



Concise Explanatory Statement Chapter 246-272A WAC, On-site Sewage Systems

Table 1: General support

| Comment Received | State Board of Health/Department of Health Determination |
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| Encourages the SBOH to adopt the rules as written. | No change to proposed rule. The State Board of Health (SBOH) and Department of Health (DOH) appreciate the feedback and support for the rules. |
| | No change to proposed rule. SBOH and DOH appreciate the feedback and support for the rules. |
| Supports the proposed changes, especially the proposed changes to increase the ease of maintenance, effectiveness, and longevity of septic system drainfields, at a minor cost increase in materials and labor. | No change to proposed rule. SBOH and DOH appreciate the feedback and support for the rules. |

Table 2: General opposition

| Comment Received | State Board of Health/Department of Health Determination |
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| Opposes the proposed changes. Believes the changes are too much extra cost and government oversight. Encourages the SBOH to not adopt the rules as written. | No change to proposed rule. SBOH and DOH appreciate the feedback. The rule revision committee made of experts and interested parties came to consensus on the changes. |
| Opposes the proposed changes. Believes the changes do not fix the problems with the original WAC 246-272A, does not include and prevents the use of efficient organic household waste treatment technologies, unreasonably limits the rights of the owners, gives Local Health Officers unlimited power of decision making, contains arbitrary requirements, and needs a thorough scientific and legal examination by independent specialists and lawyers. | No change to proposed rule. SBOH and DOH respectfully disagrees with assertions made. We believe public health would be threatened if we allowed owners to choose from a menu of household waste treatment technologies rather than require testing and registration of the products and practices allowed in OSS. |
| Opposes the proposed changes, especially the changes related to transfer of a property. Believes the changes impose additional expenses and responsibilities on the home owner. Wants chapter 246-272A WAC to remain in its current state. Encourages the SBOH to not adopt the rules as written. | No change to proposed rule. A committee of experts and interested parties determined that the rule was out of date and needed updating. SBOH and DOH believe the benefits to public health protections from requiring property transfer inspections will |

| | outweigh the financial cost and burden on the owner. |
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| · · | No change to proposed rule. SBOH and DOH appreciate the feedback. The rule revision committee made of experts and interested parties came to consensus on the changes. |

Table 3: Technical, spelling, stylistic edits

| Comment Received | State Board of Health/Department of Health Determination |
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| Ensure consistent use of mL (little m, big L) for milliliter abbreviation. | Adopt rule with amendment. Editorial change to the rule without changing the effect. |
| Ensure the use of Oxford commas. | Adopt rule with amendment. SBOH and DOH ensured commas conform to the Code Reviser's Bill Drafting Guide. Editorial change to the rule without changing the effect. |
| Confirm with DOH Style Guide the use of a hyphen between measurement and unit. Ex. 30-percent vs 30 percent (vs 30%); 12 inch vs 12-inch. | Adopt rule with amendment. SBOH and DOH ensured numbers and hyphens conform to the Code Reviser's Bill Drafting Guide. Editorial change to the rule without changing the effect. |
| Ensure initial table references are consistent. Some are simply Table X of this subsection while others are Table X, Title. | Adopt rule with amendment. SBOH and DOH ensured the table references were consistent. Editorial changes to the rule without changing the effect. |
| Ensure the abbreviation for Escherichia coli is <i>E. coli</i> . Big E, dot, space, little c, all italics. | Adopt rule with amendment. Editorial change to the rule without changing the effect. |
| Several manuals or guidance documents are referenced with edition years. Consider adding "or newer editions" so that the WAC does not need to be updated to be able to reference the newest edition of a manual. | No change to proposed rule. The suggested change conflicts with SBOH policy. |
| Consider identifying words in the text of the document that are in the definitions by using all caps/italics. | No change to proposed rule. The recommendation does not align with the Code Reviser's Bill Drafting Guide (2023). |
| Recommend using the NSF International standard citations. NSF International does not use the term "Standard" in its titles. The term "Standard" should be removed throughout the rules to align with the title of the documents. | Adopt rule with amendment. SBOH and DOH ensured the correct citations to NSF International standards were correct throughout the rules. Editorial change to the rule without changing the effect. |
| Confirm with DOH Style guide that dates do or do not the "st" or "nd" after the number. Ex. December 31st vs December 31. | Adopt rule with amendment. SBOH and DOH ensured the format for the dates conform to the Code Reviser's Bill Drafting Guide. Editorial change to the rule without changing the effect. |

Table 4: WAC 246-272A-0001, Purpose, objectives, and authority

| Comment Received | State Board of Health/Department of Health Determination |
|--|---|
| · / | No change to proposed rule. The authority granted in this section is substantively similar to other duties of the local health officer and within their authority. |
| subsection 1. Consider the following edit: (1) The purpose of this chapter is to assist single family homeowners in managing household biodegradable organic waste in the most efficient way to prevent contamination of surface and ground waters with untreated sewage | No change to proposed rule. The suggested change deprioritizes public health by removing focus on minimizing exposure to sewage and adverse impacts on ground water and surfacewater. The suggested change also introduces new undefined terms and appears to inaccurately assume single family owners are the only users of OSS. |

Table 5: WAC 246-272A-0010, Definitions

| Comment Received | State Board of Health/Department of Health Determination |
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| , , | Adopt rule with amendment. Technical change to the rule without changing the effect. "NSF" means <u>NSF International</u> National Sanitation Foundation . |
| The definitions for "detention pond" and "infiltration pond" should be added for clarification of the Table IV setbacks, to distinguish the difference between or specifically include drainage swales, and to ensure consistent interpretation and application of the setbacks required. | changing the effect. Added definitions for infiltration pond and |
| Consider including the term "geothermal well" to the definition of well. | No change to proposed rule. Geothermal wells are included in the definition of "Well". |

| For the definition of "Fill" why is it specified "unconsolidated"? Fill material is often intended to be consolidated. | No change to proposed rule. " Fill" is specified as unconsolidated because it has no soil structure. Soil becomes consolidated over time as it develops soil structure through natural weathering processes. |
|---|---|
| For the definition of "Failure" replace "septic" with "septage". | Adopt rule with amendment. Technical change to the rule without changing the effect. The correct term to use is "sewage". (31)(b) Septic Sewage backing up into a structure caused by slow soil absorption of septic tank effluent; |
| Consider adding a new definition for "DS&G" that means department standards and guidance. | No change to proposed rule. The rule includes a definition for DS&G. |
| Does adding the definition of "Fill" to the definition allow this material to be used in a drainfield? How is this term used in application. | No change to proposed rule. Definitions do not include regulatory requirements. Fill is used in drainfields in certain circumstances under waivers, in accordance with WAC 246-272A-0420. |
| For consistency, amend definition of "Fill" to insert "soil" before "dispersal component". | Adopt rule with amendment. Technical change to the rule without changing the effect. (33)(a) Meets soil types 1-6 textural criteria and is used as part of a soil dispersal component; |
| The definition of "Fill" seems to suggest that fill meeting the textural criteria may be used for a soil dispersal component and violates the broader provisions of the definition of "suitable" soil, which includes "original, undisturbed, unsaturated". | No change to proposed rule. Definitions do not include regulatory requirements. While suitable soil is required for drainfields, fill is used in drainfields in certain circumstances under waivers, in accordance with WAC 246-272A-0420. |
| What is included in subsection (31)(c) in definition of "fill"? | No change to proposed rule. This refers to shredded rubber, glass, or other materials that may be used in a drainfield. |
| Was it intended to define "residential sewage" as septic tank effluent. What about raw sewage entering a septic tank of a residential system. Certainly it can't be septic tank effluent quality when it enters the tank. Even Table III identifies that Treatment Level E is for septic tank effluent. Clearly STE and residential sewage are not to be defined as the same thing. | No change to proposed rule. This definition is meant to be used in the context of WAC 246-272A and is admittedly an imprecise description of the range of characteristics that completely untreated residential sewage is known to demonstrate. This definition was developed to facilitate clear requirements for treatment products. We reviewed available literature and determined that there is too much variability in untreated sewage to develop a useful quantitative definition which encompasses the actual range of residential sewage. |
| The new term, Disinfection Level (DL), would be better articulated as Bacterial Level (BL). This would provide better consistency throughout the rule and avoid conflicts and confusion with references to disinfecting technology. | Adopt rule with amendment. SBOH and DOH agree and applied the change throughout the rules. Technical change to the rule without changing the effect. (6) "BL" means bacterial level. |

| | (21) "DL" means disinfection level. |
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| I note that while language saying that treatment levels shall not be used as field | • • • |
| compliance standards is removed from the definition of Treatment Levels it is | feedback. |
| retained in the rule in Section 246-272A-0110(5) where Field Performance | |
| Verification is introduced and linked to the DS&G for Proprietary Treatment | |
| Products. | |

Table 6: WAC 246-272A-0015, Local management plans

| Comment Received | State Board of Health/Department of Health Determination |
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| Questions about how the Department of Health will review existing LMP plans, | No change to proposed rule. The questions will be addressed in |
| what standards or guidance will be used to review a plan, and what activities can | guidance documents. |
| an LHJ do to address a local management plan that identifies an area where | |
| phosphorous is a contaminant of concern. General comment that there is no | |
| standard for phosphorous discharge in septic effluent and there are no DOH | |
| approved devices for phosphorous reduction. | |

Table 7: WAC 246-272A-0025, Connection to public sewer systems

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| There is no direction in the rules anywhere about old systems that must be | No change to proposed rule. The rule allows these pre-permit OSS to |
| inspected, that have not failed, but are older than the local health district has | continue to operate until they fail or there is evidence they are |
| | threatening public health or water quality. The rule doesn't require |
| closest, but it is only for systems that have failed. Suggestion to add specific | specific documentation of most OSS. Documentation of OSS is a |
| evaluation steps for addressing pre-historic OSS. | programmatic function rather than a regulatory one. |
| Distance to public sewer should be revised. Revisions to this section are not | No change to proposed rule. There is no specific recommendation. |
| good enough to deal with all the issues when an owner is required to connect a | The revisions are meant to provide relief to OSS owners that would |
| failed OSS to an adjacent sewer system. Costs for sewer connection are very | pay high connection costs to connect their property to a sewer |
| high. | system when their connection piping would not follow a direct route. |
| | Communities, local planning agencies, and sewer districts need clear, |
| | enforceable rule language to compel owners of failed OSS to connect |
| | to adjacent sewer districts. |

Table 8: WAC 246-272A-0100, Sewage technologies

| Comment Received | State Board of Health/Department of Health Determination |
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| , • | Adopt rule with amendment. SBOH and DOH agree with the suggestion. Technical change to the rule without changing the effect. |
| Recommend rewriting WAC 246-272A-0100 to list and describe public domain technologies commonly used for wastewater treatment and add where to find the Department's Standards and Guidelines (DS&G). | No change to proposed rule. DOH approved public domain technologies are listed in DS&Gs. DOH reviews and approves public domain technologies based on available literature and use cases. |
| Recommend incorporating separate treatment of blackwater, graywater and solid organic waste as described in the USEPA "Onsite Wastewater Treatment Systems Manual" (revised 2002). | No change to proposed rule. The rule provides a method and requirements for treating blackwater and greywater separately from residential sewage. This is described in WAC 246-272A-0110. |
| Recommend adding public domain advanced treatment units (ATU) systems. | No change to proposed rule. DOH and local health jurisdictions do not have the resources to review and approve public domain ATUs. |

Table 9: WAC 246-272A-0110, Proprietary treatment products – Eligibility for registration

| Comment Received | State Board of Health/Department of Health Determination |
|-------------------------------------|---|
| Footnotes for Table II are missing. | Adopt rule with amendment. The missing footnotes were added. |
| | ¹ Test results for BOD₅ may be submitted in lieu of test results for |
| | CBOD₅. In these cases numerical values for CBOD₅ will be |
| | determined using the following formula: $(BOD_5 \times 0.83 = CBOD_5)$. |
| | ² Supplemental bacteriological reduction technology must be tested |
| | for influent/effluent fecal coliform or <i>E. coli</i> per WAC 246-272A-0130 |
| | (bacteriological reduction testing protocol). Supplemental fecal |
| | coliform or <i>E. coli</i> reducing technologies will be rated for log base 10 |
| | removal of fecal coliform or <i>E. coli</i> . The lowest 30-day geometric |
| | mean will be used to rate reduction level. The highest monthly |
| | geometric mean for treatment technology fecal coliform or <i>E. coli</i> |

| | reduction will be used as the baseline value for review. |
|--|--|
| Table III uses two units for fecal coliforms and <i>E. coli</i> . These should match as cfu/100 mL. FC and EC results are typically in cfu/100 mL, however, MPN is also a common result unit. Consider clarifying the treatment level required in both CFU and MPN. | Adopt rule with amendment. Technical change to the rule without changing the effect. The units for FC and EC corrected in Table III. |
| EPA Method 1664 is inappropriate to register Category 2 products. Recommend using NSF/ANSI Standard 40 instead. | No change to proposed rule. This suggestion is considered a substantive change and requires additional engagement with the industry. SBOH and DOH plan to address this in a separate rule update in the near future. |
| Requirement (in WAC 246-272A-0110(1)) that proprietary products are registered with the department (using the process described in WAC 246-272A-0120) conflicts with the requirement (in WAC 246-272A-0110(4)) that product performance is verified using laboratory data from a laboratory certified by the Washington Department of Ecology because data cannot be available from a certified laboratory before the product is allowed to be used in Washington. | No change to proposed rule. The comment appears to assume that the product must be used in Washington to meet the requirement. The sampled product is not required to be installed in Washington. The samples may be shipped to a certified laboratory. There are several certified laboratories located outside of Washington. |
| Are field compliance standards intended to only address fecal coliform? | No change to proposed rule. The rule requires field verification for products which disinfect or treat nitrogen. |
| As the rule is proposed there is not a Performance Level with the singular letter "D". Perhaps it should read "Values for Levels A-C, and DL1, DL2, and DL3 are 30-day values" | Adopt rule with amendment. Technical change to the rule without changing the effect. Table III was corrected because treatment level D was removed in the rule. "Values for Levels A - $\frac{C}{2}$ are 30-day values." |
| NSF International and other standards publishers regularly republish standards, leading to a date change on the standard title. To avoid citing obsolete standards in the rules, please verify the most recent published date of each NSF/ANSI standard prior to adoption of the revised rule. | No change to proposed rule. The referenced standards in the rule are the most current. SBOH and DOH appreciate the suggestion and will add this to the list for potential future changes to the rule. |
| This is where referring to bacteriological standard levels as "disinfection levels" is most awkward. It strikes me that stating that manufacturers may not resister products for Disinfection Level 3 (DL3) using disinfection presents a conflict of words. When the bacteriological standard was retained in Performance Levels A, B, and C, the text of the rule that limited the use of disinfection with Level C made sense and did not present an awkward use of words. If separating the bacteriological standards from the other parameters in Performance Levels A, B, and C is desired, that could still be accomplished by identifying these new performance levels as "Bacterial Levels" or "Coliform Levels". With this approach the established restriction on using disinfection to achieve BL3, or CL3 | Adopt rule with amendment. BL replaced DL throughout the rules. Technical change to the rule without changing the effect. |

would not present the awkward terminology that exists when the "Disinfection Level" terminology is used.

Table 10: WAC 246-272A-0120, Proprietary treatment product registration

| Comment Received | State Board of Health/Department of Health Determination |
|---|--|
| Recommend modifying subsection 7 for consistency with other subsections. | Adopt rule with amendment. SBOH and DOH agree. Editorial change |
| (7) The department shall maintain a list of proprietary treatment registered on- | to the rule without changing the effect. |
| site treatment and distribution products meeting the registration requirements | (7) The department shall maintain a list of proprietary treatment |
| established in this chapter. | registered on-site treatment and distribution products meeting the |
| | registration requirements established in this chapter. |
| For all installed proprietary products, what happens when that product then | No change to proposed rule. This depends on the results of the DOH |
| fails the field performance testing requirements? Requiring a compliance plan | product review. If DOH removed the product from the registered list |
| will not address installed systems that are not meeting the requirements of | for failure to meet the requirements of section WAC 246-272A-0120, |
| approved design. | it would no longer be permitted for new installations. This would not |
| | impact compliance of existing OSS. This is the process for any product |
| | that is removed from the registered list for any reason. |
| How does the state plan to administer the field sampling for devices that treat | No change to proposed rule. The draft Proprietary On-site |
| the sewage as part of their dispersal component? For example, OSCAR or | Wastewater Treatment Products Department Standards and |
| Glendon systems, would require some sort of containment under the dispersal | Guidance document requires the manufacturer to propose |
| component to effectively catch the sewage for sampling. | a sampling method for DOH review and approval. |
| For WAC 246-272A-0120(3)(b), suggest leaving "proprietary" and inserting | No change to proposed rule. DOH will consider renaming the "List of |
| "registered on-site" in front of the word "proprietary". The current "List of | Registered On-site Treatment and Distribution Products" to match |
| Registered On-site Treatment and Distribution Products" titles Section 2 as "List | the rule language. |
| of Manufacturers of Registered Proprietary On-site Products". | |
| Questions about WAC 246-272A-0120(5)(b)(ii). If it is legal to put requirements | No change to proposed rule. The requirement to complete field |
| for manufacturers to register their products in departmental standards | verification is included in the rule. The details of the process are |
| documents and what does "dated the effective date of the rule" mean. | included in the standards document. A draft of this document is |
| | available for review on DOH's rulemaking webpage. |
| For WAC 246-272A-0120(5)(b)(ii), suggest inserting "treatment" between | Adopt rule with amendment. SBOH and DOH added the title of the |
| "proprietary" and "products" in the statement relating to the standards and | document to provide clarity to the rule. |
| guidance document, to clarify the distinction between treatment products and | WAC 246-272A-0120(5)(b)(ii) A field verification performance report as |
| distribution products. | identified in the proprietary products Proprietary On-site Wastewater |
| | Treatment Products DS&G, dated February 1, 2025. |

| Proprietary treatment products that would fall under Category 2 are. designed | No change to proposed rule. Category 2 products must demonstrate |
|---|--|
| using influent BOD5. Please change "CBOD5" to "BOD5". | their capacity to treat CBOD₅ as described in WAC 246-272A-0110, |
| | Table II. This is not a proposed change. |

Table 11: WAC 246-272A-0130, Bacteriological reduction

| Comment Received | State Board of Health/Department of Health Determination |
|---|--|
| Suggest adding "when striving to meet" instead of "for meeting" in subsection 1. | No change to proposed rule. SBOH and DOH appreciate the |
| (1) Manufacturers shall, for the purpose of product registration as described in | suggestion and will add this to the list for potential future changes to |
| WAC 246-272A-0110 and 246-272A-0120: | the rule. |
| (a) when striving to meet for meeting treatment level DL1, verify bacteriological | |
| reduction performance by sampling for fecal coliform or E. coli. | |
| (b) when striving to meet for meeting treatment level DL2 or DL3, verify | |
| bacteriological reduction performance by sampling for fecal coliform. | |
| Suggest rephrasing subsection (2)(b). | No change to proposed rule. SBOH and DOH appreciate the |
| (2)(b) When testing treatment product or treatment component sequence | suggestion and will add this to the list for potential future changes to |
| according to the NSF/ANS/ Standard 40 testing protocol. | the rule. |
| The new term, Disinfection Level (DL), would be better articulated as Bacterial | Adopt rule with amendment. BL replaced DL throughout the rules. |
| Level (BL). This would provide better consistency throughout the rule and avoid | Technical change to the rule without changing the effect. |
| conflicts and confusion with references to disinfecting technology. | |

Table 12: WAC 246-272A-0145, Proprietary distribution product registration – Process and requirements

| Comment Received | State Board of Health/Department of Health Determination |
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| Subsection (6)(a) has a date of November 1 while WAC 246-272A-0120(6)(a) has | No change to proposed rule. The two sentences use slightly different |
| a date of October 31. Are these supposed to be the same dates? | constructions due to the surrounding language but both references |
| | are for the same day. |
| For consistency it may be better to leave "proprietary" and insert "registered" in | No change to proposed rule. SBOH and DOH will consider renaming |
| front of the word "proprietary". The current "List of Registered On-site | the "List of Registered On-site Treatment and Distribution Products" |
| Treatment and Distribution Products" titles Section 2 as "List of Manufacturers | to match the rule language. |
| of Registered Proprietary On-site Products". Or strike "proprietary" as proposed | |
| and make changes for consistency of language in other documents. | |

Table 13: WAC 246-272A-0200, Permit requirements

| Comment Received | State Board of Health/Department of Health Determination |
|---|--|
| Consider adding a sample permit application with gravity O.S.S. design layout. | No change to proposed rule. Permit applications are the responsibility of the local health jurisdictions, not DOH. |
| Subsection (4)(d) references subsection (1) however, it should reference subsection (2). | Adopt rule with amendment. Editorial change to the rule without changing the effect. Correctly references the right subsection of rule. (4)(d) Issue a permit when the information submitted under subsection ± 2 of this section meets the requirements contained in this chapter and in local rules; |
| Use artificial intelligence (AI) to site and design OSS. | No change to proposed rule. The rule does not preclude designers from using AI to assist in OSS design work. The final design must be stamped by an OSS Designer or Engineer. |
| Pertaining to (2)(c)(x), it is likely that only commercial projects will have surveyors using the vertical datum which provides a static, unchanging reference. It is important to recognize that a design with its own benchmark, may have a benchmark chosen that could be removed, moved or otherwise during construction or even over the 5-years allowed between issuance of an installation permit and actual installation of the system. | No change to proposed rule. The requirement to include the vertical datum used on every map that includes topographical elements comes from WAC 332-130-145 Topographic elements on maps— Requirements. This requirement was added to chapter 246-272A WAC to provide consistency and as a service to designers. |
| Pertaining to 2(c)(xi), the added requirement to include elevations in reference to the vertical datum or established benchmarks would create the need for significant fee increases due to the additional training, equipment and increased time needed for inspectors to verify in the field and office when evaluating the site/plan during any part of the design or installation. | No change to proposed rule. The rule revision committee came to consensus that use of an elevation benchmark and relative elevations is currently standard practice in the industry. |
| 2(c)(xii) seems duplicative to (2)(a)(x), since (2)(a)(x) already requires the name, signature, and stamp of the designer. Consider consolidating this into one requirement. | No change to proposed rule. (2)(a)(x) lists the requirements for the permit application. (2)(c)(xii) list the requirements of the site plan. The requirement to include the name, signature, and stamp on every map that includes topographical elements (including site plans) comes from WAC 332-130-145 Topographic elements on maps—Requirements. This requirement was added to chapter 246-272A WAC to provide consistency and as a service to designers. |

Table 14: WAC 246-272A-0210, Location

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| "Unlined stormwater infiltration pond" needs to be defined to exclude commonly used drainage swales. If the intent is to include drainage swales this will have a significant effect on land development, negatively impacting usable land area (Table XI). | No change to proposed rule. The requirement does not refer to Infiltration Swales ("drainage swales" is not defined in Department of Ecology's Stormwater Manual). It refers to Infiltration ponds as defined in the Stormwater Manual. |
| The new setbacks could not be properly evaluated since there were questions on the definition of terms used. | No change to proposed rule. SBOH and DOH appreciate the feedback. No recommended change provided. |
| Clarification is needed for the setback for pressurized water supply line or easement for water supply line. Is it to the easement if the water supply line has not been installed or always to the easement line? | No change to proposed rule. The setback is to the easement, or to the waterline, whichever is closer. |
| Up-gradient vs Down-gradient are difficult to evaluate. Is this from the bottom of the trench, top of the trench etc. Consider eliminating the distinction and using a single setback distance. | No change to proposed rule. DOH provides routine training and technical assistance on applying this aspect of the rule. A single setback distance that applied to both scenarios would need to default to the more conservative of the two. |
| Please clarify the difference between wells and nonpublic drinking water wells. With the same horizontal separation, two separate lines in Table IV does not seem to be needed. | No change to proposed rule . This was added to provide clarity between public drinking water wells and nonpublic drinking water wells. DOH routinely receives questions about this. |
| Table IV is missing footnotes for 3-8. | Adopt rule with amendment. The missing footnotes were added to Table IV: 3Any in-ground containment vessel used to store drinking water. 4A network of underground piping carrying fluid under pressure used to heat and cool a structure. 5Lined means any component that has the intended function of detaining the storm water with no intention of dispersal into surrounding soil. 6OSS components take precedence in cases of horizontal setback conflicts between OSS and stormwater components. 7Down-gradient means that subsurface water flows toward and is usually located lower in elevation. Up-gradient means subsurface water does not flow toward and generally flat, or flows away from and generally located higher in elevation. 8Unlined means any component that has the ability to or intended function of infiltrating the storm water. |

| Table IV outlines nonpublic, in-ground, drinking water containment vessel but excludes the public equivalent. Consider adding this to the proposed rule. | No change to proposed rule. DOH routinely receives questions about nonpublic, in ground, drinking water containment vessels. These containment vessels are common on properties served by OSS. We have not received questions about public, in ground, containment vessels and have determined that we do not need to add a setback requirement for them at this time. |
|--|---|
| If OSS treat sewage to treatment level A and above DL1 it should be allowed to discharge to surface water and discharged closer to the features on Table IV. | No change to proposed rule. The setback requirements in Table IV have been established through review of the available scientific literature and collaborative discussion with experts. The consensus and view of DOH is that the listed setbacks are appropriate. Discharges to surface water fall outside the authority of chapter 246-272A WAC and would need to be permitted as an NPDES permit through the Department of Ecology. |

Table 15: WAC 246-272A-0220, Soil and site evaluation

| Comment Received | State Board of Health/Department of Health Determination |
|--|--|
| The winter groundwater level evaluation is done incorrectly. The proposed rule | No change to proposed rule. SBOH and DOH appreciate the |
| allows only engineers, designers, and local health officers to complete this | feedback. There is no specific recommendation. |
| evaluation. Farmers know their winter soil water table. The rule prevents them | |
| from managing their property in the way they think is best. | |

Table 16: WAC 246-272A-0230, Design requirements - General

| Comment Received | State Board of Health/Department of Health Determination |
|--|---|
| Allow owners who are not a resident of their property to design their own OSS. | No change to proposed rule. The rule requires that only approved |
| The rule currently allows only resident owners to design their own OSS, if the | designers may design OSS, ensuring that OSS are designed by |
| LHJ allows. | competent professionals and are protective of public health. |
| | Allowing resident owners to design their own OSS allows a limited |
| | expansion of risk. Allowing non-resident owners to design OSS on |
| | properties they own would allow a much greater potential |
| | expansion of risk, likely impacting disadvantaged communities. |
| The requirement to design OSS based on 45 gallons per day (gpd) per person | No change to proposed rule. The 45 gpd per person with two people |
| with two people per bedroom is out of date and should be revised. It hinders | per bedroom design requirement is the minimum recommended by |

| water conservation. | EPA in the Onsite Wastewater Treatment Systems Manual, 2002 Revision. This is the most authoritative design requirement guidance available and is the standard in the onsite sewage industry. The requirement ensures that OSS are designed for the typical range of water use. Using less water than the maximum the OSS is designed to accommodate likely prolongs the usable lifespan of the OSS. The potential cost savings from allowing reduced gpd design requirements are marginal because the resulting reduction in size of OSS components (i.e. drainfield) is marginal and these components are relatively low cost per square foot. |
|---|--|
| Subsection (1). Add back the "s" after designer or remove the "s" after engineer to make consistent singular or plural. | Adopt rule with amendment. The change makes subsection 1 singular and consistent with the other subsections. Editorial changes to the rule without changing the effect. (1) OSS must only be designed by <u>a</u> professional engineers, licensed under chapter 18.43 RCW, or <u>an</u> OSS designer, licensed under chapter 18.210 RCW, except: |
| If no bedrooms in additional dwelling, then what? (2)(d)(ii)(B) & (2)(d)(iii)(C). | No change to proposed rule. If the dwelling has no separate bedrooms, it counts a single bedroom. |
| The rule shields department-licensed contractors from market competition and gives too much power to the LHO. All OSS technologies are many years old and designers simply use ready-made designs. Artificial intelligence can do the same. | No change to proposed rule. SBOH and DOH appreciate the feedback. There is no proposed change. |
| The requirement in section WAC 246-272A-0230 (2)(a) to direct all sewage from the building served to the OSS contradicts EPA recommendations to separate blackwater and greywater from the OSS influent. Separating these waste flows facilitates better sewage treatment. | No change to proposed rule. The EPA Design Manual does not recommend separating waste flows, but instead provides considerations for doing so. This section does not preclude separation of blackwater and greywater. |
| WAC 246-272A-0230 (2)(d) and its subparagraphs shall take into account separation of blackwater and graywater. | No change to proposed rule. WAC 246-272A-0230 (2)(d) and its subparagraphs do not preclude separation of blackwater and greywater. |
| In DS&G, the Department should list and describe the well-known and developed components of OSSs with effluent qualities that can be discharged to surface waters, and make recommendations as to which of these components should be used depending on the environmental conditions of the site. OSS installers should not be responsible to measure the quality of the resulting water. | No change to proposed rule. Discharges to surface water fall outside the authority of chapter 246-272A WAC and would need to be permitted as an NPDES permit through the Department of Ecology. The rule does not require OSS installers to measure water quality or effluent quality. |

Believes the changes give too much authority to the Local Health Officer in the local health jurisdiction without any process to appeal their decisions.

No change to proposed rule. Local Health Officer permitting decisions are generally appealable to the Local Board of Health.

Table 17: WAC 246-272A-0232, Design requirements - Septic tank sizing

| te Board of Health/Department of Health Determination |
|--|
| hange to proposed rule. Table VII is useful in providing the |
| mation in a clear, easy-to-understand format. |
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| |
| har |

Table 18: WAC 246-272A-0234, Design requirements – Soil dispersal components

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| Ensure that each (letter) sections following "meet the following requirements" | No change to proposed rule. The section describes the requirements |
| are in complete sentences. Most of the items listed are missing a verb leaving | that the Subsurface Soil Absorption System (SSAS) must meet, not |
| no 'action' for the designer to take. | actions for the designer to take. |
| Install inverted u-shaped pipes over drainfield piping to prevent blockage of | No change to proposed rule. SBOH and DOH appreciate the |
| drainfield pipes | suggestion and will forward this idea to the local health department |
| | to conduct a possible field test. The suggestion will be added to the |
| | list of potential future changes to the rule. |
| Connect drainfield lateral pipes every 10 feet to equalize flow. | No change to proposed rule. The rule allows the recommended |
| | technique but does not require it. SBOH and DOH appreciates the |
| | suggestion and will forward this idea to the local health department |
| | to conduct a possible field test. The suggestion will be added to the |
| | list of potential future changes to the rule. |
| The requirements for soil distribution components could impose an unintended | No change to proposed rule. The full impact of the recommended |
| requirement on proprietary dispersal products without clarifying the proposed | change is not well understood. All currently registered proprietary |
| rule language. Consider adding the following: | dispersal products are designed with a 3-foot wide footprint and are |
| (4)(c) Beds are only designed in soil types 1, 2, 3 or in fine sands with a width not | expected to easily comply with the rule without the recommended |
| exceeding 10 feet. Gravity beds must have a minimum of one lateral for every | change. |
| three feet in width. For proprietary distribution products, extension of the | |
| lateral beyond the connection to the product is required only if specified in the | |

| product registration; | |
|--|---|
| Consider adding a list of all technologies used for dispersal of effluent from | No change to proposed rule. Approved proprietary products are |
| treatment tanks and a link where requirements to all types of dispersal | found in the "List of Registered On-site Treatment and Distribution |
| components can be found. Separation of blackwater, graywater and solid | Products." Other guidance is found in related standards documents |
| organic waste is not considered. | on DOH's webpage. |
| (4)(c) bed width should be expanded to 12 feet due to the common usage of | No change to proposed rule. This is a technical change with potential |
| gravelless chambers and their typical widths. | impacts to treatment. This change merits literature review and |
| | collaboration with technical experts and impacted parties. The |
| | suggestion will be added to the list of potential future changes to the |
| | rule. |

Table 19: WAC 246-272A-0238, Design requirements – Facilitate operation, monitoring and maintenance

| Comment Received | State Board of Health/Department of Health Determination |
|--|--|
| Install long-sweep ells to grade at the end of each drainfield lateral to aid in | No change to proposed rule. This is a technical change with |
| flushing and jetting of laterals. | potential impacts to operations and maintenance. This change |
| | merits collaboration with technical experts and impacted parties. |
| | The suggestion will be added to the list of potential future changes |
| | to the rule. |
| Correct misspelling of "maintenance" to "maintenance" in WAC 246-272A- | Adopt rule with amendment. Corrected spelling, editorial change to |
| 0238(1)(b)(i) | the rule without changing the effect. |
| Consider revising WAC 246-272A-0238(1)(b)(iii) to read: | No change to proposed rule. Proprietary products are required to be |
| (iii) Other pretreatment units such as aerobic treatment units and packed-bed | installed according to manufacturer's instructions. If the |
| filters must have service access maintenance holes and/or monitoring ports, as | manufacturer's installation instructions include installation of |
| necessary to access components of the OSS; | monitoring ports they are required to be installed. |
| It is unclear why the language in WAC 246-272A-0238(1)(a)(i) is changed from | No change to proposed rule. The comment provided no |
| referencing septic tanks to referencing septic tanks. This section refers to | recommended change. The change in question is proposed include |
| gravity OSS, which all use septic tanks. | all scenarios. Some OSS have a gravity-operated septic tank and |
| | drainfield preceded by a pump tank or other sewage tank. |

Table 20: WAC 246-272A-0250, Installation

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| Allow owners who are not a resident of their property to install their own OSS. The rule currently allows only resident owners to install their own OSS, if the LHJ allows. | No change to proposed rule. The rule requires that only approved installers may install OSS, ensuring that OSS are installed by competent professionals and are protective of public health. Allowing resident owners to install their own OSS allows a limited expansion of risk. Allowing non-resident owners to install OSS on properties they own would allow a much greater potential expansion of risk, likely impacting disadvantaged communities. |
| Consider removing the exclusion and allowing homeowners to continue to install replacement systems under Table IX. | No change to proposed rule. Repairs under Table IX pose an increased risk to public health and the environment. SBOH and DOH do not believe homeowners should be allowed to conduct these repairs at this time. |
| Recommend adding "licensed" between "only" and "installers" in Subsection (1). | No change to proposed rule. "Installer" is defined in the definitions section. |
| Subsection (2)(c) references "Table IX standards in WAC 246-272A-0270." Section -0270 does not have a table and believe the anticipated table to be references in now Table X of 246-272A-0280. | Adopt rule with amendment. Technical change without change to impact. The change correctly references the right table and section of rule. (c) The installation permit meets Table IX X standards in WAC 246-272A-0270 246-272A-0280. |
| Subsection (1) unreasonably limits the rights of the owner to manage their property. The Code does not reveal clear descriptions of how to construct all components of OSSs. Instead, WWMS DOH gives this information into the hands of few installers and requires to use their services. LHOs do not have a right to decide who fulfills the installation, if the installed components of the system meet the requirements. | No change to proposed rule. The comment does not provide a recommendation. WAC 246-272A-0250(1) requires that only approved installers construct OSS. Local health officers approve installers. This duty and authority are granted to local health officers by RCW 70.05.070. |

Table 21: WAC 246-272A-0265, Record Drawings

| Comment Received | State Board of Health/Department of Health Determination |
|--|---|
| Subsection (2) seems as though it could be consolidated in subsection (1). | No change to proposed rule. The suggestion will be added to the |
| | list for potential future changes to the rule. |

Table 22: WAC 246-272A-0270, Operation, monitoring, and maintenance – Owner responsibilities

| Comment Received | State Board of Health/Department of Health Determination |
|--|--|
| The requirement to inspect increases costs. Sewage pumping is not needed as often as inspection are required. | No change to proposed rule. Inspections are a fundamental aspect of OSS operation and maintenance and are critical to protection of public health. DOH reviewed literature, EPA guidance, and consulted industry experts and has determined that the current inspection requirements are appropriate. Sewage pumping is a maintenance activity independent of inspections and may be needed more or less often than inspections. Both activities reduce the potential for OSS failure, offsetting repair and replacement costs that are much higher than inspection and pumping costs. |
| Subsection (1)(e) states "obtain an inspection, as required in WAC 246-272A-0260(5)" This references section is not what "requires" the inspection; -0270 is. Section -0260 outlines what makes up an inspection. Consider replacing "required" with "outlined." | No change to proposed rule. The requirements of the inspection are described in WAC 246-272A-0260(5). WAC 246-272A-0270(1)(e) describes when property transfer inspections must occur. |
| Opposes requirements for inspection because the proposed rule gives the local health department authority to enter private property and annual inspections are costly, inefficient, and time consuming. Opposes mandatory inspections other than as required under RCW 70A105.030. | No change to proposed rule. SBOH and DOH respectfully disagree with the assertions being made. The rule does not give the local health department authority to enter private property without permission. It requires the owner to hire an inspector to conduct an inspection. Routine inspections are currently required in rule. The rule does not change the frequency of routine inspections. |
| Opposes the requirements for inspection because this comprises unwarranted additional expense and scope of activity imposed on the seller when selling their home. | No change to proposed rule. Inspections will protect public health and buyers. There is no requirement to inspect or added cost to the seller if the OSS is up-to-date with routine inspection requirements. Property transfer inspections are a long-standing component of the Purchase and Sale Agreement governing all property sales in Washington. |
| Table X has conforming systems that meet Class A waiver criteria outside of the conforming system label — as an example, a system that is 70 feet from surface water, has 30 inches of vertical, with Treatment B & DL2 is conforming following the waiver criteria. There should be a horizontal separation recategorization between 50-75 and 75-100 feet based on footnote 3. | No change to proposed rule. The suggestion will be added to the list of potential future changes to the rule. |

| I question the benefit of changing the term from "septic" to "sewage" in WAC | No change to proposed rule. The comment does not provide |
|--|---|
| 246-272A-0270(1)(e)(i). | a recommendation. The change from referencing a septic tank to |
| | referencing a sewage tank is meant to add clarity and include all |
| | scenarios. Septic tanks are a type of sewage tank. Some OSS with |
| | gravity SSAS includes other types of sewage tanks. |

Table 23: WAC 246-272A-0278, Remediation

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| this subsection that there is a requirement for DOH to maintain a guidance | No change to proposed rule. This is an error on the Summary of Changes document. The rule is intended to not include a requirement for DOH to maintain a guidance document on remediation. |
| How will the new Remediation section (WAC 246-272A-0278) interact with the RS&G for Remediation Technologies and Processes? | No change to proposed rule. The comment does not provide a recommendation. DOH will update and republish the Interim Remediation Technologies and Processes RS&G as a DS&G. |

Table 24: WAC 246-272A-0280, Repair of failures

| Comment Received | State Board of Health/Department of Health Determination |
|--|---|
| We would highly support DOH and Ecology to work together to make this option | • , , |
| | representatives from Department of Ecology and several other |
| | partners. No committee members voiced an interest in revising this |
| | option. Because this change could potentially impact surface waters |
| | around the state, the department believes it would require thorough |
| | rule analysis and deliberative collaboration with partners and |
| | impacted parties. The suggestion will be added to the list of potential |
| | future changes to the rule. |

| Subsection (1)(a) references Table X which was previously Table IX. Table IX is now options for addressing OSS Failures but is not references until Subsection 3. Consider reorganizing the two tables so that the tables are in order of their reference and will maintain the contents of the "Treatment Component Performance Levels for Repair of OSS Not Meeting Vertical & Horizontal Separation" as Table IX. | No change to proposed rule. The suggestion will be added to the list for potential future changes to the rule. |
|--|---|
| Subsection (4)(e) references 246-272A-0014 & -0016. These WACs do not exist; recommend updating the WAC reference to the correct section. | Adopt rule with amendment. Technical change without change to impact. The change correctly references the right section of rule. (e) Minimize nitrogen discharge in areas where nitrogen has been identified as a contaminant of concern in the local management plan under WAC 246-272A-0014 or 246-272A-0016-246-272A-0015; |
| In Table IX, the term "dispersal" is used. Table VI uses the term "distribution", as in "method of distribution". Shouldn't "distribution" be used in Table IX instead of "dispersal"? | Adopt rule with amendment. Technical change without change to impact. The change uses the correct terminology. Table IX, Option A, 2: The soil dispersal component to be repaired or replaced complies with the treatment level and dispersal distribution method requirements in Table VI of WAC 246-272A-0230; |
| In the Table X's footnote 2 it references "treatment level A". Should this also include DL1, in accordance with the new treatment levels as described in Table III? | Adopt rule with amendment. Technical change without change to impact. BL1 was added to the footnotes since BL replaced DL throughout the rules. ² The horizontal separation indicated in Table X of this section is the distance between the soil dispersal component and the surface water, well, or spring. If the soil dispersal component is up-gradient of a surface water, well, or spring to be used as a potable water source, or beach where shellfish are harvested, the next higher treatment level shall apply unless treatment level A and BL1 is already required. |

Table 25: WAC 246-272A-0300, Abandonment

| Comment Received | State Board of Health/Department of Health Determination |
|--|--|
| (3) Consider removing this requirement since this may not always be possible | No change to proposed rule. SBOH and DOH respectfully disagree; it |
| and is mostly addressed in (2)(b). | is generally possible to provide grading to match the site conditions. |
| | A waiver can be applied in the rare instance that it is not possible. |

Table 26: WAC 246-272A-0320, Developments, subdivisions, and minimum land area requirements

| Comment Received | State Board of Health/Department of Health Determination |
|---|--|
| Recommend a reduction to minimum surface area requirement because I may need to have a repair. | No change to proposed rule. The minimum land area requirements apply to new developments. Repairs are covered under WAC 246-272A-0280 and reductions from setback requirements are allowed if needed. The minimum land and minimum usable land requirements are designed to ensure that there is enough space for the repaired components on the property. |
| The additional setback requirements listed in Table IV may have a significantly impact minimum usable land area. Guidance from DOH on how to do calculations using Table XII will be needed. | No change to proposed rule. The minimum usable land area requirement is intended to ensure that enough land is available for OSS installation and replacement. Without the appropriate land area OSS installations and repairs are more expensive, if not impossible. Impacts are expected to be positive and protective to public health and owners in the long term. DOH will provide training and guidance on the use of Table XII. |
| Table XI. Ensure leading zeros are used (<u>0</u> .5 acres) and footnotes reference the correct subsection [0234(<u>67</u>) now]. | Adopt rule with amendment. Added the zero to correct the acre format in <i>Soil Type 1</i> column and <i>Public Water Supply</i> row of Table XI and correctly reference subsection 7 in the footnote. Editorial change to the rule without changing the effect. O.5 acre WAC 246-272A-0234(67) |
| Recommend clarifying with Office of Drinking on the definition of public versus nonpublic water systems and defining in 246-272A. EPA defines (Group A) public water systems and DOH Office of Drinking Water has defined Group B public water systems. Section (2)(b) states "with nonpublic wells", however, the wording of the WAC sounds as though a development/subdivision is creating a (privately-owned) public water system with multiple wells. | No change to proposed rule. Office of Drinking Water has been consulted on the relevant definitions. |
| Removing the terms "Method 1" and "Method 2" from the rule doesn't add clarity to WAC 246-272A-0280. There are two methods in the proposed rule. | No change to proposed rule. The comment does not provide a recommendation. The rule has been updated to minimize confusion between the requirements associated with the existing methods (Method 1 and Method 2, respectively) and the requirements associated with the options in the rule. |

| Table XII title is missing the table number. | No change to proposed rule. The table title is in the rule, just |
|---|--|
| | separated by a page break in the document. |
| The section describing the method of determining lot sizes that do not meet the | No change to proposed rule. SBOH and DOH appreciate the |
| requirements in Table XI could benefit from additional editing for clarity. | feedback. The comment does not provide a recommendation. |

Table 27: WAC 246-272A-0340, Approval of installers, pumpers, and maintenance service providers

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| This would require non-Puget Sound counties that would not be mandated to | No change to proposed rule. SBOH and DOH respectfully disagrees. |
| do property transfer inspections until 2 years after implementation, to put an | This is designed to require that approval processes for maintenance |
| approval process for maintenance service providers in place 2 years in advance. | service providers to be well established before the property transfer |
| Consider changing the requirement date for these counties to have an approval | inspection requirement begins. |
| process for maintenance service providers in place closer to the implementation | |
| date, e.g., Jan 1, 2027. | |

Table 28: WAC 246-272A-0420, Waivers

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| | Adopt rule with amendment. The change corrects the sentence, so it makes sense. Editorial change without changing effect. |
| In subsection (4), recommend adding what timeframe the annual report will cover. Will it be of the calendar year or biennium? | No change to proposed rule. The suggestion will be added to the list for potential future changes to the rule. |

Table 29: WAC 246-272A-0430, Enforcement

| Comment Received | State Board of Health/Department of Health Determination |
|---|---|
| In subsection 2, consider adding that each notice and order must "include the | No change to proposed rule. WAC 246-272A-0430(2)(e) requires that |
| date in which the required repair must be completed (due date)". | notices and orders include the time or times of compliance. |
| | |

| Opposes the use of civil or criminal penalties as an enforcement action. Expressed concerns with the proposed rules giving too much authority to the Local Health Officer and punishing the homeowners. | No change to proposed rule. SBOH and DOH appreciates the feedback. The rule cannot change the local health officer's enforcement authority set by statute. |
|---|--|
| The words "may be" is redundant in this sentence (WAC 246-272A-0430(1)(f)) as the lead in "(1)may initiate enforcement action. Enforcement action <i>may</i> include, but is not necessarily limited to:" | Adopt rule with amendment. Fixed subsection 1 to remove an item that is not an example of an enforcement action and made it the new subsection 2. Renumbered the remaining subsections. Editorial change without changing effect. (2)(f) An informal conference may be held at the request of any party |
| | to resolve disputes arising from enforcement of this chapter. |
| Believes the changes give too much authority to the Local Health Officer in the local health jurisdiction without any process to appeal their decisions. | No change to proposed rule. Decisions made by the local health officer are appealable to the local board of health. |

Additional amendments to proposed rule:

- 1) WACs 246-272A-0140(2), 246-272A-0210(1), and 246-272A-0430(4) were amended to replace "shall" with "must" to correctly align with the Code Reviser's Bill Drafting Guide (2023). This was an editorial change without changing the effect of the rule.
- 2) WAC 246-272A-0238(1)(c)(i) was amended to provide clarity to the rule.
 - o Process controls such as floats, and pressure activated pump on/off switches, and pump-run timers-and process flow controls;

Notes: The State Board of Health and the Department of Health did not receive comments for sections WAC 246-272A-0005, 0007, 0013, 0140, 0170, 0233, 0240, 0260, 0282, 0290, 0310, 0400, 0410, 0425, and 0440.



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