SOUTHWEST WASHINGTON HEALTH DISTRICT

ENVIRONMENTAL HEALTH DIVISION

ON-SITE SEWAGE TREATMENT

RULES, POLICIES & PROCEDURES

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Chapter 246-272 WAC ON-SITE SEWAGE SYSTEMS

with
SOUTHWEST WASHINGTON HEALTH DISTRICT - STANDARDS & DEFINITIONS

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WAC 246-272

ON-SITE SEWAGE SYSTEMS

246-272-00101 Purpose, Objectives, and Authority.

(1) The purpose of this chapter is to protect the public health by minimizing:

(a) The potential for public exposure to sewage from on-site sewage systems; and

(b) Adverse effects to public health that discharges from on-site sewage systems may have on ground and surface waters.

(2) This chapter regulates the location, design, installation, operation, maintenance, and monitoring of on-site sewage systems to:

(a) Achieve long-term sewage treatment and effluent disposal; and

(b) Limit the discharge of contaminants to waters of the state.

(3) This chapter is adopted by the State Board of Health in accordance with the authority granted in RCW 43.20.050 to establish minimum requirements for the department of health, and local boards of health whether or not they choose to adopt local regulations.

246-272-00501 Administration.

The local health officers and the department shall administer this chapter under the authority and requirements of chapters 70.05, 70.08, 70.46, and 43.70 RCW. Under chapter 70.05.060(7) RCW, fees may be charged for this administration.

THIS DOCUMENT IS INTENDED TO PROVIDE CLARIFYING LANGUAGE FOR THE REQUIRED IMPLEMENTATION OF WAC 246-272 ON-SITE SEWAGE SYSTEMS. APPROVED ON-SITE SEWAGE AND LAND USE POLICIES & PROCEDURES APPLICABLE WITHIN THE DISTRICT'S COUNTIES OF CLARK, SKAMANIA ARE DISTINGUISHED BY SOLID-LINED BOXES. (Appendices

may be modified the Environmental Health Director in so far as they are consistent with these policies.)

SWWHD: Required fees are established and published annually by the Southwest Washington District Board of Health.

246-272-01001 Definitions.

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

"Alternative system" means an on-site sewage system other than a conventional gravity system or conventional pressure distribution system. Properly operated and maintained alternative systems provide equivalent or enhanced treatment performance as compared to conventional gravity systems.

SWWHD: All pressure distribution systems are considered to be "alternative systems" for the purpose of plan review, maintenance requirements and fee administration.

"Approved" means a written statement of acceptability, in terms of the requirements in this chapter, issued by the local health officer or the department.

"Approved list" means "List of Approved Systems and Products", developed annually and maintained by the department and containing the following:

(a) List of proprietary devices approved by the department;

(b) List of specific systems meeting treatment standard 1 and treatment standard 2;

(c) List of experimental systems approved by the department;

(d) List of septic tanks, pump chambers, and holding tanks approved by the department.

"Area of special concern" means an area of definite boundaries delineated through public process, where a local health officer, or the department in consultation with the health officer, determines additional requirements for on-site sewage systems may be necessary to reduce potential failures, or minimize negative impact of on-site systems upon public health.

SWWHD: "Areas of special concern" have been adopted by and delineated within SWWHD resolution 92-01, and as amended.

BENEFICIAL OWNER - Shall mean an individual or entity occupying the property in question and having partial or total ownership of said property.

BEST MANAGEMENT PRACTICES (BMPs) - means written or customarily accepted means of site evaluation, design, installation, operation, maintenance and repair utilizing all known and reasonable technology (AKART).

BOARD OF HEALTH - means the Board of the Southwest Washington Health District.

"Cesspool" means a pit receiving untreated sewage and allowing the liquid to seep into the surrounding soil or rock.

CESSPOOL - means a pit receiving untreated sewage and allowing the liquid to seep into the surrounding soil rock or other materials. Cesspools do not adequately treat sewage and are therefore considered to be "Failing". Cesspools, as distinguished from Dry-Wells, are not preceded by a septic tank.

"Conforming system" means any on-site sewage system, except an experimental system, meeting any of the following criteria:

(a) Systems in full compliance with new construction requirements under this chapter; or

(b) Systems approved, installed and operating in accordance with requirements of previous editions of this chapter; or

(c) Systems or repairs permitted through departmental concurrence by the waiver process which assure public health protection by higher treatment performance or other methods.

"Conventional 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.

"Conventional pressure distribution system" means an on-site sewage system consisting of a septic tank and a subsurface soil absorption system with pressure distribution of the effluent. Design, operation and maintenance, and performance monitoring are described by "Guidelines for Pressure Distribution Systems" by the Washington state department of health.

"Covenant" means a recorded agreement stating certain activities and/or practices are required or prohibited.

"Cuts and/or banks" means any naturally occurring or artificially formed slope greater than one hundred percent (forty-five degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows: [OMITTED]

"Designer" means a person who matches site and soil characteristics with appropriate on-site sewage technology.

"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.

"Department" means the Washington state department of health.

"Disposal component" means a subsurface absorption system

(SSAS) or other soil absorption system receiving septic tank or other pretreatment device effluent and transmitting it into original, undisturbed soil.

DRY-WELL - means a pit following a septic tank, whereby the effluent from a septic tank is allowed to infiltrate into the ground. Such systems are common in older construction, but no longer allowed for new construction, and if allowed for repairs will generally require pretreatment.

EDUCATION - means formal courses and seminars approved by or acceptable to the health district and includes continuing education, conducted after initial licensing or employment.

"Effluent" means liquid discharged from a septic tank or other on-site sewage system component.

"Engineer" means a person who is licensed and in good standing under chapter 18.43 RCW.

"Expansion" means a change in a residence, facility, site, or use that:

(a) Causes an on-site sewage system to exceed its existing treatment or disposal capability, for example, when a residence is increased from two to three bedrooms or a change in use from an office to a restaurant; or

(b) Reduces the treatment or disposal capability of the existing on-site sewage system or the reserve area, for example, when a building is placed over a reserve area.

"Experimental system" means any alternative system:

(a) Without design guidelines developed by the department; or

(b) A proprietary device or method which has not yet been evaluated and approved by the department.

"Failure" means a condition of an on-site sewage system that threatens the public health by inadequately treating

sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include:

(a) Sewage on the surface of the ground;

(b) Sewage backing up into a structure caused by slow soil absorption of septic tank effluent;

(c) Sewage leaking from a septic tank, pump chamber, holding tank, or collection system;

(d) Cesspools or seepage pits where evidence of ground water or surface water quality degradation exists; or

(e) Inadequately treated effluent contaminating ground water or surface water.

(f) Noncompliance with standards stipulated on the permit.

GROSS LAND AREA - means a lot area which is bounded by the centerline of adjoining road or street right-of-ways within the boundaries of the proposed development.

"Ground water" means a subsurface water occupying the zone of saturated soil, permanently, seasonally, or as the result of the tides. Indications of ground water may include:

(a) Water seeping into or standing in an open excavation from the soil surrounding the excavation.

(b) Spots or blotches of different color or shades of color interspersed with a dominant color in soil, commonly referred to as mottling. Mottling is a historic indication for the presence of groundwater caused by intermittent periods of saturation and drying, and may be indicative of poor aeration and impeded drainage. Also see "Water table".

HEALTH OFFICER - is the Southwest Washington District Health Officer or an authorized representative acting under the supervision of the Health Officer and Director of Environmental Health.

HIGH WATER (WINTER) EVALUATION - means one or more site

evaluations conducted during the wet season to determine characteristics of soil saturation and/or setbacks to surface water. Although normally conducted during the winter and spring, local conditions may require evaluation during other periods of high ground or surface water conditions.

"Holding tank sewage system" means an on-site sewage system which incorporates a holding tank, the services of a sewage pumper/hauler, and the off-site treatment and disposal for the sewage generated.

HORIZONTAL SEPARATION - means the horizontal distance from any component of an on-site sewage system to an item of concern including, but not limited to: structure, water line, well, lake, stream or spring.

"Industrial wastewater" means the water or liquid carried waste from an industrial process. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. The term includes contaminated storm water and leachate from solid waste facilities.

"Installer" means a qualified person approved by a local health officer to install or repair on-site sewage systems or components.

"Large on-site sewage system (LOSS)" means any on-site sewage system with design flows, at any common point, greater than 3,500 gallons per day.

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

MAINTENANCE - means the complete inspection of an on-site sewage system, measuring of septic tank contents, pumping as needed and corrective action in accordance with SWWHD

Regulation 92-01 and as amended.

"May" means discretionary, permissive, or allowed.

NET LAND AREA - means the area of a parcel of land enclosed within the designated boundaries of that property, and may exclude areas where the site is unusable or protected from development, such as wetlands, easements and wellhead protection areas. Determination of "net land area" will depend on the specific requirement under consideration, and may be different on the same lot for different purposes.

"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:

(a) Convey, store, treat, and/or provide subsurface soil treatment and disposal on the property where it originates, upon adjacent or nearby property; and

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

"Ordinary high-water mark" means the mark on lakes, streams, and tidal waters, 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 with respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter. The following definitions apply where the ordinary high water mark cannot be found:

(a) The ordinary high-water mark adjoining marine water is the elevation at mean higher high tide; and

(b) The ordinary high-water mark adjoining freshwater is the line of mean high water.

"Person" means any individual, corporation, company, association, society, firm, partnership, joint stock company, or any governmental agency, or the authorized agents of any such entities.

"Planned unit development" means a development characterized by a unified site design, clustered residential units and/or commercial units, and areas of common open space.

"Pressure distribution" means a system of small diameter pipes equally distributing effluent throughout a trench or bed, as described in the "Guidelines for Pressure Distribution Systems" by the department. Also see "conventional pressure distribution."

"Proprietary device or method" means a device or method classified as an alternative system, or a component thereof, held under a patent, trademark or copyright.

"Public sewer system" means a sewerage system:

(a) Owned or operated by a city, town, municipal corporation, county, or other approved ownership consisting of a collection system and necessary trunks, pumping facilities and a means of final treatment and disposal; and

(b) Approved by or under permit from the department of ecology, the department of health and/or a local health officer.

"Pumper" Means a person approved by the local health officer to remove and transport wastewater or septage from on-site sewage systems.

"Repair" means restoration, by reconstruction or relocation, or replacement of a failed on-site sewage system.

REGISTERED SANITARIAN - is a person who is currently registered with the Washington State Board of Registered Sanitarians, Oregon Sanitarians Registration Board, National Environmental Health Association or equivalent as determined by the Program Supervisor or Director. The term Registered Environmental Health Specialist is considered equivalent.

"Reserve area" means an area of land approved for the installation of a conforming system and dedicated for replacement of the OSS upon its failure.

RESIDENT OWNER - means the owner who is or will soon be the occupant of the single-family dwelling where the proposed or existing sewage treatment system is or will be located.

"Residential sewage" means sewage having the constituency and strength typical of wastewater from domestic households.

"Restrictive layer" means a stratum impeding the vertical movement of water, air, and growth of plant roots, such as hardpan, claypan, fragipan, caliche, some compacted soils, bedrock and unstructured clay soils.

"Seepage pit" means an excavation more than three feet deep where the sidewall of the excavation is designed to dispose of septic tank effluent. Seepage pits may also be called "dry wells".

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

"Septic tank" means a watertight pretreatment receptacle receiving the discharge of sewage from a building sewer or sewers, designed and constructed to permit separation of settleable and floating solids from the liquid, detention and anaerobic digestion of the organic matter, prior to discharge of the liquid.

SEPTIC TANK EFFLUENT PUMP SYSTEMS (STEP) - are sewage systems where each building is provided with a water tight septic tank and pump chamber which pumps the septic tank effluent into a

pressurized main sewer line for transmission to a disposal facility at a location off-site of the building(s) served.

"Sewage" means any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places. For the purposes of these regulations, "sewage" is generally synonymous with domestic wastewater. Also see "residential sewage."

"Shall" means mandatory.

SIGNIFICANT PERIODS OF THE YEAR - when applied to surface water determinations, means evidence of or observed presence for greater than 7 consecutive days between 1 April and 31 October or for 30 consecutive days at any time of year.

"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.

SOIL SCIENTIST - means a person registered with the American Registry of Certified Professionals in Agronomy, Crops and Soils (ARCPACS), or with the National Society of Professional Consulting Soil Scientists (NSPCSS).

"Soil type" means a numerical classification of fine earth particles and coarse fragments as described in 246-272-11001(2)(e).

"Subdivision" means a division of land or creation of lots or parcels, described under chapter 58.17 RCW, now or as hereafter amended, including both long and short subdivisions, planned unit developments, and mobile home parks.

"SSAS" or "subsurface soil absorption system" means a system of trenches three feet or less in width, or beds between three and ten feet in width, containing distribution pipe within a layer of clean gravel designed and installed in

original, undisturbed soil for the purpose of receiving effluent and transmitting it into the soil.

"Surface water" means any body of water, whether fresh or marine, flowing or contained in natural or artificial unlined depressions for significant periods of the year, including natural and artificial lakes, ponds, springs, rivers, streams, swamps, marshes, and tidal waters.

"Table VI Repair" means a repair or replacement of an existing on-site sewage system which, because of site limitations, must utilize treatment standards shown in Table VI in lieu of compliance with new construction requirements for vertical separation and/or horizontal set back from surface waters or drinking water wells or springs.

TIPPING FEE - is a charge for each gallon of septage pumped or hauled within the Southwest Washington Health District, including septage originating outside of the district, and is set by the District Board of Health to cover program costs.

"Treatment standard 1" means a thirty-day average of less than 10 milligrams per liter of biochemical oxygen demand (5 day BOD_5), 10 milligrams per liter of total suspended solids (TSS), and a thirty-day geometric mean of less than 200 fecal coliform per 100 milliliters.

"Treatment standard 2" means a thirty-day average of less than 10 milligrams per liter of biochemical oxygen demand (5 day BOD_5), 10 milligrams per liter of total suspended solids (TSS), and a thirty-day geometric mean of less than 800 fecal coliform per 100 milliliters.

"Unit volume of sewage" means:

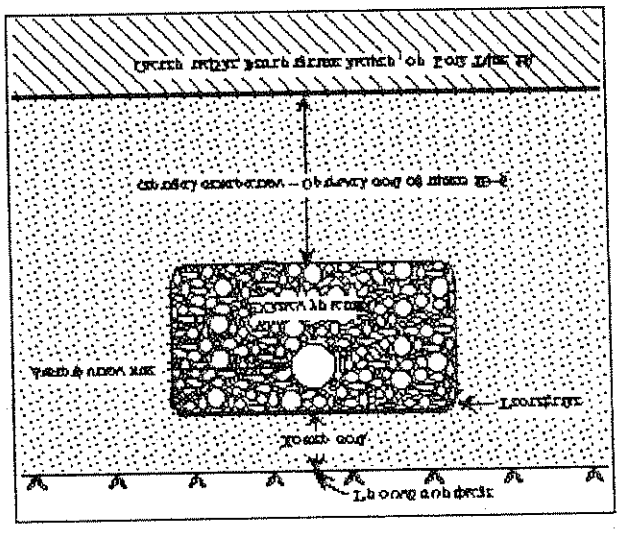
(a) A single family residence;

(b) A mobile home site in a mobile home park; or

(c) 450 gallons of sewage per day where the proposed development is not single family residences or a mobile home park.

"Vertical separation" means the depth of unsaturated, original, undisturbed soil of soil types 1B-6 between the bottom of a disposal component and the highest seasonal water table, a restrictive layer, or soil type 1A, as illustrated below by the profile drawing of a subsurface soil absorption system:

(Note: Drawing is not drawn to scale)



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

"Wave barrier" means a bulkhead of adequate height and construction protecting the immediate area of on-site sewage system components from wave action.

WINTER EVALUATION - SEE: "HIGH WATER EVALUATION" above.

246-272-02001 Local regulation.

(1) Local boards of health may adopt and enforce local rules and regulations governing on-site sewage systems when the local regulations are:

(a) Consistent with, and as stringent as, this chapter; and

(b) Approved by the department prior to the effective date of local regulations.

(2) A local board of health may apply for departmental approval of local regulations at any time by initiating the following procedure:

(a) The local board shall submit the proposed local regulations to the department.

(b) Within 90 days of receipt, the department shall:

(i) Approve the regulation; or

(ii) Signify automatic tacit agreement with the local regulations and permitting local implementation by failing to act; or

(iii) Deny approval of the regulations. If the department determines local regulations are not consistent with this chapter, the department shall provide specific reasons for denial.

(3) Upon receipt of departmental approval or after 90 days without notification, whichever comes first, the local board may implement adopted regulations. The local board shall provide a copy of the adopted local regulations to the department.

(4) If the department denies approval of local regulations, the local board of health may:

(a) Resubmit revised regulations for departmental consideration; or

(b) Submit a written request for a review of the departmental denial within 120 days from the date the local board of health receives the written reasons for the denial.

(5) Upon receipt of written request for review of the departmental denial, the department shall:

(a) Acknowledge the receipt of the request in writing; and

(b) Form a mutually acceptable advisory panel consisting of:

(i) One departmental employee;

(ii) One employee from a local health jurisdiction other than that which requested the review; and

(iii) One member of the technical review committee described in WAC 246-272-23501.

(6) If good faith efforts to reach agreement are unsuccessful, the local board of health may appeal the denial to the Washington State Board of Health for resolution.

(7) Nothing in this chapter shall prohibit the adoption and enforcement of more stringent regulations by local health departments where such regulations are needed to protect the public health.

246-272-03001 Applicability.

(1) The local health officer and the department:

(a) Shall apply this chapter to OSS treating wastewater and disposing of effluent from residential sewage sources;

(b) May apply this chapter 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.

(2) Preliminary plats specifying general methods of sewage treatment, disposal, system designs and locations approved prior to the effective date of these regulations shall be acted upon in accordance with regulations in force at the time of preliminary plat approval for a maximum period of

five years from the date of approval or for an additional year beyond the effective date of these regulations, whichever assures the most lenient expiration date.

(3) A valid sewage system design approval, or installation permit issued prior to the effective date of these regulations:

(a) Shall be acted upon in accordance with regulations in force at the time of issuance;

(b) Shall have a maximum validity period of five years from the date of issuance or remain valid for an additional year beyond the effective date of these regulations, whichever assures the most lenient expiration date; and

(c) May be modified to include additional requirements if the health officer determines that a serious threat to public health exists.

(4) The Washington state department of ecology has authority and approval over:

(a) Domestic or industrial wastewater under chapter 173-240 WAC; and

(b) Sewage systems using mechanical treatment, or lagoons, with ultimate design flows above 3,500 gallons per day.

(5) The Washington state department of health has authority and approval over:

(a) Systems with design flows through any common point between 3,500 to 14,500 gallons per day; and

(b) Any Large On-site Sewage System "LOSS" for which jurisdiction has been transferred to the department of health under conditions of memorandum of agreement with the department of ecology.

(6) The local health officer has authority and approval over;

(a) Systems with design flows through any common point up to 3,500 gallons per day;

(b) Any Large On-site Sewage System "LOSS for which jurisdiction has been transferred to a local health jurisdiction from the department by contract.

(7) Where this chapter conflicts with chapters 90.48 RCW, Water Pollution Control, the requirements under those statutes apply.

246-272-04001 Alternative systems and proprietary devices.

(1) The department:

(a) May approve guidelines for alternative systems if they are based upon:

(i) Sufficient theory and/or applied research to warrant guideline development; and

(ii) Sufficient accumulation of performance data to prove treatment standards are met; and

(iii) Review and recommendations by the Technical Review Committee established under WAC 246-272-23501.

(b) May maintain lists of approved methods, proprietary devices, guidelines, and alternative systems.

(c) May charge fees to cover the cost of administering an alternative system program.

(2) The local health officer or department shall only permit installation of alternative systems for which there are alternative system guidelines, or a proprietary device if it appears on the list of approved systems or devices maintained by the department under subsections (1)(a) and (1)(b) of this section.

(3) The local health officer:

(a) May require performance monitoring or sampling of any alternative system.

SWWHD: Regulation 92-01 requires routine maintenance for all alternative systems.

(b) May charge fees to cover the costs for monitoring system performance.

(c) Shall submit copies of evaluation reports to the department when alternative system performance is evaluated.

(d) Shall notify the department of alternative system approvals and failures.

(4) Persons desiring product inclusion on the approved list, or intending to alter an approved device or method, shall submit to the department:

(a) Documentation, data, plans, or other information requested, in an acceptable format for technical evaluation to certify that the product meets all the criteria in the appropriate guidelines.

(b) Required fees.

(5) Persons desiring continued retention on the list of approved systems and products shall submit to the department:

(a) An acceptable annual report which includes any changes in the product and certifies that the device meets appropriate guidelines; and

(b) Required fees.

246-272-05001 Experimental systems.

(1) Persons proposing a system for inclusion on the departmental approved list of experimental systems shall submit to the department for review and approval, a written proposal which includes:

(a) Description of existing theory and/or applied research supporting the application;

(b) Proposed testing protocol;

(c) Proposed operation, maintenance, and monitoring detail and schedules;

(d) Maximum number of installations;

(e) Proposed locations and uses, if multiple locations are proposed;

(f) Proposed reporting detail and frequency;

(g) Proposed schedule for the experimental program;

(h) Name(s) of the person(s) financially responsible for the experimental program, including:

(i) Routine operation and maintenance;

(ii) Monitoring; and

(iii) Repair and/or replacement of the system.

(i) Verification that the proposal is consistent with the intent of this chapter, requirements of this section, and the departmental application process.

(2) The local health officer:

(a) May permit a limited number of specific experimental systems if:

(i) The specific system is included on the department's approved list of experimental systems under subsection (5)(b) of this section;

(ii) The site will accommodate the installation of a conforming system in the event of failure of the experimental system;

(iii) Local agreements to provide for monitoring, sampling, testing, reporting, maintenance, repairs, and the replacement of the system in accordance with the protocol approved by the department under subsection (1) of this section are completed and signed.

(b) May charge fees to cover the cost of evaluating or monitoring the experimental system.

(3) After the experimental system proposal is approved, the person noted as responsible for an experimental system program on the departmental approved list shall:

(a) Follow the experimental system protocol, procedures, and other related written agreements approved by the department and the local health officer;

(b) Monitor the experimental system and submit records as required to meet department's approval or the local health officer's permit; and

(c) Annually renew each state experimental system permit.

(4) A person desiring to install an experimental system shall:

(a) Obtain a permit from the local health officer;

(b) Submit a written promise to the health officer agreeing to abandon the experimental system and install a conforming system if:

(i) The system fails;

(ii) The performance of the experimental system is unsatisfactory; or

(iii) The applicant fails to adequately monitor the experimental system and submit records as required in the department's approval or the local health officer's permit;

(iv) The system components do not function as indicated by submitted documents;

(v) Performance does not meet the anticipated objectives of the experiment; or

(vi) The state experimental system permit is not renewed annually.

(c) Provide financial guarantees, acceptable to the health officer, and a copy of the recorded covenant required under (b) of this subsection to the local health officer; and

(d) Obtain through the local health officer an annually renewable state experimental system permit.

(5) The department:

(a) Shall obtain recommendations from the technical review committee prior to issuing approval of a proposal;

(b) Shall maintain a list of experimental systems that have been approved by the department, which also indicates each system's current status, application, use, and restrictions;

(c) Shall monitor the performance of the experimental system, including evaluation of any failures;

(d) Shall annually renew the state experimental system permit when:

(i) The requirements under subsections (3)(a) and (3)(b) of this section are satisfied; and

(ii) The performance of the system is satisfactory; and

(f) Shall no longer apply the requirements of this section when the requirements of WAC 246-272-04001 are satisfied.

(6) The department and the local health officer shall not permit an experimental LOSS.

246-272-07001 Connection to public sewer system.

(1) When adequate public sewer services are available within two hundred feet of the residence or facility, the local health officer, upon the failure of an existing on-site sewage system may:

(a) Require hook-up to a public sewer system; or

(b) Permit the repair or replacement of the on-site sewage system only if a conforming system can be designed and installed.

(2) Except as noted in subsection (1) of this section, the owner of a failure shall abandon the OSS under WAC 246-272-18501 and connect the residence or other facility to a public sewer system when:

(a) The distance between the residence or other facility and an adequate public sewer is two hundred feet or less as measured along the usual or most feasible route of access; and

(b) The sewer utility allows the sewer connection.

(3) The owner of a residence or other facility served by a Table VI repair as defined in WAC 246-272-01001 of this chapter shall abandon the OSS according to the requirements specified in WAC 246-272-18501, and connect the residence or other facility to a public sewer system when:

(a) Connection is deemed necessary to protect public health by the local health officer;

(b) An adequate public sewer becomes available within two hundred feet of the residence or other facility as measured along the usual or most economically feasible route of access; and

(c) The sewer utility allows the sewer connection.

(4) Local boards of health may require a new development to connect to a public sewer system to protect public health.

246-272-08001 Large on-site sewage systems (LOSS).

(1) Persons proposing a new LOSS for which the department has jurisdiction by WAC or memorandum of agreement with the department of ecology shall meet the requirements specified in "Design Standards for Large On-site Sewage Systems," 1993, Washington state department of health (Available upon written request to the department).

(2) Persons shall submit the documents and fees specified under subsections (a) through (f) of this subsection and obtain approval from the department before installing a LOSS to serve any facility:
(a) A preliminary report, stamped and signed by an

engineer, including:

(i) A discussion of the proposed project, including the schedule of construction;

(ii) A discussion of compliance with other state and local zoning, platting, health, and building regulations as they relate to sewage treatment and disposal;

(iii) An analysis of the site's capacity to treat and dispose of the proposed quantity and quality of sewage;

(iv) An analysis of the factors identified in WAC 246-272-20501(2)(d)(ii)(A); and

(v) A soil and site evaluation as specified in WAC 246-272-11001 signed by the evaluator;

(vi) A management plan describing the:

(A) Management entity consisting of one of the following:

(I) For residential subdivisions where the lots are individually owned, a public entity serves as the primary management entity, or as the third party trust for a private management entity; or

(II) For other uses, including single ownership, a public entity or a private entity via an appropriate contract or agreement provides management;

(B) Duties of the management entity, including specific tasks and frequency of operation and maintenance;

(C) Controls to ensure the continuity and permanency of proper operation and maintenance;

(D) Methods and frequency of monitoring, record keeping, and reporting to the department;

(E) Rights and responsibilities of management; and

(F) Rights and responsibilities of persons purchasing connections to the LOSS.

(b) Complete plans and specifications of the LOSS:

(i) Showing a conventional pressure distribution system with three feet of vertical separation;

(ii) Meeting all other design criteria within "Design Standards for Large On-site Sewage Systems", 1993, Department of Health. (available upon written request to the department); and

(iii) Stamped and signed by an engineer;

(c) A schedule of inspections to confirm the installation conforms to the plans and specifications;

(d) A draft operation and maintenance manual, describing the LOSS and outlining routine maintenance procedures for proper operation of the system;

(e) Required fees; and

(f) Other information as required by the department.

(3) Persons desiring to repair, modify or expand a facility served, or to be served by a LOSS shall submit all documents and fees specified under subsections (2)(a) through (2)(f) of this section, unless the department waives submission of some elements as unnecessary, and obtain approval from the department.

(4) The department:

(a) Shall not change the terms of a project's construction approval during a two year validity period. However additional terms to protect public health may be

included before granting one year approval permit extensions;

(b) Shall conduct a pre-site inspection; and

(c) May allow the applicant to renew approval under the initial terms for successive one-year periods if:

(i) The LOSS is incomplete two years after the department's approval;

(ii) The applicant requests renewal in writing; and

(iii) The applicant submits required fees.

(5) A qualified installer shall install the LOSS.

(6) The applicant or applicant's agent:

(a) Shall comply with all conditions set forth in the department's construction approval;

(b) May request extensions to the construction approval permit; and

(c) Shall comply with any additional conditions upon construction approval extensions set forth by the department, and pay required fees for renewing the approval.

(7) Before a new LOSS is used:

(a) An engineer shall stamp, sign, and submit a LOSS construction report to the department within sixty days following the completion of construction of the LOSS including:

(i) A completed form stating the LOSS was constructed in accordance with the department's approved plans and specifications; and

(ii) An "as built" or "record" drawing;

(b) The department shall conduct a final inspection; and

(c) The owner shall:

(i) Submit an operation and maintenance manual developed by an engineer for the installed LOSS to the department for review and approval; and

(ii) Obtain a LOSS operating permit from the department by:

(A) Completing and submitting forms to the department; and

(B) Paying required fees.

(8) The owner of a LOSS that has been approved by the department or local health officer or constructed after July 1, 1984, shall:

(a) Obtain a LOSS operating permit from the department; and

(b) Annually renew it.

(9) The owner shall annually renew the LOSS operating permit by:

(a) Continued retention of an approved management entity to operate and maintain the LOSS;

(b) Submitting a report to the department demonstrating the LOSS is operated, maintained, and monitored in accordance with this chapter and the approved operation and maintenance manual; and

(c) Submitting required fees.

(10) The department:

(a) Shall issue a LOSS operating permit to owners of LOSS meeting the requirements of subsections (1) through (7) of this section;

(b) Shall annually renew the LOSS operating permit when the owner has complied with the requirements under subsection (9) of this section;

(c) May revoke the LOSS operating permit when the:

(i) Approved management entity ceases to operate

and maintain the LOSS;

(ii) Owner does not meet other conditions of the LOSS operating permit; or

(iii) LOSS fails;

(d) Shall monitor the performance of LOSS; and

(e) Shall apply the requirements under WAC 246-272-16501 to failing LOSS.

(11) The department may request the assistance of the local health officer to review the site or the design or to inspect the construction of a LOSS.

(12) A local health officer and the department may enter into a contract under which:

(a) The local health officer will assume the department's responsibilities in subsections (2), (4), (6), (7)(a), (7)(b) and (7)(c)(i) of this section to regulate LOSS; and

(b) The local health officer may charge fees to a LOSS applicant or owner for services provided if the authorization for such fees is set forth in local regulations adopted under this chapter.

SWWHD: All Large On-Site Sewage Systems (LOSS) proposed within Southwest Washington Health District shall obtain site, design, permit and maintenance management approval from the Southwest Washington Health District prior to receiving a building permit or installation permit.

246-272-09001 Permits For OSS under 3500 gallons per day.

(1) Prior to beginning the construction process, a person proposing the installation, repair, modification, connection to, or expansion of an OSS, shall develop and submit the following to the local health officer and obtain approval:

(a) General information including:

(i) Name and address of the property owner and the applicant at the head of each page of submission;

(ii) Parcel number and address, if available, of the site;

(iii) Source of drinking water supply;

(iv) Identification if the property is within the boundaries of a recognized sewer utility;

(v) Size of the parcel;

(vi) Type of permit for which application is being made, for example, new installation, repair, expansion, alteration, or operational;

(vii) Source of sewage, for example, residential, restaurant, or other type of business;

(viii) Location of utilities;

(ix) Name of the site evaluator;

(x) Name of the designer;

(xi) Date of application; and

(xii) Signature of applicant.

(b) The soil and site evaluation as specified under WAC 246-272-11001(2).

(c) A complete, detailed, and dimensional site plan including:

(i) Designated areas for the proposed initial system and the reserve area;

(ii) The location of all soil logs and other soil tests for the OSS;

(iii) General topography and/or slope of the site;

(iv) Site drainage characteristics;

(v) The location of existing and proposed encumbrances affecting system placement, including legal access documents if any component of the OSS is not on the lot where the sewage is generated; and

(vi) An arrow indicating north.

(d) A detailed system design meeting the requirements under WAC 246-272-11501 including:

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

(ii) Vertical cross-section drawings showing:

(A) The depth of the disposal component, the vertical separation, and depth of soil cover; and

(B) Other OSS components constructed at the site.

(iii) Calculations and assumptions supporting the proposed design, including:

(A) Soil type;

(B) Hydraulic loading rate in the disposal component; and

(C) System's maximum daily flow capacity.

(e) Such additional information as deemed necessary by the local health officer.

(2) The local health officer may develop the required information specified in subsection (1) of this section if authorization for such actions is included in local regulations.

(3) The local health officer shall:

(a) Issue a permit when the information submitted under subsection (1) of this section meets the requirements contained in this chapter and in local regulations;

(b) Identify the permit as a new installation, repair, expansion, modification, or operational permit;

(c) Specify the expiration date on the permit;

(d) Include a reminder on the permit application of the applicant's right of appeal; and

(e) State the period of validity and the date and conditions of renewal when requiring operational permits to be obtained and retained;

(4) The local health officer may revoke or deny a permit for due cause. Examples include, but are not limited to:

(a) Development or continued use of an OSS that threatens the public health;

(b) Misrepresentation or concealment of material fact in information submitted to the local health officer; or

(c) Failure to meet conditions of the permit or the regulations.

(5) Before the local health officer issues a permit for the installation of an OSS to serve more than one development, the applicant shall show:

(a) An approved public entity owning or managing the OSS in perpetuity; or

(b) An arrangement with a management entity acceptable to the local health officer, recorded in covenant, lasting until the on-site system is no longer needed, and containing, but not limited to:

(i) A legal easement allowing access for

construction, operation and maintenance, and repair of the OSS; and

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

(6) The local health officer shall not delegate the authority to issue permits.

(7) The local health officer may stipulate additional requirements for a particular permit if necessary for public health protection.

246-272-09501 Location.

(1) Persons shall design and install OSS to meet the minimum horizontal separations shown in Table I, Minimum Horizontal Separations:

TABLE I
MINIMUM HORIZONTAL SEPARATIONS

Items requiring setback	From edge of disposal component and reserve area	From septic tank, holding tank, containment vessel, pump chamber, and distribution box	From building sewer, collection, and non-perforated distribution line[1]
Non-public well or suction line	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
Public drinking water spring[3]	200 ft.	200 ft.	100 ft.
Spring or surface water used as drinking water source[2,3]	100 ft.	50 ft.	50 ft.
Pressurized water supply line[4]	10 ft.	10 ft.	10 ft.
Properly decommissioned well[5]	10 ft.	N/A	N/A
Surface water[3] Marine water Fresh water	100 ft. 100 ft.	50 ft. 50 ft.	10 ft. 10 ft.
Building foundation	10 ft. [6]	5 ft. [6]	2 ft.
Property or easement line [6]	5 ft.	5 ft.	N/A
Interceptor / curtain drains/ drainage ditches Down-gradient[7] Up-gradient[7]	30 ft. 10 ft.	5 ft. N/A	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

[1] "Building sewer" as defined by the most current edition of the Uniform Plumbing Code . "Non-perforated distribution" includes pressure sewer transport lines.

[3] If surface water is used as a public drinking water supply, the designer shall locate the OSS outside of the required sanitary control area.

[3] Measured from the ordinary high-water mark.

[4] The local health officer may approve a sewer transport line within 10 feet of a water supply line if the sewer line is constructed in accordance with section 2.4 of the department of ecology's "Criteria For Sewage Works Design," revised October 1985, or equivalent.

[5] Before any component can be placed within 100 feet of a well, the designer shall submit a "decommissioned water well report" provided by a licensed well driller, which verifies that appropriate decommissioning procedures noted in chapter 173-160 WAC were followed. Once the well is properly decommissioned, it no longer provides a potential conduit to groundwater, but septic tanks, pump chambers, containment vessels or distribution boxes should not be placed directly over the site.

[6] The local health officer may allow a reduced horizontal separation to not less than two feet where the property line, easement line, or building foundation is up-gradient.

[7] 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.

(2) Where any condition indicates a greater potential for contamination or pollution, the local health officer or the department 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.

(3) The horizontal separation between an OSS disposal component and an individual water well, spring, or surface water can be reduced to a minimum of 75 feet, by the local health officer, and be described as a "conforming" system upon signed approval by the health officer if the applicant demonstrates:

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

(b) 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 WAC 246-272-11501(2)(f) Table IV; or

(c) Evidence of protective conditions involving both 3(a) and (b) of this section.

(4) Persons shall design and/or install disposal components only where:

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

(b) The area is not subject to:

(i) Encroachment by buildings or construction such as placement of swimming pools, power poles and underground utilities;

(ii) Cover by impervious material;

(iii) Vehicular traffic; or

(iv) Other activities adversely affecting the soil or the performance of the OSS.

(c) Sufficient reserve area for replacement exists to treat and dispose 100% of the design flow;

(d) The land is stable; and

(e) Surface drainage is directed away from the site.

(5) A local health officer may allow expansion of an existing on-site sewage system adjacent to a marine shoreline that does not meet the minimum horizontal separation between the disposal component and the ordinary high water mark required by WAC 246-272-09501 Table I, provided that:

(a) The system meets all requirements of WAC 246-272-11501;

(b) The system complies with all other requirements of WAC 246-272-09501 and WAC 246-272-17501;

(c) Horizontal separation between the disposal component and the ordinary high water mark is 50 feet or greater; and

(d) Vertical separation is 3 feet or greater with a conventional gravity drainfield, or 2 feet or greater with a conventional pressure distribution drainfield.

246-272-11001 Soil and Site Evaluation.

(1) The local health officer or department shall permit only engineers, qualified designers and soil scientists to perform soil and site evaluations.

SWWHD: Ethics. All persons offering consultation services within SWWHD shall use all known and reasonable technology and perform all aspects of their work ethically and legally. Designers must be familiar with appropriate RCWs, WACs and local requirements and show evidence of education and experience adequate for determining the appropriateness of on-site sewage treatment systems for use in the district. Such evidence must demonstrate knowledge of the following: public health aspects of sewage, soils & site analysis, system design, construction and maintenance of on-site treatment systems. Errors and omissions leading to greater than 10 percent rejections (additional fees have been assessed) of submitted applications, plans or installations shall be grounds for license revocation, fines and or legal action. Where the designer consistently fails to submit an adequate quality of work, the health officer may hold an administrative hearing and determine whether to suspend, revoke or deny reissuance of the designer's license. Questions of ethics of or quality of work performed by professional engineers will be submitted to BORPELS.

(2) The person evaluating the soil and site shall:

(a) Record:

(i) A sufficient number of soil logs to evaluate conditions within:

(A) The initial disposal component; and
(B) The reserve area.

(ii) The ground water conditions, the date of the observation, and the probable maximum height;

(iii) The topography of the site;

(iv) The drainage characteristics of the site;

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

(vi) The existence of designated flood plains; and

(vii) The location of existing encumbrances affecting system placement, such as:

(A) Wells and suction lines;
(B) Water sources and supply lines;
(C) Surface water;
(D) Abandoned wells;
(E) Outcrops of bedrock and restrictive layers;
(F) Buildings;
(G) Property lines and lines of easement;
(H) Interceptors such as footing drains, curtain drains and drainage ditches;
(I) Cuts, banks, and fills;
(J) Driveways and parking areas;
(K) Existing OSS; and
(L) Underground utilities.

(b) Use the soil and site evaluation procedures and terminology in accordance with chapter 3 and Appendix A of the "Design Manual: On-site Wastewater Treatment and Disposal Systems", United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980, except where modified by, or in conflict, with this chapter (available upon written request to the department);

(c) Use the soil names and particle size limits of the United States Department of Agriculture Soil Conservation Service classification system;

(d) 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

(e) Classify the soil as in Table II, Soil Textural Classification:

TABLE II
SOIL TEXTURAL CLASSIFICATION

Soil Type	Soil Textural Classifications
1A	Very gravelly[1] coarse sands or coarser. All extremely gravelly[2] soils.
1B	Very gravelly medium sand, very gravelly fine sand, very gravelly very fine sand, very gravelly loamy sands.
2A	Coarse sands (also includes ASTM C-33 sand).
2B	Medium sands.
3	Fine sands, loamy coarse sands, loamy medium sands.
4	Very fine sands, loamy fine sands, loamy very fine sands, sandy loams, loams.
5	Silt loams, that are porous and have well developed structure.
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.
Unsuitable for treatment or disposal	Sandy clay, clay, silty clay, and strongly cemented or firm soils.

[1] Very Gravelly = >35% and <60% gravel and coarse fragments, by volume.

[2] Extremely Gravelly = >60% gravel and coarse fragments, by volume.

(3) The owner of the property or his agent shall:

(a) Prepare the soil log excavation to:

(i) Allow examination of the soil profile in its original position by:

(A) 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 bottom of the disposal component; or

(B) Stopping at a shallower depth if a water table or restrictive layer is encountered; and

(ii) 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; and

(b) Assume responsibility for constructing and maintaining the soil log excavation in a manner to reduce potential for physical injury by:

(i) Placing excavated soil no closer than 2 feet of the excavation;

(ii) Providing a ladder, earth ramp or steps for safe egress to a depth of 4 feet, then scoop out a portion from the floor to gain the additional 2 foot depth necessary to observe the 6 feet of soil face, however the scooped portion is not to be entered;

(iii) Provide a physical warning barrier around the excavation's perimeter; and

(iv) Fill the excavation upon completion of the soil log.

(4) The local health officer:

(a) Shall render a decision on the height of the water table within 12 months of receiving the application under precipitation conditions typical for the region;

(b) 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;

(c) May require any other soil and site information affecting location, design, or installation; and

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

246-272-11501 Design.

(1) The local health officer shall require that on-site sewage systems be designed only by engineers or qualified designers, except:

(a) Where at the discretion of the local health officer a resident owner of the single family residence is allowed to design a system for that residence; or

(b) The local health officer performs the soil and site evaluation and develops the design.

SWWHD: SWWHD plan review does not relieve the applicant, designer or engineer of responsibility to comply with this chapter.

(2) The local health officer and the department shall require the following design criteria:

(a) All the sewage from the building served is directed to the OSS;

(b) Drainage from the surface, footing drains, roof drains, and other non-sewage drains is prevented from entering the OSS and the area where the OSS is located;

(c) The OSS is designed to treat and dispose of the following flows:

(i) For single family residences, 120 gallons per bedroom per day, with a minimum of 240 gallons per day, unless technical justification is provided to support calculations using a lower design flow;

(ii) For other facilities, the design flows noted in "Design Manual: On-site Wastewater Treatment and Disposal Systems", United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980 (available upon written request to the department). If the type of facility is not listed in the EPA design manual, design flows from one of the following documents are used:

(A) "Design Standards for Large On-site Sewage Systems," 1993, Washington state department of health (available upon request to the department); or

(B) "Criteria for Sewage Works Design", revised October 1985, Washington state department of ecology (available upon written request to the department of ecology).

(d) Septic tanks:

(i) Are included on the approved list under subsection (5)(d) of this section;

(ii) Have the following minimum liquid capacities:

(A) For a single family residence use Table III, Required Minimum Liquid Volumes of Septic Tanks:

TABLE III
REQUIRED MINIMUM LIQUID VOLUMES OF SEPTIC TANKS

Number of bedrooms	Required minimum liquid tank volume in gallons
≤ 3	900
4	1000
Each additional bedroom	250

SWWHD: Minimum septic tank size shall be 1000 gallons for new construction with an additional 250 gallons for each bedroom above 3 bedrooms. All septic tanks will be structurally sound, have outlet screens, have water-tight access risers installed to or above ground surface and be filled with water and demonstrated to be water tight prior to use or approval

(B) For facilities handling residential sewage, other than one single family residence, 1.5 times the daily design flow with a minimum of 1000 gallons;

(iii) Have clean-out and inspection accesses within 12 inches of finished grade; and

(iv) Are designed with protection against floatation and ground water intrusion in high ground water areas;

(e) Pump chambers:

(i) Are included on the approved list under subsection (5)(d) of this section;

(ii) Have clean-out and inspection accesses at or above finished grade; and

(iii) Are designed with protection against floatation, ground water intrusion, and surface water inflow in high ground water areas;

(f) Methods for effluent distribution shall correlate to

soil types 1A through soil type 6 as described by TABLE IV of this section, except where local regulations approved by the department under WAC 246-272-02001 are more stringent:

TABLE IV
METHODS OF EFFLUENT DISTRIBUTION FOR SOIL TYPES AND DEPTHS

	VERTICAL SEPARATION			
SOIL TYPE	< 1 foot	≥ 1 foot to < 2 feet	≥ 2 feet to < 3 feet	≥ 3 feet
1A	Not allowed	Pressure Distribution (see note)[1 & 2]	Pressure Distribution (see note)[1]	Pressure Distribution (see note)[1]
2A	Not allowed	Pressure Distribution (see note)[1 & 2]	Pressure Distribution	Pressure Distribution
1B - 6	Not allowed	Pressure Distribution (see note)[1 & 2]	Pressure Distribution	Gravity Distribution

[1] System meeting Treatment Standard 2 required.

[2] Mound systems installed where the original, undisturbed, unsaturated soil depth is between 12 and 18 inches, require pretreatment by an intermittent sand filter.

(g) SSAS beds are only designed in soil types 2A, 2B, or 3, with a width not exceeding 10 feet;

(h) Designs for conventional gravity systems in type 1A soil are not permitted due to the inadequate treatment performance capability of coarse grained soils. However, an exception may be permitted by the local health officer if the site meets all of the following criteria:

(i) System serves a single family residence;

(ii) The lot size is greater than 2.5 acres;

(iii) Annual precipitation in the region is less than 25 inches per year as described by "Washington

Climate" published jointly by the Cooperative Extension Service, College of Agriculture, and Washington State University (available for inspection at Washington state libraries);

(iv) The system is located outside all areas of special concern defined by WAC 246-272-21501(1);

(v) The system is located outside the 12 county Puget Sound Water Quality Authority region; and

(vi) The geologic conditions beneath the disposal component must satisfy the minimum unsaturated depth requirements to groundwater identified by interpreting a readable, representative well log. The method for determination is described by "Design Guideline for Conventional Systems In Type 1 Soils", (available upon written request to the department).

(i) Individual SSAS laterals greater than one hundred feet in length are to use pressure distribution;

(j) OSS having daily design flows between 1000 and 3,500 gallons of sewage per day:

(i) Are located only in soil types 1 - 5;

(ii) Are located on slopes of less than thirty percent, or 17 degrees; and

(iii) Have pressure distribution;

(k) Conventional gravity systems and conventional pressure distribution system have:

(i) The calculation of absorption area based upon the design flows in subsection (2)(c) of this section and loading rates equal to or less than those in Table V, Maximum Hydraulic Loading Rate for Residential Sewage, and applied only to the bottom of the trench of the excavation.

TABLE V
MAXIMUM HYDRAULIC LOADING RATE
FOR RESIDENTIAL SEWAGE[1]

SOIL TYPE	SOIL TEXTURAL CLASSIFICATION DESCRIPTION	LOADING RATE gal./sq. ft./day
1A	Very gravelly[2] coarse sands or coarser, extremely gravelly[3] soils.	Varies according to system selected to meet Treatment Standard 2 [4]
1B	Very gravelly medium sands, very gravelly fine sands, very gravelly very fine sands, very gravelly loamy sands.	Varies according to soil type of the non-gravel portion [5]
2A	Coarse sands (includes the ASTM C-33 sand).	1.2
2B	Medium sands.	1.0
3	Fine sands, loamy coarse sands, loamy medium sands.	0.8
4	Very fine sands, loamy fine sands, loamy very fine sands, sandy loams, loams.	0.6
5	Silt loams that are porous and have well developed structure.	0.45
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2

[1] Compacted soils, cemented soils, and/or poor soil structure may require a reduction of the loading rate or make the soil unsuitable for conventional OSS systems.

[2] Very Gravelly = >35% and <60% gravel and coarse fragments, by volume.

[3] Extremely Gravelly = >60% gravel and coarse fragments, by volume.

[4] Due to the highly permeable nature of type 1A soil, only alternative systems which meet or exceed Treatment Standard 2 can be installed. However, a conventional gravity system may be used if it meets all criteria listed under WAC 11501(2)(h). The loading rate for these systems is provided in the appropriate guideline.

[5] The maximum loading rate listed for the soil described as the non-gravel portion is to be used for calculating the absorption surface area required. The value is to be determined from this table.

(ii) The bottom of a SSAS shall not be deeper than three feet below the finished grade, except under special conditions approved by the local health officer. The depth of such system shall not exceed ten feet from the finished grade;

(iii) The sidewall below the invert of the distribution pipe is located in original, undisturbed soil;

(iv) Clean gravel, covered with a geotextile; and

(v) A cover of between six and twenty-four inches of mineral soil containing no greater than 10% organic content over the gravel to preclude accumulation of water over the drainfield.

(l) For other features, conventional gravity systems shall conform with the "Design Manual: On-site Wastewater Treatment and Disposal Systems," United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980 (available upon written request to the department) except where modified by, or in conflict with this section or local regulations.

(3) When proposing the use of OSS for non-residential sewage, the designer shall provide to the local health officer:

(a) Information to show the sewage is not industrial wastewater;

(b) Information to establish the sewage's strength and identify chemicals found in the sewage that are not found in residential sewage; and

(c) A design providing treatment equal to that required of residential sewage.

(4) The local health officer or department:

(a) Shall approve only OSS designs meeting the requirements of this chapter;

(b) Shall only permit the use of septic tanks, pump chambers, and holding tanks on the approved list under subsection (5)(d) of this section;

(c) Shall not approve designs for:

(i) Cesspools;

(ii) Seepage pits, except as allowed for repairs under WAC 246-272-16501(3); or

(iii) Conventional gravity systems or conventional pressure distribution systems in soil type 1A, except when an applicant meets all criteria established by WAC 246-272-11501(2)(h).

(d) May approve a design for the reserve area different than the design approved for the initial OSS, if both designs meet the requirements of this chapter for new construction; and

(e) May allow the hydraulic loading rate calculated for the infiltration surface area in a disposal component to include six inches of the SSAS sidewall height for determining design flow where total recharge by annual precipitation and irrigation is less than twelve inches per year.

(5) The department shall:

(a) Develop and maintain design and construction standards for septic tanks, pump chambers, and holding tanks.

(b) Review septic tanks, pump chambers, and holding tanks, approving those satisfying the design and construction standards developed by the department.

(c) Require an annual report from the manufacturers or distributors of all products on the approved list under subsection (5)(d) of this section which assures that the product still meets the standards defined in this section, before relisting the product.

(d) Maintain a list of approved septic tanks, pump chambers, holding tanks that meet design and construction standards.

(e) Make periodic checks of products approved under this subsection.

(6) Persons desiring to manufacture or distribute septic tanks, pump chambers, holding tanks for use in an OSS shall:

(a) Certify the product meets standards for subsection (5)(a) of this section and submit the required documentation to the department for approval when:

(i) The manufacturer or distributor needs initial departmental review and listing to allow permitting by the local health officer or department;

(ii) The department amends the applicable criteria or standards; or

(iii) The manufacturer or distributor alters the product;

(b) Submit an annual report acceptable to the department to retain departmental approval; and

(c) Pay required fees to the department.

246-272-12501 Holding tank sewage systems.

(1) Persons shall not install or use holding tank sewage systems for residential development or expansion of residences, whether seasonal or year-round, except as set forth under subsection (2) of this section.

(2) The local health officer may approve installation of holding tank sewage systems only:

(a) For permanent uses limited to controlled, part-time, commercial usage situations, such as, recreational vehicle parks and trailer dump stations.

(b) For interim uses limited to handling of emergency situations.

(c) For repairs as permitted under WAC 246-272-16501(1)(c)(i).

(3) A person proposing to use a holding tank sewage system shall:

(a) Follow established design criteria established by the department;

(b) Submit a management program to the local health officer assuring ongoing operation and maintenance before the local health officer issues the installation permit; and

(c) Use a holding tank on the current approved list under WAC 246-272-11501(5)(d);

SWWHD: Recreational Vehicles with self-contained holding tanks do not require permits where the waste is disposed in an approved location and manner and where the duration of residence does not exceed 60 days.

246-272-13501 Installation.

(1) The local health officer and the department shall require approved installers to construct OSS, except as noted under subsection (2) of this section.

(2) The local health officer may allow the resident owner of a single family residence to install the OSS for that single family residence when:

(a) The OSS is either located on the same lot as the residence or situated on adjoining property controlled by the owner and legally listed as an encumbrance.

SWWHD: Resident owners of single family homes may install a maximum of one on-site sewage system per year for their own use, but must take and pass the examination for the level of system proposed. For alternative sewage treatment systems a formal waiver is required and all work must be reviewed by an approved Designer. Resident owners may not design and install alternative systems.

(3) The installer described by either (1) or (2) of this section shall:

(a) Follow the approved design;

(b) Have the approved design in possession during installation;

(c) Only install septic tanks, pump chambers, and holding tanks approved by the department;

(d) Be on the site at all times during the excavation and construction of the OSS;

(e) Install the OSS to be watertight, except for the disposal component;

(f) Cover the installation only after the local health officer has given approval to cover; and

(g) Back fill and grade the site to prevent surface water from accumulating over any component of the OSS;

246-272-14501 Inspection.

(1) The local health officer shall:

(a) Visit the OSS site during the site evaluation, construction, or final construction inspection;

(b) Either inspect the OSS before cover or allow the designer of the OSS to perform the inspection before cover if:

(i) The designer is qualified; and

(ii) The designer is not also named as installer of the system; and

(iii) A qualified installer installed the OSS.

(c) Keep the "as-built" or "record" drawings on file.

(2) The person responsible for the final construction inspection

shall:

(a) Assure the OSS meets the approved design; and

(b) Direct the person responsible for final cover of the system to place a permanent marker at finished grade where needed to identify the location of the septic tank's first manhole.

(3) The designer or installer, as directed by the local health officer, upon completion of the OSS shall develop and submit a complete and detailed, "as-built" or "record drawing" to both the health officer and the OSS owner that include:

(a) For new OSS, measurements to existing site features enabling the first tank manhole to be easily located, and a dimensioned reserve area; and

(b) For repaired or altered OSS, the new, repaired, or altered components with their relationship to the existing system.

246-272-15501 Operation and maintenance.

(1) The OSS owner is responsible for properly operating and maintaining the OSS, and shall:

(a) Determine the level of solids and scum in the septic tank once every three years;

(b) Employ an approved pumper to remove the septage from the tank when the level of solids and scum indicates that removal is necessary;

(c) Protect the OSS area and the reserve area from:

(i) Cover by structures or impervious material;

(ii) Surface drainage;

(iii) Soil compaction, for example by vehicular traffic or livestock; and

(iv) Damage by soil removal and grade alteration;

(d) Keep the flow of sewage to the OSS at or below the approved design both in quantity and waste strength;

(e) Operate and maintain alternative systems as directed by the local health officer; and

(f) Direct drains, such as footing or roof drains away from the area where the OSS is located.

(2) The local health officer shall:

(a) Provide operation and maintenance information to the OSS owner upon approval of any installation, repair, or alteration of an OSS; and

(b) Develop and implement plans to:

(i) Monitor all OSS performance within areas of special concern;

(ii) Initiate periodic monitoring of each OSS no later than January 1, 2000, to assure that each OSS owner properly maintains and operates the OSS in accordance with this section and in accordance with other applicable operation and maintenance requirements.

(iii) Disseminate relevant operation and maintenance information to OSS owners through effective means routinely and upon request; and

(iv) Assist in distributing educational materials to OSS owners.

(3) Persons shall not:

(a) Use or introduce strong bases, acids or chlorinated organic solvents into an OSS for the purpose of system cleaning.

(b) Use a sewage system additive unless it is specifically approved by the department; or

(c) Use an OSS to dispose of waste components atypical of

residential wastewater.

(4) The local health officer shall require annual inspections of OSS serving food service establishments and may require pumping as needed.

(5) The local health officer may require the owner of the OSS to:

(a) Use one or more of the following management methods or another method consistent with the following management methods for proper operation and maintenance:

(i) Obtain and comply with the conditions of a renewable or operational permit;

(ii) Employ a public entity eligible under Washington state statutes to, directly or indirectly, manage the OSS; or

(iii) Employ a private management entity, guaranteed by an public entity eligible under Washington state statutes or sufficient financial resources, to manage the OSS;

(b) Evaluate any effects the OSS may have on ground water or surface water; and/or

(c) Dedicate easements for inspections, maintenance, and potential future expansion of the OSS.

(6) Persons may obtain a handbook with material outlining management methods to achieve proper operation, maintenance, and monitoring of OSS from the department one year after the effective date of this chapter.

(7) The local health officer may require installation of observation ports in each individual lateral or bed which extend from the bottom of the gravel to the finished grade for monitoring OSS performance.

246-272-16501 Repair of Failures.

(1) When an OSS failure occurs, the OSS owner shall:

(a) Repair or replace the OSS with a conforming system or a Table VI repair either on the:

(i) Property served; or

(ii) Nearby or adjacent property if easements are obtained; or

(b) Connect the residence or facility to a:

(i) Publicly owned LOSS; or

(ii) Privately owned LOSS where it is deemed economically feasible; or

(iii) Public sewer; or

(c) Perform one of the following when requirements in subsections (1)(a) or (1)(b) of this section are not feasible:

(i) Use a holding tank; or

(ii) 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 local health officer determines:

(A) An OSS is not feasible; and

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

(iii) Abandon the property.

(2) Prior to replacing or repairing the effluent disposal component, the OSS owner shall develop and submit information required under WAC 246-272-09001(1).

(3) The local health officer shall permit a Table VI repair only when:

(a) Installation of a conforming system is not possible; and

(b) Connection to either an approved LOSS or a public sewer is not feasible.

(4) The person responsible for the design shall locate and design repairs to:

(a) Meet the requirements of Table VI if the effluent treatment and disposal component to be repaired or replaced is closer to any surface water, well, or spring that is not used as a public water source as prescribed by the minimum separation required in Table 1 of WAC 246-272-09501(1);

TABLE VI

REQUIREMENTS FOR REPAIR OR REPLACEMENT OF DISPOSAL COMPONENTS NOT MEETING VERTICAL AND HORIZONTAL SEPARATIONS [1,2]

Vertical Separation in feet	Horizontal Separation in Feet[3]		
	< 25	25-50	> 50-100
<1	Treatment Standard 1	Treatment Standard 1	Treatment Standard 2[4]
1-2	Treatment Standard 1	Treatment Standard 2[4]	Pressure Distribution
>2	Treatment Standard 2[4]	Pressure Distribution	Pressure Distribution

[1] The treatment standards refer to effluent quality before discharge to unsaturated, subsurface soil.

[2] The local health officer may permit ASTM C-33 sand to be used as fill to prevent direct discharge of treated effluent to ground water, surface water, or upon the surface of the ground.

[3] The horizontal separation indicated is the distance between the disposal component and the surface water, well, or spring. If the disposal component is up-gradient of a surface water, well, or spring to be used as a potable water source, the next higher standard level of treatment shall apply unless treatment standard 1 is already being met.

[4] Mound systems are not allowed to meet treatment standard 2.

(b) Protect drinking water sources;

(c) Prevent the direct discharge of sewage to ground water, surface water, or upon the surface of the ground;

(d) Meet the horizontal separations under WAC 246-272-09501(1) to public drinking water sources;

(e) Meet other requirements of this chapter to the maximum extent permitted by the site;

(f) Maximize the:

(i) Vertical separation;

(ii) Distance from a well, spring, or suction line; and

(iii) Distance to surface water;

(5) The local health officer shall identify Table VI repair permits for the purpose of tracking future performance.

(6) An OSS owner receiving a Table VI repair permit from the local health officer shall:

(a) Immediately report any failure to the local health officer;

(b) Monitor the performance of the OSS according to the "Interim Guidelines for the Application of Treatment Standards 1 & 2, using Alternative On-site Sewage Treatment/Disposal Systems" amended August 4,1992, (available upon written request to the department of health) and report the results to the local health officer at a minimum frequency of:

(i) Quarterly when treatment standard 1 is required; and

(ii) Annually when treatment standard 2 is required;

(c) Comply with all local and state requirements stipulated on the permit.

246-272-17501 Expansions.

The local health officer or department shall require an on-site sewage system and a reserve area in full compliance with the new system construction standards specified in this chapter for an expansion of a residence or other facility.

246-272-18501 Abandonment.

Persons permanently removing a septic tank, seepage pit, cesspool, or other sewage container from service shall:

(1) Have the septage removed by an approved pumper;

(2) Remove or destroy the lid; and

(3) Fill the void with soil.

246-272-19501 Septage Management.

(1) An individual shall be approved by the local health officer as a qualified pumper before removing septage from an OSS.

(2) Persons removing septage from an OSS shall:

(a) Transport septage or sewage only in vehicles clearly identified with the name of the business and approved by the local health officer;

(b) Record and report septage removal to the local health officer.

(c) Dispose of septage, or apply septage biosolids to land only in a manner consistent with applicable laws.

SWWHD: SWWHD REGULATION 92-01 AND AS AMENDED APPLIES.

246-272-20501 Developments, subdivisions, and minimum land area requirements.

(1) A person proposing the development shall obtain approval from the local health officer prior to any development where the use of OSS is proposed.

(2) The local health officer shall require the following prior to approving any development:

(a) Site evaluations as required under WAC 246-272-11001, excluding subsections (3)(a)(i) and (4)(d);

(b) Where a subdivision with individual wells is proposed:

(i) Configuration of each lot to allow a 100-foot radius water supply protection zone to fit within the lot lines; or

(ii) Establishment of a 100-foot protection zone around each existing and proposed well site;

(c) Where preliminary approval of a subdivision is requested, provision of at least one soil log per proposed lot, unless the local health officer determines existing soils information allows fewer soil logs;

(d) Determination of the minimum lot size or minimum land area required for the development using Method I and/or Method II:

(i) **METHOD I.** Table VII, Single Family Residence Minimum Lot Size or Minimum Land Area Required Per Unit Volume of Sewage, shows the minimum lot size required per single family residence. For developments other than single family residences, the minimum land areas shown are required for each unit volume of sewage.

TABLE VII
MINIMUM LAND AREA REQUIREMENT
SINGLE FAMILY RESIDENCE OR UNIT VOLUME OF SEWAGE

Type of Water Supply	Soil Type (defined by section 11001 of this chapter)					
	1A, 1B	2A, 2B	3	4	5	6
Public	0.5 acre[1]	12,500 sq. ft.	15,000 sq. ft.	18,000 sq. ft.	20,000 sq. ft.	22,000 sq. ft.
	2.5 acre[2]					
Individual, on each lot	1 acre[1]	1 acre	1 acre	1 acre	2 acres	2 acres
	2.5 acres[2]					

[1] Due to the highly permeable nature of type 1 soil, only alternative systems which meet or exceed Treatment Standard 2 can be installed.

[2] A conventional gravity system in type 1 soil is only allowed if it is in compliance with all conditions listed under WAC 246-272-11501(2)(h). One of these limiting conditions is a 2.5 acre minimum lot size.

(ii) **METHOD II.** A minimum land area proposal using Method II is acceptable only when the applicant:

(A) Justifies the proposal through a written analysis of the:

(I) Soil type and depth;
(II) Area drainage, and/or lot drainage;
(III) Public health impact on ground and surface water quality;
(IV) Setbacks from property lines, water supplies, etc;
(V) Source of domestic water;

(VI) Topography, geology, and ground cover;

(VII) Climatic conditions;

(VIII) Availability of public sewers;

(IX) Activity or land use, present, and anticipated;

(X) Growth patterns;

(XI) Reserve areas for additional subsurface treatment and disposal;

(XII) Anticipated sewage volume;

(XIII) Compliance with current planning and zoning requirements;

(XIV) Possible use of alternative systems or designs;

(XV) Existing encumbrances, such as listed in WAC 246-272-09001(1)(c)(v) and WAC 246-272-11001(2)(a)(vii); and

(XVI) Any other information required by the local health officer.

(B) Shows development with public water supplies having:

(I) At least 12,500 square feet lot sizes per single family residence;

(II) No more than 3.5 unit volumes of sewage per day per acre for developments other than single family residences; and

(C) Shows development with individual water supplies having at least one acre per unit volume of sewage; and

(D) Shows land area under surface water is not included in the minimum land area calculation; and

SWWHD: Method II requires a complete and detailed evaluation prepared by a qualified designer. Method II analyses shall be considered to be requests for waivers and subject to collection of appropriate fees. Staff analysis of a method II submission may result in allowing smaller lot sizes or in the requirement of larger lot sizes. Lot sizes required by other agencies are not affected by method II evaluations.

(e) Regardless of which method is used for determining required minimum lot sizes or minimum land area, submittal to the health officer of information consisting of field data, plans, and reports supporting a conclusion the land area provided is sufficient to:

(i) Install conforming OSS;

(ii) Assure preservation of reserve areas for proposed and existing OSS;

(iii) Properly treat and dispose of the sewage; and

(iv) Minimize public health effects from the accumulation of contaminants in surface and ground water.

(3) The local health officer shall require lot areas of 12,500 square feet or larger except when a person proposes:

(a) OSS within the boundaries of a recognized sewer utility having a finalized assessment roll; or

(b) A planned unit development with:

(i) A signed, notarized, and recorded deed covenant restricting any development of lots or parcels above the approved density with the density meeting the minimum land area requirements of subsection (2)(d) of this section;

(ii) A public entity responsible for operation and maintenance of the OSS, or a single individual owning the OSS;

(iii) Management requirements under WAC 246-272-08001

when installing a LOSS; and

(iv) Extinguishment of the deed covenant and higher density development allowed only when the development connects to public sewers.

(4) The local health officer may:

(a) Allow inclusion of the area to the centerline of a road or street right-of-way in a Method II determination under subsection WAC 246-272-20501(2)(d)(ii) to be included in the minimum land area calculation if:

(i) The dedicated road or street right-of-ways are along the perimeter of the development;

(ii) The road or street right-of-ways are dedicated as part of the proposed development; and

(iii) Lots are at least 12,500 square feet in size.

(b) Require detailed plot plans and OSS designs prior to final approval of subdivision proposals;

(c) Require larger land areas or lot sizes to achieve public health protection;

(d) 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

(e) Permit the installation of an OSS, where the minimum land area requirements or lot sizes cannot be met, only when all of the following criteria are met:

(i) The lot is registered as a legal lot of record created prior to the effective date of this chapter;

(ii) The lot is outside an area of special concern where minimum land area has been listed as a design parameter necessary for public health protection; and

(iii) The proposed system meets all requirements of

these regulations other than minimum land area.

246-272-21501 Areas of special concern.

(1) The local health officer may investigate and take appropriate action to minimize public health risk in formally designated areas such as:

(a) Shellfish protection districts or shellfish growing areas;

(b) Sole Source Aquifers designated by the U.S. Environmental Protection Agency;

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

(d) Designated public water supply wellhead protection areas.

(e) 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;

(f) Areas designated by the department of ecology as special protection areas under chapter 173-200-090 WAC, Water Quality Standards for Ground Waters of the State of Washington;

(g) Wetland areas under production of crops for human consumption;

(h) Frequently flooded areas delineated by the Federal Emergency Management Agency; and

(i) Areas identified and delineated by the local board of health in consultation with the department to address public health threat from on-site systems.

(2) The permit issuing authority may impose more stringent requirements on new development and corrective measures to protect public health upon existing developments in areas of

special concern, including:

(a) Additional location, design, and/or performance standards for OSS;

(b) Larger land areas for new development;

(c) Prohibition of development;

(d) Additional operation, maintenance, and monitoring of OSS performance;

(e) Requirements to upgrade existing OSS;

(f) Requirements to abandon existing OSS; and

(g) Monitoring of ground water or surface water quality.

(3) Within areas of special concern, to reduce risk of system failures, a person approved or designated by the local health officer shall:

(a) Inspect every OSS at least once every three years;

(b) Submit the following written information to both the local health officer and the property owner within 30 days following the inspection:

(i) Location of the tank;

(ii) Structural condition of the tank, including baffles;

(iii) Depth of solids in tank;

(iv) Problems detected with any part of the system;

(v) Maintenance needed;

(vi) Maintenance provided at time of inspection; and

(vii) Other information as required by the local health officer.

(c) Immediately report failures to the local health

officer.

246-272-22501 Certification of designers, installers, pumpers, inspectors, and maintenance personnel.

(1) Guidelines defining qualifications for designers, installers, pumpers, inspectors and maintenance personnel shall be established by the department. The guidelines shall include, but not be limited to education, experience, testing, and certification.

246-272-23501 Technical review committee.

(1) The department shall:

(a) Maintain a committee consisting of a maximum of nine individuals with technical or scientific knowledge applicable to OSS whose purpose is to provide technical advice to the department; and

(b) Select members for the technical review committee from:

(i) Local health departments;

(ii) Engineering firms;

(iii) The department of ecology;

(iv) Land sales, development and building industries;

(v) Public sewer utilities;

(vi) On-site sewage system design and installation firms;

(vii) Environmental organizations;

(viii) University/college academic communities;

(ix) On-site sewage system or related product manufacturers; and

(x) Other interested organizations or groups.

(c) Convene meetings as needed.

246-272-24001 State advisory committee.

(1) The department shall:

(a) Maintain an on-site sewage advisory committee to:

(i) Make recommendations concerning departmental policy and regulations;

(ii) Review program services; and

(iii) Provide input to the department regarding the on-site sewage program;

(b) Select members from agencies, professions, organizations having knowledge and interest in OSS, and groups which are affected by the regulations; and

(c) Convene meetings as needed.

246-272-26001 Enforcement.

(1) The department or the local health officer:

(a) Shall enforce the rules of chapter 246-272 WAC; or

(b) May refer cases within their jurisdiction to the local prosecutor's office or office of the attorney general, as appropriate.

(2) When a person violates the provisions under this chapter, the department, local health officer, local prosecutor's office, or office of the attorney general may initiate enforcement or disciplinary actions, or any other legal proceeding authorized by law, including but not limited to any one or a combination of the following:

(a) Informal administrative conferences, convened at the request of the department or owner, to explore facts and resolve problems;

(b) Orders directed to the owner and/or operator of the OSS and/or person causing or responsible for the violation of the rules of chapter 246-272 WAC;

(c) Denial, suspension, modification, or revocation of permits, approvals, or certification; and

(d) Civil or criminal action.

(3) Orders authorized under this section include the following:

(a) Orders requiring corrective measures necessary to effect compliance with chapter 246-272 WAC which may include a compliance schedule; and

(b) Orders to stop work and/or refrain from using any OSS or portion of the OSS or improvements to the OSS until all permits, certifications, and approvals required by rule or statute are obtained.

(4) Enforcement orders issued under this section shall:

(a) Be in writing;

(b) Name the person or persons to whom the order is directed;

(c) Briefly describe each action or inaction constituting a violation of the rules of chapter 246-272 WAC, or applicable local code;

(d) Specify any required corrective action, if applicable;

(e) Specify the effective date of the order, with time or times of compliance;

(f) Provide notice of the consequences of failure to comply or repeated violation, as appropriate. Such notices may include a statement that continued or repeated violation may subject the violator to:

(i) Denial, suspension, or revocation of a permit approval, or certification; and/or

(ii) Referral to the office of the county prosecutor

or attorney general.

(iii) Other appropriate remedies.

(g) Provide the name, business address, and phone number of an appropriate staff person who may be contacted regarding an order.

(h) Comply with chapter 43.70 RCW and chapter 34.05 RCW if issued by the department.

(5) Enforcement orders shall be personally served in the manner of service of a summons in a civil action or in a manner showing proof of receipt.

(6) The department shall have cause to deny the application or reapplication for an operational permit or to revoke, suspend, or modify a required operational permit of any person who has:

(a) Failed or refused to comply with the provisions of chapter 246-272 WAC, or any other statutory provision or rule regulating the operation of an OSS; or

(b) Obtained or attempted to obtain a permit or any other required certificate or approval by misrepresentation.

(7) For the purposes of subsection (6) of this section and WAC 246-272-27001, a person is defined to include:

(a) Applicant;

(b) Re-applicant;

(c) Permit holder; or

(d) Any individual associated with subsection 7 (a), (b) or (c) or this section including, but not limited to:

(i) Board members;
(ii) Officers;
(iii) Managers;
(iv) Partners;
(v) Association members;
(vi) Agents; and in addition
(vii) Third persons acting with the knowledge of such

persons.

246-272-27001 Notice of decision -- Adjudicative Proceeding.

(1) All local boards of health shall:

(a) Maintain an administrative appeals process to consider procedural and technical conflicts arising from the administration of local regulations; and

(b) Establish rules for conducting hearings requested to contest a local health officer's actions.

(2) The department shall provide notice of a denial, suspension, modification or revocation of a permit, certification, or approval consistent with chapter 43.70.115 RCW, chapter 34.05 RCW, and chapter 246-10 WAC.

(3) A person contesting a departmental decision regarding a permit, certificate, approval, or fine may file a written request for an adjudicative proceeding consistent with chapter 246-10 WAC.

(4) Department actions are governed under the Administrative Procedure Act chapter 34.05 RCW, chapter 43.70.115 RCW, this chapter, and chapter 246-10 WAC.

SWWHD: Appeals are covered under SWWHD regulation 96-01, and as amended.

SWWHD: All fees are charged to recover the costs incurred by staff administration of these rules, clerical support, administrative overhead, and for complaint resolution, monitoring of system enforcement and overall liquid waste environmental protection program development.

246-272-28001 Severability.

If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances shall not be affected.

SWWHD APPENDIX A

ON-SITE SEWAGE TREATMENT SYSTEM DESIGNER POLICY

POLICY STATEMENT: All persons seeking to provide consultation services regarding on-site sewage treatment systems must first provide evidence of training and experience demonstrating competence in on-site sewage treatment system site evaluations, design selection, installation and maintenance. All such individuals must also pass an examination designed by the Southwest Washington Health District. Said examination will cover those aspects of conducting site evaluations and the type system or systems about which the person intends to consult. All on-site sewage treatment systems, shall meet criteria established in accordance with Washington Administrative Code 246-272 and local rules, regulations and policies. Persons engaged in on-site sewage system consulting are required to adhere to the standards of education, experience, testing and certification contained in this regulation/policy.

RATIONALE: To protect and promote the public health and to establish procedures for determining who may provide consulting services regarding on-site sewage treatment systems within Southwest Washington Health District. To ensure that persons providing consulting services for on-site sewage treatment systems are informed of requirements. The practice of consulting in the area of on-site sewage treatment systems requires specialized and general knowledge to preclude adverse environmental impacts and to provide the public with reasonable assurance that the authorized designer is qualified.

A. INITIAL TESTING AND CERTIFICATION:

1. CERTIFICATION. Professional designers must show proof of experience, education and knowledge of local regulations. Upon receipt of evidence of such knowledge, passing the required test, completing the application form and paying the licensing fees, an individual may be licensed to consult on and oversee the installation of on-site sewage treatment systems in Southwest Washington Health District. Alternatively, the District would accept a certified letter from the Washington State Board of Professional Engineers stating that the individual is Licensed as a Professional Engineer, in good standing and is competent to perform site evaluation work.

2. EDUCATION. All persons, seeking to obtain a designer's license, must show proof of educational level equal to a Bachelor's degree in a science related to environmental health. Such persons shall demonstrate that the course content is equivalent to that required for registration as a Sanitarian, Environmental Health Specialist, Soil Scientist, Registered Geologist or Professional Engineer. Courses shall include as a minimum upper division level Soils Morphology, or equivalent course utilizing SCS terminology.

3. PREREQUISITES: Unless otherwise waived by the Program Supervisor or Director, Registration as a Registered Sanitarian (RS), Registered Environmental Health Specialist (REHS), or Certified Professional Soil Scientist (CPSS), will be the minimum acceptable credentials to be considered for testing and licensing. Professional Engineers (PEs) are regulated by the Washington State Board of Professional Engineers which retains responsibility for the conduct of such persons. All questions, comments or complaints regarding the conduct or qualifications of such persons will be referred to that Board. Persons currently licensed by the Health District as "Designers" may continue and be re-licensed subject to continued satisfactory performance.

4. TESTING. All persons, seeking to obtain a designer's license, must first pass the examination for the type of system(s) proposed for installation. In addition to the test for site evaluation and design criteria, all levels of the installers test must be taken and passed.

5. PERIOD OF VALIDITY. Results from the designer test and installers test shall be valid for three years from successfully passing each test.

B. PERFORMANCE STANDARDS:

1. EDUCATION. After successfully obtaining initial professional licensing, each designer shall attend at least 50 percent of all training & informational sessions scheduled for designers by the Southwest Washington Health District. Credit for attendance at outside educational events may be granted at the discretion of the Program Supervisor or Division Director.

2. EXPERIENCE. Individuals seeking to renew a designer license must demonstrate acceptable levels of competence as evidenced by maintaining fewer than 10 percent rejections on submitted site evaluations or system plans and fewer than 10 percent red tags on all systems installed during the initial

probationary or licensing period.

3. SITE EVALUATION PROCEDURES. All consulting services will be based on a site evaluation conducted by a licensed designer or by authorized Southwest Washington Health District Staff. Such site evaluations will be conducted utilizing methods approved by the Southwest Washington Health District. Data, diagrams and observations regarding site evaluations or other site specific analyses will be provided in a format approved by the Southwest Washington Health District.

4. SUPERVISION OF INSTALLATIONS. It is the designer's responsibility to oversee, inspect, diagram and require any needed corrections to the installation of systems they consult on, prior to approval. Any design adjustments must be documented. Any installation violations that cannot be immediately corrected on the site must be reported to the SWWHD. Designers are required to sign the as-built and submit any design alterations to the SWWHD at least 7 work days after the final inspection. The SWWHD will review as-built drawings and conduct spot checks of installations to ensure that standards are being followed. SWWHD re-inspection fees may be paid by the Designer and/or Installer as determined by the Supervisor or Director.

5. RENEWAL OF CERTIFICATION. Currently licensed designers will be required to take and pass the new tests for installation, site evaluation and design criteria before license renewal. Designers seeking license renewal will be required to have demonstrated competence by adhering to all applicable state and local regulations and to the standards set in this policy and those of any registration or certifying body upon which issuance of the designer's license was based. Further, all designers and designers must seek to utilize all known and reasonable technology, work within the scope of their licensed practice and follow the intent and letter of laws and regulations governing all aspects of on-site sewage treatment and public health protection.

6. LICENSE. Licenses will expire on 1 March of each year and may be renewed prior to that date at the discretion of the Health District. Consistent failure to adhere to established requirements may be grounds for suspension, revocation or denial of renewal of the license.

C. FEES. Fees, as set by the Southwest Washington District Board of Health, will be charged for testing and licensing designers.

SWWHD APPENDIX C

CHECKLIST FOR COMMON SIGNIFICANT RED TAGS

The following is a partial list of commonly encountered problems that could result in the Health District issuing a red tag during a system inspection. The problems listed below can affect the efficiency and/or treatment capability of a treatment system, or may reflect on the legality of the installation:

CONVENTIONAL AND CAP SYSTEMS, (without pumps):

- Drainfield not installed in the approved area.
- Drainfield within 100' of a well or surface water.
- Drainfield trenches placed too deep in the soil.
- Distribution box inadequately adjusted.
- D-box or septic tank pipes inadequately grouted or glued.
- Material other than approved filter fabric over the drainfield gravel.
- Drainfield trenches or lines not level.
- Square footage of drainfield infiltration area inadequate.
- Length or width of drainfield trenches inadequate.
- Distance of pipes on center less than approved length.
- Distance from D-box to perforated pipe is less than 2 feet.
- Ends of laterals not capped.
- Perforated pipe not installed with the holes at 5 o'clock + 7 o'clock positions.
- Rock under pipe not to the proper depths.
- Dirty drainfield gravel.
- System gradient improper for effective effluent distribution.
- Broken lines during cover process.
- Wrong size septic tank or pump chamber installed.
- Water lines not double encased if less than 10' to sewage line.
- Transport pipes under surface water or driveways not double encased.
- Inadequate setbacks to property line, foundation, or steep slope .
- Septic tank baffles missing or not grouted.
- No installer or state contractors license on file.
- No as-built or copy of permit on site at the time of final inspection.
- System not installed according to approved plan.
- Required Waiver not obtained, prior to installation.

CHECKLIST FOR COMMON RED TAGS FOR ALTERNATIVE SYSTEMS

The following is a partial list of commonly encountered problems that could result in the Health District issuing a red tag during a final system inspection. The problems listed below can affect the efficiency and/or treatment capability of an alternative sewage treatment system:

ALTERNATIVE AND LIFT SYSTEMS: Items listed in Conventional Systems Significant Red Tags, PLUS:

- No screen in the pump chamber (or on outlet baffle on septic tank).
- No block under pump.
- No check valve or quick disconnect.
- No high water alarm (float).
- Riser on the pump chamber not 6" above grade.
- Riser not adequately sealed.
- Inlet or outlet pipes not grouted.
- Transport pipe size and or depth inadequate.
- System does not pump to a minimum required height during the pressure test.
- Orifices not at the designed spacing or size.
- System components not as per the design specifications.
- Not within design specs and/or location.
- Ruptured filter liner.
- Dirty or untested filter sand or gravel.
- Inadequate depth of sand or gravel.
- Inadequate soil cover.
- No monitoring ports.
- No orifice shields on site for sand filters and pressure distribution systems.
- No designer blue tag.
- Plan alterations not approved by the Designer &/or SWWHD.