

# Skagit County Code 12.05 OSS

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### 12.05.010 Purpose, ~~objectives~~ 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 dispersal; and
- (b) Limit the discharge of contaminants to waters of the State.

(3) This Chapter is adopted by the Skagit County Board of Health in accordance with the authority granted in RCW Chapter [70.05](#). (Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

### 12.05.020 Administration.

This Chapter shall be administered under the authority and requirements of RCW Chapters [43.70](#), [70.05](#), [70.118](#), ~~and~~ [70.118A](#), and the Skagit County on-site sewage system management plan. As authorized under RCW [70.05.060](#)(7), fees may be charged for the costs of administration. (Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

### 12.05.025 On-site sewage systems rules and regulations adopted.

(1) Washington Administrative Code (WAC) Chapter [246-272A](#), as now enacted or hereafter amended, is adopted by reference. Should any section of this Chapter conflict with WAC Chapter [246-272A](#), the more restrictive regulation shall apply.

**i** Washington State Department of Health has developed Standards and Guidance documents for many system types. Some are referenced in WAC but not all of them. To ensure everyone is using the same standards, program staff would like to propose that these be adopted reference.

(2) Washington State Department of Health's (DOH) Department Standards and Guidance (DS&G) documents, as now published or hereafter amended, are adopted by reference. Should any section of this Chapter or Health Department policies conflict with the DS&Gs, the more restrictive standard shall apply.

- (a) When multiple DS&Gs are used in concert with each other, the more restrictive standard shall apply if conflicts arise.

(Ord. O20160001 (Att. A); Ord. O20070010 (part))

### 12.05.030 Definitions.

(1) Terms and acronyms in WAC [246-272A-0010](#) are adopted by reference.

## (2) Additional Acronyms Used in This Chapter.

**i** SCPHD has received request from industry professionals to clarify the definition of a CEU. CEU is sometimes interchanged with credit hours, but Public Health has not applied a one-to-one equivalent historically. Language added to reflect historical practice.

“CEU” means continuing education unit, which is eight credit hours of Health Officer-approved classroom training. One CEU is equivalent to one-half year of experience for operations and maintenance specialist and one-quarter year for installers.

“DOH” means Washington State Department of Health.

“O&M” means operations and maintenance.

“OSS” means on-site sewage system.

“SCC” means Skagit County Code.

## (3) Additional Definitions Used in This Chapter.

“Abandoned septic tank” is a septic tank that is permanently taken out of service.

“Area of special concern” means an area of definite boundaries delineated through public process, where the Health Officer determines additional requirements for on-site sewage systems which may be necessary to reduce potential failures, or failures or minimize negative impact of on-site systems upon public health.

**i** Residential OSS designs are determined based on the number of bedrooms. Building layouts can include additional rooms with varying labels - such as flex room, office, den, studio area - that while the current owners intended use of the space is not a sleeping quarter, future owners may need to use the space for sleeping quarters. Non-residential design flow is based upon the designer’s evaluation of flow.

Minimum residential design flow is 240 gallons per day equivalent to a two-bedroom system, but this definition is applicable when expanding an existing system to serve a new plumbed structure.

“Bedroom” means any room normally used for sleeping and indicated as such on building plans. The minimum number of bedrooms per square foot of floor area (basement, first, second, etc.) shall be:

	1000 sq ft	1 bedroom
1001 -	2000sq ft	2 bedrooms
2001 -	3000 sq ft	3 bedrooms
Each additional 500 sq ft or portion thereof shall		1 bedroom

“Board of Health” means the Skagit County Board of Health defined in RCW Chapter 70.05.

“Campground” means an area of land developed for recreational use in temporary occupancy, such as two or more tents and/or recreational vehicles.

“Certified” means approved by the Health Officer to have met qualifications established by these rules and regulations to practice as a pumper, installer, or operations and maintenance specialist in Skagit County.

“Closed record hearing or appeal” means a proceeding based upon the existing record.

“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.

**i** Language added to reflect historical usage of the term to provide clarity on what a simple conventional pressure distribution system is.

“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 using only non-Proprietary On-site Products. A subsurface drip system is not considered a conventional pressure distribution system.

**i** Public Health received feedback from Legal to define days within Code.

“Days” unless otherwise specified, “days” means calendar days, not business or working days. If days in reference to a timeline or due date and the due day falls on a weekend or major federal holiday, then the end of the timeline or due date shall be the next working day.

**i** Reordered in alphabetical order with proposed definition change.

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

“Dump station” means an area used for emptying recreational vehicle wastewater holding tanks.

“Health Department” means Skagit County Public Health.

“Health Officer” means the Health Officer of Skagit County within the State of Washington, or a representative authorized by and under the direct supervision of the Health Officer.

**i** Public Health has received requests from industry professionals for added clarity on what course will be accepted for CEUs. Public Health proposes to add a definition to provide clarity.

“Health Officer-approved training” means courses provided by Washington On-Site Sewage Association, National Onsite Wastewater Recycling Association, or other on-site specific training, as approved by the Health Officer on a case-by-case basis.

- i** Propose the development of level of installation based on experience. This distinction is supported by WA DOH DS&Gs such as Subsurface Drip Section 2.6.2 stating installers must obtain training specific to the treatment type.

“Level 1 Installer” means an OSS installer who is certified to install conventional gravity systems, conventional pressure distribution systems, and gravity with pump systems.

“Level 2 Installer” means an OSS installer who is certified to install public domain system types (mound, sand filters, etc.) as well as proprietary alternative systems in which they provide documentation of specific training from the manufacturer.

- i** Similarly to the above, proposed levels of Operation & Maintenance specialists that matches the installer definition.

“Level 1 Operation and Maintenance Provider” means an individual certified to inspect conventional gravity systems, conventional pressure distribution systems, and gravity with pump systems.

“Level 2 Operation and Maintenance Provider” means an individual certified to inspect other public domain system types (mound, sand filters, etc.) as well as proprietary alternative systems in which they provide documentation of specific training from the manufacturer.

- i** Proposed definition update to match the terminology used by the Department for covenant.

“Maintenance agreement covenant” means a recorded agreement stating certain activities and/or practices are required or prohibited.

“Management Plan” means the Skagit County on-site sewage management plan.

“Manufactured home” means a structure built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation. Manufactured home does not include recreational vehicles.

“Manufactured or mobile home park” means a single lot of record, under the ownership or management of one person, firm, or corporation, for the purposes of locating two or more mobile or manufactured homes for residential dwelling purposes. It does not include a temporary manufactured home that meets the definition of a temporary manufactured home under this Chapter.

“Marine recovery area” or MRA means an area of definite boundaries where the Health Officer, or the Washington State Department of Health, in consultation with the Health Officer, determines that additional requirements for existing on-site sewage systems may be necessary to reduce potential failing systems or minimize negative impacts of on-site sewage systems.

“Open record hearing or appeal” means a proceeding where new information relevant to the matter can be introduced.



- i** Term that is used in WAC and SCC without definition. Proposal to create a definition based on RCW 70A.115.030. Definition becomes relevant for proposals further into the Chapter.

“Operational permit” means a permit that is issued for a term of one year and renewed annually upon receipt of a complete application and fee. At the time of initial permit application or at the time of permit renewal the department may impose such permit conditions, requirements for system improvements, and compliance schedules as it determines are reasonable and necessary to ensure that the system functions as intended.

“Operations and maintenance specialist” means a person certified by the Health Department to independently inspect an OSS.

- i** Public Health has historically accepted record drawings developed by certified or licensed individuals, or the homeowner when they are the designer or installer of the system. Language added to reflect historical practice.

“Record drawing” means an accurate graphic and written record of the location and features of the OSS - developed by a Skagit County certified OSS individual, Washington State Licensed On-Site Wastewater Designer, or Washington State Licensed Professional Engineer - that are needed to properly monitor, operate, and maintain that system. Also known as an “as-built” drawing. Homeowner drawn record drawings are accepted when the homeowner is the designer or installer of record as authorized under SCC 12.05.120 and 12.05.140 respectively.

- i** Permits have historically had a redesign and renewal option; certifications have a renewal option. Proposal to formally define the terms that have historically been used within the department.

“Redesign” means changes made to a previously approved design prior to the approved design being installed where the changes are minor in nature such as a revision to a design layout or pre-treatment unit, using the existing approved soil evaluation and maintaining the same treatment level.

“Renew” means extending the expiration date of a certification or permit prior to the existing expiration date.

- !** WAC revised Residential Sewage to be Treatment Level E in Table III which changed the CBOD5 and decreased the TSS. FOG is also now O&G.

“Residential sewage ~~influent~~effluent” means ~~influent~~effluent that does not exceed a five-day biochemical oxygen demand (CBOD<sub>5</sub>) of ~~230~~228 milligrams per liter, total suspended solids of ~~145~~80 milligrams per liter, and ~~fats, greases and oils~~O&G of 20 milligrams per liter.

- i** County permitting software includes the term revision as well as used within Public Health. This term is not currently used in code however, we are proposing the below definition as it is applicable to permitting fees and the Public Health schedule of charges.

“Revision” means a change to a septic design for a permit that has been assigned a permit number, where the change is made before the permit is approved and issued. These may be required changes following the Health Department review or changes based on recommendations or requests to the designer.

- i** Site and soil evaluations are terms used in SCC and WAC though have not previously been defined in SCC or WAC. Proposal to add the below definition consistent with guidance from EPA wastewater manual and DOH guidance.

“Site evaluation” means the process of evaluating the proposed site capabilities to accept the expected wastewater based on environmental conditions, physical features, and wastewater characteristics as described in Onsite Wastewater Treatment Systems Manual, Chapter 5.5

“Soil evaluation” means the evaluation of the soil horizon’s texture, structure, compaction, and other characteristics to determine the Soil Type as defined in WAC Chapter 246-272A-0220 Table V.

“Soil type” means one of seven numerical classifications of fine earth particles and coarse fragments as described in WAC Chapter 246-272A and this Chapter.

“Temporary manufactured home” means the temporary placement of one manufactured home on a parcel with an existing residence to accommodate the housing needs of disabled or elderly family members or to house one farm worker and his/her/their immediate family.

“Training” means education or field experience in a subject area.

- i** The term waiver is utilized in WAC and relates to state on-site sewage regulations. These are reportable to DOH on a quarterly basis. The term variance has been used in the Health Department to refer to request for divergence from Skagit County Code. The processing for both also varies internally. Proposal to add terms to match current usage of the terms (fee schedule) and bring clarity.

“Variance” means a deviation or exemption from Skagit County Code Chapter 12.05.

“Waiver” means an exemption from Washington Administrative Code Chapter 246-272A as authorized under RCW 70.05.072 and WAC 246-272A-0420.

“Water recreation facilities” means any artificial basin or other structure containing water used or intended to be used by the public for recreation, bathing, relaxation, or swimming, where body contact with the water occurs or is intended to occur and includes auxiliary buildings and appurtenances. The term includes, but is not limited to:

- (a) Conventional swimming pools, wading pools, and spray pools;



(b) Recreational water contact facilities as defined under RCW [70.90.110](#) and regulated under WAC Chapter [246-262](#);

(c) Spa pools and tubs using hot water, cold water, mineral water, air induction, or hydrojets.

(Ord. O20160001 (Att. A); Ord. O20110012 Att. A (part); Ord. O20070010 (part); Ord. 17443 (part), 1999: Ord. 16438 (part), 1997)

#### 12.05.040 Applicability.

The provisions of this Chapter shall be applicable to:

(1) OSS treating sewage and dispersing effluent from residential sources with design flows through any common point up to 3,500 gallons per day; and

(2) OSS for nonresidential sources of sewage if treatment, siting, design, installation, and operation and maintenance measures provide treatment and effluent dispersal equal to that required of nonresidential sources.

**i** Public Health would like to propose addition to explicitly state what structures must have an approved sewage/wastewater disposal method to ensure said sewage is properly treated to protect the environment.

(3) All structures with indoor plumbing and/or produces sewage must have an approved wastewater disposal method.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.045 Connection to public sewer system.

(1) See WAC [246-272A-0025](#).

**i** WAC 246-272A-0025 requires connection to public sewer upon failure of an existing OSS. Utility policy may require new construction within their service area to connect to the existing sewer line. In cooperation with our utility partners, we'd like to propose confirmation from the utility for new constructions.

(2) New development within a public sewer system service area must provide written documentation of the utilities approval to install a new OSS within their service area.

(Ord. O20160001 (Att. A); Ord. O20070010 (part))

#### 12.05.050 Sewage treatment and distribution technologies.

(1) Only the following treatment and distribution technologies may be permitted for use with on-site sewage systems:

(a) Proprietary treatment, bacteriological reduction, and distribution technologies that are registered with the ~~Washington State Department of Health~~ DOH.

(2) The Health Officer may require performance monitoring or sampling of any proprietary device or method.

**!** DOH registers incinerating and composting toilets. DOH RS&G includes the following criteria for both composting and incinerating toilets. To provide clarity to Skagit County customers, Public Health proposes to include the criteria within SCC with a slight rewording (composting and incinerating changed to waterless).

(3) Approved waterless toilets (e.g. composting, incinerating, vault and pit toilets) registered with the Department of Health may be permitted.

(a) Where potable water is provided and wastewater is generated, waterless toilets may only be permitted and used when combined with an approved on-site wastewater treatment and dispersal system.

(b) Where potable water is not provided and wastewater is not generated, waterless toilets may be used without an approved on-site wastewater treatment and disposal system or by public sewage system.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.060 Product development permits.

(1) See WAC 246-272A-0170, as adopted in 12.05.025.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.090 Permit requirements.

(1) See WAC 246-272A-0200, as adopted in 12.05.025.

**!** Reiterating the required components of a permit as well as clearly stating that incomplete applications will be returned to the designer until complete. This is a copy and paste from WAC; no changes were made.

(2) Except for a minor repair, a person proposing the installation, repair, modification, connection to, or expansion of an OSS, shall submit an application and obtain a permit from the local health officer prior to beginning construction. The permit application must include the following:

(a) General information including:

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

(ii) Parcel number and if available, the address 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, modification, or operational;
  - (vii) Source of sewage. For example, residence, restaurant, or other type of business;
  - (viii) Location of utilities;
  - (ix) Name of the site evaluator;
  - (x) Name, signature and stamp of the designer;
  - (xi) Date of application; and
  - (xii) Name and signature of the fee simple owner, the contract purchaser of the property, or the owner's authorized agent.
- (b) The soil and site evaluation as specified under WAC 246-272A-0220;
- (c) A dimensioned site plan of the proposed initial OSS, the reserve area and those areas immediately adjacent that contain characteristics impacting design including:
- (i) Designated areas for the proposed initial OSS and the reserve area;
  - (ii) The location of all soil logs and other soil tests for the OSS;
  - (iii) General topography and slope;
  - (iv) Drainage characteristics;
  - (v) Horizontal separations as noted in Table IV in WAC 246-272-0210;
  - (vi) The location of existing and proposed encumbrances affecting OSS placement, including legal access documents if any component of the OSS is not on the lot where the sewage is generated;
  - (vii) An arrow indicating north;
  - (viii) A legend of symbols used;
  - (ix) Plan scale and a graphic scale bar;
  - (x) Vertical datum used (such as "assumed," "North American Vertical Datum of 1988 (NAVD 88)," "National Shoreline Reference Station (NSRS)," or "unknown");
  - (xi) An elevation benchmark and relative elevations of system components;
  - (xii) Name, signature, stamp, and contact information of the designer; and
  - (xiii) A statement on limitation of use indicating the site plan is not a survey.
- (d) A detailed OSS design meeting the requirements under WAC 246-272A-0230, 246-272A-0232, 246-272A-0234, and 246-272A-0238 including:

(i) A drawing showing the dimensioned 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 soil dispersal component, the vertical separation, and depth of cover material; and

(B) Other new OSS components constructed at the site.

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

(A) System operating capacity and design flow;

(B) Soil type;

(C) Hydraulic loading rate in the soil dispersal component; and

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

**i** Designs for complex sites may require a waiver or variance for approval. When one is needed or proposed by the designer, Public Health is recommending that the waiver or variance application be included with permit application to make a complete application.

**i** An evaluation of a failure is required of the designer in WAC to better understand the cause of the failure and help prevent premature failure in the future. Public Health is proposing that this evaluation be included in the permit application/design to provide a full picture of the parcel. These evaluations could be as simple as referring to the inspection report that indicates the failure. When no inspection report showing signs of failure exists, the narrative will be more substantial from the designer.

(f) A complete DOH waiver or County variance form, if one is required for the design to be approvable.

(g) For repair designs, a short narrative of the evaluation as to the cause of the failure as required by WAC 246-272A-0280.

(3) Upon receipt of a complete application, the Health Department will respond to the application with either approval, denial, or pending per RCW 70.05.074.

**i** Establish timeline for submitting payment before the application is void.

(4) Permit applications submitted without payment of the associated fees within 90 calendar days shall be void. A new application will be required to be submitted and meet any additional requirements effective at that time.

**i** Recommending a slight terminology change for consistency with the addition of "renew" definition.

(52) Permits for installation of a new OSS will expire three years after the date issued.

(a) Upon application, a new OSS installation permit may be ~~extended~~-renewed for an additional three years.

(b) Only one ~~extension~~-renewal is allowed.

(63) Permits for repairs to an OSS will expire one year after the date issued.

(74) Upon expiration of a permit to install a new or make a repair to an OSS, a new permit application and fee is required.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.100 Location.

(1) See WAC 246-272A-0210, as adopted in 12.05.025.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.110 Soil and site evaluation.

(1) See WAC 246-272A-0220, as adopted in 12.05.025.

**i** State Health states a sufficient number of test pits to determine the soil profile and the specific number is left to the LHJ. The number of required soil logs is dependent on the permit type (new system vs repair).

(2) When a new system design is being proposed, a minimum of three soil evaluation test pits must be characterized – two in the proposed primary drainfield area and one in the proposed reserve area. One soil test pit in the primary area may be accepted if previous soil evaluations were approved after July 22, 1984.

(a) A minimum of one soil evaluation test pit is required when the design proposal is for a repair of an existing system without a reserve area designated on the original system design. Two test pits are recommended.

**i** Highest seasonal water table determination, also referred to as wet season review, has been a part of SCC. Industry professionals have requested added clarity on what this entails and criteria for when to expect it. Part (a) has been Public Health's process and part (b) is from DOH DS&Gs as guidelines (may statements). We are proposing to formalize these items by codifying.

(32) When insufficient information is available to determine the highest seasonal water table, persons performing soil and site evaluations shall measure and document water table measurements during the wet season.

(a) Wet season review may consist of multiple site visits to the test pits generally between November and April. Season may vary based on actual conditions.

(b) When the site and soil evaluation indicate the depth of soil to a water table is less than 18 inches, a wet season review must be completed to confirm that there are at least 12 inches.



**i** WAC 246-272A-0220 states soil logs are to be “excavated pits of sufficient dimensions to enable observation of soil characteristics by visual and tactile mean to a depth three feet deeper than the anticipated infiltrative surface at the bottom of the soil dispersal component.” DOH with L&I have subsequently prepared a publication for test pit construction consistent with both department’s regulations. We are recommending adopting this reference along with EPA Manual references in WAC to help establish a consistent method for soil test pits that facilitate the soil evaluation process.

(4) Soil evaluation test pits must be constructed in a manner consistent with DOH’s Guidelines for Test Pit Construction for On-site Sewage Systems (Publication 337-110) and USEPA Onsite Wastewater Treatment Systems Manual (February 2001) Chapter 5 Section 5.6.

(a) A small diameter excavation may be accepted on a case-by-case basis and may be pre-approved by the local health officer.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

### 12.05.120 Design requirements—General.

(1) See WAC 246-272A-0230, as adopted in 12.05.025.

(2) On-site sewage systems shall be designed by engineers licensed under RCW Chapter 18.43 or on-site wastewater treatment system designers licensed under RCW Chapter 18.210.

**i** Prior to July 22, 1984, the method for determining soil types was primarily based on a percolation rate test which is no longer accepted as a means for soil classifications and evaluation. WAC requires soil evaluations based on soil textural and structure classification. This proposal is to codify what has been done in practice since the change was effective.

(3) Designers and engineers shall verify previously approved soil and site evaluations prior to design to assure conditions have not changed and the soil and site evaluations contain accurate information. Soil and site evaluations approved prior to July 22, 1984, without soil textural classifications, are no longer valid and cannot be used in a current design.

(4) A resident owner of a single-family residence may design an on-site sewage system for their residence only when the following applies:

**i** Current SCC allows residential owners to design a pump-to-gravity septic system. In SCC 12.05.160 we are proposing owner to be able to inspect their own gravity systems and in section 12.05.140, installation of only gravity systems. This recommendation is to be consistent between design, install, and inspection for owners.

(a) The OSS is a conventional gravity ~~or pump-to-gravity~~ system;

(b) The resident owner of the single-family residence has not designed more than one on-site sewage treatment system in the preceding five-year period;

**i** Updated to match WAC wording of location in relation to shoreline.

(c) The property is not ~~adjacent~~ within 200 feet of ~~to~~ a marine shoreline; and

(d) The resident owner certifies that the design was not prepared by any other person; and:

**i** Waivers from the standards are allowable if deemed to provide public health protection at least equal to that provided by the standards. By definition, a waiver design can increase the risk to public health. We are recommending limiting residential designs when a waiver or variance is needed as an added measure of protections.

(e) The site will not require waivers or variances.

(5) When proposing the use of an OSS for nonresidential sewage, the designer shall provide to the Health Officer:

(a) Documentation showing the sewage is not industrial wastewater;

(b) Documentation establishing the sewage's strength characteristics (CBOD<sub>5</sub>, total suspended solids, and ~~fat, grease and oil~~ O&G levels) and identification of 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 effluent.

**i** A recorded document has long been required when a proprietary treatment product is used in a design to ensure the current and future homeowners are aware of the proprietary nature and on-going maintenance requirement. The drafted language is to formally title the notice that is required to be recorded with the Auditor and associated with the draft definition.

(6) The property owner shall record a ~~maintenance agreement covenant notice~~ with the County Auditor whenever a design contains a proprietary treatment product (PTP) that is registered by the ~~Washington State Department of Health~~ DOH.

**i** Many previous systems had proprietary treatment installed that required a maintenance agreement. These agreements labelled the treatment unit installed. Current maintenance agreements are more general to all proprietary treatments. The recommendation is to accept past agreement even if the treatment unit is removed (such as in a repair) rather than require a new agreement to be recorded.

(a) Historic product specific recorded maintenance agreements shall be accepted to meet the requirement in 12.05.120(6) so long as the current maintenance requirements are not less strict.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

#### 12.05.122 Design requirements—Septic tank sizing.

(1) See WAC 246-272A-0232(1) , as adopted in 12.05.025.

- i** WAC and SCC have previously set standards in terms of single-family residences and applied the standard for all dwellings such as ADU. Recommendation to add dwelling to capture this practice in code. Dwelling may need to be defined if this recommendation is accepted.

(2) In lieu of the volumes listed in Table VII of WAC 246-272A-0232(2), septic tanks for single-family residences and dwellings shall have the following minimum liquid volumes:

Number of Bedrooms	Required Minimum Liquid Tank Volume in Gallons
≤ 3	1,000
4	1,250
Each Additional Bedroom	250

- i** Clarity on tank expectations when more than one plumbed structure is present on a single parcel.

(3) For systems receiving wastewater flow from multiple structures, the system may have a single tank sized to meet the total bedroom/flow minimum tank volume or a septic tank for each structure that meets the minimum tank volume for that structure.

(Ord. O20160001 (Att. A); Ord. O20070010 (part))

#### New Section in WAC

### 12.05.123 Design requirements—Pump Chambers

(1) See WAC 246-272A-0233, as adopted in 12.05.025.

### 12.05.125 Design requirements—Soil dispersal components.

(1) See WAC 246-272A-0234, as adopted in 12.05.025.

(2) Reserve areas cannot be between trenches unless authorized by the Health Officer.

(Ord. O20160001 (Att. A); Ord. O20070010 (part))

### 12.05.127 Design requirements—Facilitate operation, ~~monitoring~~ monitoring, and maintenance.

(1) See WAC 246-272A-0238, as adopted in 12.05.025.

(2) Diagnostic tools, such as dose-cycle counters and hour meters on the sewage stream, or flow meters on both the water supply and sewage stream are required for systems using pumps.

(Ord. O20160001 (Att. A); Ord. O20070010 (part))

### 12.05.130 Holding tank sewage systems.

(1) See WAC 246-272A-0240, as adopted in 12.05.025.

**i** Skagit County has approved holding tanks. Holding tanks have on-going maintenance including routine pumping. The DS&G state that "health office must require an annual operational agreement and may collect fees to oversee the holding tank." Proposed language to incorporate the requirement in DS&G with the addition of a recorded document to provide future owners notification of the system and requirements.

(2) Holding tank sewage systems may be used only if ~~they~~ the tank meets the ~~Department of Health's~~ DOH DRS&G for holding tank sewage systems. An operational permit and recorded agreement are required for permanent use of a holding tank.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

### 12.05.140 Installation.

(1) See WAC 246-272A-0250, as adopted in 12.05.025.

(2) A resident owner of a single-family residence may install an on-site sewage treatment system for their residence only when the following applies:

(a) The OSS is a conventional gravity system ~~and may include pumps to a conventional~~ drain field;

**i** Change in WAC 246-272A-0250 from "adjacent to marine shorelines" to having set distances for marine and surface waters.

(b) The primary and reserve areas are more than 200-feet from marine waters and 100-feet from surface waters;

(~~b~~c) The single-family resident/property owner has not installed more than one on-site sewage treatment system in the preceding five years; ~~and~~

(~~d~~e) The resident owner certifies ~~they~~ will advise the Health Department if any installation work will be completed by someone other than the owner;:-



**i** Public Health would like to propose an educational aspect before approving a residential owner installation to help ensure a seamless installation process. This would be new in Skagit County. We have discussed and present multiple routes in which this could be completed.

- Passing the Washington On-site Sewage Association Installer Level 1 (homeowner) certification exam.
- Completing the Washington On-site Sewage Association Basics of Installation Course
- Completing the National On-site Wastewater Recycling Association Installer training bundle course
- Demonstrate equivalent employment experience within the construction/excavation industry

(e) The resident owner provides documentation of...(education);

**i** Homeowner installation does not negate the importance of proper installation. To ensure the homeowner is knowledgeable about the requirements for installation, the homeowner will need to provide documentation of OSS installation education or testing.

**i** Design standards are set to protect public health though waivers from the standards are allowable if deemed to provide public health protection at least equal to that provided by the standards. A waiver design generally tightens the margin of error allowable at installation which inherently makes accurate installation more necessary.

(f) The OSS design did not request or require waivers or variances for approval;

(g) The OSS design is not a repair of a failed system; and

**i** The newly approved schedule of charges includes a homeowner installation fee. This fee was proposed to cover the staff time to determine legibility for installation as well additional inspections proposed under 12.05.150. This language drafted for review is incorporate that legibility review and fee.

(h) The resident owner received approval from the Health Officer to complete the installation and has paid any associated fees.

**i** Installation when soils are too wet is exclusively prohibited in the DOH DS&Gs because it can cause smearing and compaction resulting in reduced infiltration capacity of the soil. Lack of installation during wet weather has generally been in practice. This recommendation is to provide increase clarity of the practice. If recommendation is accepted, a definition of dry weather will be drafted for review.

(3) Installation during the wet season – generally, November 1 to April 1 – must be completed during dry weather times or prior approval by the Health Officer before beginning construction. Season may vary based on actual conditions.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)



### 12.05.150 Inspection.

(1) See WAC 246-272A-0260, as adopted in 12.05.025.

(2) The OSS designer shall be responsible for inspecting the final construction and assuring the OSS meets the approved OSS design, however, gravity systems may be inspected by the installer of record.

(3) All installations must be inspected by the Health Department prior to backfilling, except when the installer of record receives written permission from the Health Department.

**i** WAC 246-272A-0260 requires inspections during the site evaluation, construction, or final construction. When installation is completed by certified installer, Public Health completes inspections during the site evaluation and final construction. Many licensed designers request a meeting during construction as well. For resident owners, we are proposing additional meetings – prior and during – with Public Health staff **or** the licensed designer to help ensure seamless installed.

(4) OSS installed by a resident owner must request to meet the Health Department and/or licensed designer and have an inspection prior to installation, during construction, and at final construction.

(Ord. O20160001 (Att. A); Ord. O20070010 (part); Ord. 16438 (part), 1997)

### 12.05.155 Record drawings.

(1) See WAC 246-272A-0265, as adopted in 12.05.025.

**i** WAC revisions change responsibility to the owner. Skagit County Public Health has historically required, and will continue to require, record drawing to be developed and submitted by certified designers, or installer. **Homeowner drawn record drawings are not accepted unless they are the installer of record.**

(2) The record drawing shall be the responsibility of the designer **or installer of record**. Only individuals certified in Skagit County as installers or Washington State licensed designers are permitted to develop, certify, and submit record drawings, unless the homeowner is the designer or installer of record.

(3) In addition to the requirements set out in WAC 246-272A-0265, the record drawing shall contain:

(a) A permanent landmark, such as a property corner, structure, or geologic feature, by which the OSS can be located at a future date; and

(b) A north arrow; and

(c) Horizontal scale bars at a scale appropriate to fill a minimum eight-and-one-half-inch by 11-inch drawing.

**i** In order to finalize an OSS permit, an as-built record drawing is required to be submitted. Historically, the timeline for submitting these documents has varied widely. To ensure processes are complete and the records for the OSS are finalized, we are proposing timeline be established.

(4) The designer of record or installer shall submit the as-built record drawing and Health Officer approved cover sheet to the Health Officer in a timely manner of the final inspection completed by the department.

(a) For repair permits and new gravity systems, the record drawing must be submitted within 90 calendar days of the final inspection.

(b) For other new system installations, the record drawing must be submitted prior to department issuing approval for use as references in SCC 12.05.210.

**i** The certification is required in DS&G and should accompany the as-built for a full record of the system installed.

(c) For designs using filter media – coarse sand media or ASTM C-33 sand, a copy of the written certification from the supplier that the media conforms to the media specifications outlined in DOH RS&G.

-(Ord. O20160001 (Att. A); Ord. O20160001 (Att. A); Ord. O20070010 (part))