PACIFIC COUNTY BOARD OF HEALTH
ORDINANCE NO. 3E

ON-SITE SEWAGE TREATMENT AND DISPOSAL

AN ORDINANCE RELATING TO ON-SITE SEWAGE TREATMENT AND DISPOSAL

WHEREAS, under the provisions of Chapter 70.05 RCW, the Pacific County Board of Health is charged with the duty of protecting the public health of Pacific County by minimizing the effects of on-site sewage systems on surface and groundwater, and the potential for public exposure to sewage;

WHEREAS, the Washington State Legislature enacted a law effective in 1995 which gives the Pacific County Board of Health jurisdiction in the entire County, including the incorporated cities of Raymond, South Bend, Long Beach, and Ilwaco;

WHEREAS, the Pacific County Board of Health has a legislative mandate to enforce public health rules in the incorporated areas of Pacific County;

WHEREAS, the Pacific County Board of Health needs to update Board of Health Ordinance No. 3 which pertains to on-site sewage disposal as a result of recent rule changes made by the Washington State Legislature in Chapter 246-272A WAC;

WHEREAS, the Pacific County Board of Health Ordinance No. 3E incorporates all of the modifications made to BOH Ordinance No. 3 through subsequent amendments in Ordinance Numbers 3A, 3B, 3C, and 3D; and

NOW, THEREFORE, IN ACCORDANCE WITH CHAPTER 70.05 RCW AND CHAPTER 246-272A WAC, IT IS HEREBY ORDAINED BY THE PACIFIC COUNTY BOARD OF HEALTH THAT PACIFIC COUNTY BOARD OF HEALTH ORDINANCE NO. 3E IS ADOPTED AS FOLLOWS AND THAT PACIFIC COUNTY BOARD OF HEALTH ORDINANCE NOS. 3, 3A, 3B, 3C, AND 3D ARE REPEALED AS OF THE EFFECTIVE DATE OF PACIFIC COUNTY BOARD OF HEALTH ORDINANCE NO. 3E:

Pacific County Board of Health Ordinance No. 3E

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SECTION 1 - AUTHORITY, PURPOSE, AND POLICY

1.1 This Ordinance is established pursuant to Chapter 70.05 RCW and Chapter 246-272A WAC. This Ordinance applies to the incorporated and unincorporated areas of Pacific County.

1.2 The purpose of this Ordinance is to protect the public health by:

1.2.1 Minimizing the potential for public exposure to sewage from on-site sewage systems;

1.2.2 Minimizing adverse effects to public health that discharges from on-site sewage systems may have on ground and surface waters;

1.2.3 Setting conditions for the withdrawal or revocation of approvals, for the cessation of uses of on-site sewage systems, and for the elimination of health hazards; and,

1.2.4 Setting conditions of project approval for integration with other water quality,

land use, and wastewater management plans.

1.3 This Ordinance regulates the location, design, installation, operation, maintenance, repair, and monitoring of on-site sewage systems. This Ordinance seeks to:

1.3.1 Achieve long-term sewage treatment and effluent disposal; and

1.3.2 Limit the discharge of contaminants to waters of the State.

SECTION 2 - ADMINISTRATION

2.1 The Administrative Officer for the Board of Health shall be the administrator of this Ordinance and shall be responsible for administrating the provisions and requirements of this Ordinance.

2.2 The Health Officer shall act under the direction of the Board of Health or the Administrative Officer. The Health Officer shall have the powers and duties enumerated in RCW 70.05.070.

2.3 The Health Officer or his/her designees shall be responsible for administering the provisions and requirements of this Ordinance.

2.4 The Administrative Officer is hereby authorized to adopt and implement written administrative rules which are consistent with and effectuate the purpose of this Ordinance. Any such rules must be approved by resolution of the Board. Any activity pertaining to on-site sewage treatment and disposal shall conform to any such administrative rules that are adopted by the Administrative Officer.

2.5 The provisions of Chapter 246-272A WAC, and any amendments thereto, are adopted herein by reference. Where the provisions of Chapter 246-272A WAC, and any amendments thereto, conflict with this Ordinance, or any written administrative rules adopted under Subsection 2.4, the more strict regulation shall apply.

2.6 The Administrative Officer is hereby authorized to develop a fee schedule to cover all of the activities delineated in this Ordinance. Any proposed fees shall not become effective until approved by resolution of the Board of Health. The Health Officer shall not accept for review any material supplied by an applicant, nor issue any permit, nor in any manner take any official action, until the appropriate fees are paid.

2.7 Where the provisions of any local, State, or Federal regulation shall conflict with this Ordinance, the more strict regulation shall apply, including, but not limited to Pacific County Ordinance No. 147 and any amendments thereto.

SECTION 3 - DEFINITIONS

3.1 Abandoned System - "Abandoned System" means an OSS or LOSS connected to a

structure that has not been served by electrical power during the previous six (6) year period and does not meet the current requirements of this Ordinance. "Abandoned System" also means an OSS or LOSS which has not been connected to a structure within six (6) years after the date of issuance of the installation permit. A system which is only used in conjunction with recreational vehicle use shall not be deemed to be an abandoned system, provided such use is not disallowed by any other regulation. Conversion of use from recreational vehicle use to any other use beyond six (6) years from the effective date of this Ordinance or from final approval of a system, whichever is later, shall be considered an expansion.

Those permitted systems installed after December 4, 1997 and deemed abandoned under this definition due solely to an expiration of the six (6) year timeframe and that contain the following types of systems and/or components of systems may be repaired under Table VI repairs:

3.2.1 Drainfields and gravel bed systems up to 15 feet wide, provided that all required vertical and horizontal separations are adhered to.

3.2.2 Gravity drainfield systems with a vertical separation to a restrictive layer greater than or equal to three (3) feet as measured from maximum seasonal saturation. All horizontal setbacks must also be maintained.

3.2.3 Pressurized mound systems constructed using clean beach sand installed on clean beach sand soils. Note: Mound pressure distribution systems must have the proper number of floats, alarms, observation ports and cleanouts for maintenance. Also Note: sand mound systems installed on clay and/or silt soils must be constructed using ASTM C-33 sand.

3.2.4 Gravel less chamber drainfield systems, without a reduction factor.

3.2 Additive – "Additive" means a commercial product added to an on-site sewage system intended to affect the performance or aesthetics of an on-site sewage system.

3.3 Administrative Officer - "Administrative Officer" means the Administrative Officer appointed by the Board of Health under RCW 70.05.040.

3.4 Alternative System - "Alternative System" means any on-site sewage system other than a conventional gravity system or conventional pressure distribution system.

3.5 Approved - "Approved" means a written statement of acceptability, in terms of the requirements in this Ordinance, issued by the Health Officer or the DOH.

3.6 Aquifer Recharge Area – "Aquifer Recharge Area" (as defined in Pacific County Ordinance No. 147, or any amendments thereto), is an aquifer that is susceptible to contamination due to physical (hydro-geologic) factors and is any land within Pacific

County that contains the following soil types as listed in the Soil Survey of Grays Harbor County Area, Pacific County, and Wahkiakum County, Washington, 1986, Soil Conservation Service, USDA.

Soil Types	(Map Unit Descriptions)
9	Beaches
35	Dune Land
92	Netarts Fine Sand, 3-12 percent slopes
108	Orcas Peat
132	Seastrand Mucky Peat
133	Seastrand Variant Muck
147	Udorthents, level
153	Westport Fine Sand, 3-12 percent slopes
162	Yaquina Loamy Fine Sand

3.7 Area of Special Concern - “Area of Special Concern” means an area of definite boundaries delineated through public process, where the Health Officer, after consultation with the DOH, determines that additional requirements for on-site sewage systems may be necessary to reduce potential failures, or to minimize negative impacts of on-site systems upon public health.

3.8 Authorized Professional - "Authorized Professional" means a Washington State Registered Sanitarian, a Washington State Professional Engineer, or a Licensed Designer licensed by the Washington State Department of Licensing.

3.9 Bed – “Bed” means a soil dispersal component consisting of an excavation with a width of at least six feet and no greater than ten feet.

3.10 Bedroom - "Bedroom" means any room in a dwelling as defined by the International Construction Codes.

3.11 Board of Health - "Board of Health" means the Pacific County Board of Health.

3.12 Building Sewer - "Building Sewer" means that part of the horizontal piping of a drainage system extending from the building drain, which collects sewage from all the drainage pipes inside a building, to an on-site sewage system. It begins two feet outside the building wall and conveys sewage from the building drain to the remaining portions of the on-site sewage system.

3.13 Cesspool - “Cesspool” means a pit receiving untreated sewage and allowing liquid to seep into the surrounding soil or rock.

3.14 Commercial Installer - "Commercial Installer" means a person licensed by the Health Officer who installs and/or repairs sewage disposal systems.

3.15 Conforming System - "Conforming System" means any on-site sewage system that meets any of the following criteria:

3.15.1 A system in full compliance with the new construction requirements of this Ordinance;

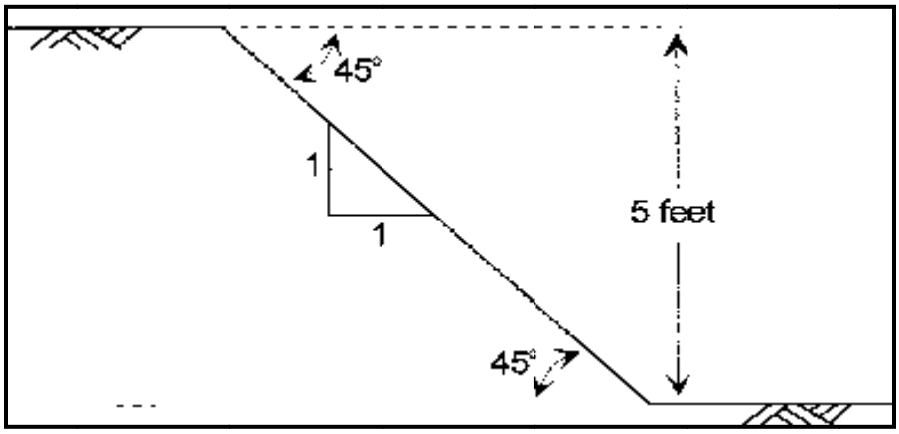
3.15.2 A system approved, installed, and operating in accordance with previous regulations pertaining to on-site sewage systems;

3.15.3 A system (including a repaired system) that has been granted a waiver by the Board of Health, the Health Officer, or the Department of Health.

3.16 Covenant - "Covenant" means provisions within a recorded document that requires and/or prohibits certain activities and/or practices.

3.17 Cover Material - "Cover Material" means soil placed over a soil dispersal component composed predominantly of mineral material with no greater than ten percent organic content. Cover material may contain an organic surface layer for establishing a vegetative landscape to reduce soil erosion.

3.18 Cuts and/or banks - "Cuts and/or banks" means any naturally occurring or man-formed slope which is greater than one hundred percent (forty-five degrees) and extends vertically at least five feet from the toe of the slope to the top of the slope.



3.19 Department of Community Development - "Department of Community Development" means the Pacific County Department of Community Development.

3.20 Department of Health - "Department of Health" means the Washington State Department of Health.

3.21 Designer - “Designer” means a person licensed by the Washington State Department of Licensing who designs OSS by matching the site and soil characteristics with the appropriate on-site sewage technology.

3.22 Design Flow – “Design Flow” means the maximum volume of sewage a residence, structure, or other facility is estimated to generate in a twenty-four-hour period. It incorporates both an operating capacity and a surge capacity for the system during periodic heavy use events. The sizing and design of the on-site sewage system components are based on the design flow.

3.23 Development - “Development” means the creation of a residence, structure, facility, Mobile Home Park, subdivision, planned unit development, site, area, or any activity resulting in the production of sewage.

3.24 Disinfection – “Disinfection” means the process of destroying pathogenic microorganisms in sewage through the application of ultraviolet light, chlorination, or ozonation.

3.25 Drainage Ditch - “Drainage Ditch” means a man-made open depression created and maintained to transport storm water away from the surrounding property, structure, and/or encumbrances.

3.26 Drainfield – see subsurface soil absorption system (SSAS) and soil dispersal component.

3.27 Drainrock – “Drainrock” means clean washed gravel or crushed rock ranging in size from three-quarters inch to two and one-half inches, and containing no more than two percent by weight passing a US No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve.

3.28 Effluent - “Effluent” means liquid discharged from a septic tank or other on-site sewage system components.

3.29 Effluent Sewer - "Effluent Sewer" means that part of the system drainage piping that conveys partially treated effluent from the septic tank or other treatment facility into a distribution unit or absorption facility (SSAS).

3.30 Emergency Repair - "Emergency Repair" means repair of a failing septic system where immediate action is necessary (1) to prevent sewage from backing up into a dwelling or building or (2) to fix a broken pressure sewer pipe.

3.31 Expansion - “Expansion” means a change in a residence, facility, site, or use that:

3.31.1 Causes an on-site sewage system to exceed its existing treatment or disposal capability.

3.31.2 Reduces the treatment or disposal capability of the existing on-site sewage system or the reserve area.

3.32 Failing System - "Failing System" means the presence of any of the conditions delineated in Subsections 26.1 and 26.2 of this Ordinance.

3.33 Feasibility Review - "Feasibility Review" means preliminary inquiry by the Health Officer to determine whether a proposed subdivision complies with this Ordinance.

3.34 Frequently Flooded Area – "Frequently Flooded Area" (as defined in Pacific County Critical Areas and Resource Lands Ordinance No. 147, or any amendments thereto) means those floodways and associated floodplains designated by the Federal Emergency Management Act (FEMA) flood hazard classifications as delineated on the area flood hazard maps for Pacific County dated September 27, 1985, or as subsequently revised by FEMA, as being within the 100-year floodplain, or those floodways and associated floodplains delineated by a comprehensive flood hazard management plan adopted by the Pacific County Board of County Commissioners, as being within the 100-year floodplain or having experienced historic flooding.

3.35 Gravity System - "Gravity System" means an on-site sewage system consisting of a septic tank and a subsurface soil absorption system with gravity distribution of the effluent.

3.36 Gray Water – "Gray Water" means sewage from bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes.

3.37 Groundwater - "Groundwater" means subsurface water occupying the zone of saturation, either permanently, seasonally, or as the result of tides. Indication may be demonstrated by one or both of the following methods:

3.37.1 Water seeping into or standing in an open excavation from the soil surrounding the excavation.

3.37.2 Spots or blotches of different shades of color interspersed with a dominant color in soil, commonly referred to as mottling. This is caused by intermittent periods of saturation and drying, and may be indicative of poor aeration and impeded drainage.

3.38 Health Hazard - "Health Hazard" means a condition or situation where disease potential exists, and if left unabated the disease potential will increase and may result in a public health emergency.

3.39 Health Officer - "Health Officer" means the Health Officer appointed by the Board of

Health pursuant to RCW 70.05.040 and RCW 70.05.050, or a representative authorized by, and under the direct supervision of, the appointed Health Officer.

3.40 Holding Tank Sewage System – "Holding Tank Sewage System" means an on-site sewage system which incorporates a sewage tank without a discharge outlet, and utilizes the services of a sewage pumper/hauler for the off-site treatment and disposal of the sewage generated.

3.41 Household Waste Strength - "Household Waste Strength" means the waste strength as documented in Table 4-3, page 56 of the *Design Manual: On-Site Waste Water Treatment and Disposal System,* United States Environmental Protection Agency, EPA 625/1-80-012, October 1980 (or the relevant section of any document that replaces the 1980 EPA Design Manual).

3.42 Individual Water Supply - "Individual Water Supply" means the source of water serving a single family residence.

3.43 Installer – "Installer" means a person approved by the Health Officer to install on-site sewage systems or components.

3.44 Large On-site Sewage System (LOSS) - "Large On-site Sewage System" means any on-site sewage system with design flows, at any common point, greater than three thousand five hundred (3500) gallons per day.

3.45 Modification - "Modification" means a change in an OSS component without a change in the design capacity.

3.46 Native Soil - "Native Soil" means soil that exhibits the same structural, textural, hydraulic loading rate, compaction, and vegetative characteristics as defined in the U.S. Department of Agriculture's *Soil Survey of Grays Harbor County Area, Pacific County, and Wahkaikum County, Washington*, July 1986, or any successor document.

3.47 Net Land Area - "Net Land Area" means the total lot area excluding surface water, roads, right-of-ways, and road and utility easements.

3.48 New Installation - "New Installation" means any system not defined as repair, expansion, or modification.

3.49 Non-Residential Facilities - "Non-Residential Facilities" means any facility which is constructed or used for the purpose of commercial, industrial, institutional, recreational, or multiple family housing.

3.50 On-Site Sewage System (OSS) - "On-Site Sewage System (OSS)" means an integrated arrangement of components for a residence, building, industrial establishment, or other places not connected to a public sewer system which:

3.50.1 Conveys, stores, treats and/or provides subsurface soil treatment and disposal, not exceeding 3,500 gallons per day, on the property where it originates, or upon adjacent or nearby property; and,

3.50.2 Includes piping, treatment devices, other accessories, and soil underlying the disposal component of the initial and reserve areas.

3.51 Operation and Maintenance Specialist – "Operation and Maintenance Specialist" or "OSS Maintenance Specialist" means an individual with training, skills and experience in the maintenance, monitoring, and operation of an OSS that is licensed by the Health Officer to inspect the OSS at time of property sale, to perform routine maintenance on the OSS, and to monitor the performance of an OSS.

3.52 Ordinary High-Water Mark - "Ordinary High Water Mark" means the mark on all lakes, streams, and tidal waters, which can be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation, as that condition exists on the effective date of this Ordinance, or as it may naturally change thereafter. In any area where the ordinary high-water mark cannot be found, the ordinary high-water mark adjoining saltwater shall be the line of mean higher high tide and the ordinary high-water mark adjoining freshwater shall be the line of mean high water.

3.53 Owner of Record - "Owner of Record" means the person(s) who is/are shown as the person(s) in control of the property by recorded deed in the records of the Pacific County Auditor.

3.54 Operational Permit - "Operational Permit" means a permit issued by the Health Officer for a specified period for the operation and/or use of an on-site sewage systems that has special operational or maintenance needs.

3.55 Permit - "Permit" means a written certificate issued by the Health Officer allowing an activity under the provisions of this Ordinance.

3.56 Person - "Person" means an individual, a partnership (including partners and manager), a corporation (including board members, officers, and managers), or any other entity of any kind. "Person" also includes an applicant, a permit holder, an authorized agent of any entity, or any third party acting on behalf of any entity.

3.57 Pressure Distribution Manifold - "Pressure Distribution Manifold" means piping or fittings in a pressure distribution system which supply effluent from the pressure transport piping to the pressure laterals.

3.58 Pressure Distribution System - "Pressure Distribution System" means a system of small

diameter pipes equally distributing effluent throughout a SSAS, as described in the DOH *Recommended Standards and Guidance for Pressure Distribution Systems, 2001.* A subsurface drip system may be used wherever this Ordinance requires pressure distribution.

3.59 Prior Approval - "Prior Approval" means any valid written approval or permit pertaining to a specific septic system application which was issued before the effective date of this Ordinance.

3.60 Proprietary Device - "Proprietary Device" means any device, system or component meeting the requirements of WAC 246-272A-0110.

3.61 Public Sewer System - "Public Sewer System" means a sewage system under permit from the Washington State Department of Ecology which is owned or operated by a city, town, municipal corporation, county, political subdivision of the state, or other approved ownership consisting of a collection system and necessary trunks, pumping facilities, and a means of final treatment and disposal.

3.62 Registered List - "Registered List" means the *List of Registered On-site Treatment and Disposal Products* which is developed and maintained by the DOH and containing a list of treatment and distribution products that meet the requirements for product registration in WAC 246-272A.

3.63 Regulation - "Regulation" means a statute. "Regulation" also means an administrative rule or adjudicatory decision which is adopted under the authority of the Board of Health, the Pacific County Board of Commissioners, the State of Washington, or the Federal Government.

3.64 Repair - “Repair” means the restoration or replacement of a failed on-site sewage system.

3.65 Reserve Area - “Reserve Area” means an area of land approved for the installation of an on-site sewage system and dedicated for replacement of the OSS in the event of its failure.

3.66 Residential Sewage – “Residential Sewage” means sewage having the constituency and strength typical of wastewater from domestic households that does not exceed one or more of the following concentrations: CBODs of 230 mg/L, TSS of 150 mg/L, or O&G of 25 mg/L (see Subsection 3.86.2 for specific definitions of each of these terms). Also referred to as “Residential Waste Strength.”

3.67 Restrictive Layer - "Restrictive Layer" means a layer that impedes the movement of water, air, and growth of plant roots, including, but not limited to, groundwater tables, hardpans, claypans, fragipans, compacted soils, bedrock and unstructured clay soils.

3.68 Seepage Pit - “Seepage Pit” means an excavation more than three (3) feet deep where the

sidewall of the excavation is designed to dispose of septic tank effluent.

3.69 Septage - “Septage” means the mixture of solid wastes, scum, sludge, and liquids pumped from within septic tanks, pump chambers, holding tanks, and other OSS components.

3.70 Septic Tank - "Septic Tank" means a water tight receptacle which receives the discharge of sewage from a building sewer, and is designed and constructed so as to permit separation of settleable and floating solids from the liquid, and detention and digestion of the organic matter, prior to discharge of the liquid portion.

3.71 Septic Tank Pumper - "Septic Tank Pumper" means a person licensed by the Health Officer who cleans and pumps septic tanks, cesspools, or other sewage.

3.72 Sewage - “Sewage” means urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places. For the purpose of this Ordinance, “sewage” is generally synonymous with domestic wastewater.

3.73 Sewage Quality – “Sewage Quality” means contents in sewage that include:

3.73.1 $CBOD_5$, TSS and O&G (See Subsection 3.86.2 for a description of each);

3.73.2 Other parameters that can adversely affect treatment, e.g., pH, temperature, and dissolved oxygen;

3.73.3 Other constituents that create concerns due to specific site sensitivity, e.g., fecal coliform and nitrogen.

3.74 Shellfish, Kelp, Eelgrass, Herring, and Smelt Spawning Critical Areas - “Shellfish, kelp, eelgrass, herring, and smelt spawning critical areas” means those public and private saltwater tidelands or beds that are devoted to the process of growing, farming, or cultivating shellfish, including commercial clam and oyster grounds, oyster and mussel raft areas, and recreational shellfish harvesting areas. In addition, all property located three hundred (300) feet landward from the boundary of upland vegetation constitutes shellfish, kelp, eelgrass, herring, and smelt spawning critical areas.

3.74 Site Evaluation - "Site Evaluation" means evaluation of the soil profile and landscape features of a specific lot and location performed by the Health Officer for the purpose of determining whether the site complies with the requirements of this Ordinance for the installation of an on-site sewage disposal system.

3.75 Site Installer - “Site Installer” means a person who has passed the commercial installer’s examination and maintains an annual license, but is working under the direction of a licensed commercial installer.

3.76 Soil Dispersal Component - "Soil Dispersal Component" means a sub-surface soil absorption system (SSAS), or other technology, that releases effluent from a treatment component into the soil for dispersal, final treatment and recycling.

3.77 Soil Log - "Soil Log" means a detailed description of soil characteristics providing information on the soil's capacity to act as an acceptable treatment and disposal medium for sewage.

3.78 Soil Type - "Soil Type" means a numerical classification of fine earth particles and coarse fragments as described in Subsection 16.1.1 of this Ordinance.

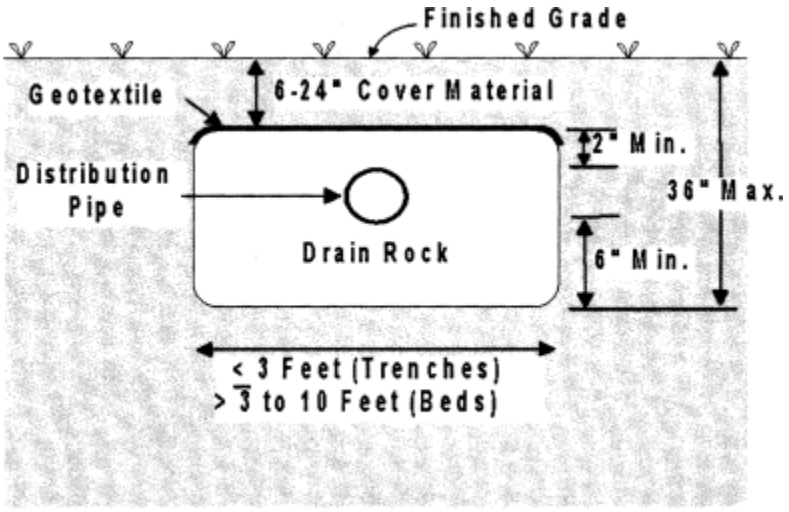
3.79 Statute - "Statute" means any Ordinance of the Board of Health or the Pacific County Board of Commissioners, or any State or Federal law.

3.80 Subdivision - "Subdivision" means a division of land, as defined in Pacific County Ordinance 149, or any amendment thereto, including both long and short subdivisions.

3.81 Sub-Optimal System – "Sub-Optimal system" means an on-site septic system that does not meet the definition of a failed system, yet the Health Officer has under current regulations found that the system contains a significantly undersized septic tank, pretreatment component, drainfield, disposal component; or is characterized by excessive ponding or clogging of the disposal component; or is subject to seasonal water table intrusion into a pretreatment or disposal component; or suffers from a significant limitation to its optimal operation.

3.82 Subsurface Drip System – "Subsurface drip system" means an efficient pressurized wastewater distribution system that can deliver small, precise doses of effluent to soil surrounding the drip distribution piping (called dripline) as described in the Department of Health's *Recommended Standards and Guidance for Subsurface Drip Systems.*

3.83 Subsurface Soil Absorption System - "Subsurface Soil Absorption System (SSAS)" means a soil dispersal component of trenches or beds containing either a distribution pipe within a layer of drainrock covered with a geotextile, or an approved gravelless distribution technology, designed and installed in original, undisturbed, unsaturated soil providing at least minimal vertical separation as established in this chapter, with either gravity or pressure distribution of the treatment component effluent.



3.84 Surface Water - "Surface Water" means any body of water, whether fresh or marine, which either flows or is contained in natural or artificial depressions for continuous periods of thirty (30) days or more. Such bodies include, but are not limited to, natural and artificial lakes, ponds, rivers, streams, swamps, marshes, and tidal waters, but shall exclude surface water contained by a drainage ditch, culvert, concrete impoundment, or other protective and impervious material.

3.85 Timed Dosing - "Timed dosing" means delivery of discrete volumes of sewage at prescribed time intervals.

3.86 Treatment Component - "Treatment Component" means a technology that treats sewage in preparation for further treatment and/or dispersal into the soil environment. Some treatment components, such as mound systems, incorporate a soil dispersal component in lieu of separate treatment and soil dispersal components.

3.87 Treatment Level – "Treatment level" means one of six levels (A, B, C, D, E, & N) used in this Ordinance to:

3.87.1 Identify treatment component performance demonstrated through requirements specified in WAC 246-272A-0110; and

3.87.2 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 System Performance Testing Levels (WAC 246-272A-0110, Table III)

Level	Parameters				
	$CBOD_5$	**TSS**	**O&G**	**FC**	**TN**
A	10 mg/L	10 mg/L	----	200/100 ml	----
B	15 mg/L	15 mg/L	----	1,000/100 ml	----
C	25 mg/L	30 mg/L	----	50,000/100 ml	----
D	25 mg/L	30 mg/L	----	----	----
E	125 mg/L	80 mg/L	20 mg/L	----	----
N	----	----	----	----	20 mg/L

CBOD means carbonaceous biochemical oxygen demand, typically expressed in mg/L.
TSS means total suspended solids, a measure of all suspended solids in a liquid, typically expressed in mg/L.
O&G means oil and grease, a component of sewage typically originating from food stuffs (animal fats or vegetable oils) or consisting of compounds of alcohol or glycerol with fatty acids (soaps and locations). Typically expressed in mg/L.
FC means fecal coliform, typically expressed in number colonies/100 mil.
TN means total nitrogen, typically expressed in mg/L.

3.88 Treatment Sequence - "Treatment Sequence" means any series of treatment components that discharges treated sewage to the soil dispersal component.

3.89 Trench – "Trench" means a soil dispersal component consisting of an excavation with a width of three feet or less.

3.90 Undocumented On-Site Sewage Disposal System - "Undocumented On-Site Sewage Disposal System" means an installed on-site sewage disposal system for which no permit is on file with the Department of Community Development.

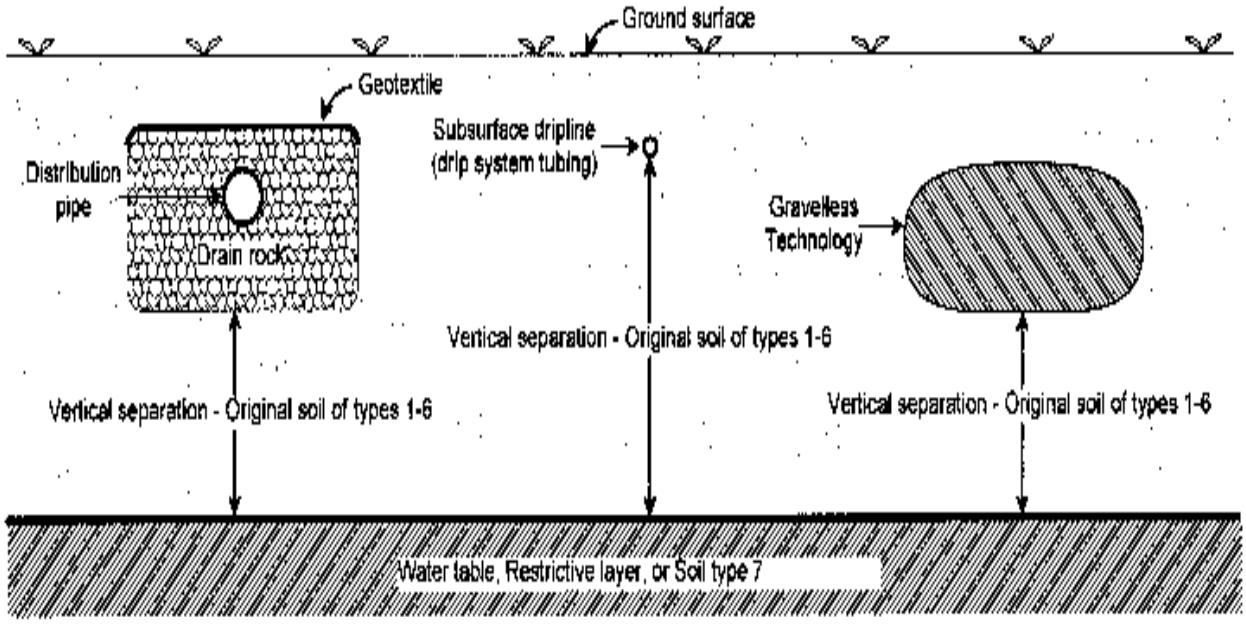
3.91 Unit Volume of Sewage - "Unit Volume of Sewage" means:

3.91.1 Flow from a single family residence;

3.91.2 Flow from a mobile home site in a mobile home park; or

3.91.3 Four Hundred Fifty (450) gallons of sewage per day where the proposed development is neither a single family residence nor a mobile home park.

3.92 Vertical Separation - "Vertical Separation" means 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 a subsurface soil absorption system.



3.93 Water Table - "Water Table" means the upper surface of the ground water, whether permanent or seasonal. Also, see "ground water."

SECTION 4 – APPLICABILITY AND GENERAL REQUIREMENTS

4.1 Every residence, place of business, or other building or place where persons congregate, reside, or are employed that is not connected to a public sewer system shall contain a water flush toilet system or alternative system which meets the requirements of this Ordinance.

4.2 Preliminary subdivisions approved prior to the effective date of this Ordinance that contain requirements pertaining to on-site sewage systems shall be acted upon in accordance with regulations in force at the time of preliminary subdivision approval for a maximum period of two years from the date of approval or for an additional year beyond the effective date of this Ordinance, whichever ensures the most lenient expiration date.

4.3 The Health Officer may apply this Ordinance to OSS for sources other than residential sewage, excluding industrial wastewater, if pretreatment, siting, design, installation, and operation and maintenance measures provide treatment and effluent disposal equal to that required of residential sewage.

4.4 The Health Officer shall not apply the location and design requirements in this Ordinance to any OSS in existence as of the effective date of this Ordinance, except for system repairs, modifications, expansions or additions.

4.5 A valid sewage system design approval or installation permit issued prior to the effective date of these regulations:

4.5.1 Shall be acted upon in accordance with regulations in force at the time of issuance;

4.5.2 Shall have a maximum validity period of two years from the date of issuance; and

4.5.3 May be modified to include additional requirements if the Health Officer determines that a threat to public health exists.

4.6 The Washington State Department of Ecology has authority and approval over:

4.6.1 Domestic or industrial wastewater under Chapter 173-240 WAC; and

4.6.2 Waste systems using mechanical treatment or lagoons, with ultimate design flows above three thousand five hundred (3,500) gallons per day.

4.7 The Washington State Department of Health (DOH) has authority and approval over:

4.7.1 Systems with design flows through any common point between three thousand five hundred (3,500) to fourteen thousand five hundred (14,500) gallons per day; and

4.7.2 Any large on-site sewage system (LOSS) for which jurisdiction has been transferred to the DOH under conditions of a memorandum of agreement with the Department of Ecology.

4.8 The Health Officer has authority and approval over:

4.8.1 Systems with design flows through any common point up to three thousand five hundred (3,500) gallons per day;

4.8.2 Any large on-site sewage system (LOSS) for which jurisdiction has been transferred, by contract, from the DOH to the Board of Health.

4.9 This chapter does not apply to facilities regulated as reclaimed water use under chapter 90.46 RCW.

4.10 Sewage that is not treated through a public sewer system shall not be discharged to surface water, to the surface of the ground, or underground unless the discharge conforms to the requirements of this Ordinance, or any amendments thereto.

SECTION 5 – CONNECTION TO PUBLIC SEWER

5.1 When public sewer services are available within two hundred (200) feet of a residence or facility as measured along the usual or most feasible route of access, the owner of record must connect the residence or facility to the public sewer system if:

5.1.1 The residence or facility is served by an OSS or LOSS which has failed; or

5.1.2 The residence or facility does not have an OSS or LOSS.

5.2 The owner of record of a residence or other facility served by a Table VI repair as listed in Section 26 shall abandon the OSS according to the requirements specified in Section 28, and shall connect the residence or other facility to a public sewer system, if the sewer utility allows the sewer connection, and:

5.2.1 Connection is deemed necessary to protect public health by the Health Officer; or,

5.2.2 A public sewer becomes available within two hundred (200) feet of the residence or other facility as measured along the usual or most feasible route of access.

SECTION 6 - ALTERNATIVE SYSTEMS AND PROPRIETARY DEVICES

6.1 Alternative systems and proprietary devices shall comply with the requirements of Chapters 246-272A-0100 through 246-272A-0150 WAC.

6.2 The Health Officer shall only permit installation of alternative systems for which there are alternative system guidelines or a proprietary device if it is approved by the DOH under Chapters 246-272A-110 through 246-272A-150 WAC.

6.3 The Health Officer:

6.3.1 May require performance monitoring or sampling of any alternative system;

6.3.2 Shall submit copies of evaluation reports to the DOH when alternative system performance is evaluated; and

6.3.3 Shall notify the DOH of alternative system approvals and failures.

SECTION 7 - NON-RESIDENTIAL ON-SITE SEWAGE DISPOSAL SYSTEMS

7.1 An authorized professional shall design non-residential on-site sewage systems and shall certify that a proposed non-residential on-site sewage system meets the requirements of this Ordinance and will adequately serve a proposed facility.

7.2 When an OSS is proposed for non-residential sewage, the applicant shall have a designer

submit to the Health Officer:

7.2.1 Information which shows that the sewage is not industrial wastewater;

7.2.2 Information that establishes the sewage's strength and identifies chemicals present in the sewage that are not found in residential sewage; and

7.2.3 A design that provides treatment equal to that required for residential sewage.

7.3 An application for an OSS for nonresidential sewage shall be denied by the Health Officer if the requirements of Subsection 7.2 are not met.

7.4 Non-residential and multi-residential disposal fields of one thousand five hundred (1500) square feet or more shall require pressure distribution.

SECTION 8 - ACTIVITIES REQUIRING A PERMIT

8.1 No person shall operate an alternative system without a valid permit.

8.2 No person shall install, repair, modify, or expand an OSS or LOSS without a valid permit.

8.3 Upon approval by the Health Officer, emergency repairs may be made prior to issuance of a permit notwithstanding Subsections 8.1 and 8.2.

8.4 Persons applying for a building permit for the construction or alteration of a building which will necessitate an on-site sewage system shall obtain an OSS installation permit from the Health Officer before starting construction. No permit shall be issued without an approved site evaluation as required in Section 11.

8.5 If a person fails to comply with the terms of a permit issued under this Ordinance, or engages in activities regulated under this Ordinance without the appropriate permit(s), the Health Officer may issue a written order to immediately stop or suspend all work, except that which is necessary to bring the project into compliance with this Ordinance.

8.6 A permit is not required for replacement, addition, or modification of broken or malfunctioning building sewers, risers and lids, septic tank lids, septic tank baffles, septic tank pumps, pump control floats, pipes connecting multiple septic tanks, and OSS inspection boxes and ports where a septic tank, treatment component, or soil dispersal component does not need to be replaced. The Health Officer may require the owner of record to submit information regarding these activities for recordkeeping purposes.

SECTION 9 – PERMIT REQUIREMENTS

9.1 Prior to beginning the construction process, a person proposing the installation, repair, modification, connection to, or expansion of, an OSS shall obtain a permit from the Health Officer.

9.2 Any person desiring to obtain a permit for an OSS shall submit a completed application on forms provided by the Health Officer. The following information shall be provided:

9.2.1 Name and address of the property owner and the applicant, if different;

9.2.2 Parcel number, legal description, and if available, the address of the site;

9.2.3 Source of drinking water supply;

9.2.4 Identification of whether the property is within the boundaries of a recognized sewer utility or urban growth area under the Growth Management Act;

9.2.5 Size of the parcel;

9.2.6 Type of permit for which application is being made, for example, new installation, repair, expansion, modification, or operational;

9.2.7 Source of sewage, for example, residential, restaurant, or other type of business;

9.2.8 Location of utilities;

9.2.9 Number of bedrooms, if applicable;

9.2.10 Name of the designer, if applicable;

9.2.11 Date of application; and

9.2.12 Signature of applicant.

9.3 Any person desiring to obtain a permit for an OSS shall submit a complete, detailed, and dimensional site plan to the Health Officer that includes:

9.3.1 Designated areas for the proposed initial system, the reserve area and those areas immediately adjacent that contain characteristics impacting design;

9.3.2 The location of all soil logs and other soil tests for the OSS;

9.3.3 General topography and/or slope of the site;

9.3.4 Site drainage characteristics;

9.3.5 The location of existing and proposed encumbrances affecting system placement, including legal easements and access documents if any component of the OSS is not on the lot where the sewage originates. Copies of easements and their recording numbers must be furnished when such easements are necessary for the Health Officer's approval of the disposal system;

9.3.6 The location, size, shape and placement of all existing buildings on the site showing their relationship to the OSS disposal systems, wells, underground and surface storage tanks, swimming pools, water supply lines, property lines and easements;

9.3.7 The location of all wells on the subject property and on adjacent properties within one hundred (100) feet of the property lines;

9.3.8 The location of any septic tank and drainfield locations on the subject property and also any on-site sewage disposal system location on adjacent property within one hundred (100) feet of any existing or proposed wells on the applicant's site;

9.3.9 The direction of flow and discharge point of all surface and subsurface water interception drains and ditches;

9.3.10 The location, size and shape of area in which the on-site sewage disposal system is to be installed, and distances from designated area to any cuts, banks, terraces, foundations, property lines, wells (including those on neighboring property), lakes, streams, swamps, marshes, salt water beaches, driveways, walkways, patios, water lines, drainage ditches or fills;

9.3.11 An arrow indicating north; and

9.3.12 Any other additional information deemed necessary by the Health Officer.

9.4 If the property has been platted, the application shall include the plat number, plat name and lot number with the application materials.

9.5 The soil log holes or sieve sample holes shall be spaced uniformly over the proposed drainfield site and reserve area with each hole identified on the site plan with a unique number. At least three (3) soil logs (2 in the lowest portion of the proposed primary drainfield area and 1 in the lowest portion of the proposed reserve area) shall be required for each lot. Additional soil logs may be required by the Health Officer as deemed necessary. The number of soil logs may be reduced if adequate soils information is available. Soil logs shall be provided in sufficient numbers or detail to allow the determination of any restrictive layer;

9.6 A detailed system design meeting the requirements contained in Section 13 shall be submitted to the Health Officer for review and shall include all of the following:

9.6.1 A drawing showing the dimensional location of components of the proposed OSS, and the system designed for the reserve if reserve site characteristics differ significantly from the initial area;

9.6.2 Vertical cross-section drawings showing:

9.6.2.1 The depth of the disposal component, the vertical separation, and the depth of soil cover; and

9.6.2.2 Other OSS components constructed at the site.

9.6.3 Calculations and assumptions supporting the proposed design, including soil type, hydraulic loading rate in the disposal component and the systems maximum daily flow capacity; and

9.6.4 Using a bench mark that will remain in place throughout the development of the project as the reference point, the designer shall identify relative elevations of the plumbing stub-out, the finished ground elevation of the drainfield area and the corners of the subject property and elevation of the drainfield trenches. This information shall be clearly demonstrated on the design submitted for review.

9.7 The designer shall stake or otherwise physically mark the center of the proposed tanks, flow adjustment valves, and corners of beds and/or center line of trenches for both the primary and reserve areas, if at all possible.

9.8 If the property is served by public water, the designer or owner of record shall have the water purveyor field locate all potable water lines within 15 feet of any proposed OSS device.

9.9 The Health Officer shall:

9.9.1 Respond to an application within thirty days as required in RCW 70.05.074;

9.9.2 Permit only public domain technologies that have DOH RS&G. Permit only proprietary products that are registered by the DOH;

9.9.3 Issue a permit when the information required in this Section has been submitted and meets the requirements contained in this Ordinance and in other local regulations;

9.9.4 Identify the permit as a new installation, repair, expansion, modification, or operational permit;

9.9.5 Specify the expiration date on the permit. The expiration date may not exceed two

years from the date of permit issuance;

9.9.6 Include a reminder on the permit of the applicant's right of appeal, and

9.9.7 State the period of validity and the date and conditions of renewal for operational permits.

9.10 The Health Officer may revoke or deny a permit for cause. Examples include, but are not limited to:

9.10.1 Construction or continued use of an OSS that threatens the public health;

9.10.2 Misrepresentation or concealment of material fact in information submitted to the Health Officer; or

9.10.3 Failure to meet conditions of the permit, this ordinance, or any local regulations.

9.11 Before the Health Officer issues a permit for the installation of an OSS to serve more than one development, the applicant shall show:

9.11.1 An approved public entity owning or managing the OSS in perpetuity; or

9.11.2 A management arrangement acceptable to the Health Officer, recorded in covenant, lasting until the on-site system is no longer needed, and containing, but not limited to;

9.11.3.1 A recorded easement allowing access for construction, operation, monitoring maintenance, and repair of the OSS; and;

9.11.3.2 Identification of an adequate financing mechanism to assure the funding of operation, maintenance, and repair of the OSS.

9.12 The Health Officer shall not delegate the authority to issue permits.

9.13 The Health Officer may stipulate additional requirements for a particular permit if necessary for public health protection.

9.14 The Health Officer may design residential gravity flow systems. If the Health Officer chooses to design a residential gravity flow system, he/she is responsible for complying with the requirements of this Ordinance, or any amendment thereto.

9.15 New installation, expansion, and modification permits shall be valid for a period of two (2) years from the date of issuance. Such permits are transferable, but they shall not be renewed.

9.16 Repair permits shall be valid for a period of six (6) months from the date of issuance and shall be transferable. Repair permits may be renewed for an additional six (6) months if the Health Officer determines that a health hazard does not exist.

9.17 Operational permits for on-site sewage systems that have special operational or maintenance needs shall be valid for a period of time set by the Administrative Officer through the adoption of administrative rules under Subsection 2.3. All operational permits are transferable and may be renewed subject to conditions specified by the Health Officer.

9.18 The Health Officer has the authority to certify that the operation of an OSS complied with the requirements of this Ordinance on the date the Health Officer inspected the OSS.

SECTION 10 - LOCATION OF ON-SITE SEWAGE SYSTEMS

10.1 Every new OSS shall meet the minimum horizontal separations shown in Table I, Minimum Horizontal Separations:

Table I
Minimum Horizontal Separations

Items Requiring Setback	From edge of soil dispersal component and reserve area	From sewage tank and distribution box	From building sewer, and nonperforated distribution pipe
Well or suction line	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
Public drinking water spring measured from the ordinary high-water mark	200 ft.	200 ft.	100 ft.
Spring or surface water used as drinking water source measured from the ordinary high-water mark[1]	100 ft.	50 ft.	50 ft.
Pressurized water supply line	10 ft.	10 ft.	10 ft.
Decommissioned well (decommissioned in accordance with chapter 173-160 WAC)	10 ft.	N/A	N/A
Surface water measured from the ordinary high-water mark	100 ft.	50 ft.	10 ft.
Building foundation/in-ground swimming pool	10 ft.	5 ft.	2 ft.
Property or easement line	5 ft.	5 ft.	N/A
Interceptor/curtain drains/foundation drains/drainage ditches			
Down-gradient[2]:	30 ft.	5 ft.	N/A
Up-gradient[2]:	10 ft.	N/A	N/A
Other site features that may allow effluent to surface			
Down-gradient[2]:	30 ft.	5 ft.	N/A

	Up-gradient[2]:	10 ft.		N/A		N/A
Down-gradient cuts or banks with at least 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change		25 ft.		N/A		N/A
Down-gradient cuts or banks with less than 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change		50 ft.		N/A		N/A
Other adjacent soil dispersal components/subsurface storm water infiltration systems		10 ft.		N/A		N/A

[1]If surface water is used as a public drinking water supply the designer shall locate the OSS outside of the required source water protection area.

[2]The item is down-gradient when liquid will flow toward it upon encountering a water table or a restrictive layer. The item is up-gradient when liquid will flow away from it upon encountering a water table or restrictive layer.

10.2 If any condition indicates a greater potential for contamination or pollution, the Health Officer may increase the minimum horizontal separations. Examples of such conditions include excessively permeable soils, unconfined aquifers, shallow or saturated soils, dug wells, and improperly abandoned wells.

10.2.1 All proposed OSS within the shellfish, kelp, eelgrass, herring, and smelt spawning critical areas must be increased one treatment level beyond what the soil and site conditions (horizontal and vertical separations) would normally dictate, up to a maximum of treatment level A (see subsection 6.C.1 of Pacific County Ordinance No. 147, or any amendment thereto).

10.3 The Health Officer may allow a reduced horizontal separation to not less than two feet where the property line, easement line, in-ground swimming pool, or building foundation is up-gradient. The Health Officer may require the submittal of a recorded survey if the request is to reduce the horizontal separation to a property line or easement.

10.4 The horizontal separation between an OSS soil disposal component and an individual water well, individual spring, or surface water that is not a public water source can be reduced to a minimum of seventy-five feet, by the Health Officer, and be described as a conforming system upon signed approval by the Health Officer, if the applicant demonstrates:

10.4.1 That adequate protective site-specific conditions, such as physical settings with low hydro-geologic susceptibility from contaminant infiltration, exist. Examples of such conditions include evidence of confining layers and/or aquatards separating potable water from the OSS treatment zone, excessive depth to ground water, down-gradient contaminant source, or outside the zone of influence;

10.4.2 Design and proper operation of an OSS system assuring enhanced treatment performance beyond that accomplished by meeting the vertical separation and effluent distribution requirements described in Table III contained in Subsection 13.2.9; and,

10.4.3 Evidence of protective conditions involving both 10.4.1 and 10.4.2 of this subsection.

10.5 Soil dispersal components shall be designed or located in areas only if:

10.5.1 The slope is less than forty-five percent (twenty-four degrees);

10.5.2 The area is not subject to encroachment by buildings or construction such as placement of power poles or underground utilities, is or won't be covered with impervious materials such as asphalt and vehicular traffic or other activities which may adversely affect the soil or the performance of the OSS;

10.5.3 There exists sufficient reserve area for the replacement soil dispersal component to treat and dispose of one hundred percent of the design flow,

10.5.4 The land is stable; and

10.5.5 Surface drainage is directed away from the site.

10.6 The Health Officer shall not approve a reduction from the 100 foot horizontal separation between the OSS soil disposal component and surface water for new construction within the shellfish, kelp, eelgrass, herring, and smelt spawning critical areas as identified in Pacific County Ordinance No. 147, or any amendment thereto.

10.7 The Health Officer may approve a sewer transport line within ten feet of a water supply line if the sewer line is constructed in accordance with section C1-9 of the Department of Ecology's *"Criteria For Sewage Works Design,"* December 1998, or any successor document.

SECTION 11 - SOIL AND SITE EVALUATION

11.1 The Health Officer shall permit only professional engineers and/or designers to perform soil and site evaluations. The Health Officer and his/her designee may also perform soil and site evaluations.

11.2 The person evaluating the soil and site shall:

11.2.1 Record all of the following:

11.2.1.1 A sufficient number of soil logs to evaluate conditions within the

initial soil dispersal component as well as the reserve area;

11.2.1.2 The groundwater conditions, including the probable maximum height, and the date of the observation;

11.2.1.3 The topography of the proposed initial system, the reserve area, and those areas immediately adjacent that contain characteristics impacting the design;

11.2.1.4 The drainage characteristics of the proposed initial system, the reserve area and those areas immediately adjacent that contain characteristics impacting the design;

11.2.1.5 The existence of structurally deficient soils subject to major wind or water erosion events such as slide zones or dunes;

11.2.1.6 The existence of any critical area as defined in Pacific County Ordinance No. 147, or any amendments thereto; and

11.2.1.7 The location of existing features affecting system placement, including, but not limited to:

11.2.1.7.1 Wells and suction lines;

11.2.1.7.2 Water sources and supply lines;

11.2.1.7.3 Surface water and stormwater infiltration areas;

11.2.1.7.4 Abandoned wells;

11.2.1.7.5 Outcrops of bedrock and restrictive layers;

11.2.1.7.6 Buildings;

11.2.1.7.7 Property lines and lines of easements;

11.2.1.7.8 Interceptors such as footing drains, curtain drains, and drainage ditches;

11.2.1.7.9 Cuts, banks, and fills;

11.2.1.7.10 Driveways and parking areas;

11.2.1.7.11 Existing OSS; and

11.2.1.7.12 Underground utilities.

11.2.2 Use the soil and site evaluation procedures and terminology in accordance with Chapter 5 of the *On-site Wastewater Treatment Systems Manual*, EPA 625/R-00/008, February 2002 except where modified by, or in conflict with, this ordinance (available upon request to the DOH);

11.2.3 Use the soil names and particle size limits of the United States Department of Agriculture Natural Resources Conservation Service classification system;

11.2.4 Determine texture, structure, compaction and other soil characteristics that affect the treatment and water movement potential of the soil by using normal field and/or laboratory procedures such as particle size analysis; and

11.2.5 Classify the soil as in Table II, Soil Type Descriptions.

TABLE II
Soil Type Descriptions

Soil Type	Soil Textural Classifications
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding soil types 5 and 6, all soil types with greater than or equal to 90% rock fragments.
2	Coarse sands.
3	Medium sands, loamy coarse sands, loamy medium sands.
4	Fine sands, loamy fine sands, sandy loams, loams.
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate or strong structure (excluding platy structure).
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.
7 **Unsuitable for treatment or dispersal**	Sandy clay, clay, silty clay, strongly cemented or firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.

11.3 The owner of record shall be responsible for:

11.3.1 Preparing the soil log excavation to:

11.3.1.1 Allow examination of the soil profile in its original position by:

11.3.1.1.1 Excavating pits of sufficient dimensions to enable observation of soil characteristics by visual and tactile means to a depth three feet deeper than the anticipated infiltrative surface at the bottom of the soil dispersal component; or

11.3.1.1.2 Stopping at a shallower depth if a water table or restrictive layer is encountered.

11.3.1.2 Allow determination of the soil's texture, structure, color, bulk density or compaction, water absorption capabilities or permeability, and elevation of the highest seasonal water table.

11.3.2 Assuming responsibility for constructing and maintaining the soil log excavation in a manner to prevent injury as required by chapter 296-155 WAC.

11.4 The Health Officer:

11.4.1 Shall render a decision on the height of the water table within twelve months of receiving the application under precipitation conditions typical for the region;

11.4.2 May require water table measurements to be recorded during months of probable high-water table conditions if insufficient information is available to determine the highest seasonal water table as per Section 12;

11.4.3 May require any other soil and site information affecting location, design, or installation; and

11.4.4 May reduce the required number of soil logs for OSS serving a single-family residence if adequate soils information has previously been developed.

SECTION 12 – WINTER WATER TABLE EVALUATION

12.1 Sites held for winter water table evaluations are sites where the Health Officer cannot accurately determine the seasonal groundwater height, or in areas that have a history of large water table fluctuations between winter and summer months.

12.1.1 The Health Officer may deem it necessary to hold over sites for a winter water table evaluation if the following seasonal high water table indicators are present:

12.1.1.1 Historic information of high water table documented in County development files;

12.1.1.2 Alterations of landscape, or filling and grading practices, which in

the opinion of the Health Officer could alter the flow of surface/ground water at the site;

12.1.1.3 Discoloration (mottling) in the soil horizons;

12.1.1.4 Observations of wetland vegetation;

12.1.1.5 Proximity to water bodies, such as canals, marshes, wetlands, shorelines, etc.;

12.1.1.6 Areas or lots located in flood plains;

12.1.1.7 Proximity to lots that have been denied or have enhanced treatment systems;

12.1.1.8 Lots or areas exhibiting poor drainage; or

12.1.1.9 High water-table measurements recorded at the time of initial evaluation.

12.2 If it is determined that the site will require a winter water table evaluation, the applicant will be informed in writing by the Health Officer.

12.3 Winter water table elevations will be evaluated on a bi-weekly basis during the months of December, January, and February for fluctuation in the groundwater level. Results of the winter water table evaluation shall be rendered to the applicant within one (1) month following the evaluation period.

12.4 The decision of whether to approve the site for an OSS shall be based on the site conditions recorded during the winter water table evaluation and a comparison of that season's rainfall (October through February) and 64.51 inches, which is one standard deviation above the mean rainfall data gathered from the Washington State University Cranberry Research Station between 1980 and 1996.

12.5 All rainfall data shall be gathered from the Washington State University Cranberry Research Station located in Long Beach, Washington.

12.6 All winter water table evaluation seasons (October through February) with recorded rainfall of greater than or equal to the established comparison listed in Subsection 12.4 shall allow for the installation of systems complying with the regulations delineated within this ordinance.

12.7 The Health Officer may increase vertical separation requirements and/or the level of sewage treatment for sites evaluated during winter periods (October through February) with less than 64.51" of rainfall. Such increases in vertical separation and/or treatment

shall be determined via analysis of the site conditions and shall be commensurate with the degree of variation from the "….precipitation conditions typical for the region".

12.8 The winter water table evaluation will be conducted utilizing the original soil evaluation holes or through the use of a piezometer. Sites shall be denied if the water table is measured within twelve (12) inches of grade on any two reading or if the surface water setback cannot be maintained. If a substandard reading of less than twelve inches is recorded, another reading will be recorded within 7-10 days of the first substandard reading. Each applicant or owner or record will be informed of the substandard conditions of their site via a letter of denial from the Health Officer.

12.9 All applicants shall have the opportunity to submit their site for an additional winter water table evaluation period. This evaluation shall be completed in association with the results obtained from the first winter water table evaluation period and its associated rainfall. The second evaluation period may be subject to additional fees.

SECTION 13 – DESIGN REQUIREMENTS

13.1 On-site sewage systems shall only be designed by professional engineers licensed under chapter 18.43 RCW or on-site sewage treatment system designers licensed under chapter 18.210 RCW, with the following exceptions:

13.1.1 At the discretion of the Health Officer, a resident owner of a single family residence not adjacent to a marine shoreline is allowed to design a system for that residence; or

13.1.2 If the Health Officer performs the soil and site evaluation, the Health Officer is allowed to design a system.

13.2 The designer shall use the following criteria when developing a design for an OSS:

13.2.1 Direct all sewage from the building served to the OSS;

13.2.2 Septic tanks shall be reviewed and approved by the DOH;

13.2.3 Direct all drainage from the surface, footing drains, roof drains, subsurface stormwater infiltration systems, and other non-sewage drains away from the OSS and the reserve area;

13.2.4 The OSS is designed to treat and disperse single family residential sewage volume as follows:

13.2.4.1 The operating capacity is based on forty five (45) gpd per capita with two people per bedroom;

13.2.4.2 The minimum design flow per bedroom per day is the operating capacity of ninety (90) gallons multiplied by 1.33. This results in a minimum design flow of one hundred twenty (120) gallons per bedroom per day;

13.2.4.3 A factor greater than 0.33 to account for surge capacity may be required by the Health Officer;

13.2.4.4 The Health Officer may require an increase of the design flow for dwellings with anticipated greater flows, such as larger dwellings; and

13.2.4.5 The minimum design flow is two hundred forty (240) gallons per day.

13.2.5 For other facilities, the design flows noted in *On-site Wastewater Treatment Systems Manual*, USEPA, EPA-625/R-00/008, February 2002 (available upon request to the department) shall be used. Sewage flows from other sources of information may be used in determining system design flows if they incorporate both an operating capacity and a surge capacity.

13.2.6 The OSS is designed to address sewage quality for all systems as follows:

13.2.6.1 $CBOD_5$, TSS, and O&G;

13.2.6.2 Other parameters that can adversely affect treatment anywhere along the treatment sequence. Examples include pH, temperature and dissolved oxygen;

13.2.6.3 The sensitivity of the site where the OSS will be installed. Examples include areas where fecal coliform constituents can result in public health concerns, such as shellfish growing areas, designated swimming areas, or aquifer recharge areas; and

13.2.6.4 Nitrogen contributions.

13.2.7 For OSS treating sewage from a nonresidential source, the designer shall provide the following information:

13.2.7.1 Information to show the sewage is not industrial wastewater;

13.2.7.2 Information regarding the sewage quality and identifying chemicals found in the sewage that are not found in sewage from a residential source; and

13.2.7.3 A site-specific design providing the treatment level equal to that required of sewage from a residential source.

13.2.8 The vertical separation to be used to establish the treatment levels and application rates. The selected vertical separation shall be used consistently throughout the design process.

13.2.9 Treatment levels:

13.2.9.1 Requirements for matching treatment component and method of distribution with soil conditions of the soil dispersal component are listed in Table III. The treatment levels correspond with those established for treatment components under the product performance testing requirements in Table III of WAC 246-272A-0110. The method of distribution applies to the soil dispersal component.

13.2.9.2 Disinfection may not be used to meet the fecal coliform threshold standard for Treatment levels A or B in Type 1 soils, or Treatment level C.

TABLE III
Treatment Component Performance Levels and Method of Distribution[1]

Vertical Separation in inches	Soil Type		
	1	2	3-6
12 < 18	A - pressure with timed dosing	B - pressure with timed dosing	B - pressure with timed dosing
≥18 < 24	B - pressure with timed dosing	B - pressure with timed dosing	B - pressure with timed dosing
≥24 < 36	B - pressure with timed dosing	C – pressure with timed dosing	E – pressure with timed dosing
≥36 < 60	B - pressure with timed dosing	E – pressure with timed dosing	E – gravity [2]
≥60	C – pressure with timed dosing	E - gravity	E - gravity

[1]The treatment component performance levels correspond with those established for treatment components under the product testing requirements in WAC 246-272A-0110.
[2] Soil type 4 requires a 60 inch vertical separation to the winter water table for a gravity flow distribution (as per Subsection 9.C.b of Pacific County Critical Areas and Resource Lands Ordinance No. 147, or any amendments thereto). In soil types 3-6, a vertical separation of between 37 to 59 inches requires pressure distribution with timed dosing.

13.3 The coarsest textured soil within the vertical separation selected by the designer shall determine the minimum treatment level and method of distribution.

13.4 The Health Officer shall not approve designs for cesspools or seepage pits.

13.5 The Health Officer may approve a design for the reserve area different from the design approved for the initial OSS, if both designs meet the requirements of this chapter for new construction.

SECTION 14 – SEPTIC TANK SIZING

14.1 Septic tanks shall:

14.1.1 Have at least two compartments with the first compartment liquid volume equal to one-half to two-thirds of the total liquid volume. This standard may be met by one tank with two compartments or by two single compartment tanks in series. In multi-compartment tanks, or when two or more tanks in a series are used, the primary compartment or tank shall not have a liquid capacity of less than five hundred (500) gallons or less than two-thirds of the total liquid capacity, whichever is greater;

14.1.2 Be on the DOH approved list of wastewater (septic) tanks prior to being manufactured, constructed or sold on a commercial basis for installation;

14.1.3 Have the following minimum liquid volumes:

14.1.3.1 For a single-family residence containing up to four bedrooms, the minimum liquid volume of the septic tank shall be 1,000 gallons. Each additional bedroom requires an additional 250 gallons of liquid volume tank capacity.

14.1.3.2 For OSS treating sewage from a residential source other than one single-family residence, two hundred fifty (250) gallons per bedroom with a minimum of one thousand gallons.

14.1.3.3 For OSS treating sewage from a nonresidential source, three times the design flow.

14.1.3.4 Pump chambers shall be a minimum of one thousand (1,000) gallons for timed dose systems.

14.1.4 Have 1.5 times the daily design flow with minimum of one thousand (1,000) gallons for facilities handling residential sewage, other than one single family residence;

14.1.5 Have clean-out and inspection accesses at or above grade;

14.1.6 Have watertight access covers constructed of durable material with a lockable lid or otherwise be securable to prevent unauthorized entry;

14.1.7 Be designed with protection against floatation and groundwater intrusion in high groundwater areas;

14.1.8 Have an intact inner partition separating the compartments containing no gaps between the partition and the sides of the tank;

14.1.9 Have all residual concrete removed, leaving a smooth surface on all tanks using concrete baffles;

14.1.10 Be equipped with an effluent screen designed to meet the performance criteria found in the *Recommended Standards and Guidance for Pressure Distribution Systems*; and

14.1.11 Be certified watertight, by the Health Officer, prior to use.

14.2 No pre-cast septic tank shall be installed except those which have been approved by the Health Officer.

14.3 No metal septic tanks shall be installed.

14.4 Pump Chambers shall:

14.4.1 Be included on the approved list of pump chambers maintained by the DOH;

14.4.2 Have clean-out and inspection accesses at or above finished grade;

14.4.3 Have watertight access covers constructed of durable material with a lockable lid or otherwise be securable to prevent unauthorized entry;

14.4.4 Have an access cover with a lockable lid or otherwise be securable to prevent unauthorized entry;

14.4.5 Be designed with protection against floatation, ground water intrusion, and surface water inflow; and

14.4.6 Be certified watertight by the Health Officer prior to use.

14.5 Location of Septic Tank and Pump Chambers

14.5.1 No septic tank or pump chamber shall be located under paving unless the manhole

and inspection holes are extended up through the paving, the manhole is equipped with a locking-type cover, and the tank is reinforced to withstand the additional loading caused by potential vehicular traffic. A Washington State Professional Engineer shall determine the appropriate specifications for the reinforced tank.

SECTION 15 – SOIL DISPERSAL COMPONENTS

15.1 All soil dispersal components, except ones using a subsurface dripline product, shall be designed to meet the following requirements:

15.1.1 Maximum hydraulic loading rates shall be based on the rates described in Table IV:

TABLE IV
Maximum Hydraulic Loading Rate

Soil Type	Soil Textural Classification Description	Loading Rate for Residential Effluent Using Gravity or Pressure Distribution gal./sq. ft./day
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding Soil types 5 & 6, all soil types with greater than or equal to 90% rock fragments.	1.0
2	Coarse sands.	1.0
3	Medium sands, loamy coarse sands, loamy medium sands.	0.8
4	Fine sands, loamy fine sands, sandy loams, loams.	0.6
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate structure or strong structure (excluding a platy structure).	0.4
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2
7	Sandy clay, clay, silty clay and strongly cemented firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.	Not suitable

15.1.2 The absorption area shall be calculated based on:

15.1.2.1 The design flow in Subsection 13.2; and

15.1.2.2 Loading rates equal to or less than those in Table IV applied to the infiltrative surface of the soil dispersal component or the finest textured soil within the vertical separation selected by the designer, whichever has the finest texture.

15.1.3 Requirements for the method of distribution shall correspond to those in Table III.

15.1.4 Soil dispersal components having daily design flow between one thousand (1,000) and three thousand five hundred (3,500) gallons of sewage per day shall:

15.1.4.1 Only be located in soil types 1-5;

15.1.4.2 Only be located on slopes of less than thirty (30) percent, or seventeen (17) degrees; and

15.1.4.3 Have pressure distribution including time dosing.

15.2 All soil dispersal components using a subsurface dripline product must be designed to meet the following requirements:

15.2.1 Calculation of the absorption area is based on:

15.2.1.1 The design flow in subsection 13.2; and

15.2.1.2 Loading rates that are dependent on the soil type, other soil and site characteristics, and the spacing of dripline and emitters.

15.2.2 The dripline must be installed a minimum of six (6) inches into original, undisturbed soil;

15.2.3 The system shall use timed dosing; and

15.2.4 Soil dispersal components having daily design flows greater than one thousand (1,000) gallons of sewage per day may only be located in soil types 1-5 and shall be located on slopes of less than thirty (30) percent, or seventeen (17) degrees.

15.3 All SSAS shall meet all the following requirements:

15.3.1 The infiltrative surface may not be deeper than three (3) feet below the finished grade, except under special conditions approved by the Health Officer. The depth of such system shall not exceed ten feet from the finished grade.

15.3.2 No SSAS shall be installed which consists of less than two (2) laterals. For equal

distribution or loop systems of more than four (4) lines utilizing a header, there shall be one (1) effluent line for each three (3) laterals or fraction thereof.

15.3.3 A minimum of twelve (12) inches of sidewall must be located in original undisturbed soil. This may be reduced to a minimum of six (6) inches of sidewall located in original undisturbed soil for pressure distribution systems..

15.3.4 Beds can only designed for use in soil types 1, 2, 3 or in fine sands and shall maintain a width of no less than six (6) feet and no greater than ten (10) feet, with the length necessary to maintain the necessary square footage required on the permit.

15.3.5 The drain rock in the disposal field shall terminate at the intersection of the drainfield trench sidewall and the effluent line. Such intersection shall be at least five (5) feet from the septic tank. The trench under the effluent line shall not be excavated below the outlet from the septic tank.

15.3.6 The maximum length of individual lines shall not exceed one hundred (100) feet, without pressure distribution.

15.3.7 The bottom width of trenches shall be between twenty four (24) and thirty six (36) inches, except for SSAS beds.

15.3.8 The method of effluent distribution in all cases shall meet or exceed the requirements contained in Table III. If applicable, the requirements of Section 12 override the standards delineated in Table III.

15.3.9 The grade of the bottom of drainfield trenches and drainfield lines shall be level plus or minus one (1) inch.

15.3.10 The maximum depth of cover over SSAS shall not exceed twenty four (24) inches except by special permission of the Health Officer and shall not contain more than ten (10) percent organic material.

15.3.11 The minimum depth of cover over SSAS shall not be less than six (6) inches and shall not contain more than ten (10) percent organic material.

15.3.12 SSAS distribution pipe must be installed in native soil.

15.3.13 The bottom of the SSAS shall not be deeper than thirty six (36) inches below the finished grade, unless the Health Officer explicitly approves the nonconformity.

15.3.14 The minimum depth of drain rock under drainfield lines shall not be less than six (6) inches.

15.3.15 The amount of drain rock over drainfield lines shall not be less than two (2) inches.

15.3.16 The minimum distance between drainfield lines shall be not less than eight (8) feet on centers.

15.3.17 The minimum diameter of gravity drainfield pipe shall be not less than four (4) inches.

15.3.18 Other features shall conform with the *On-site Wastewater Treatment Systems Manual*, United States Environmental Protection Agency EPA-625/R-00/008 February 2002, or its successor document (available upon request to the DOH) except where modified by, or in conflict with, this section.

15.3.19 Gravity flow distribution SSAS on all slopes over five (5) percent shall contain a distribution box as described in the EPA Design Manual.

15.3.20 Pumps must be designated for effluent use.

15.3.21 Diameter of pressure laterals shall be as specified in engineering design and must meet those specifications listed in the DOH Pressure Guidelines.

15.3.22 No SSAS shall be installed unless the proper grade of the system is maintained while backfilling.

15.3.23 No SSAS shall be installed which, after placement of the gravel over the pipe, is not then covered with filter fabric, or other porous non-biodegradable material, that meets the specifications listed in Subsection 15.7. This requirement may be waived by the Health Officer.

15.3.24 All SSAS laterals shall contain observation ports. Gravity systems shall have one (1) observation port for each lateral. Pressurized systems shall have two (2) observation ports for each lateral.

15.3.25 No gravity fed SSAS shall be installed unless the SSAS pipe used is PVC ASTM 2729 perforated sewer pipe or the equivalent.

15.3.26 Gravelless chambers or gravel substitutes may be used if shown on the DOH List of Registered Systems and Products, and installed in accordance with guidelines established by the DOH.

15.4 For gravity SSAS with drainrock and distribution pipe:

15.4.1 A minimum of two inches of drainrock is required above the distribution pipe;

15.4.2 The sidewall below the invert of the distribution pipe is located in original undisturbed soil; and

15.4.3 The drainrock shall be clean washed gravel or crushed rock ranging in size from 3/4 to 2 ½ inches in diameter, and containing no more than two percent by weight passing a US No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve.

15.5 Distribution boxes:

15.5.1 Shall be constructed and installed to provide equal flow of effluent to all outlets;

15.5.2 Shall be set on stable soil or otherwise supported to prevent misalignment;

15.5.3 Shall be durable, water tight, and equipped with an adequate removable cover;

15.5.4 Shall not be constructed or installed where the bottom of the inlet pipe is less than one (1) inch above the level of the bottom of the outlet pipes, nor shall the bottom of the outlet pipes be less than two (2) inches above the floor of the distribution box; and

15.5.5 Shall not be installed within thirty six (36) inches of filter material.

15.6 Building Sewer and Effluent Pipe:

15.6.1 Pipe used for construction for a building sewer beyond the building plumbing shall be a minimum of four (4) inches inside diameter and of plastic that shall be PVC ASTM 3034, ABS Schedule 40, or the equivalent.

15.6.2 Construction of the building sewer line shall be such as to secure water tight joints and it shall be on a grade of not less than 1/8 inch per foot and not more than 1/4 inch per foot.

15.6.3 No tees or elbows exceeding forty-five (45) degrees shall be permitted in the building sewer line except plastic long bend 90 elbows or sanitary tees are acceptable. All elbows shall have accessible cleanouts.

15.6.4 Building sewers of four (4) inch diameter shall have cleanouts installed at intervals of not more than fifty (50) feet and sewers of six (6) inch diameter and larger shall have cleanouts installed at intervals of not more than one hundred (100) feet.

15.6.5 Effluent sewer pipe shall be of the same material and size as the building sewer (a minimum of PVC ASTM 3034 or the equivalent).

15.6.6 Construction of the effluent sewer line shall be such as to secure water tight joints and it shall be on a grade of not less than 1/8 inch per foot.

15.6.7 Where the effluent sewer line exceeds fifty (50) feet in length, a clean out shall be placed every fifty (50) feet.

15.6.8 When using a header pipe, all effluent sewer connections shall be by standard tee and at points between the laterals.

15.7 Barrier material/filter fabric shall meet or exceed the specifications described below:

Barrier Material/Filter Fabrication Specifications

Property	Requirement	Test Method
Grab Strength	80 lbs.	ASTM D4632
Puncture Strength	25 lbs.	ASTM D4833
Trapezoid Tear	25 lbs.	ASTM D4533
Apparent Opening Size	AOS <0.297 mm, or >#50 US Standard Sieve	ASTM D4751
Permeability	0.4 cm/sec. for soil types 1 & 2, 0.004 cm/sec. for soil types >2	ASTM D4491

15.8 The Health Officer may increase the loading rate in Table IV up to a factor of two for soil types 1-4 and up to a factor of 1.5 for soil types 5 and 6 if a product tested to meet treatment level D is used. This reduction may not be combined with any other SSAS size reductions.

15.9 The primary and reserve areas must be sized to at least one hundred (100) percent of the loading rates listed in Table IV.

15.10 The Health Officer may allow a legal lot of record created prior to the effective date of this Ordinance that cannot meet this primary and reserve area requirement enumerated in Section 17 to be developed if all the following are met:

15.10.1 The lot cannot meet the minimum primary and reserve area requirements due to the loading rates for medium sand, fine sand and very fine sand listed in Table IV;

15.10.2 The primary and reserve areas are sufficient to allow installation of a SSAS using

maximum loading rates of 1.0 gallons/square foot per day for medium sand, 0.8 gallons/square foot/day for fine sand, and 0.6 gallons/square foot/day for very fine sand; and

15.10.3 A treatment product meeting at least Treatment Level D and pressure distribution with timed-dosing is used.

SECTION 16 – OPERATION, MONITORING, AND MAINTENANCE

16.1 The OSS must be designed to facilitate operation, monitoring and maintenance according to the following criteria:

16.1.1 For gravity systems, septic tank access (commonly called risers) for maintenance and inspection shall be located at finished grade. If effluent filters are used, access to the filter shall also be located at finished grade. The Health Officer may allow access for maintenance and inspection of a system consisting of a septic tank and gravity flow SSAS to be a maximum of six inches below finished grade provided a marker showing the location of the tank access is installed at finished grade.

16.1.2 For all other systems, service access and monitoring ports for all system components shall be located at finished grade. Specific component requirements shall meet the following requirements:

16.1.2.1 Septic tanks shall have service access manholes and monitoring ports for the inlet and outlet. If effluent filters are used, access to the filter at finished grade is required;

16.1.2.2 Surge, flow equalization or other sewage tanks must have service access manholes;

16.1.2.3 Other pretreatment units (such as aerobic treatment units and packed-bed filters) must have service access manholes and monitoring ports;

16.1.2.4 Pump chambers, tanks and vaults must have service access manholes;

16.1.2.5 Disinfection units shall have service access and shall be installed to facilitate complete maintenance and cleaning; and

16.1.2.6 Soil dispersal components shall have monitoring ports for both distribution devices and the infiltrative surface. This includes risers of adequate size around “d-boxes” and valve boxes around flow adjustment valves for pressure drainfields.

16.1.3 For systems using pumps, clearly accessible controls and warning devices shall include the following:

16.1.3.1 Process controls such as float and pressure activated pump on/off switches, pump-run timers and process flow controls;

16.1.3.2 Diagnostic tools including dose cycle counters and hour meters on the sewage stream, or flow meters on either the water supply or sewage stream; and

16.1.3.3 Audible and visual alarms designed to alert a resident of a malfunction. The alarm must be placed on a circuit independent of the pump circuit.

16.2 All accesses must be designed to allow for monitoring and maintenance and shall be secured to minimize injury or unauthorized access in a manner approved by the Health Officer.

SECTION 17 - DEVELOPMENTS, SUBDIVISIONS, AND MINIMUM LAND AREA REQUIREMENTS

17.1 A person proposing a subdivision where the use of OSS is planned shall obtain a recommendation for approval from the Health Officer as required by Pacific County Ordinance No. 149, or any amendment thereto.

17.2 A complete site evaluation, including the submittal of the minimum application materials delineated in Sections 9 – 11 is required at the time of preliminary subdivision application.

17.3 At least one soil log per proposed lot is required unless the Health Officer determines that existing soils information allows fewer or greater soil logs. All soil log holes shall be prepared in accordance with Section 11.

17.4 All lots within a proposed subdivision using individual wells shall:

17.4.1 Be configured to allow a one hundred (100) foot radius water supply protection zone to fit within the lot lines; or

17.4.2 Have established a one hundred (100) foot protection zone around each existing and proposed well site.

17.5 All applications for preliminary subdivisions shall include a determination of the minimum lot size or minimum land area as required in Table V:

TABLE V
Minimum Land Area Requirement[3]
Single-Family Residence or Unit Volume of Sewage

Type of Water Supply	Soil Type (defined by Section 12)					
	1	**2**	**3**	**4**	**5**	**6**
Public	0.5 acre 2.5 acre[1]	12,500 sq. ft.	15,000 sq. ft.	1 acre to 18,000 sq. ft. [2]	20,000 sq. ft.	22,000 sq. ft.
Individual, on each lot	1.0 acre 2.5 acres[1]	1 acre	1 acre	1 acre	2 acres	2 acres

[1]See Subsection 15.8.
[2] Subsection 9.C.2.a. of the Pacific County's Critical Areas and Resource Lands Ordinance No. 147, or any amendment thereto, limits lot size to one acre for gravity OSS, 30,000 sq. ft. for pressure distribution OSS, and to 18,000 sq. ft. for Treatment Levels A or B systems in the Aquifer Recharge Area for lots proposed for single family residences regardless of water source. For developments other than single family residences on public water, 18,000 sq ft per Unit Volume of Sewage applies.
[3] For the purpose of this section, "minimum land area" shall mean the total lot area minus those areas covered by surface water lying water-ward of the ordinary high water mark, and those areas contained within rights of way, road and/or utility easements as per Subsection 9.C.2.a of Pacific County's Critical Areas and Resource Lands Ordinance No. 147, or any amendment thereto.

17.6 The owner of record shall submit to the Health Officer information consisting of field data, plans, and reports demonstrating that the provided land area is sufficient to:

17.6.1 Install conforming OSS;

17.6.2 Assure preservation of reserve area for proposed and existing OSS;

17.6.3 Properly treat and dispose of the sewage; and

17.6.4 Minimize public health effects from the accumulation of contaminants in surface and ground water.

17.7 The Health Officer shall require lot areas of 12,500 square feet or larger except when a person proposes an OSS within the boundaries of a recognized sewer utility having a finalized assessment roll.

17.8 The Health Officer may:

17.8.1 Require detailed plot plans and OSS designs prior to final approval of subdivision proposals;

17.8.2 Require larger land areas or lot sizes to achieve public health protection;

17.8.3 Prohibit development on individual lots within the boundaries of an approved subdivision if the proposed OSS design does not protect public health by meeting requirements of these regulations; and

17.8.4 Permit the installation of an OSS, where the minimum land area requirements or lot sizes cannot be met, only when all of the criteria enumerated in Subsection 15.11 are met.

17.9 The use of a reduced-sized SSAS does not provide for a reduction in the minimum land area requirements established in this section. Site development incorporating reduced-sized SSAS must meet the minimum land area requirements established in state and local codes.

17.10 If alternative or community systems are proposed for a subdivision, conceptual or detailed designs shall be provided, including specific site location for both original and reserve systems.

17.11 If alternative or community systems are proposed for a subdivision, the Health Officer shall require specific language on the face of the plat addressing the special design considerations and/or system design requirements.

17.12 Subsequent changes to the site or soil conditions after the completion of the site evaluation may result in preliminary subdivision approval revocation.

SECTION 18 - AREAS OF SPECIAL CONCERN

18.1 The Health Officer, after consultation with the DOH, may designate the following areas as areas of special concern. This designation shall not be made unless a minimum of one public hearing is held by the Health Officer within the proposed area of special concern.

18.1.1 Shellfish protection districts or shellfish growing areas;

18.1.2 Sole source aquifers designated by the U.S. Environmental Protection Agency;

18.1.3 Areas with a critical recharging effect on aquifers used for potable water as designated under RCW 36.70A.170 (Washington Growth Management Act);

18.1.4 Designated public water supply wellhead protection areas;

18.1.5 Up-gradient areas directly influencing water recreation facilities designated for swimming in natural waters with artificial boundaries within the waters as described by the Water Recreation Facilities Act, Chapter 70.90 RCW;

18.1.6 Areas designated by the Department of Ecology as special protection areas under

WAC 173-200-090, water quality standards for ground waters of the State of Washington;

18.1.7 Wetland areas under production of crops for human consumption;

18.1.8 Frequently flooded areas delineated by the Federal Emergency Management Agency; and

18.1.9 Areas identified and delineated by the Board of Health in consultation with the DOH which constitute a health hazard due to the presence of failing on-site sewage systems.

18.2 The Health Officer may impose more stringent requirements on new developments and take corrective measures to protect public health upon existing developments in areas of special concern, including, but not limited to:

18.2.1 Requiring additional location, design, and/or performance standards for OSS;

18.2.2 Requiring larger land areas for new development;

18.2.3 Mitigating the impacts of development;

18.2.4 Requiring additional operation procedures and maintenance/monitoring protocols for OSS;

18.2.5 Requiring upgrades to particular existing OSS;

18.2.6 Requiring particular existing OSS to be abandoned; and

18.2.7 Monitoring of ground water or surface water quality.

18.3 In order to reduce risk of system failures within an area of special concern, a person approved or designated by the Health Officer shall:

18.3.1 Inspect every OSS at least once every three (3) years;

18.3.2 Submit the following written information to both the Health Officer and the property owner within thirty days following the inspection:

18.3.2.1 Location of the tank;

18.3.2.2 Structural condition of the tank, including baffles;

18.3.2.3 Depth of solids in tank;

18.3.2.4 Problems detected with any part of the system;

18.3.2.5 Maintenance needed;

18.3.2.6 Maintenance provided at time of inspection; and

18.3.2.7 Other information as required by the Health Officer.

18.3.3 Immediately report failures to the Health Officer.

SECTION 19 – HOLDING TANK SEWAGE SYSTEM

19.1 A person may not install or use holding tank sewage systems for residential development or expansion of residences, whether seasonal or year-round; however, the Health Officer may approve the installation of holding tank sewage systems for the following:

19.1.1 For permanent uses limited to controlled, part-time, commercial usage situations, such as recreational vehicle parks and trailer dump stations;

19.1.2 For interim uses limited to handling of emergency situations; or

19.1.3 For repairs as permitted under Subsection 26.1.4.1.

19.2 A person proposing to use a holding tank sewage system shall:

19.2.1 Follow design criteria established by the DOH;

19.2.2 Submit a management program to the Health Officer assuring ongoing operation, monitoring and maintenance before the Health Officer issues the installation permit; and

19.2.3 Use a holding tank reviewed and approved by the DOH.

SECTION 20 – INSTALLATION

20.1 Only licensed septic system installers may construct an OSS, except as noted under subsection 20.2.

20.2 The Health Officer may allow the resident owner of a single-family residence not adjacent to a marine shoreline to install a gravity OSS for that single-family residence. OSS requiring pressure distribution must be installed by a licensed septic system installer unless prior approval is granted by the Health Officer.

20.3 The Health Officer may develop and maintain a County OSS construction manual with

the assistance of local OSS installers, designers, and other County health departments

20.4 A person who installs an OSS shall:

20.4.1 Comply with the requirements contained in Section 30;

20.4.2 Follow the approved design;

20.4.3 Have the approved design in his/her possession during installation;

20.4.4 Only install septic tanks, pump chambers, and holding tanks approved by the DOH;

20.4.5 Be on the site at all times during the excavation and construction of the OSS;

20.4.6 Install the OSS to be watertight, except for the disposal component;

20.4.7 Cover the installation only after the Health Officer has given approval to cover. If any work is covered before it is inspected and approved, the Health Officer may require the system to be uncovered; and

20.4.8 Backfill and grade the site to prevent surface water from accumulating over any component of the OSS.

SECTION 21 – INSPECTION

21.1 All construction and materials used in an OSS shall be subject to inspection by the Health Officer at any reasonable time. Using an OSS prior to final inspection and approval is unlawful. At the time of final inspection, the OSS shall meet the following conditions:

21.1.1 The septic tank construction shall be completed and the cover shall be removable so that the inside of the tank may be inspected;

21.1.2 The entire absorption trenches or bed shall be completed except for backfilling with top soil over the filter fabric;

21.1.3 There shall be an unobstructed view of all outlets within the distribution box;

21.1.4 All electrical work including the installation of system control panels shall be installed and operating; and

21.1.5 All required OSS components shall be installed.

21.2 When the On-Site Sewage Disposal System is ready for inspection, the Health Officer shall inspect the system within five (5) working days after system completion. The

owner of record or commercial installer making such installation or modification shall be responsible for notifying the Health Officer that the installation is ready for inspection. Notification shall be made at least one (1) working day prior to the anticipated date that the system will be ready for inspection.

21.3 If, upon inspection, the Health Officer finds that the work, material, design, or location of the on-site sewage system does not comply with the requirements of this Ordinance, he/she shall notify the owner of record and/or commercial installer by written notice. If non-conformance with the provisions of this Ordinance is not corrected, the OSS shall not be approved and its use shall be prohibited.

21.4 On-Site Sewage Disposal Systems shall not be approved by the Health Officer until the designer and/or commercial installer and/or owner of record has submitted an "as-built" drawing of the installed system and signed a declaration that the system has been installed according to all State and local regulations. "As-built" drawings shall be made available to the Health Officer at the time of final inspection and shall be prepared as required in Section 22 of this Ordinance.

SECTION 22 – OSS RECORD DRAWINGS (AS-BUILT DRAWINGS)

22.1 Upon completion of the new construction, alteration or repair of the OSS, a complete and detailed OSS record drawing (as-built) shall be submitted to both the Health Officer and the OSS owner that includes, at a minimum, the following:

22.1.1 Measurements and dimensions accurate to +/- 1/2 foot, unless otherwise determined by the Health Officer, to assure the following parts of the OSS can be easily located:

22.1.1 All sewage tank openings requiring access;

22.1.2 The ends, and all changes in direction, of installed and found buried pipes and electrical cables that are part of the OSS; and

22.1.3 Any other OSS component which, in the judgment of the Health Officer or the designer, must be accessed for observation, maintenance, or operation.

22.1.2 Location and dimensions of reserve area:

22.1.3 A statement that the materials and equipment meet the specifications contained in the design;

22.1.4 A description of the initial settings of electrical or mechanical devices that must be known to operate the system in the manner intended by the designer or installer; and

22.1.5 For proprietary products, submittal of the manufacturer's standard product literature, including performance specifications and maintenance recommendations needed for operation, monitoring, maintenance, or repair of the OSS.

SECTION 23 – OPERATION, MONITORING, AND MAINTENANCE (OWNER RESPONSIBILITIES)

23.1 The owner of record is responsible for operating, monitoring, and maintaining the OSS to minimize the risk of failure, and to accomplish this purpose, shall:

23.1.1 Obtain approval from the Health Officer before repairing, altering or expanding an OSS;

23.1.2 Secure and renew contracts for periodic maintenance where required by the Health Officer;

23.1.3 Obtain and renew operation permits if required by the Health Officer;

23.1.4 Perform a complete evaluation of the system components and/or property to determine functionality, maintenance needs and compliance with regulations and any permits according to the following:

23.1.4.1 At least once every three (3) years for all systems consisting solely of a septic tank and gravity SSAS; or

23.1.4.2 Annually for all other systems unless more frequent inspections are specified by the Health Officer.

23.1.5 Employ a licensed pumper to remove the septage from the tank when the level of solids and/or scum indicates that removal is necessary;

23.1.6 Provide maintenance and needed repairs to promptly return the system to a proper operating condition;

23.1.7 Protect the OSS area and the reserve area from:

23.1.7.1 Cover by structures or impervious material;

23.1.7.2 Surface drainage, and direct drains, such as footing or roof drains. The drainage must be directed away from the area where the OSS is located;

23.1.7.3 Soil compaction, for example by vehicular traffic or livestock; and

23.1.7.4 Damage by soil removal and grade alteration.

23.1.8 Keep the flow of sewage to the OSS at or below the approved operating capacity and sewage quality;

23.1.9 Operate and maintain the system as directed by the Health Officer; and

23.1.10 Request assistance from the Health Officer upon occurrence of a system failure or suspected system failure.

23.2 All new, repaired, expanded or modified Table VI repair OSS shall be monitored according to the monitoring and maintenance schedules established in this Section.

23.3 All existing, new, repair, expanded or modified OSS are recommended to be monitored by an OSS Maintenance Specialist at the following frequency:

Aerobic Treatment Unit:	At six months & annually thereafter
Stratified Sand Filter:	At six months & annually thereafter
Recirculating Sand Filter:	At six months & annually thereafter
Intermitten Sand Filter:	At six months & annually thereafter
Community System:	Annually
Mound:	Annually
Composting/Incineration Toilet:	Annually
Vault Privy:	Annually
Pressure Distribution:	Annually
Gravity:	Biannually

23.4 It is recommended that all new, repair, expansion, or modification permits issued after January 1, 2002 for installation of a Treatment Level 1 (now A) or Treatment Level 2 (now B) system that utilize additional treatment (disinfection) to meet pathogen reduction attenuation should sample for BOD5, TSS and fecal coliform bacteria quarterly thereafter. Sample results should not exceed 200 organisms/100 ml for Treatment Level 1 (A) systems, and 800 organisms/100 ml for Treatment Level 2 (B) systems. If fecal coliform concentrations exceed these limits, monthly sampling should continue until two consecutive readings do not exceed these limits.

23.5 All Treatment Level A and B systems (and/or products or technologies requiring ongoing service contracts as part of their standards of use as noted in Section 6) require continuing Operation and Maintenance contracts with a qualified third party for the life of the OSS.

23.6 At the time of, or prior to, property transfer, the owner of record (seller) shall have his/her septic tank pumped by a licensed septic tank pumper prior to recording a document transferring real property ownership. This requirement shall not pertain to the following real property transfers: transfers between spouses; transfers resulting from marriage dissolution; transfers due to rescission of sale; transfers solely for the purpose of

clearing title; transfers conveying an easement; transfers creating a joint tenancy or a tenancy in common; transfers in lieu of foreclosure; transfers resulting from a warranty fulfillment deed; transfers involving trustee deed or estate/probate deeds; and transfers involving deeds similar in kind and intent. The requirement for septic tank pumping shall be waived if the owner of record submits a pumper inspection report demonstrating that a licensed septic tank pumper has pumped the septic tank within the previous twenty-four months.

23.7 At the time of, or prior to, property transfer, the owner of record (seller) shall provide to the buyer, OSS maintenance records (if available), and a completed OSS inspection report prepared by a County licensed Operation and Maintenance (O&M) Specialist. These O&M maintenance records and inspection reports are in addition to the completed seller disclosure statement completed in accordance with chapter 64.06 RCW for residential real property transfers.

23.8 All septic tanks, holding tanks, pump chambers and SASS required to be inspected or monitored as required in Subsection 23.4, 23.5, 23.6 or 23.7 shall be inspected for the following:

23.8.1 Sludge and scum accumulation;

23.8.2 Signs of leaking in the tank or riser;

23.8.3 Riser and lid condition;

23.8.4 Actual pump run time per cycle and draw down as compared to design specifications;

23.8.5 Infiltration, structural problems, and improper liquid levels;

23.8.6 Pump or siphon malfunctions that may include problems related to dosing volumes, pressurization, breakdown, clogging, burnout, or cycling;

23.8.7 Electrical equipment failures pertaining to timers, counters, control boxes, pump switches, floats, alarms, junction boxes, and other electrical equipment for proper operation;

23.8.8 Mechanical equipment condition pertaining to valves and other mechanical or plumbing components;

23.8.9 Material fatigue and/or failure, corrosion problems, or the use of improper materials;

23.8.10 Negligent or improper use such as loading beyond the design flow, poor maintenance, or excessive biological growth;

23.8.11 Overflow or backup problems;

23.8.12 Alarm functions at high and low liquid levels;

23.8.13 Float function;

23.8.14 Effluent filter flow to check for clogging or other disruption;

23.8.15 Surface water ponding on top of the subsurface soil absorption system;

23.8.16 Vehicular or livestock traffic traversing over the subsurface soil absorption system;

23.8.17 Vegetation or landscaping impacts, impervious surfaces, and surface water impounds that may negatively effect the OSS;

23.8.18 Excess accumulation of liquid (ponding) or seeping;

23.8.19 Condition of the distribution box including, but not limited to, the levelness of the inverts of the outlets and the uniformity of outlet flow; and

23.8.20 Confirmation that drainfield laterals receive equal flow, and that residual pressure at the distal ends of laterals is the same as that recorded on the as-built drawing.

23.9 The Health Officer shall keep on file copies of every inspection.

23.10. A report of monitoring activities required by Subsection 23.7 of this Ordinance, or any amendments thereto, shall be submitted to the Health Officer no more than thirty (30) days after the assessment of the system is completed.

23.11 If an OSS Maintenance Specialist discovers that a system condition meets the definition of failure as specified within Section 25 of the Ordinance, then he or she shall report this information in writing to the Health Officer.

23.12 Any metal tank discovered by an OSS Maintenance Specialist during an inspection required by this Ordinance shall be replaced with an approved septic tank prior to recording of any document transferring real property ownership.

23.13 If an OSS Maintenance Specialist identifies a system that does not meet the definition of failure, but he/she believes may constitute a Sub-Optimal System, he or she must disclose such information in writing to the Health Officer and to the prospective system purchaser. The Health Officer shall make the final determination as to whether a system constitutes a failure or sub-optimal system as defined by this Ordinance. The OSS Maintenance Specialist may provide recommendations to the prospective system transferee that the

OSS Maintenance Specialist believes would help to prolong the operating life of the OSS.

23.14 Failure to comply with requirements of Subsection 23.7 of this Ordinance shall result in the following:

23.14.1 The denial of developmental permits for the property in question until an OSS operation and maintenance inspection is conducted and the results are submitted to the Health Officer;

23.14.2 The recording of a notice in the real property records of the Pacific County Auditor indicating that compliance with this Ordinance has not occurred; and

23.14.3 Other actions as allowed by this Ordinance or any amendments thereto.

23.15 Persons shall not:

23.15.1 Use or introduce strong bases, acids or chlorinated organic solvents into an OSS for the purpose of system cleaning;

23.15.2 Use a sewage system additive unless it is specifically approved by the Department of Health; or

23.15.3 Use an OSS to dispose of waste components atypical of sewage from a residential source.

SECTION 24 – OPERATION, MONITORING, AND MAINTENANCE (NON RESIDENTIAL ESTABLISHMENTS)

24.1 All owners of record with non-residential uses/establishments utilizing an OSS are responsible for operating, monitoring, and maintaining the OSS to minimize the risk of failure, and to accomplish this purpose, shall:

24.1.1 Obtain approval from the Health Officer before repairing, altering or expanding an OSS. Obtain and renew operation permits if required by the Health Officer;

24.1.2 Secure and renew contracts for periodic maintenance where required by the Health Officer;

24.1.3 Perform a complete evaluation of the system components and/or property to determine functionality, maintenance needs and compliance with regulations and any permits on an annual basis, or more frequently if specified by the Health Officer;

24.1.4 Employ a licensed pumper to remove the septage from the tank when the level of solids and scum indicates that removal is necessary;

24.1.5 Provide maintenance and needed repairs to promptly return the system to a proper operating condition;

24.1.6 Protect the OSS area and the reserve area from:

24.1.6.1 Cover by structures or impervious material such as pavement;

24.1.6.2 Surface drainage and direct drains, such as footing or roof drains;

24.1.6.3 Soil compaction, for example by vehicular traffic; and

24.1.6.4 Damage by soil removal and grade alteration.

24.1.7 Keep the flow of sewage to the OSS at or below the approved operating capacity and sewage quality; and

24.1.7 Operate and maintain systems as directed by the Health Officer, and request assistance from the Health Officer upon occurrence of a system failure or suspected system failure.

24.2 All new, repair, expanded or modified OSS serving restaurants and/or commercial establishments shall have the effluent entering the SSAS sampled for Biological Oxygen Demand (BOD5), Total Suspended Solids (TSS), and Fats, Oils and Grease (FOG) within the first six months of operation, and annually thereafter. If sample results indicate that the effluent exceeds residential waste strength, it is recommended that the system owner contract with the system designer to pursue system modifications to reduce waste strength to fall within residential waste strength limits;

SECTION 25 - FAILING SYSTEMS

25.1 An on-site sewage system failure occurs when:

25.1.1 Sewage and/or sewage effluent is present upon the surface of the ground;

25.1.2 Sewage and/or sewage effluent is discharging to surface water directly or by means of a ditch or depression;

25.1.3 Sewage is backing up into a residence or business;

25.1.4 Sewage is leaking from a septic tank, pump chamber, holding tank, or collection system; and/or

25.1.5 Effluent is directly or indirectly reaching groundwater and that effluent does not meet Treatment Level B (or Treatment Level A, if applicable).

25.2 An on-site sewage system failure also includes:

25.2.1 The construction and/or use of an outhouse;

25.2.2 The construction and/or use of a cesspool;

25.2.3 The use of a metal septic tank that leaks or is in disrepair;

25.2.4 The use of a wood septic tank;

25.2.5 The use of a SSAS, with no record of approval, that is located within fifty (50) feet of surface water or individual or public water supply; and

25.2.6 Noncompliance with standards stipulated on a permit.

25.3 No person shall knowingly cause, permit, or allow an OSS failure to occur.

SECTION 26 – REPAIR OF FAILURES

26.1 When an OSS failure occurs that cannot be readily rectified by a procedure not requiring a permit, or an owner of record intends to use an abandoned system, the OSS owner shall, in order of priority:

26.1.1 Connect the residence or facility to a:

26.1.1.1 Public sewer;

26.1.1.2 Publicly owned LOSS; or

26.1.1.3 Privately owned LOSS where it is deemed economically feasible by the Health Officer;

26.1.2 Repair or replace the OSS with a conforming system, either on the property served, or on nearby or adjacent property if the necessary easement(s) is/are obtained.

26.1.3 Repair or replace the OSS with a Table VI repair, either on the property served, or on nearby or adjacent property if the necessary easement(s) is/are obtained;

26.1.4 Perform one of the following when requirements in Subsections 26.1.1, 26.1.2, or 26.1.3 are not feasible:

26.1.4.1 Use a holding tank, conforming with Section 19;

26.1.4.2 Obtain a National Pollution Discharge Elimination System or State discharge permit from the Washington State Department of Ecology issued to a public entity or jointly to a public entity and the system owner only when the Health Officer determines:

26.1.4.2.1 An OSS is not feasible; and

26.1.4.2.2 The only realistic method of final disposal of treated effluent is discharge to the surface of the land or into surface water; or

26.1.4.3 Abandon the property.

26.2 Prior to repairing the soil dispersal component, the OSS owner shall develop and submit information required under Section 9 and obtain a permit from the Health Officer.

26.3 The Health Officer shall permit a Table VI repair only when:

26.3.1 Installation of a conforming system is not possible; and

26.3.2 Connection to either an approved LOSS or a public sewer is not feasible.

26.4 The person responsible for the design shall locate and design repairs to:

26.4.1 Meet the requirements of Table VI if the effluent treatment and soil dispersal component to be repaired or replaced is closer to any surface water, well, or spring than prescribed by the minimum separation required in Table I. Pressure distribution with timed dosing in the soil dispersal component is required in all cases where a conforming system is not feasible:

TABLE VI
Treatment Component Performance Levels for Repair of OSS Not Meeting Vertical and Horizontal Separations[1]

Vertical Separation (in inches)	Horizontal Separation[2]											
	< 25 feet			25 < 50 feet			50 < 100 feet[3]			≥100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type		
	1	2	3-6	1	2	3-6	1	2	3-6	1	2	3-6
< 12	A	A	A	A	A	A	A	A	B	B	B	B
≥ 12 < 18	A	A	A	A	B	B	A	B	B			

≥ 18 < 24	A	A	A	A	B	B	A	B	C	Conforming
≥ 24 < 36	A	B	B	B	C	C	B	C	C	Systems
≥ 36	A	B	B	B	C	C	B	C	E	

[1]The treatment component performance levels correspond with those established for treatment components under the product performance testing requirements in Table III.

[2] The horizontal separation indicated in Table VI is the distance between the soil dispersal component and the surface water, well, or spring. If the soil dispersal component is up-gradient of a surface water, well, or spring to be used as a potable water source, or beach where shellfish are harvested, the next higher treatment level shall apply unless treatment level A is already required.

[3]On a site containing a horizontal setback of 75 - 100 feet between an OSS dispersal component and an individual water well, individual spring, nonmarine surface water or surface water that is not a public water source and a vertical separation of greater than twelve inches, a conforming system that complies with Subsection 10.4 shall be installed if feasible.

26.4.2 Protect drinking water sources and shellfish harvesting areas;

26.4.3 Minimize nitrogen discharge in areas where nitrogen has been identified as a contaminant of concern;

26.4.4 Prevent the direct discharge of sewage to ground water, surface water, or upon the surface of the ground;

26.4.5 Meet the horizontal separations under Subsection 10.1 to public drinking water sources;

26.4.6 Meet other requirements of this chapter to the maximum extent permitted by the site; and

26.4.7 Maximize the vertical separation, distances from wells, springs or suction lines, and distances to surface water.

26.5 Prior to designing the repair system, the designer shall consider the contributing factors of the failure to enable the repair to address identified causes.

26.6 If the vertical separation is less than twelve (12) inches, the Health Officer may permit ASTM C-33 sand or coarser to be used as fill to prevent direct discharge of treated effluent to ground water, surface water, or upon the surface of the ground.

26.7 For a repair using the requirements of Table VI, disinfection may not be used to achieve the fecal coliform requirements to meet:

26.7.1 Treatment levels A or B where there is less than eighteen inches of vertical separation;

26.7.2 Treatment levels A or B in type 1 soils; or

26.7.3 Treatment level C.

26.8 Replacement of a septic tank shall be permitted without requiring the repair or replacement of the associated on-site septic system treatment and/or disposal component(s) so long as all of the following conditions are met at the time that the septic tank replacement is permitted:

26.8.1 The existing soil dispersal component (drainfield) contains a minimum of 90 square feet of trench or bed bottom area per bedroom (i.e., thirty lineal feet of three foot wide trench) for residential structures, or achieves the equivalent soil application rate for commercial structures; and

26.8.2 The existing soil dispersal component (drainfield) consists of beds or trenches composed of gravel-less chambers, or drain rock and perforated distribution pipe (no seepage pits, cesspools, oystershell or other un-approved filter materials present); and

26.8.3 The parcel is served by an approved public water system, or the private water system source (well point or spring) is located more than 100 feet measured horizontally from the edge of any disposal component; and

26.8.4 The site in not located within a Frequently Flooded Area as designated by the Pacific County Flood Control Zone District No. 1; and

26.8.5 The disposal component(s) do not meet the definition of failure specified within subsection 3.32.

26.9 The Health Officer may permit the replacement of a septic tank without repair or replacement of the associated seasonally saturated treatment and/or disposal component(s) if the use (occupancy) of the structure is limited to the dry season during which saturation does not occur, and only after acknowledgement and restriction of such use is attached to the parcel via an instrument recorded with the Pacific County Auditor.

26.10 Repairs to septic tanks and treatment and/or disposal components to correct for minor physical damage are allowable without requiring replacement of the entire septic tank, treatment and/or disposal component(s), with prior approval of the Health Officer.

26.11 The Health Officer shall identify repair permits meeting the requirements of Table VI for the purpose of tracking future performance.

26.12 An owner of record who receives a Table VI repair permit from the Health Officer shall immediately report any failures to the Health Officer and comply with all local and state requirements stipulated on the permit.

26.13 Repair permits shall be valid for a period of six (6) months from the date of issuance and shall be transferable. Repair permits may be renewed for an additional six (6) months if the Health Officer determines that a health hazard does not exist.

SECTION 27 – EXPANSIONS

27.1 An expansion of a residence or other facility not served by a public sewer system shall not occur unless the on-site sewage system (OSS) and the reserve area fully comply with the new system construction standards specified in this Ordinance.

SECTION 28 – ABANDONMENT

28.1 Any OSS or LOSS no longer in use, seepage pit, or cesspool shall be abandoned by:

28.1.1 Having the septage removed by an approved pumper;

28.1.2 Removing or destroying the lid;

28.1.3 Removing and disposing of any metal or wood septic tanks; and

28.1.4 Filling the void with soil.

SECTION 29 - COMMERCIAL AND SITE INSTALLER'S LICENSE

29.1 It shall be unlawful for any person to engage in the business of installing, modifying, and/or repairing on-site sewage systems in Pacific County unless that person possesses a valid commercial or site installer's license. Application for such license shall be made to the Health Officer. Such license may be denied by the Health Officer, if the applicant is not qualified to install and/or repair on-site sewage systems in accordance with this Ordinance.

29.2 A commercial installer's license or site installer's license shall be issued to applicants who obtain a score of eight (80) percent or better on an examination that assesses knowledge of OSS construction principles and soil characteristics and that measures how well an applicant understands local and State regulations governing on-site sewage systems.

29.3 Applicants failing to meet or exceed the eighty (80) percent passing rate on the above-mentioned examination shall be required to wait a minimum of thirty (30) days before retaking the examination. Unsuccessful examinees shall have the right to discuss their examination with the Health Officer.

29.4 A licensed commercial installer may hire a site installer to comply with the requirements of this Ordinance. The licensed commercial installer shall inform the Health Officer of

the site installer's name(s) and of any changes in employment status. Site installers must pass the examination noted in Subsection 29.2.

29.5 A commercial installers license shall vest with the individual passing the examination described in Subsection 29.2 and not with the corporation or firm for whom the individual is employed. This license is non-transferable.

29.6 Prior to the issuance or renewal of a commercial installer's license, the applicant must demonstrate that he/she is in compliance with the requirements of RCW 18.27.010 through RCW 18.27.060. A commercial installer's license may be suspended or revoked by the Health Officer if the licensee violates any of the requirements contained in RCW 18.27.010 through RCW 18.27.060.

29.7 A site installer's license is valid only if the licensed commercial installer for whom the site installer works agrees in writing to be responsible for defending against any claims for defective work that are made against the site installer and for paying any judgment that is rendered against the site installer for defective work. If requested, the parties shall provide the written agreement to the Health Officer.

29.8 A commercial or site installer's license shall expire December 31st of each year. A commercial or site installer's license shall be renewable annually provided that an application, appropriate fees, and documentation of sufficient approved classroom training under Subsection 29.9 are received by the Health Officer prior to December 31st of each year. If a license is renewed for consecutive years, the examination need not be repeated. If a license lapses for non-renewal, an examination shall be required upon reapplication.

29.9 Unless waived by the Health Officer, each commercial installer and site installer shall be required to obtain a minimum of five (5) hours of approved classroom (training) time per calendar year. The subject matter must be directly related to on-site sewage disposal and must be acceptable to the Health Officer. Proof of attendance shall be submitted to the Health Officer not more than sixty (60) days after the attendance of the training session.

29.10 Nothing herein contained shall prohibit the owner of record from personally constructing, installing or repairing an on-site sewage system for his/her own single family residence, provided he/she constructs no more than one system in any one calendar year, and gains prior approval from the Health Officer. An owner of record may not personally install a designed system unless he/she has passed the examination described in Subsection 29.2.

29.11 Any commercial or site installer's license issued pursuant to this Ordinance may be suspended or revoked by the Health Officer for incompetence, negligence, misrepresentation, or failure to comply with this Ordinance on the part of the commercial or site installer.

SECTION 30 - SEPTIC TANK PUMPERS

30.1 It shall be unlawful for any person to clean any septic tank, cesspool or sewage pit, or other means of on-site sewage disposal without first obtaining a septic tank pumper's license from the Health Officer.

30.2 Only those sites receiving written approval by the Health Officer shall be used for dumping of septage.

30.3 An applicant for a septic tank pumper's license must furnish his/her equipment for inspection by the Health Officer at a reasonable time. The equipment must meet the following minimum requirements:

30.3.1 All hoses and pumping equipment must be stored in a cleanable, water-tight enclosed area on the truck. Hoses are exempt from this requirement if water-tight fitting caps are used;

30.3.2 Truck equipment must be designed to adequately control effluent disposal from the truck into manholes or other receiving stations;

30.3.3 All equipment must be in good repair and easily cleanable;

30.3.4 Truck holding tank(s) in general must have a minimum effluent capacity of one thousand (1000) gallons. If no water carried household or commercial sewage is present, a holding tank with a minimum capacity of two hundred seventy five (275) gallons may be used; and

30.3.5 The name of the operating firm and address shall be conspicuously displayed on both sides of the truck in bold letters not less than three (3) inches high for the firm name and not less than two (2) inches high for other information.

30.4 Prior to the issuance or renewal of a septic tank pumper's license, the applicant must demonstrate that he/she has insurance in the amount of at least two thousand dollars ($2,000) for tort and contract claims related to the pumping of septic tanks. This insurance coverage must remain in full force and effect from the date the septic tank pumper's license is issued or renewed until the end of the calendar year.

30.5 A septic tank pumper's license expires on December 31st of each year. This license is renewable if the licensee continues to meet the requirements of this Ordinance.

30.6 Septic tank pumpers shall submit the following minimum information in writing on forms provided by the Health Officer no later than fifteen (15) days after each calendar quarter:

30.6.1 Gallons pumped according to area and site address;

30.6.2 Gallons disposed of at each authorized site; and

30.6.3 Statistics on disposal site maintenance including maintenance problems.

30.7 Any septic tank pumper's license issued pursuant to this Ordinance may be suspended or revoked by the Health Officer for incompetence, negligence, misrepresentation, or failure to comply with the requirements of this Ordinance on the part of the septic tank pumper.

SECTION 31 - OPERATION AND MAINTENANCE (O&M) SPECIALISTS

31.1 It shall be unlawful for any person to engage in the business of inspecting and maintaining an OSS for the purpose of meeting the requirements of OSS monitoring and maintenance required under Subsections 23.2 & 23.3 of this Ordinance unless that person possesses a valid OSS Maintenance Specialist license. Application for such license shall be made to the Health Officer. The Health Officer may deny such license, if the applicant is not qualified to inspect or maintain an OSS in accordance with this Ordinance.

31.2 An OSS Maintenance Specialist license shall be issued to applicants who:

31.2.1. Obtain a score of eighty (80) percent or better on an examination that assesses their knowledge of OSS operation, maintenance, and construction principles as well as the applicants understanding of local and state regulations governing on-site sewage systems; and

31.2.2 Possess a valid OSS designer, installer, or pumper license during the previous two (2) year period or attended operation and maintenance educational classes as required by Subsection 31.7.

31.3 Applicants failing to meet or exceed the eighty (80) percent passing rate on the above-mentioned examination shall be required to wait a minimum of thirty (30) days before retaking the examination. Examinees shall have the right to discuss their examination with the Health Officer.

31.4 An OSS Maintenance Specialist license shall vest with the individual passing the examination described in Subsection 31.2.1 and not with the corporation or firm for whom the individual is employed. This license is non-transferable.

31.5 An OSS Maintenance Specialist license shall expire on December 31st of each year, unless it is renewed. An OSS Maintenance Specialist license shall be renewable annually provided that an application, appropriate fees, and documentation of sufficient approved classroom training under Subsection 31.7 are received by the Health Officer prior to December 31st of each year. If any person who receives an OSS Maintenance Specialist license under Subsection 31.2 has his/her license lapse, an OSS Maintenance Specialist license shall not be issued to that person until that person once again passes the examination described in Subsection 31.2.1.

31.6 Prior to issuance or renewal of an OSS Maintenance Specialist license, the applicant must demonstrate that he/she has liability insurance in the amount of at least one hundred thousand dollars ($100,000) for tort and contract claims related to the maintenance of an OSS. The insurance coverage must remain in full force and effect from the date the OSS Maintenance Specialist license is issued or renewed, until the end of the calendar year.

31.7 Unless waived by the Health Officer, each OSS Maintenance Specialist shall successfully complete the Washington On-Site Sewage Association Basics of Monitoring (Monitor 101) course, or equivalent, prior to expiration of his/her first annual license, in order to obtain his or her license for a subsequent year. Each OSS Maintenance Specialist shall thereafter be required to obtain a minimum of five (5) hours of approved classroom (training) time per calendar year prior to re-licensure with the County. The subject matter must be directly related to on-site sewage disposal and must be acceptable to the Health Officer. Proof of attendance shall be submitted to the Health Officer not more than sixty (60) days after the attendance of the training session.

31.8 A licensed OSS Maintenance Specialist may perform the following duties:

31.8.1 Measure the solid and scum layers to determine the need for pumping;

31.8.2 Visually evaluate the condition of all OSS components to determine if pump controls need to be changed;

31.8.3 Utilize monitoring ports, access ports, septic probes, and other necessary equipment to inspect and report the condition of all OSS components.

31.8.4 Install and repair septic tank and pump chamber access risers;

31.8.5 Replace pumps or float switches in accordance with Washington State Labor and Industry requirements;

31.8.6 Install and replace check valves intended to prevent the backflow of effluent into the pump chamber;

31.8.7 Make adjustments to cycle counters, timers, and other operating meters;

31.8.8 Repair tanks to correct ground water intrusion or leakage problems;

31.8.9 Replace non-perforated pipe between the structure served and the septic tank;

31.8.10 Draw effluent samples entering the drainfield or in the septic tank; and

31.8.11 Any other limited maintenance activities approved by the Health Officer.

31.9 A licensed OSS Maintenance Specialist shall not:

31.9.1 Alter or replace any portion of the subsurface soil absorption system or pretreatment component; or

31.9.1 Alter or repair a proprietary device without the written consent of the manufacturer or patent holder.

31.10 An OSS Maintenance Specialist shall immediately report the failure of an OSS to the Health Officer.

31.11 Any OSS Maintenance Specialist license granted pursuant to this Ordinance may be suspended or revoked by the Health Officer for incompetence, negligence, misrepresentation, or failure to comply with the requirements of this Ordinance.

31.12 Nothing herein contained shall prohibit the owner of record from personally performing the duties of an OSS Maintenance Specialist specified in Subsection 31.7 for his/her own single family residence, provided that he/she successfully completes the requirements of subsection 31.2.1.

SECTION 32 - WATER SUPPLY

32.1 No person shall dig, drive, drill, or otherwise construct a new well for domestic purposes without first obtaining a permit from the Health Officer.

32.2 A site plan drawn to scale is required and shall show the exact location of the proposed well in relation to:

32.2.1 Property boundaries;

32.2.2 Existing and proposed buildings; and

32.2.3 On-site sewage disposal systems on the proposed parcel and adjoining parcels within two hundred (200) feet of the proposed well.

32.3 The owner of record also shall provide the following information prior to permit issuance:

32.3.1 Type of well;

32.3.2 Approximate depth of proposed well; and,

32.3.3 Intended use of the proposed well.

32.4 The Health Officer may accept the site plan as proposed, modify the location, or order a

different type of well depending on the impact of the proposal on the aquifer source.

32.5 A permit may be denied where the distance between the proposed well and any existing on-site sewage system is less than one hundred (100) feet or where the proposed well violates any local, State, or Federal regulations.

32.6 Prior to final approval of a new well, a well log must be submitted to the Health Officer. Furthermore, a water quality analysis that assesses total coliform bacteria and nitrate concentrations shall be completed by a Washington State certified laboratory. Water quality samples shall contain less than one (1) organism per 100 milliliters for total coliform bacteria and ten (10) parts per million for nitrate. If these standards are not met, the well shall not be approved.

32.7 Any well which was constructed prior to the effective date of this Ordinance is exempt from the provisions herein. Further, no individual water supply permit shall be denied for any parcel, if a residence in present and continuous use existed on that parcel prior to the effective date of this Ordinance, and no community water system is available.

SECTION 33 - SAVINGS AND SEVERABILITY

33.1 If any provision, or any portion thereof, contained in this Ordinance is held to be unconstitutional, invalid, or unenforceable, said provisions, or portion(s) thereof, shall be deemed severed and the remainder of this Ordinance shall not be affected and shall remain in full force and effect.

SECTION 34 - ADMINISTRATIVE HEARINGS

34.1 This Section only applies to:

34.1.1 The processing of applications for permits and licenses;

34.1.2 The issuance of permits and licenses;

34.1.3 The suspension of permits and licenses;

34.1.4 The revocation of permits and licenses; and

34.1.5 The issuance of stop work orders.

34.2 Notwithstanding Subsection 34.1, any action which is taken that requires a valid permit and/or license when no such permit and/or license has been issued, or when the permit and/or license has expired, or when the permit and/or license is suspended or revoked, is subject to the sanctions listed in Subsections 35.2 through 35.6. In addition, any violation of a stop work order is subject to the sanctions listed in Subsections 35.2 through 35.6.

34.3 A person aggrieved by any action taken by the Health Officer's designee pertaining to the activities listed in Subsection 34.1 may request an administrative hearing before the Health Officer. Such request shall be filed in writing with the Health Officer within ten (10) working days of the date of the action being challenged. Upon receipt of such request, the Health Officer shall notify the person aggrieved of the time and date of such hearing, which shall be set at a mutually convenient time not less than five (5) working days nor more than fifteen (15) working days from the date the request was received, unless a later date is agreed to by the person aggrieved.

34.4 The administrative hearing delineated in Subsection 34.3 shall be conducted in an informal manner. The Rules of Evidence shall not apply. All relevant evidence is admissible which, in the opinion of the Health Officer, is the best evidence reasonably obtainable, having due regard for its necessity, availability, and trustworthiness. The person aggrieved may be represented by a lawyer.

34.5 The Health Officer shall decide disputed matters based on a preponderance of the evidence. The Health Officer shall determine whether the explanation of the events by the person aggrieved justifies modifying or reversing the initial decision. The decision of the Health Officer to affirm, reverse, or modify the initial decision shall be in writing and shall be issued within thirty (30) days after the close of the hearing. The decision shall be justified with written findings of fact and shall be promptly sent to the person aggrieved.

34.6 If the person who requested the administrative hearing disagrees with the final decision of the Health Officer, he/she may appeal the decision to the Administrative Officer. Any such appeal shall comply with, and be subject to, the requirements listed in Section IV of Pacific County Board of Health Ordinance No. 1, or any amendments thereto. The Administrative Officer's decision represents final County action.

SECTION 35 - VIOLATIONS

35.1 Subsections 35.2 through 35.6 do not apply to actions that are addressed in Section 34. However, any action which is taken that requires a valid permit and/or license when no such permit and/or license has been issued, or when the permit and/or license has expired, or when the permit and/or license is suspended or revoked, is subject to the sanctions listed in Subsections 35.2 through 35.6. In addition, any violation of a stop work order is subject to the sanctions listed in Subsections 35.2 through 35.6.

35.2 A person who violates the provisions of this Ordinance or who fails to comply with any of its requirements shall be subject to the procedures and sanctions as set forth in Pacific County Board of Health Ordinance No. 1 or any amendments thereto.

35.3 In addition to the civil penalty provisions provided in Pacific County Board of Health Ordinance No. 1 or any amendments thereto, any person who violates any of the provisions of this Ordinance is guilty of a misdemeanor, and each day or portion thereof during which a violation is committed, continued, or not permitted shall constitute a

separate offense. The penalty for each violation is a fine of not more than one thousand dollars ($1,000) plus statutory assessments or imprisonment for not more than ninety (90) days, or both. The principles of liability contained in Chapter 9A.08 RCW including, but not limited to, liability for conduct of another, shall apply to the enforcement of this Ordinance as shall all judicial interpretations thereof.

35.4 When a court determines that a person has committed a civil infraction under this Ordinance and Pacific County Board of Health Ordinance No. 1 or any amendments thereto, the Board of Health may collect penalties, assessments, costs, and/or fines by any procedure established for the collection of debts that are owed to the Board of Health.

35.5 Any disposition of a violation pursuant to this Ordinance and Pacific County Board of Health Ordinance No. 1 or any amendments thereto shall not absolve a person from correcting or abating a violation and shall not prevent the prosecuting authority from pursuing criminal prosecution, other civil action including, but not limited to, injunctive relief, license revocation, and abatement, or all of the above. If the Board of Health prevails in a separate civil action, the Court may award the Board of Health reasonable costs including, but not limited to, the costs of the responsible officials' time, witness fees, attorney fees, court costs, and the costs to the Board of Health of abatement or of enforcement of an injunction, or both.

35.6 Any or all of the remedies articulated in Subsections 35.2, 35.3 and 35.5 may be used by the Board of Health to enforce this Ordinance.

35.7 Nothing contained in this Ordinance shall prevent the Board of Health, by and through the prosecuting authority, from taking such other lawful action as is necessary to prevent or remedy any violation of this Ordinance.

SECTION 36 - WAIVER OF REGULATIONS

36.1 For individual, site-by-site waiver requests, the Health Officer may grant a waiver from specific requirements in this Ordinance for OSS if:

36.1.1 The applicant submits a waiver application to the Health Officer which justifies how the requested waiver is consistent with the purpose of this Ordinance; and

36.1.2 The Health Officer determines that the waiver is consistent with the purpose of this Ordinance.

36.2 A person aggrieved by a decision of the Health Officer pertaining to a waiver request may appeal the decision to the Administrative Officer. The Administrative Officer shall process waiver applications according to the procedural rules delineated in Subsection IV.B.1 of Pacific County Board of Health Ordinance No. 1. The Administrative Officer’s decision on a waiver application may be appealed to Superior Court according to the requirements of Section IV of the Pacific County Board of Health Ordinance No. 1.

36.3 On a quarterly basis, the Health Officer shall forward to the DOH any approved or denied waivers for its records.

36.4 If an applicant desires to modify and resubmit a previously denied waiver request, the process described in Subsection 36.1 shall be followed again.

SECTION 37 - EFFECTIVE DATE

37.1 If the DOH explicitly approves this Ordinance during its ninety (90) day review period under WAC 246-272A-0015, this Ordinance shall take effect five (5) days after the date on which the DOH's approval is published in the official legal newspaper for Pacific County.

37.2 If the DOH tacitly approves this Ordinance by failing to act during its ninety (90) day review period under WAC 246-272A-0015, this Ordinance shall take effect five (5) days after the date on which the DOH tacit approval is published in the official legal newspaper for Pacific County.

37.3 If the DOH disapproves this Ordinance during its ninety (90) day review period under WAC 246-272A-0015, this Ordinance shall not take effect.

SECTION 38 - REPEAL OF PACIFIC COUNTY BOARD OF HEALTH ORDINANCE NO. 3, 3A, 3B, 3C & 3D.

38.1 Pacific County Board of Health Ordinance No. 3, 3A, 3B, 3C & 3D are hereby repealed as of the effective date of this Ordinance.

(Signature Block on Next Page)

PASSED BY THE PACIFIC COUNTY BOARD OF HEALTH, meeting in regular session at South Bend, Washington, by the following vote, then signed by its membership and attested to by its Clerk in authorization of such passage the 9th day of November, 2007.

____3__AYE; __0____ NAY; ___0___ ABSTAIN; ____0____ ABSENT

BOARD OF HEALTH
PACIFIC COUNTY, WASHINGTON

_____/s/_____
Jon Kaino, Chair

_____/s/_____
Norman "Bud" Cuffel, Member

_____/s/_____
Clay Harwood, Member

ATTEST:

_____/s/_____
Kathy Noren
Clerk of the Board of Health

APPROVED AS TO FORM:

_____/s/_____
David Burke, County Prosecutor