the proposal, request additional information, or determine that waivers advocated by the proposal would be inconsistent with the intent of the State Board of Health on-site sewage regulations. Class B waivers may be granted by the local health officer only after DOH agrees with the proposed review criteria and mitigation measures. Denial of proposal may be appealed.

- Records of Class B waivers will be maintained by local health agencies and available to DOH upon request.

Local health agencies will submit quarterly reports concerning the Class B waivers requests and the review criteria and mitigation measures applied.

Class C

A waiver for which no pre-approved review criteria and mitigation measures have been developed; Department of Health approval for review criteria and mitigation measures can be secured on a case-by-case basis.

- DOH must grant agreement for each waiver individually. The agreement may be obtained either prior to local health agency approval in consultation with DOH or after local health agency granting through the quarterly reporting process. (Advance agreement is strongly recommended.)

- Local health jurisdictions may consult with DOH regarding a waiver/review criteria and mitigation proposal to discuss the adequacy of technical justification, review criteria, site/design/administrative mitigation measures, and verification methods. DOH may agree with the proposal, request additional information or determine that the proposed waiver and review criteria and mitigation measures would be inconsistent with the intent of the State Board of Health on-site sewage regulations.

- A local health jurisdiction may grant a waiver prior to securing agreement by DOH. In such instances, the local health jurisdiction must submit, with the next quarterly report, complete documentation of the basis for the waiver including, as applicable, technical justification, review criteria, site/design/administrative mitigation measures, and proposed methods of verification.

Class C Waivers, with their review criteria and mitigation measures, upon agreement by DOH, may be considered for inclusion on the local/state pre-approved Class B Waiver options list for the health jurisdiction. Any subsequent application for waiver for the same portion of the state regulations could then be treated as a Class B waiver application within the applicable county or jurisdiction.

Table 1. CLASS A - NONPERFORATED DISTRIBUTION LINE HORIZONTAL SEPARATIONS (6/07)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider	Approved Mitigation Measures*
246-272A-0210(1) Table IV	Pressure sewer transport line 10 feet from surface water	Subaqueous crossing of pressure sewer transport line or down to 0 feet horizontally	**1)** Extra protection of integrity of line at crossing	**1a)** Transport line installed in a casing of at least Schedule 40 steel or ductile iron pipe within 10 feet on each side of the crossing. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23. Underground installation of line consistent with ASTM D 2774.
				1b) Transport line buried at least 3 feet below the bottom of the water body's bed.
				1c) Transport line within 10° of the perpendicular direction of the stream.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Determination of applicable aquatic resource permitting requirements	**3a)** Submit JARPA application to appropriate review agencies.
246-272A-0210(1) Table IV	Pressure sewer transport line 10 feet from surface water	Aerial crossing of pressure sewer transport line or down to 0 feet horizontally	**1)** Extra protection of integrity of line at crossing	**1a)** Transport line installed in a casing of at least Schedule 40 steel or ductile iron pipe within 10 feet on each side of the crossing. Transport line uniformly supported by casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23.
				1b) Transport line crossing designed by an engineer to prevent freezing, leaking, settlement, lateral movement, and damage from expansion/contraction.
				1c) Transport line located with proper clearance above floodwater conditions.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Determination of applicable aquatic resource permitting requirements	**3a)** Submit JARPA application to appropriate review agencies.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 1. CLASS A - NONPERFORATED DISTRIBUTION LINE HORIZONTAL SEPARATIONS (6/07)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272A-0210(1) Table IV	Pressure sewer transport line 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of line within 50 feet of well	**1a)** Transport line installed in a casing of at least Schedule 40 PVC within 50 feet of well. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23. Underground installation of line consistent with ASTM D 2774.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Determination of any existing covenants or easements for maintaining a sanitary control area	**3a)** Notify well owner of proposed encroachment if there are no existing covenants or easements establishing a control area.
246-272A-0210(1) Table IV	Building sewer, collection, non-pressure non-perforated distribution line 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of line within 50 feet of well	**1a)** Line installed in a casing of at least Schedule 40 PVC pipe within 50 feet of well. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23.
				1b) Underground installation of line consistent with ASTM D 2321.
			2) Performance testing of line	**2a)** Line leakage test consistent with ASTM F 1417 or exfiltration test consistent with WSDOT 7-17.3(2)B.
			3) Determination of any existing covenants or easements for maintaining a sanitary control area	**3a)** Notify well owner of proposed encroachment if there are no existing covenants or easements establishing a control area.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 2. CLASS A - SEWAGE TANK HORIZONTAL SEPARATIONS (6/07)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272A-0210(1) Table IV	Sewage tank 50 feet from surface water	Down to 25 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C 1644, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank tested for water-tightness consistent with ASTM C 1227. Fiberglass tank tested for water-tightness consistent with IAPMO/ANSI Z1000-2007.
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
246-272A-0210(1) Table IV	Sewage tank 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C 1644, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank tested for water-tightness consistent with ASTM C 1227. Fiberglass tank tested for water-tightness consistent with IAPMO/ANSI Z1000-2007.
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
			4) Determination of any existing covenants or easements for maintaining a sanitary control area	**4a)** Notification of proposed encroachment to the well owner if there are no existing covenants or easements establishing a control area.
246-272A-0210(1) Table IV	Sewage tank 10 feet from pressured water supply line	Down to 2 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C 1644, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank tested for water-tightness consistent with ASTM C 1227. Fiberglass tank tested for water-tightness consistent with IAPMO/ANSI Z10000-2007..
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
			4) Extra protection of integrity of water line	**4a)** Water line installed in casing of at least Schedule 40 PVC within 10 feet of the tank. Water line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 3. CLASS A - SOIL DISPERAL COMPONENT HORIZONTAL SEPARATIONS (6/07)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272A-0210(4)	Soil dispersal component 75 feet from surface water	Down to 50 feet, except not in Soil Type 1	**1)** Enhanced treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B. Disinfection can not be used to achieve the fecal coliform limit of the treatment level. The soil dispersal component maintaining at least 3 feet vertical separation; i.e., sand filter followed by a gravity distribution SSAS with at least 3 feet of vertical separation or by a pressure distribution SSAS with at least 2 feet of vertical separation. . A mound system with 2 feet of sand media may be allowed, if there is at least 3 feet of available soil depth.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. evidence of excessive depth to groundwater, down-gradient contaminant source, or outside a sensitive area.
246-272A-0210(4)	Soil dispersal component 75 feet from non-public well or suction line	Down to 50 feet, except not in Soil Type 1	**1)** Enhanced treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B. Disinfection can not be used to achieve the fecal coliform limit of the treatment level. The soil dispersal component maintaining at least 3 feet vertical separation; i.e., sand filter followed by a gravity distribution SSAS with at least 3 feet of vertical separation or by a pressure distribution SSAS with at least 2 feet of vertical separation. A mound system with 2 feet of sand media may be allowed, if there is at least 3 feet of available soil depth.
			2) Performance assurance of treatment system	**2a)** Management program established which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. evidence of confining layers and or aquitards separating potable water from the OSS treatment zone, excessive depth to groundwater, down-gradient contaminant source, or outside the zone of influence.
			4) Determination of any existing covenants or easements for maintaining a sanitary control area	**4a)** Notification of proposed encroachment to the well owner if there are no existing covenants or easements establishing a control area.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 3. CLASS A - SOIL DISPERSAL COMPONENT HORIZONTAL SEPARATIONS (6/07)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider	Approved Mitigation Measures*
246-272A-0210(1) Table IV	Soil dispersal component 10 feet from pressurized water supply line	Down to 5 feet	**1)** Extra protection of integrity of water line	**1a)** Water line installed in casing of at least Schedule 40 PVC within 10 feet of the dispersal component. Water line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23.
			2) Performance testing of water line	**2a)** Water line leakage test consistent with WSDOT 7-09.3(23) Hydrostatic Pressure Test.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. deep, well-drained soils or down-gradient contaminant source.
246-272A-0210(1) Table IV	Soil dispersal component 30 feet from interceptor/ curtain drains/ drainage ditches down-gradient	Down to 15 feet, except not in Soil Type 1	**1)** Enhanced treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B. Disinfection not used to achieve the fecal coliform limit of the treatment level. The soil dispersal component with pressure distribution and maintaining at least 2 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 2 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established which assures the on-going proper operation and maintenance of the system.
246-272A-0210(1) Table IV	Soil dispersal component 25 feet from down-gradient cuts or banks with at least 5 feet of original soil above a restrictive layer	Down to 12 feet, except not in Soil Type 1	**1)** Enhanced treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B. Disinfection not used to achieve the fecal coliform limit of the treatment level. The soil dispersal component with pressure distribution and maintaining at least 3 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 3 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Stability of bank or cut	**3a)** Evidence of slope stability.
246-272A-0210(1) Table IV	Soil dispersal component 50 feet from down-gradient cuts or banks with less than 5 feet of original soil above a restrictive layer	Down to 25 feet, except not in Soil Type 1	**1)** Enhanced treatment performance	**1a)** Treatment component or treatment sequence listed as meeting Treatment Level B. Disinfection not used to achieve the fecal coliform limit of the treatment level. The soil dispersal component with pressure distribution and maintaining at least 2 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 2 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established which assumes the on-going proper operation and maintenance of the system.
			3) Stability of bank or cut	**3a)** Evidence of slope stability.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 4. CLASS A - MISCELLANEOUS DESIGN PROVISIONS (6/07)

WAC Section	*Specific Item Waived*	*Extent or Degree Waived*	*Minimum Issues/Criteria to Consider**	*Approved Mitigation Measures**
246-272A-0240(2)	Holding tank used only for permanent uses limited to controlled, part-time, commercial usage situations.	Holding tank used for other than part-time non-residential use	**1)** Holding tank design criteria	**1a)** Design criteria consistent with the Recommended Standards and Guidance for Holding Tank Sewage Systems, and tank on current "Approved List".
			2) Performance assurance of system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
246-272A-0234(3)(a)	SSAS infiltrative surface depth shall not exceed 10 feet from the finished grade	Down to 20 feet in depth	**1)** Enhanced treatment performance	**1a)** Treatment with greater than 3 feet of sand-lined bed/trench media and the soil dispersal component's infiltrative surface is installed in suitable native soil consistent with the Recommended Standards and Guidance for Sand Lined Trench Systems.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a**) Adequate protection site specific conditions existing, such as physical setting with low hydrogeologic susceptibility from contaminant infiltration. The point where the treated wastewater is applied to the native soil for dispersal must be within the zone of aeration.
246-272A-0234(3)(b)	All SSAS must have a minimum of six inches of sidewall located in original undisturbed soil	SSAS sidewall installed in unoriginal disturbed soil (installed in fill)	**1)** Enhance treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B without disinfection to achieve the fecal coliform limit. The soil dispersal component maintaining at least 3 feet separation between the bottom of the infiltrative surface and the highest seasonal water table, a restrictive layer or soil type 7 i.e. sand filter followed by gravity distribution SSAS with a least 3 feet separation or by pressure distribution SSAS with a least 2 feet of separation.
246-272A-0234(4)(b)	The sidewall below the invert of the distribution pipe is loca-ted in original, undisturbed soil	SSAS sidewall installed in unoriginal disturbed soil (installed in fill)	**2)** Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic characteristics	**3a)** Evidence of soil stability, and soil (fill material) displays suitable hydraulic conductivity.
246-272A-0234(3)(c)	SSAS beds are only designed in Soil Types 1, 2, 3, or in fine sands with a width not exceeding 10 feet	Allow bed in Soil Type 4-6, with a width not exceeding 10 feet	**1)** Enhance treatment performance	**1a)** Treatment component or sequence listed as meeting Treatment Level B without disinfection to achieve the fecal coliform limit. The SSAS bed maintaining at least 3 feet vertical separation; i.e. sand filter followed by gravity distribution bed with a least 3 feet vertical separation (pressure distribution with 2 feet of vertical separation allowed). A pressure distribution bed with at least 4 feet of vertical separation may be substituted for a Treatment level B treatment component/sequence.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Extra protection of soil during construction to limit damage to infiltrative surface	**3a)** Site preparation, excavation, placement of gravel, and backfilling operations done with the proper equipment and care. Only low load-bearing construction equipment to be used in the bed area to limit soil compaction.
				3b) Construction proceeds only during low soil moisture content conditions (below its plastic limit). Once exposed, infiltrative surface covered within 12 hours to prevent desiccation or before periods of precipitation to prevent puddling.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Section 4: Waiver Reporting

Waiver Approval Form

This single page document is the primary waiver recording form and contains the following information (See Appendix B - Request for Wavier from State Regulations form):

- Basic permit data (applicant name, site address, designer name, etc.);
- Specific rule/requirement waived (section and subsection of Chapter 246-272A WAC);
- Site/design/administrative mitigation measures proposed and any additional evaluation criteria and/or mitigation measures employed; Type of Waiver (Class A, B, or C);
- Confirmation of adjacent or affected property owner notification (if appropriate); and
- Approval signature (by qualified/authorized local health agency personnel).

This form is completed whenever a waiver of state regulations is requested.

Local Record-Keeping / Data Management

The local health officer is required to maintain complete and retrievable records of all waivers reviewed, granted or denied. Individual waiver request forms / records are, at minimum, to be filed with the sewage system permit records. A copy of the waiver request form may also be filed in a separate file as an on-going record of waivers reviewed, approved or denied. Electronic record keeping may also be used to track and retrieve information regarding waivers.

Quarterly Reports Form Local Health Officer to DOH

Both the statue and WAC 246-272A requires that the local health officer report quarterly to DOH regarding the waiver request activity within their jurisdiction. This involves submitting all waiver requests (any waiver approved or denied) to DOH by their quarterly due date.

Report Schedule

First Quarterly (January - March)	Due April 15th
Second Quarterly (April - June)	Due July 15th
Third Quarterly (July - September)	Due October 15th
Fourth Quarter (October - December)	Due January 15th

Report Format

Each Quarterly Report is to consist of the following items:

- Copies of each complete waiver application (See Section 5, Appendix B - Request for Wavier from State Regulations form) acted on during the time-period of the report. "acted on" means reviewed and either approved or denied. Waiver requests received but pending review or decision will be reported in subsequent reports.

- A Quarterly Report Coversheet, with the signature of the local health officer or authorized local health agency supervisory personnel, to indicate that the local health officer is adequately informed regarding waiver activity (See Section 5, Appendix B - Quarterly Report).

DOH Review / Technical Assistance / Assurance

The Department of Health is available for consultation and technical assistance at any point in the local health officer review and decision-making processes. Inquiry and discussion prior to granting waivers is encouraged when questions or issues arise. This is particularly true for Class C waivers for which no specific waiver request evaluation criteria or pre-approved mitigation measures have been developed.

The DOH has a principal role in the assurance of consistent and appropriate extension of public health protection in all local health jurisdictions. To that end, DOH will review the local health officer's quarterly reports regarding their waiver review and granting activity. It is anticipated that a more comprehensive oversight will be provided through periodic local on-site sewage program reviews, as opposed to response to received problems or complaints. DOH, however, will respond to non-agreement or non-compliance issues as they arise.

Assembly / How the Components Link Together

- Flow Chart: A comprehensive Flow Chart presents the three primary process routes for waiver of state regulations. As this chart presents all of the information together to show the interrelationships, the reader is encouraged to study the chart section-by-section, by class of waiver. The chart format is a "decision-tree" -- that is, a question leads the reader depending upon the answer, "Yes" or "No" (See Figure 1 - Evaluation of Site-By-Site Waiver Requests of State Regulations).

Reference Materials: The various reference materials provided in the **Referenced Standards and Technical Material for On-Site Sewage Systems** notebook supports the Class A mitigation measures found in Tables 1-4. Most of the materials are technical in nature, which are based on standard engineering and industry practice, intended to provide uniformity of practice. In addition, terms used in this document which need definition or clarification are provided in Appendix C of Section 5- Glossary of Terms.

Section 5: Appendixes

Appendix A - Statutory Authority and Regulations Pertaining To Waivers

RCW 70.05.072 Local health officer–Authority to grant waiver from on-site sewage system requirements. The local health officer may grant a waiver from specific requirements adopted by the state board of health for on-site sewage systems if:

(1) The on-site sewage system for which a waiver is requested is for sewage flows under three thousand five hundred gallons per day;

(2) The local health officer on an individual, site-by-site basis evaluates the waiver request;

(3) The local health officer determines that the waiver is consistent with the standards in, and the intent of, the state board of health rules; and

(4) The local health officer submits quarterly reports to the department regarding any waivers approved or denied.

Based on review of the quarterly reports, if the department finds that the waivers previously granted have not been consistent with the standards in, and intent of, the state board of health rules, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.

If upon further review of the quarterly reports, the department finds that the inconsistency between the waivers granted and the state board of health standards has not been corrected, the department may suspend the authority of the local health officer to grant waivers under this section until such inconsistencies have been corrected.

WAC 246-272A-0420 Waiver of state regulations. (1) The local health officer may grant a waiver from specific requirements of this chapter if:

(a) The waiver request is evaluated by the local health officer on an individual, site-by-site basis;

(b) The local health officer determines that the waiver is consistent with the standards in, and the intent of, these rules;

(c) The local health officer submits quarterly reports to the department regarding any waivers approved or denied; and

(d) Based on review of the quarterly reports, if the department finds that the waivers previously granted have not been consistent with the standards in, and the intent of these rules, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns. If upon further review of the quarterly reports, the department finds that the inconsistency between the waivers granted and the state board of health standards has not been corrected, the department may suspend the authority of the local health officer to grant waivers under this section until such inconsistencies have been corrected.

(2) The department shall develop guidance to assist local health officers in the application of waivers.

Appendix B – Waiver Forms

On-Site Sewage Systems (Chapter 246-272A WAC)
Waivers from State Regulations

Quarterly Report

TO: Washington State Department of Health
On-Site Sewage System Waivers
P.O. Box 47824
Olympia WA 98504-7824

FROM: _____

Copies of Waiver Request Forms and this transmittal sheet are to be submitted by the local health officer to the Washington State Department of Health for each quarter of the year. Submittal of this information is part of the process required under 70.05 RCW for waivers of state regulations granted by the local health officer.

Year:

- ☐ 2007
- ☐ 2008
- ☐ 2009
- ☐ 2010
- ☐ 2011
- ☐ 2012
- ☐ 2013
- ☐ 2014
- ☐ 2015
- ☐ 2016

Quarter:

- ☐ 1st (January – March) [Due April 15]
- ☐ 2nd (April – June) [Due July 15]
- ☐ 3rd (July – September) [Due October 15]
- ☐ 4th (October – December) [Due January 15]

With this transmittal sheet are copies of the Requests For Waiver From State Regulations for On-Site Sewage Systems (Chapter 246-272A WAC) received and either approved or denied during the indicated year and quarter.

These waiver requests were reviewed, and approved or denied in full compliance with the provisions of the Washington State Board of Health's on–site sewage system rules.

Where waivers have been granted, the conditions, comments, requirements and mitigation measures have been evaluated for their ability to provide public health protection at least equal to that provided by Chapter 246-272A WAC On-Site Sewage Systems.

All waivers granted under these provisions have been evaluated and approved either by the local health officer or persons specifically authorized by the local health officer.

_____ _____
Local Health Officer **Date**

On-Site Sewage Systems (Chapter 246-272A WAC)
Request for Waiver from State Regulations

Section I.	*(completed by applicant)*
Name: ***(1)***	Local Health Department / District ***(2)*** *(see instructions)*
Address:	
Telephone: ( )	
Signature:	
Property Identification: ***(3)***	

Section II.	*(completed by applicant)*	
WAC Number**:** ***(4)***	WAC Requirement: ***(5)***	Waiver Sought: ***(6)***
246-272A —		
Subsection:		
Justification *(mitigation measures to be provided)*: ***(7)***		

Section III.	*(completed by health officer)*
Review Criteria: ***(8)***	Mitigation Measures *(in addition to those proposed)*: ***(9)***
Comments / Conditions: ***(10)***	

Type of Waiver: ***(11)*** **[ ]** Class A **[ ]** Class B **[ ]** Class C — Request DOH review <u>before</u> granting? Yes ___ No ___

Neighbor Notification: ***(12)*** Required? Yes ___ No ___ *If needed, are agreements, easements, etc. properly filed?* Yes ___ No ___

Section IV. *(completed by health officer)*

This Request For Waiver From State Regulations has been reviewed according to the provisions of Chapter 246-272A WAC On-Site Sewage Systems. The review criteria applied, and the mitigation measures proposed and/or required, have been evaluated for their ability to provide public health protection at least equal to that provided by this chapter WAC.

[ ] Denied **[ ] Approved / Granted** —Subject to all comments, conditions and requirements noted in Sections II and III.

Local Health Officer ***(13)*** _____ **Date:** _____

Instructions for Completion

Sections I and II are to be completed by the Applicant.
Sections III and IV are to be completed by the local health officer or his/her authorized representative.

Most items in each Section are followed by a number in ( ). The instructions below are listed by these numbers:

(1) Individual requesting waiver. (Presumed to be property owner..., indicate if not.) Be sure to include mailing address and phone number.

(2) Local Health Department. Usually this will be "filled in" by the local health agency office.

(3) Property Identification: Provide the address, parcel number, permit application number or other identifying description of the property for which a waiver is being requested. A full legal description is not required.

(4) WAC Number. Specify the particular WAC number from Chapter 246-272A WAC for which a waiver is being sought, such as "WAC 246-272A-0210(1)".

(5) WAC Requirement. State the requirement in the specified WAC for which a waiver is being sought, such as "100 foot setback from soil dispersal component to a well".

(6) Waiver Sought. Briefly describe the waiver sought, such as "Reduction of setback to 70 feet".

(7) Justification. Provide the rationale for the waiver request. What site conditions, system design characteristics, etc. mitigate the concerns that resulted in the requirements in the WAC? Technical justification should include supporting data, plat plans, device or treatment methodology proposed, possible mitigating site characteristics, gross land area, other options explored, and any other pertinent data. Possible mitigation measures may include system design, site requirements, or administrative approaches. Attach additional pages, if necessary to provide the local health officer adequate information upon which to make an informed decision.

(8) Review Criteria. Indicate when specific criteria were used in the review of the proposed waiver and mitigation measures.

(9) Mitigation Measures. Indicate any mitigation measures required in addition to those proposed by the applicant.

(10) Comments / Conditions. Briefly describe any concerns or issues regarding the waiver request, mitigation measures, or related issues.

(11) Type of Waiver. Indicate which category of waivers this particular request is in. For Class C Waivers, indicate if DOH review is to be requested before a decision is made to grant the request.

(12) Neighbor Notification. Are there any aspects of this waiver request for which notification to and/or permission by, adjoining or nearby property owners / dwellers would be appropriate?

(13) Local Health Officer. This is where the local health officer, or his/her authorized representative, by checking the appropriate box and signing, grants or denies the requested waiver.

Assistance for applicants requesting a "Waiver From State Regulations" may be obtained from the Local Health Department or District.

Local Health Department / District Health Officers may obtain assistance from the Washington State Department of Health in their review of proposed "Waiver From State Regulations":
(360) 236-3043 / Leslie Turner

Appendix C - Glossary of Terms

ACI: American Concrete Institute.

ASTM: American Society for Testing and Materials.

Aquitard: A semi-permeable (low porosity) or impermeable geologic layer that impedes vertical movement of groundwater and acts as a confining layer to an aquifer. It may include the following materials: hardpan, silt, clay, till, or massive bedrock.

AWWA: American Water Works Association.

Bed: A soil dispersal component consisting of an excavation with a width greater than three feet.

Casing: A metal or plastic pipe where a PVC pressure transport or gravity collection line is installed inside for additional protection in case of pipe failure or leakage.

Casing Spacers / Skids: Pipe fittings that provide long-term support around the circumference of a PVC pressure transport or gravity collection pipe within a casing. Skids may extend the full length of the pipe encased, with the exception of the bell and spigot position, or may be spaced at intervals inside a casing.

Confining Layer: A layer of impermeable material adjacent to an aquifer that hampers the movement if water into or out of the aquifer.

Desiccation: Thorough removal of water from a soil by drying.

Flexible Coupling: A device used to form a leakproof joint between sections of plain end pipe or fittings of the same or different materials, of the same or different size, or any combination of materials or pipe sizes.

Hydraulic Conductivity: The ability of soil to transmit liquids through pore spaces in a specified direction, e.g., horizontally or vertically.

Hydrogeologic Characteristics: Characteristics that describe the hydrology (the distribution of water on the surface and below the ground) and the geology (the structure and content of the earth) at a site. Hydrogeologic characteristics include soil type, depth to ground water, soil permeability, and ground-water recharge rate. These properties control the entrance of water to the subsurface and the capacity to hold, transmit, and deliver water.

Hydrogeologic Susceptibility: Hydrogeologic characteristics that would either impede or enhance the movement of contaminants from the land surface into groundwater or surface water.

Hydrostatic Pressure: The pressure per unit area exerted by water at rest.

IAPMOSPS: International Association of Plumbing & Mechanical Officials Material & Property Standard for Prefabricated Septic Tanks.

Infiltrative Surface: The surface within a treatment component or soil dispersal component to which is applied and thorough which effluent moves into original, undisturbed soil or other porous treatment media.

JARPA: Joint Aquatic Resource Permits Application. Fill out a JARPA to apply for Hydraulic Project Approvals, Shoreline Management Permits, Water Quality Certifications, and U.S. Army Corps of Engineers Section 404 and Section 10 permits.

Load-bearing: The ability to support superimposed loads without shear failure or excessive deformation within the soil mass.

Local Health Officer: The health officer of the city, county, or city-county health department or district within the state of Washington, or a representative authorized by and under the direct supervision of the local health officer, as defined in chapter 70.05 RCW.

Maintenance: The actions necessary to keep the on-site sewage system components functioning as designed.

Monitoring: The periodic or continuous checking of an on-site sewage system, which is performed by observations and measurements, to determine if the system is functioning as intended and if system maintenance is needed. Monitoring also includes maintaining accurate records that document monitoring activities.

Performance Standard: A standard used to judge whether predetermined requirements have been met, such as the necessary level of treatment for waste stream, after the completion or initiation of operation. Performance standards generally are in the form of a pre-determined level or concentration of a particular compound or constituent that is allowed in a waste effluent.

Plastic Limit: The moisture content at which a soil changes from a semisolid to plastic consistency; characterized by a soil just beginning to crumble when rolled into a wire approximately 1/8 in. in diameter.

Pressure Distribution: A system of small diameter pipes equally distributing effluent throughout a SSAS, as described in the department's "Recommended Standards and Guidance for Pressure Distribution Systems," 2001. A subsurface drip system may be used wherever the chapter requires pressure distribution.

Puddling: Act of destroying soil structure, usually by disturbing or compacting the soil at high water content, thereby reducing porosity and permeability.

Registered List: "List of Registered On-site Treatment and Distribution Products", developed and maintained by the department and containing a list of treatment and distribution products that meets the requirements for product registration in WAC 246-272A.

Sanitary Control Area: A horizontal protective radius around a well, which excludes major potential contaminant sources.

Sewage Tank: A prefabricated or cast-in-place septic tank, pump tank/dosing chamber, holding tank, grease interceptor, recirculating filter tank or any other tanks as they relate to on-site sewage systems including tanks for use with proprietary products.

Slope Stability: The resistance of an inclined surface to failure by sliding or collapsing.

Soil Compaction: Increasing the soil bulk density, and concomitantly decreasing the soil porosity, by the application of mechanical forces to the soil. Results in a soil that retains less water and resists root penetration. Soils with high clay content are more easily compacted than sandy soils.

Soil Dispersal Component: A technology that releases effluent from a treatment component into the soil for dispersal, final treatment and recycling.

Timed Dosing: The delivery of discrete volumes of sewage at prescribed time intervals.

Treatment Component: A technology that treats sewage in preparation for further and/or dispersal into the soil environment. Some treatment components, such as mound systems, incorporate soil dispersal components in lieu of separate treatment and soil dispersal components. (same as "treatment product").

Treatment level: One of six levels (A, B, C, D, E, & N) to: (a) Identify treatment component performance demonstrated through requirements specified in WAC 246-272A-0110; and (b) match site conditions of vertical separation and soil type with treatment components. Treatment levels used in these rules are not intended to be applied as field compliance standards. Their intended use is for establishing treatment product performance in a product testing setting under established protocols by qualified testing entities.

Treatment Sequence: Any series of treatment components that discharges treated sewage to the soil dispersal component.

Vertical Separation: The depth of unsaturated, original, undisturbed soil of soil types 1-6 between the bottom infiltrative surface of a soil dispersal component and the highest seasonal water table, a restrictive layer, or soil type 7 as illustrated below by the profile drawing of subsurface soil absorption systems.

Waterproof Surface Barrier: A barrier material applied for treating concrete surfaces to prevent leakage into a retaining structure or to prevent loss of water from a retaining structure.

Well: Any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering or withdrawal of ground water for agricultural, municipal, industrial, domestic, or commercial use. Excluded are:

(a) A temporary observation or monitoring well used to determine the depth to a water table for locating an OSS;

(b) An observation or monitoring well used to measure the effect of an OSS on a water table; and

(c) An interceptor or curtain drain constructed to lower a water table.

WSDOT: Washington State Department of Transportation.

Zone of Aeration: That part of the ground in which the voids are not continuously saturated.

Zone of Influence: The area surrounding a pumping well within which the water table or potentiometric surfaces have been changed due to groundwater withdrawal.

Section 6: References

1. ***Criteria for Sewage Works Design, October 2007***, Publication No. 98-37 WQ Washington State Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600. www.ecy.wa.gov/biblio/9837.html

2. ***On-Site Sewage System Management Plan Guidance for the Twelve Puget Sound Counties, June 2006,*** Washington State Department of Health, P.O. Box 47824, Olympia, WA 98504-7824. www.doh.wa.gov/Portals/1/Documents/Pubs/337-084.pdf

3. ***Handbook of PVC Pipe Design & Construction, Forth Edition, 2001***, Uni-Bell Plastic Pipe Association, 2655 Villa Creek Drive, Suite 155, Dallas, TX 75234-7362

4. ***Management Options for Unstable Bluffs in Puget Sound, Washington, Coastal Erosion Management Studies Volume 8,*** Shorelands and Water Resources Program, Washington Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600. www.ecy.wa.gov/biblio/94081.html

5. ***PVC Pipe - Design and Installation, Manual of Water Supply Practices M23, Second Edition, 2002.*** American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235.

6. ***Testing Reinforced Concrete Structures for Watertightness, ACI 350.1R-93/AWWA 400-93,*** ACI Committee 350 report/AWWA Committee 400, American Concrete Institute, P.O. Box 9094 Farmington Hills, MI 48333.

7. **2006** ***Uniform Plumbing Code,*** International Association of Plumbing and Mechanical Officials. 20001 Walnut Drive South, Walnut, CA 91789-2825.

8. ***WSDOT 2006 Standard Specifications for Road, Bridge, and Municipal Construction M41-10,*** Department of Transportation, P.O. Box 47408, Olympia, WA 98504-7408. www.wsdot.wa.gov/Publications/Manuals/M41-10.htm