

**Final Agenda**

Time	Agenda Item	Speaker
8:30 a.m.	Call to Order & Introductions	Patty Hayes, Board Chair
8:45 a.m.	1. Approval of Agenda—Possible Action	Patty Hayes, Board Chair
8:50 a.m.	2. Approval of November 8, 2023, Minutes – Possible Action	Patty Hayes, Board Chair
8:55 a.m.	3. Public Comment	Please note: Verbal public comment may be limited so that the Board can consider all agenda items. The Chair may limit each speaker’s time based on the number people signed up to comment.
9:15 a.m.	4. Announcements and Board Business	Michelle Davis, Board Executive Director
9:30 a.m.	5. 2024 Legislative Session Preview	Kelly Cooper, Policy & Legislative Relations Director, Department of Health Amy Ferris, Chief Financial Officer, Department of Health Vicki Lowe, Executive Director, American Indian Health Commission Jaime Bodden, Managing Director, Washington Association of Local Public Health Officials
10:00 a.m.	6. Water Recreation Petition <a href="#">WAC 246-260</a> Update	Patty Hayes, Board Chair Andrew Kamali, Board Staff David DeLong, Department of Health

Time	Agenda Item	Speaker
10:20 a.m.	7. 2024 State Health Report	Mindy Flores, Board Member Molly Dinardo, Board Staff Hannah Haag, Board Staff
10:35 a.m.	Break	
10:50 a.m.	8. Indoor Air Quality Panel <ul style="list-style-type: none"> <li>• Eric Vander Mey – Delta E Consulting</li> <li>• Brandon Kemperman – Public Health Seattle King County</li> <li>• Nancy Bernard – Department of Health</li> <li>• Ben Omura – State Building Code Council</li> <li>• Erin McTigue – Environmental Protection Agency Region 10</li> </ul>	Patty Hayes, Board Chair Andrew Kamali, Board Staff
12:40 p.m.	Lunch	
1:30 p.m.	9. Rules Hearing – <a href="#">On-Site Sewage Systems</a> , Chapter 246-272A WAC <ul style="list-style-type: none"> <li>– Public Testimony</li> <li>– Possible Action</li> </ul>	Kate Dean, Board Member Andrew Kamali, Board Staff Jeremy Simmons, Department of Health
2:30 p.m.	10. Emergency Rulemaking – <a href="#">On-Site Sewage Systems</a> , WAC 246-272A-0110, Proprietary Treatment Products and Supply Chain Shortages <ul style="list-style-type: none"> <li>– Possible Action</li> </ul>	Tao Sheng Kwan-Gett, Secretary’s Designee Andrew Kamali, Board Staff Jeremy Simmons, Department of Health
2:45 p.m.	Break	

Time	Agenda Item	Speaker
3:00 p.m.	11. Petition for Rulemaking for <a href="#">Chapter 246-760 WAC</a> , Visual Screening Standards – School Districts – Possible Action	Socia Love-Thurman, Board Member Molly Dinardo, Board Staff
3:20 p.m.	12. 2024 Legislative Statement – Possible Action	Michelle Davis, Board Executive Director
3:45 p.m.	13. Snohomish County Health Department Complaint – Possible Action	Kelly Oshiro, Vice Chair Molly Dinardo, Board Staff
4:00 p.m.	14. Board Member Comments and Updates	
4:20 p.m.	Adjournment	

- **To access the meeting online and to register:**  
[https://us02web.zoom.us/webinar/register/WN\\_FvTsOSBvRbqMrlvz2Ky4mA](https://us02web.zoom.us/webinar/register/WN_FvTsOSBvRbqMrlvz2Ky4mA)
- **You can also dial-in using your phone for listen-only mode:**  
 Call in: +1 (253) 215-8782 (not toll-free)  
 Webinar ID: 818-6445-6351  
 Passcode: 682856

**Important Meeting Information to Know:**

- Times are estimates only. We reserve the right to alter the order of the agenda.
- Every effort will be made to provide Spanish interpretation, American Sign Language (ASL), and/or Communication Access Real-time Transcription (CART) services. Should you need confirmation of these services, please email [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov) in advance of the meeting date.

## Notice of Public Meeting

Wednesday, January 10, 2024, 8:30 a.m. – 4:20 p.m.

Physical meeting location:

Washington State Department of Health  
111 Israel Road S.E., Tumwater, WA 98501  
Building: Town Center 2, Rooms 166 & 167

Virtual meeting: ZOOM Webinar  
(hyperlink provided below)

Language interpretation available

- If you would like meeting materials in an alternate format or a different language, or if you are a person living with a disability and need [reasonable modification](#), please contact the State Board of Health at (360) 236-4110 or by email [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). Please make your request as soon as possible to help us meet your needs. Some requests may take longer than two weeks to fulfill. TTY users can dial 711.

### Information About Giving Verbal Public Comment at Hybrid Meetings:

- For the public attending in-person: If you would like to provide public comment, please write your name on the sign-in sheet before the public comment period begins. We strongly encourage people to sign up with the Board by sending an email by 12:00 Noon the last business day before the meeting to: [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). As this is a business meeting of the Board, time available for public comment is limited (typically 2 to 4 minutes per person). The Chair will call on those who have signed up to speak to the Board, first. The amount of time allotted to each person will depend on the number of speakers present. If time remains, those who have not signed up ahead of time to speak to the Board will be called on to speak until the scheduled time for Public Comment comes to an end.
- For the public attending virtually: If you would like to provide public comment, please sign up through the Zoom webinar link by 12:00 Noon, the last business day before the meeting. Your name will be called when it's your turn to comment.

### Information About Giving Written Public Comment:

- Please visit the Board's [Meeting Information webpage](#) for details on how to provide written public comment.

# WASHINGTON STATE BOARD OF HEALTH

## Draft Minutes of the State Board of Health

November 8, 2023

Hybrid Meeting

ASL (or CART) and Spanish interpretation available

Physical location:

Washington State Department of Health  
111 Israel Road S.E., Tumwater, WA 98501  
Building: Town Center 2, Rooms 166 & 167  
Virtual meeting: ZOOM Webinar

### State Board of Health Members present:

Patty Hayes, RN, MN, Chair  
Kelly Oshiro, JD, Vice Chair  
Stephen Kutz, BSN, MPH  
Kate Dean, MPH  
Umair A. Shah, MD, MPH  
Tao Sheng Kwan-Gett, MD, MPH, Secretary's Designee  
Kelly Cooper, Secretary's Designee  
Dimyana Abdelmalek, MD, MPH  
Socia Love-Thurman, MD

### State Board of Health Members absent:

Mindy M. Flores, MBA-HCM  
Paj Nandi, MPH

### State Board of Health staff present:

Michelle Davis, Executive Director  
Melanie Hisaw, Executive Assistant  
Michelle Larson, Communications  
Manager  
Anna Burns, Communications Consultant  
Stuart Glasoe, Health Policy Advisor  
Molly Dinardo, Health Policy Advisor

Andrew Kamali, Health Policy Advisor  
Jo-Ann Huynh, Administrative Assistant  
Miranda Calmjoy, Health Policy Analyst  
LinhPhụng Huỳnh, Council Manager  
Cait Lang-Perez, Health Policy Analyst  
Lilia Lopez, Assistant Attorney General

### Guests and other participants:

Mike Means, Department of Health  
Brad Burnham, Department of Health  
Elaine Harvey, Columbia River Inter-Tribal Fish Commission  
Paulina Lopez, Duwamish River Community Coalition  
Ryan Oelrich, Priority Spokane & Spokane City Council Member  
Sue Sullivan, Whatcom County  
Joana Solario, Spanish Interpreter  
Sacha Delgado, Spanish Interpreter  
Seven Star, ASL Interpreter  
Molly Sano, ASL Interpreter

Patty Hayes, Board Chair, called the public meeting to order at 9:38 a.m. and read from a prepared statement (on file).

Michelle Davis, Board Executive Director, gave an acknowledgment on behalf of National American Heritage Month in November.

### **1. APPROVAL OF AGENDA**

**Motion:** Approve November 8, 2023 agenda

**Motion/Second:** Member Kutz/Member Love-Thurman. Approved unanimously

### **2. ADOPTION OF OCTOBER 9, 2023 MEETING MINUTES**

**Motion:** Approve the October 9, 2023 minutes

**Motion/Second:** Member Dean/Member Abdelmalek. Approved unanimously

### **3. PUBLIC COMMENT**

Patty Hayes, Board Chair, opened the meeting for public comment and read from a prepared statement (on file).

Jan Davis, commented on the harm from COVID-19 immunizations, saying Pfizer kept data secret for 75 years and was recently ordered to release a detailed report on the harms of the MRNA vaccination. J. Davis commented on racism, saying 160 countries are coming in an unvetted open border, and that our biggest threat is sex trafficking.

Bill Osmunson, commented on meta-analysis as an evidence stream to consider public health. B. Osmunson talked about the dangers of fluorosis and trusting science.

Mary Long, Spokane resident, commented on the harm from the COVID-19 vaccination, especially to children, and asked the Board not to promote the vaccination. M. Long provided numbers of daycare through college age people, saying four died, 47 had life-threatening reactions, 69 were disabled, and 118 developed myocarditis.

Gerald Braude, Jefferson County, commented on the harm from the COVID-19 shots, saying the Department of Health (Department) dashboard promotes the shot but says nothing about the adverse effects. G. Braude mentioned attending previous Board meetings and commented on the alarming number of deaths reported from the Centers for Disease Control (CDC) Vaccine Adverse Event Reporting System (VAERS) report, identifying 222 deaths in WA and more in the nation following the COVID-19 shots.

Vince Jovanovich, Vashon Island, commented on outdoor food establishments. V. Jovanovich asked if the Board would consider more equitable and fair rule changes for outdoor food trucks.

Keith Grellner, congratulated Chair Hayes and Member Nandi, saying they are both excellent choices. K. Grellner thanked Executive Director Davis and Board staff for their

good work that protects the citizens of Washington. K. Grellner thanked Governor Gregoire and Governor Inslee for the opportunity to serve on the Board.

Lisa Templeton, Informed Choice Washington (ICW), commented on the harm from the COVID-19 vaccine, and asked the Board to cease all vaccines that contain dangerous levels of outside and foreign DNA fragments and endotoxin contaminants. L. Templeton talked about a report from the Canadian Care Alliance and commented on the correlation between adverse events and higher levels of fragments.

Natalie Chavez, commented on the harm from the COVID-19 vaccine and asked for experimental vaccines to be put on hold until independent quality control is done. N. Chavez talked about the increased hidden and long-term risks and rates of myocarditis. N. Chavez talked about an eight-year-old grandson of prominent Israeli doctors who died on September 28 from sudden cardiac arrest after being vaccinated.

#### 4. **BOARD ANNOUNCEMENTS AND OTHER BUSINESS**

Michelle Davis, Board Executive Director, gave several updates covered under materials (see materials on file under Tab 4).

Executive Director Davis shared Governor Inslee's announcement regarding the appointment of Patty Hayes as Board Chair. Executive Director Davis announced the Governor's office appointed Paj Nandi to serve as a person with a background in Health and Sanitation, replacing Keith Grellner. Executive Director Davis shared the Resolution for Keith Grellner, who was appointed to the Board in March 2011 by Governor Gregoire. Governor Inslee subsequently reappointed Keith Grellner three times. Keith was appointed as Board Chair in November 2014. Executive Director Davis expressed appreciation to for leading the Board and taking on challenging issues during his tenure.

Executive Director Davis said Member Flores is unable to join the meeting today.

Executive Director Davis directed Board members to a letter from the Office of Financial Management (OFM) to Secretary Shah. The OFM letter details the allocations for Foundational Public Health Services (FPHS), including: \$11,838,000 from General Fund-State for the fiscal year 2024 and \$40,906,000 from General Fund-State for the fiscal year 2025 as well as \$28,050,000 from the FPHS Account-State for the biennium. These funds will be used for the new FPHS activities that support the public health system.

Executive Director Davis shared the Board's October letter to Governor Inslee's office urging support and inclusion in the 2024 Supplemental Budget of the Environmental Justice Council (EJ Council) 2024 Climate Commitment Act funding recommendations that relate to school environmental justice. Executive Director Davis discussed the outdated and suspended school rules and queuing this up to talk about during the legislative session. Chair Patty Hayes agreed that it needs to be addressed.

Stephen Kutz, Board Member asked about new schools and if we can update the rule for new construction and designs. Kate Dean, Board Member, talked about how revenues will be prioritized and is pleased the EJ Council is working on this but knows there might not be funding for their requests. Member Dean shared support for a

consistent amount of funding to do planning around the implementation of the rule and seeking some sort of commitment.

Dimyana Abdelmalek, Board Member shared concern regarding confusion for folks working to operationalize school safety rules. Member Abdelmalek talked about incremental progress and an understanding of goals for new schools. Patty Hayes, Board Chair welcomed direction from the Board on revised rules, for an incremental approach and clarity. Member Abdelmalek agreed if the proviso is lifted, to facilitate an appropriate transition to new rules. Kelly Oshiro, Board Vice Chair, talked about collaborating with partners and community engagement regarding timeline, budget and rule change. Member Kutz wondered about the Office of Superintendent Public Instruction (OSPI) position, saying he hasn't heard much in the last 12 years.

Secretary Shah, made an introduction and said Secretary Designee Kwan-Gett is participating today for the Department of Health (Department).

Executive Director Davis talked about partnerships on this topic, the importance of creating the space to collaborate, and Equity Justice (EJ) Council recommendations that include funding for the Board to hold those groups and come back with recommendations.

Chair Hayes said the legislative statement is homework for Board Members over the next few weeks. Executive Director Davis talked about past and future conversations with OSPI around indoor air quality. Member Kutz talked about the changes in construction over the years, and the responsibility to make sure best practices are in place and correct an outdated rule. Chair Hayes asked Board Members to email Executive Director Davis if they have further thoughts.

Executive Director Davis referenced materials in the packet, including newborn screening petition responses to Kim Tuminello's petition regarding the Board's recommendation to add Guanidinoacetate methyltransferase (GAMT) deficiency and Christine Zahn regarding the Board recommending adding Arginase 1 deficiency (ARG1-D). Executive Director commented on recent rule filings, including the CR-101 for possible rulemaking for auditory screening of school-age children regarding auditory and visual screening of children in schools, and the CR-103E, emergency rule-making order regarding proprietary products used in on-site sewage systems. Executive Director Davis updated the Board on Health Impact Reviews (HIR) for SHB 1010 (Commercial Shellfish), SSB 5171 (Gender Discrimination), and ESHB 1589 (Residents in Long-Term Care Facilities).

Executive Director Davis updated the Board on staff recruitments. Over 40 people applied for the Equity and Engagement Manager position. Executive Director Davis announced the position for Stuart's successor was posted and talked about an upcoming recruitment for a Communications Consultant 3.

## **5. DEPARTMENT OF HEALTH UPDATE**



Umar A. Shah, Secretary of Health and Board Member, and Tao Sheng Kwan-Gett, Chief Science Officer and Secretary's Designee, provided an update from the Department of Health (Department).

Secretary Shah shared statistics on the Washington state health ecosystem, including eight million people (13 most populous state), 71,362 square miles (18 largest state), 29 federally recognized Tribes, 35 local health departments, 500,000 licensed healthcare professionals, and nearly 100 hospitals (see materials on file). The Department's transformational plan is their NorthStar with five areas of focus. Secretary Shah said public health never sleeps and is always addressing issues such as COVID-19, fires, fentanyl, and more.

Kate Dean, Board Member, asked if the current booster for COVID-19 is still effective with the current variants we're seeing. Dr. Kwan-Gett said it is more effective on these variants than the older versions of the vaccine. Member Dean also asked about how the Department interacts with Vaccine Adverse Event Reporting System (VAERS) data and how to view data that comes out of VAERS. Dr. Kwan-Gett responded that VAERS is intentionally a very broad net and epidemiologists must determine which events are related to the vaccine. Dr. Kwan-Gett said this work shows that the COVID-19 vaccines are very safe and safer than expected.

Stephen Kutz, Board Member, commented that current anecdotes around COVID-19 spread are seen in groups going on cruises and bringing it back to their community. Member Kutz also mentioned the ventilation systems in airplanes. Secretary Shah commented that if you are sick or have symptoms you should consider not getting on the flight and wearing a mask. Secretary Shah said we have many tools and we need to use those tools wisely and talked about the free COVID test kits provided by the federal program.

The Board took a break at 11:25 a.m. and reconvened at 11:35 a.m.

## **6. 2024 MEETING SCHEDULE**

Michelle Davis, Executive Director, reviewed the proposed 2024 meeting schedule for the Board and requested Board Members' consideration, saying that some locations are still being determined. Executive Director Davis asked Board Members to let Board staff know of suggestions for future meeting locations, and noted that the April and July meetings are typically tentative.

Stephen Kutz, Board Member expressed appreciation to see meetings be in other locations. Discussion continued about specific logistics and dates, including a suggestion to move the October meeting from Monday, October 7 to Tuesday, October 8. Patty Hayes, Board Chair suggested co-locating with WA Association of Counties or Cities meetings. Kate Dean, Board Member asked about another Local Board of Health (LBOH) training as it provides a chance to build connections.

**Motion:** The Board approves the proposed 2024 meeting schedule, as amended with the October 8, 2024, meeting date.

**Motion/Second:** [Member Kutz/Vice Chair Oshiro](#). Approved unanimously.

## 7. LEGISLATIVE STATEMENT UPDATE

Michelle Davis, Board Executive Director, said the Board updates its legislative statement each year and Board staff refer to the statement to identify and analyze legislation. Executive Director Davis shared that staff conducted a preliminary review of the current statement (adopted January 2023) and identified possible changes. The changes include simple editorial updates; additional areas of interest expressed by Board Members; priorities from the Board's partners that align with Board areas of work; and updates based on presentations to the Board. Executive Director Davis added that there may be additional areas for recommendation based on proposals that partners have submitted to the Governor's Office for approval.

Executive Director Davis said Board Members will receive a marked-up version of the legislative statement soon for their review and feedback. Executive Director Davis said Board staff will bring the marked-up version to the Board's January public meeting, where the Board may discuss and consider adopting changes to the statement. Lastly, Executive Director Davis noted that the Board received public comments on the legislative statement, however, they were received after the public comment deadline and were sent to Board Members and will be posted with materials for the next public meeting.

## 8. REQUEST FOR DELEGATED RULEMAKING AUTHORITY – ENGROSSED SECOND SUBSTITUTE HOUSE BILL (E2SHB) 1181, CLIMATE RESILIENCE ELEMENT IN WATER SYSTEM PLANS, GROUP A PUBLIC WATER SUPPLIES, [CHAPTER 246-290 WAC](#)

Stuart Glasoe, Board staff, introduced the topic and presenters. Stuart explained the Board's authority delegating rulemaking to the Department of Health (Department) and the nature of the Department's request. The Department is requesting to incorporate and align water system planning requirements in chapter 246-290 WAC, Group A Public Water Supplies, with new state law, RCW43.20.310, requiring climate resilience elements in Group A water system plans. Mike Means and Brad Burnham, Department of Health, presented background on the bill that passed the 2023 legislative session, Engrossed Second Substitute House Bill (E2SHB) 1181, anticipated revisions to align the Group A rules with the new law, and initial plans and considerations for handling the request for delegated rulemaking (see materials on file).

Stephen Kutz, Board Member asked if work by the Department updating rules on the drinking water state revolving fund is part of this rulemaking or if that is a separate issue. Mike said the issue is separate from this request. Kate Dean, Board Member, stated familiarity with the bill as it pertains to the Growth Management Act (GMA), and asked if water system plans need to be incorporated or adopted into local comprehensive plans. Mike said the bill limits which water systems must add this climate resilience piece. The water system planning process requires coordination between water utilities and local GMA authorities and requires plans to be "not inconsistent" with local GMA planning requirements. Member Dean asked if water system planning includes both water quality and water quantity. Mike said water system planning must address both, and specifically referenced the water rights self-assessment and coordination with the Department of Ecology.

**Motion:** The Board delegates to the Washington Department of Health rulemaking authority to make changes to WAC 246-290-100 to incorporate the requirements of RCW 43.20.310, requiring Group A public water systems to include climate resilience elements in their water system plans.

**Motion/Second:** Member Kutz/Member Kwan-Gett. Approved unanimously.

The Board took a lunch break at 12:02 p.m. and reconvened at 1:01 p.m.

## 9. CLIMATE CHANGE STORY TELLING PANEL

Patty Hayes, Board Chair, introduced the panel discussion and noted that the Board would be hearing from panelists from all four corners of Washington. Chair Hayes stated that the Board is committed to monitoring the effects of climate change and that it is a priority in the Board's most recent Strategic Plan.

Kate Dean, Board Member, introduced the four panelists, Elaine Harvey, Watershed Department Manager at the Columbia River Inter-Tribal Fish Commission (CRITFC), Paulina Lopez, Executive Director at the Duwamish River Community Coalition, Ryan Oelrich, Executive Director at Priority Spokane, and Sue Sullivan, Environmental Health Manager at the Whatcom County Health Department. Member Dean shared the panelists' biographies (bios) and background information on their current work related to climate change and environmental justice (see materials on file for full bios).

Elaine Harvey, Columbia River Inter-Tribal Fish Commission, Citizen of the Yakama Nation, and Descendent of the Cowlitz Tribe, presented on Tribal wisdom and Indigenous Traditional Ecological Knowledge (ITEK) and what it means to Elaine as a Yakama Citizen. ITEK is unique to each Tribe and the geographic area in which they live. Elaine noted that this knowledge has been carried down for thousands of years. Tribes know what is needed to cultivate and take care of the land but have been prevented from practicing ITEK. Elaine highlighted how Traditional Ecological Knowledge (TEK) and Indigenous Knowledge (IK) can be applied in federal decision-making practices and environmental management strategies. Elaine emphasized that natural resources are cultural resources – everything has a purpose, and everything is connected on the earth. Elaine highlighted how, for decades, Tribes have been acutely aware of the disproportionate impacts of climate change on Tribes and Tribal Members. For example, the negative impacts on first foods and changes to the gathering season, and the warming Columbia River and Tributaries. Elaine shared the Yakama Nation Climate Adaptation Plan for the Territories of Yakama Nation and outlined the strategies Yakama Nation is taking towards climate Resiliency. Elaine presented how climate change and the green energy movement continue to pose threats to Tribal Cultural Resources and Sacred Sites, and how these projects are often conducted without Tribal consultation or input (see full presentation on file).

Paulina Lopez, Duwamish River Community Coalition (DRCC), provided background history on the Duwamish River including its rich history and cultural significance. Paulina shared how the river started as the peaceful home of the Duwamish Tribe, to

becoming one of the Nation's most toxic rivers by 2001, from pollution of the river for economic benefit. Paulina gave an overview of the communities living in the Duwamish River Valley, including demographics, and the downstream impacts living near this Superfund site. Paulina shared the mission of the DRCC, to elevate the voices of those impacted by the Duwamish River pollution and other environmental injustices. Paulina underscored the importance of including and engaging the community in their work at every step in the process and highlighted community concerns and anxieties about addressing the magnitude of the issues the community is facing.

Paulina then shared about research DRCC did in partnership with the University of Washington (UW). DRCC and UW conducted a cumulative health impact assessment to examine the range of disproportionate health exposures and impacts affecting people in the Duwamish Valley. Paulina concluded by expressing appreciation that the Board is bringing in discussions related to environmental justice. Paulina provided a reminder that we need to work together to face the systemic inequities communities face, and we need to identify the root causes of inequities, prioritize advocacy, youth empowerment, and make connections throughout communities. Paulina provided calls for specific actions from community members and detailed how climate change has already impacted and displaced community members in the Duwamish River Valley (see presentation on file).

Ryan Oelrich, Priority Spokane & Spokane City Council Member, presented on the recent Priority Spokane community health needs assessment. The assessments are conducted about every three to five years. Ryan emphasized that several of the assessment priorities were directly related to climate change. Ryan outlined the six focus areas included in the assessment, economy, education, environment, health, housing, and public safety, and presented the methods their team used for assessment development and priority identification. Ryan shared that the assessment took 10 months to complete, and involved data gathering and hosting community meetings and focus groups to ensure the community informed the Spokane County's four end priorities were selected through the assessment process. Ryan highlighted the priorities related to climate change. The priorities included increasing the tree canopy to improve the environment, counteract dangerous heat days, improve air and water quality, and more. Ryan provided examples of the impacts of climate change in Spokane County, including the recent Medical Lake Fire and other extreme weather events that have affected the mental health of Spokane community members. Ryan noted that in addition to climate change being a prevalent factor in the assessment priorities, homelessness was another topic that rose to the top and is also exacerbated by climate change. Many community members noted that this topic has become so big that they aren't sure what could be done in the next three to five years to make a dent in the issue. Ryan concluded by sharing information about how to follow Priority Spokane's work moving forward (see full presentation on file).

Sue Sullivan, Whatcom County, provided background demographic information on Whatcom County, Whatcom County Environmental Health Division, and introduced the Whatcom County vulnerability assessment, also known as BRASH (Building Resilience Against Smoke and Heat). The BRASH assessment will identify the public health impacts of extreme heat and wildfire smoke on the residents of Whatcom County. Sue noted that the BRASH assessment was possible due to recent investments in

environmental public health-related Foundational Public Health Services (FPHS). Sue consulted with state and local partners to develop a plan for the BRASH assessment, which is modeled after the Centers for Disease Control's (CDC) Building Resilience Against Climate Effects BRACE framework (BRACE). Sue shared the goals of the BRASH assessment, the project approach, and the steering committee that helped to frame the approach, and the timeline for this work. Sue noted the project has qualitative and quantitative components, outlined the assessment methods, and emphasized the key goals of this work are to build lasting relationships and partnerships and to operationalize equity in the County's climate planning work. Sue shared that this work is ongoing, and the results from the current assessment phase are expected by June 2024 (see full presentation on file).

Chair Hayes thanked the panel members and asked a question on behalf of Member Dean, who had to leave the meeting early. Chair Hayes asked Elaine if there are examples of TEK and IK where state or local agencies have begun to apply these practices. If so, how can we collect information about what has worked and what has been successful.

Elaine responded that agencies applying and incorporating ITEK into their work are new. Since ITEK is Tribally based and varies on the Tribe and their geographic location, you can't learn it from a text or a book. Elaine said that agencies need to approach this work from the Tribal level. For example, sending an inquiry to the specific Tribe Chairman and the Chairman will then relay that information where it needs to go. Elaine mentioned that each Tribe also has a Cultural Resource Department that could assist with providing ITEK consultation.

Chair Hayes thanked Elaine and noted that this would be helpful for the Board to keep in mind moving forward.

Tao Sheng Kwan-Gett, Chief Science Officer, Secretary's Designee thanked the presenters and commented on some themes from the presentations. Member Kwan-Gett then asked if the panelists had advice for state government agencies on what they can do to better facilitate the kind of community engagement each panelist described in their work.

Ryan shared that Priority Spokane learned many lessons about community engagement through their work, especially from making mistakes. Ryan recommended partnering with community experts on the ground, and to not just engage one person, but to do the intentional work of engaging multiple people and groups to identify who the trusted experts are from communities. Ryan said that agencies should listen first and ask what communities need to build authentic relationships and ensure community needs are met before asking by request what agencies are hoping to learn from the community.

Sue agreed with Ryan's comments and noted that it was extremely valuable to have members from the community serve on their committees and support their work.

Paulina emphasized that there is a community engagement continuum. Paulina noted that some people see community engagement as a tabling event and providing information, and posed the question of how agencies can go beyond that and move

toward meaningful consultation and collaboration. Paulina shared a diagram outlining this community engagement continuum and stated that agencies need to invest in communities to empower them, and empowerment is the highest level and truest form of engagement.

Elaine added from the Tribal perspective, Agency Tribal liaisons should be reaching out to Tribes at different levels and scales for consultation. Elaine shared that due to the high turnover at state agencies, a large part of a Tribe's work focuses on providing ongoing education. Elaine said that the Yakama Nation does this through hosting workshops for different agencies and provided a recent example of a Tribal Water Rights workshop they conducted for the Department of Ecology and noted that it would be beneficial for agencies to request this type of education.

Steve Kutz, Board Member, asked a question related to the Healthy Environment for All (HEAL) Act and whether any of the work panelists shared is related to the HEAL Act.

Paulina responded that the work at Whatcom County is supported through FPHS Funding, which is separate from HEAL.

Member Kutz then asked Elaine if Yakima, Kittitas, or other surrounding counties within the Yakama Nation traditional area has reached out asking about incorporating Yakama Nation work into their environmental justice work to get Tribal perspective.

Elaine said they were not sure, and just recently got linked into work related to the HEAL Act and the health disparities map through the Yakama Tribal Health Department. Elaine noted that this would be a good question for the Tribal Health Director.

Member Kutz thanked Elaine and said that with so much of this work going on in different arenas, we will want to try and figure out how to link all this work together.

Member Kwan-Gett mentioned that the Department is launching an Office of Tribal Public Health and Tribal Relations, and they're recruiting an Office Director. Member Kwan-Gett hopes that this person will be an even stronger liaison with the Tribal communities.

Socia Love-Thurman, Board Member, asked how citizens of Washington can get involved in this work, and in what ways families or youth are engaging in the work the panelists are doing.

Elaine shared that when it comes to climate change, they go above and beyond to get education out to the community. It includes doing this work on weekends and focusing on youth because they absorb so much. Elaine stated that by educating youth, they can take these messages back to their friends and family and it can grow just from that experience. Elaine emphasized that we are all stewards of the land, and youth will be the future stewards, so engagement and education with them is key.

Paulina emphasized the importance of involving youth in this work and how the DRCC's youth programming is a core piece of what they do, and what they do as a coalition wouldn't be possible without the powerful voices of their youth. Elaine provided

examples of how they've included youth in their work and noted how important it is to include youth in any programming and invest in bringing their knowledge forward.

Dimyana Abdelmalek, Board Member, asked the panelists, given the immense challenges that climate change brings to public health work, what are things people should be looking for to indicate that we are moving in the right direction.

Ryan said that one of the issues in Spokane County is that they haven't been paying enough attention to water and the availability of water, especially as it relates to building new and future housing and building infrastructure. Are they looking far enough out at how long water will be available for these homes and buildings? Ryan stated that given the impacts of climate change, they need to be more strategic about where they are building these houses and where they are putting in water systems.

Elaine agreed with Ryan and said this is an issue in Eastern Washington with declining aquifers and the number of wells drying out. Elaine noted that the Department is permitting these wells, and they are exempt wells and said that although there is a limit on water use, who is metering and monitoring use? Elaine commented on how people are losing water access and how the creek ecosystem is negatively impacted by building and overuse of water. Elaine noted this is a topic that has been brought up at least monthly to the county commissioners around people buying land and then subdividing land to create more homes. Elaine is concerned about the limited supply of water. Elaine shared that when this concern is expressed to county commissioners, they say to talk to the Department of Health, and when you go to the Department of Health, they say to talk to your county commissioner, so it's a big circle. Elaine stated that there should be studies and assessments of water use and availability in each county to better control and limit wells put in certain areas to preserve the limited water we do have. Elaine concluded that they go around in circles to protect fish, wetlands, and everything else, but it goes back to the Department of Health, and this should be something they think about.

Member Kwan-Gett thanked Elaine for sharing this concern and said they would relay this to the Department of Health leadership because water is one of our most valuable resources.

Chair Hayes closed the panel by thanking the panelists again and Andrew for putting the panel together.

## **10. BOARD MEMBER COMMENTS AND UPDATES**

Patty Hayes, Board Chair, opened Board Member comments by expressing gratitude for last month's Board meeting in conjunction with the Washington State Public Health Association (WSPHA) conference. Chair Hayes noted how valuable the conference was and the great speakers that presented.

Dimyana Abdelmalek, Board Member, stated appreciation for the WSPHA Association conference and the opportunity to meet with local health colleagues. Member Abdelmalek updated Board Members about the group work going on between local

health jurisdictions, local health officers, Environmental Health Directors, and the Department of Health around methamphetamine decontamination standards and looking at what is needed and the rules the Board has related to this work. Member Abdelmalek will provide updates at a future meeting.

Stephen Kutz, Board Member, shared that the Suquamish clinic recently opened to Medicaid patients. Member Kutz commented that climate change is going to impact almost all the work we do and that the Board will need to have this as an overarching focus as we move forward.

## **ADJOURNMENT**

Patty Hayes, Board Chair, adjourned the meeting at 2:50 p.m.

## **WASHINGTON STATE BOARD OF HEALTH**

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Patty Hayes, Chair

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## **Public Comment Note:**

**In this packet we have also included written comments received after the November meeting public comment deadline. The Board has already received these comments dated prior to November 14, 2023.**

*Current Public Comments Packet added at noon,  
three business days prior to meeting*

Public comment, December 25, 2023. . . Happy Holidays.

To: The Washington State Board of Health

Presented by Bill Osmunson DDS MPH

The December 7, 2023 Board meeting provided a Department presentation to the Board regarding Oral Health, essentially public perception of fluoridation. Without surprise, the report found most in some areas do not trust the Board or Department. Trying to convince the public to harm themselves is not going to be easy. You will need lots of money to market the lies.

The Department defers to the Board, caving truth to power. Maybe the Department employees would end up like the Washington State Board of Pharmacy if they disagreed with the Board.

**The Board appears complicit, an accomplice (certainly an accessory), aiding and abetting fluoridation of public water which is a violation of the Safe Drinking Water Act, Food Drug and Cosmetic Act, unethical and harming most of the public.**

**EPA - - Too Much Fluoride:** The Board trusts the dental lobby rather than the EPA who provided the science (along with empirical evidence in 2010 DRA and RSC) that most children are ingesting too much fluoride during at least part of their lives. The Safe Drinking Water Act prohibits the the EPA from adding anything to the public water which is intended to treat humans. Like the Board, the EPA tries to claim others are responsible. Just like Donald Trump did not storm the Capital on January 6. However, many of us agree he, as an authority, was complicit in insurrection.

When authorities recommend an action, they cannot claim innocence when the action is found to be illegal. Especially when they have the science, laws, and ethics showing they are harming the public. We can give space for good intentions and ignorance, but dentistry, public health and the Board have the science and now have no excuse.

**FDA - - Illegal Drug:** The Department trusts endorsements and the dental lobby rather than Congress (FD&C Act), RCW (Washington State Law), the FDA CDER and/or Washington State Board of Pharmacy that fluoride with intent to prevent disease is a drug, prescription drug, unapproved and therefore illegal drug. Why has the FDA CDER not approved fluoride ingestion with intent to prevent dental caries? Why? Ask yourself why? One reason is the Board has never asked the FDA CDER for approval. And the FDA has determined the evidence of efficacy is incomplete (regardless of dosage). The Board would need to show science of efficacy and they cannot to the satisfaction of the FDA CDER.

**FDA - - Fluoride Toothpaste A Legal Approved Drug:** The Department failed to mention the toothpaste label says "Do Not Swallow" which refers to a quarter milligram of fluoride, the same as each glass of Seattle water.

The Board forces me to ingest in each glass of water the same amount as the FDA CDER warns “Do Not Swallow.” Processed foods, unlabeled often contain fluoridated water.

The Board does not provide a label for the fluoridation drug. How much is too much? If a person is swallowing toothpaste or exposed to more fluoride in other sources, how does the Board or patient know how much they are ingesting? The Board simply implies safe and effective at any and all doses.

**Quality Research:** The Department failed to mention no Phase II or Phase III trials have been published and arguably no Phase I trials showing efficacy. Only one randomized controlled trial has been published and it did not have statistical significance. Fluoridation has not even been approved by the FDA CDER as an experimental drug.

**Mechanism of Action:** The Department failed to mention research has not found a mechanism for ingested fluoride to get to the the surface of the tooth in therapeutic doses.

The Board’s evidence is attempting to tell the public, other than teeth with dental fluorosis, no other cells of the body are harmed. That is a preposterous implausibility. No reasonable scientist would accept such a wild claim. . . unless they were the dental lobby.

For example, the Board’s fluoridation is causing premature cell death (apoptosis).

[Mitochondria-Mediated Pathway Regulates C2C12 Cell Apoptosis Induced by Fluoride.](#)

[Fluoride Exposure Provokes Mitochondria-Mediated Apoptosis and Increases Mitophagy in Osteocytes via Increasing ROS Production.](#)

[Toxic effects of fluoride on organisms.](#)

There are hundreds of studies with similar results: fluoride ingested causes **cell death**.

Yet the Board blindly trusts the dental lobby and endorsements that ingesting fluoride is safe. Let me explain. Most people would not go to their dentist for brain surgery or to diagnose brain or cellular damage, but the Board goes to the dentists (dental lobby) to do precisely that.

**HHS NTP:** The Department trusts the Board and dental lobby rather than the National Toxicology Program who’s meta-analysis determined about 3 IQ loss for those in fluoridated communities. Of course some are harmed more and others less.

**0.7 ppm vs 1.2 ppm:** Most research on fluoridation is historic at 1.2 ppm. Neither the Department nor the Board has given scientific evidence, nor has the dental lobby given evidence that fluoridation at 0.7 ppm is actually reducing dental caries. Historical studies, although low quality, were at higher doses of fluoride than current fluoridation.

Neither the public nor the Board should trust the Department to provide a balanced scientific position on fluoridation. They cannot speak truth to power.

While the science is reporting fluoridation is not safe or even effective, the Board continues to declare fluoridation safe without exception. Anyone with horse sense or reads some science knows there is no highly toxic poison, prescription drug, unapproved FDA CDER drug, which is safe for everyone at any dosage. When the FDA CDER says "Do Not Swallow" fluoride, the same amount the Board recommends in each glass of water, the public has good reason not to trust the Board. The Board has and is harming the developing brain of millions.

Yet the Department has spent hard earned taxpayer money trying to find out what percentage of the public does not believe the Board. How stupid can we in public health be? The public does not believe us because the science does not support us and we fail to read the science. And when we are this anti-science with an unapproved toxic poison, why should the public trust us on anything else such as global warming, nutrition, vaccinations, or sanitation.

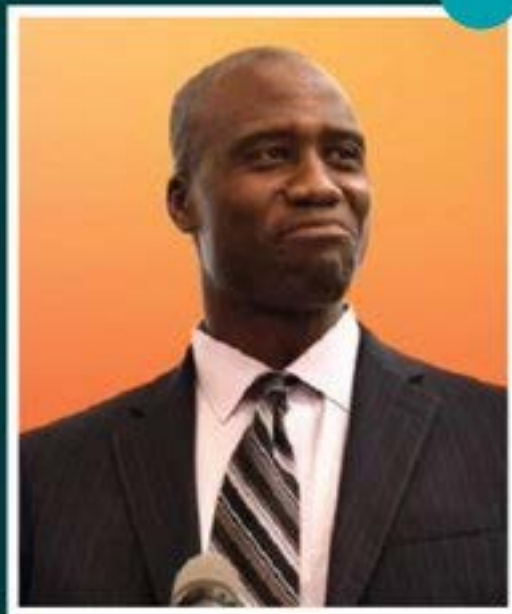
The Board must stop protecting policy and start protecting the public by reading the science, laws and ethics, rather than trying to figure out how we can fool the public with our lies.

Friends, you can't keep pushing an illegal drug on everyone without their consent and expect the public to believe and respect us. The ethics is barbaric. The attempt to keep the public away from the science is reminiscent of the dark ages.

When the mitochondria, the "power house of the cell" is harmed and cells are dying, we cannot continue to say fluoridation is either safe or effective.

Please change your web page or delete it.

Bill Osmunson DDS MPH



**I am calling for a halt to the use of mRNA COVID-19 vaccines.**

The U.S. Food and Drug Administration and the Centers for Disease Control and Prevention have always played it fast and loose with COVID-19 vaccine safety, but their failure to test for DNA integration with the human genome - as their own guidelines dictate - when the vaccines are known to be contaminated with foreign DNA is intolerable.

# Is Water Fluoridation Effective?

According to most major sources, estimates of fluoridation effectiveness amount to at most a reduction of only one-half cavity per child. Low end estimates find **no significant reduction at all**. Children aged 6-17 average 2.1 cavities in their permanent teeth<sup>1</sup>:

- Cochrane Collaboration<sup>2</sup> (2015): 26% (**0.5 cavity per child**)
- CDC<sup>3</sup> (2018): 25% (**0.5 cavity per child**)
- Iowa Fluoride Study<sup>4</sup> (2018): **No significant reduction**
- World Health Organization data<sup>5</sup> (2005): **No evidence of fluoridation's effectiveness**



*There is already a consensus including CDC, Cochrane Collaboration, the Iowa Fluoride Study and others that fluoride's effectiveness in preventing cavities is mainly topical (not swallowed).*

The **Cochrane Collaboration** is considered the gold standard of evaluating effectiveness. It said the cavity reduction referenced above was **"based predominantly on old studies and may not be applicable today."**

*"Over 97% of the 155 studies were at a high risk of bias, which reduces the overall quality of the results... We did not identify any evidence... to determine the effectiveness of water fluoridation for preventing caries in adults... There is insufficient evidence to determine whether water fluoridation results in a change in disparities in caries levels across socio-economic status."*

The **Iowa Fluoride Study (IFS)**, funded by the National Institutes of Health, is the most comprehensive, ongoing research project in the U.S., the only one measuring all sources of fluoride ingestion. The 2018 study from IFS referenced above found no significant correlation between ingested fluoride and cavity reduction, further validating a 2009 study<sup>6</sup> from IFS that stated:

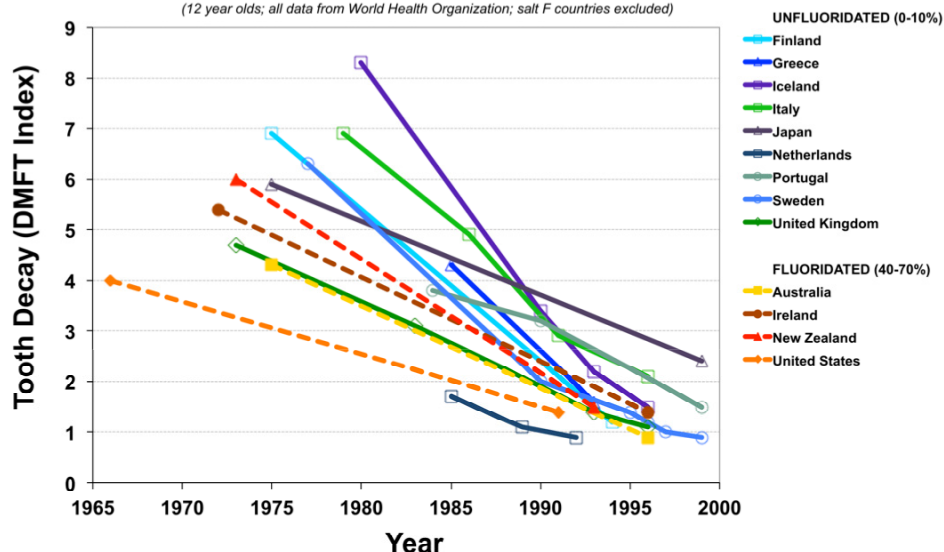
*"... achieving a caries-free status may have relatively little to do with fluoride **intake** (emphasis in the original) ... recommending an 'optimal' fluoride intake is problematic."*

Finally, World Health Organization data show cavity rates in children (age 12) have dropped as much in nations that don't fluoridate (darker solid lines) as in nations that do (red/yellow dotted lines). (See graph)

1. Slade et al, 2018, Journal of Dental Research, <https://www.ncbi.nlm.nih.gov/pubmed/29900806>
2. Cochrane Collaboration, 2015, [https://www.cochrane.org/CD010856/ORAL\\_water-fluoridation-prevent-tooth-decay](https://www.cochrane.org/CD010856/ORAL_water-fluoridation-prevent-tooth-decay)
3. CDC, 2018, <https://www.cdc.gov/fluoridation/index.html>
4. Curtis et al, 2018, Journal of Public Health Dentistry, <https://www.ncbi.nlm.nih.gov/pubmed/29752831>
5. Neurath, 2005, Fluoride, <http://www.fluorideresearch.org/384/files/384324-325.pdf>
6. Warren et al, 2009, Journal of Public Health Dentistry, <https://www.ncbi.nlm.nih.gov/pubmed/19054310>

**Tooth Decay Trends:  
Fluoridated vs. Unfluoridated Countries**

(12 year olds; all data from World Health Organization; salt F countries excluded)



Washington State Board of Health, Public Comment, December 2023

Dear Washington State Board of Health and Department of Health (Board),

December 2023 Public Comment

The [Board's website](#), in part, states: "**Access to community water fluoridation benefits the health of everyone: children, adults, and seniors. Recommendation: Expand and maintain access to community water fluoridation.**"

The Board's claim and recommendation lacks current scientific evidence and support, law or logic and for almost two decades the Board has known their claim is harming the public.

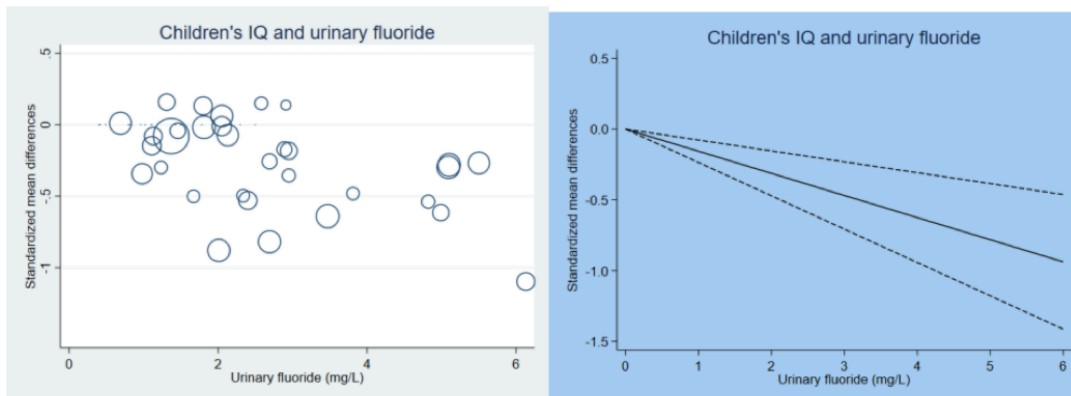
Hearing a Board member say, "but we are not supposed to have to review science" makes the term "Board of Health" at best a rubber stamp of industry.

Instead of reviewing the empirical evidence, science, facts, the Board is trusting industry and others. The Board is ignoring and evading the qualified experts with jurisdiction and knowledge on fluoridation, such as:

- I. **The Washington State Board of Pharmacy.** . . . disbanded in part because they agreed with the law and science that fluoride ingested with intent to prevent disease is a prescription drug. Are the Board of Health doctors willing to put your license on the line prescribing the drug for everyone in Washington State without patient consent or being patients of record? That would be unethical. Pharmacists have more training and expertise with toxins, dosage, adverse reactions and inter reactions of toxins than any other licensed profession. You, the Board of Health, do not have publicly released empirical evidence which disagrees with the Board of Pharmacy? The Board of Health is violating science and laws of health.
- II. **The U.S. Congress** which has authorized the Food and Drug Administration Center for Drug Evaluation and Research (FDA CDER) to evaluate substances used with intent to prevent disease and prohibit the EPA from adding anything for the treatment of humans.
- III. **The FDA CDER** has determined fluoride ingestion lacks evidence of efficacy. And the FDA has given warnings to bottled water manufacturers (not FDA CDER approved) the fluoridated water must not be marketed to those under two years of age. The Board of Health is harming the public by disagreeing with authorized regulatory agencies.
- IV. **The Environmental Protection Agency scientists** finding over two decades ago that fluoridation borders on a criminal Act because of toxicity and lack of current benefit. And the EPA Dose Response Analysis and Relative Source Contribution of 2010 reporting that most or all infants and toddlers are ingesting too much fluoride.
- V. **The National Research Council 2006** report for the EPA that EPA's Maximum Contaminant Level for fluoride was not protective. That's right, fluoride is a contaminant the Board recommends adding to water.

**VI. The National Toxicology Draft Report** of 2023 report of 55 human studies, 52 reported IQ loss a 95% consistency. And their meta-analysis reports IQ loss. As urine fluoride concentration increases, IQ decreases.

### Urinary Fluoride Exposure



**eFigure 18. Pooled Dose-Response Association Between Fluoride in Urine and Standardized Mean Differences in Children's IQ**

Left panel: Circles indicate standardized weighted mean differences in individual studies; size of bubbles is proportional to precision (inverse of variance) of the standardized mean differences. Right panel: Urinary fluoride levels were modeled with a linear random-effects model (solid line). Dashed lines represent the 95 % confidence intervals for the linear model. Please see eTable 2 for characteristics of the studies included in the *dose-response meta-analysis* (studies with urinary fluoride exposure and at least two exposure levels).

Not everyone has the same sensitivity to drugs/toxins or the same health or the same ability to handle drugs/toxins. Some individuals have much more IQ loss with fluoridation and some were probably unaffected. The mean is not protective or representative of each individual. The Board must protect everyone, not just the healthiest and wealthiest, or even like the EPA only consider up to the 90<sup>th</sup> percentile.

**VII. Only one RCT (randomized controlled trial) and no meta-analysis of fluoride's alleged benefit from ingestion has been published.** And the one published RCT reported no statistical benefit from ingesting the fluoride. That's right. NO, NONE, ZERO quality studies reporting dental benefit of fluoride ingestion. Ecological studies of fluoridation are problematic with many flaws. No wonder the FDA said the evidence of efficacy is incomplete.

**VIII. The lack of mechanism of action.** Fluoride cannot go from the blood to the tooth pulp chamber through the calcium rich dentin and enamel to the outside of the tooth where the dental caries are forming and active. Fluoride during swallowing of water is short term and little gets to the lower teeth. The slight increase of fluoride in saliva with water at 0.7 ppm is too dilute to have a caries mitigating effect. Research has not reported a benefit a significant therapeutic effect at 700 ppm let alone 0.7 ppm when drinking water.

**IX. 97% of Europe does not fluoridate their water.** And their dental caries are at a similar rate as fluoridated communities and those states which do not fluoridate their water or least fluoridated.



**The Board appears to trust industry** who profit from the sales of fluoride. We dentists make a great deal of money selling fluoride. . . topical which has good evidence of efficacy. Raising alarms of fluoride toxicity will reduce our income.

**The Board appears to trust the CDC dental division** who are in lockstep with industry and politics, not scientific facts. The CDC does not determine either the efficacy, dosage or safety of any drugs. Congress charged the FDA CDER with that job.

**The Board appears to trust the US Public Health Service** who are soldiers marching to the orders of politicians and industry. The USPHS has no Congressional authority to approve the safety, dosage or efficacy of any drugs and fails to review the scientific evidence.

**The Board appears to trust public health reviews** of fluoridation from like-minded believers rather than digging deep into the science and considering the empirical evidence of efficacy, dosage, safety and ethics of mass medication of fluoride to everyone regardless of health, age, or choice.

The Board must not wash their hands thinking that the voters approved fluoridation from now through eternity regardless of any new science.

Once again, I am calling for the Board to remove their false and knowing misrepresentation of the facts, fake science, lies, from their web page. If that is not immediately done to start protecting the public, Board members must resign.

Bill Osmunson DDS MPH

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From: Garry Blankenship  
Sent: 12/4/2023 8:10:27 AM  
To: Van De Wege, Kevin, Chapman, Mike (LEG), DOH  
WSBOH, sheriff@co.clallam.wa.us, mozias@co.clallam.wa.us, rjohnson@co.clallam.wa.us, shahidafatin@gmail  
Allison 2  
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City Herald (DOHi)  
Cc:  
Subject: Fwd: Expert testimony on the Pandemic in the UK Parliament

External Email

I encourage all of you to at a minimum view the trailer below. It is not excusable that health professionals have promoted and administered these experimental toxins. Relying upon recommendations farther up the medical hierarchy is not an adequate defense for injecting people with harmful substances. Informed consent is not a concept. Particularly when our health administrators are not adequately informed.

<<https://eotrx.substackcdn.com/open?token=eyJtIjojPDlwMjxMjAzMjI1MDM4LjMuZjFmOTc1ZTRhMGM3MjE0Lm1hbnR1eSB1b291dG8iOiJkcm9wdG8iOiJkcm9wdG8iOj09>

and its consequences   


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Expert testimony on the Pandemic in the UK Parliament  
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and its consequences

Robert W Malone MD, MS  
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TOMORROW 4TH DECEMBER

MP Andrew Bridgen is joined by Dr David E. Martin, Dr Robert Malone, Dr Ryan Cole, Dr Pierre Kory, Professor Angus Dalgleish & Steve Kirsch who will be giving expert testimony on the Pandemic & its consequences. With video addresses from Dr Peter McCullough AND Dr Mike Yeadon! Please continue to lobby MPs to attend, letter template can be found here

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Thank you Oracle Films

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for putting this video together.

Once I have a link to the testimony in the UK Parliament from tomorrow evening, I will get it posted.

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From: bill teachingsmiles.com  
Sent: 12/7/2023 6:42:10 PM  
To: DOH WSBOH  
Cc:  
Subject: WSBH December 7, 2023 meeting Osmunson comments



attachments\FC3E7C87D43D4A5A\_WSBH 12 7 23 Meeting CWF.pdf

External Email

pdf attached

Washington State Board of Health Meeting regarding the Department of Health's Oral Health presentation by Shelley Guinn. Shelley.Guinn@doh.wa.gov  
<mailto:Shelley.Guinn@doh.wa.gov>

Comments by Bill Osmunson DDS MPH

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highlighting mounting evidence showing that fluoride is likely impairing brain development and reducing kids' IQ. The video below was recorded during a public Zoom presentation that Dr. Birnbaum made to environmental advocates about her life and her work as part of a webinar series hosted by The Center for Health, Environment, and Justice.

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#6. Regarding the Washington State Oral Health Equity Assessment.

The CDC Oral Health Division funded a Cochrane evaluation of the best fluoridation efficacy research at the time. They did not evaluate risks or harm. One pertinent conclusion included:

“There was insufficient information available to find out whether the introduction of a water fluoridation programme changed existing differences in tooth decay across socioeconomic groups.”

That is essentially an answer to the Department’s survey and the answer was published 7 years ago. Tax-payers could have saved money if the Department simply read the published literature.

Years ago, I plotted the USA states on percentage of their whole population fluoridated and ranked low and high income reported good to excellent teeth.

The rich have better oral health than the poor, but fluoridation has no common cause.

I then ranked all the Washington State Counties based on their reported percentage of the population fluoridated and ranked their rates of decayed, filled surfaces and caries. No matter the access to fluoridation, the caries prevalence is about the same. Having everyone fluoridated would not change the pink line or caries rates.

Is that evidence, “proof?” No, but it raises concern.

What about those countries not fluoridating? Remember, most developed countries do not fluoridate their water and 97% of Europe is without fluoridated water.

Plotting caries prevalence with WHO data over about 30 years, fluoride intake has not made a difference and all countries have reduced their caries prevalence to similar low levels. . . regardless of fluoride intake.

There is no quality published research suggesting increased access to fluoridation reduces oral health disparity. ESSB 5693 did not review safety or efficacy, rather assumed safety and efficacy based in part on claims made by the Department and Board.

I have requested a copy of the Department's report. The report recruited 122 participants in six counties, a sample size too small to have statistical significance. Dividing the counties into "three buckets."

The purpose was for marketing and promotion, not evaluation of safety or efficacy to see if those on fluoridated water had better oral health or fewer side effects. The Department just assumed and spent time and money on hierarchical evidence, which is considered a "house of cards."

Quantitatively: No good results.

Qualitatively: The Department uses words like "most believed" which is not factual. More than 50%? 99%?

And the Department uses a "good number had some degree of opposition." Again, what does a "good number" actually represent, 5% 95%? True, the study was too small to have significance, but the numbers could have been provided by the Department rather than having the Board "trust". And similar published research should have been provided for comparison. And the Department chalks up the public's concern of acceptability of the water to the water quality rather than the public's concern for the fluoride in the water.

The Department's study does not support a racial health equity problem but an income problem. Lack of income is not just an oral health problem but a health problem. The Board and Department should focus on income rather than CWF.

Lower income communities have both lower quality of health and less fluoridation. But no science is provided to show common cause. Just because two events happen is not proof they are related.

The second conclusion assumes increased fluoridation will in some way reduce inequity of lower income. More fluoridation will not reduce inequality of disease. The Department

does not look at benefit or risk, but how to promote policy, i.e. more CWF regardless of benefit or risk.

One of the Department's recommendations is "Community-based education should focus on the value of water fluoridation." Unless the Department and Board base their education on science, the public will only have less trust for authority. The value of CWF must include both efficacy, dosage, known/expected risks, and individual consent. For the Department and Board to repeat "safe and effective" trust us because we are authority, will convince some but harm many.

Over 4,800 medical and scientific professionals

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have signed a statement in opposition to fluoridation, including both dental (IAOMT.org and IABDM.org) and medical organizations (ICIMED.org). Has the Board invited any of those professionals to speak on the science and ethics?

The Department's waste of tax-payer money and Board time should receive a D- grade.

My request is to have those opposed to fluoridation provide evidence at a Board meeting. At a minimum, the Department and Board will better understand how to respond to the public's concerns.

Sincerely,

Bill Osmunson DDS MPH

December 7, 2023, Washington State Board of Health Meeting regarding the Department of Health's Oral Health presentation by Shelley Guinn. [Shelley.Guinn@doh.wa.gov](mailto:Shelley.Guinn@doh.wa.gov)

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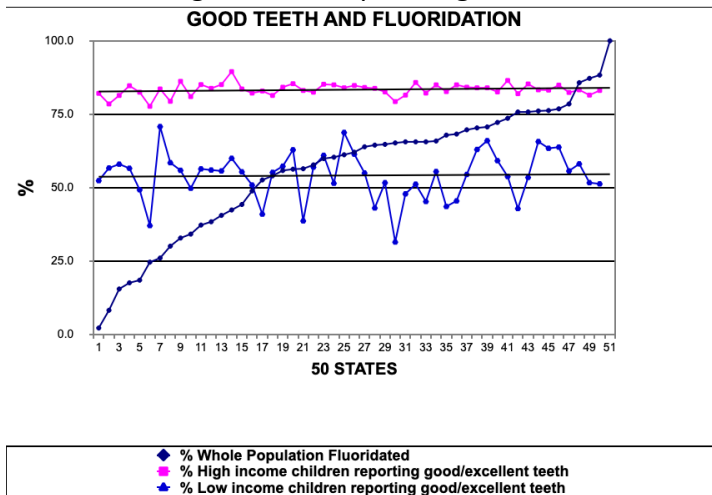
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<sup>1</sup> heozor-Ejiofor Z, Worthington HV, Walsh T, O'Malley L, Clarkson JE, Macey R, Alam R, Tugwell P, Welch V, Glennly A, Water fluoridation to prevent tooth decay, Cochrane Review, June 18, 2015.

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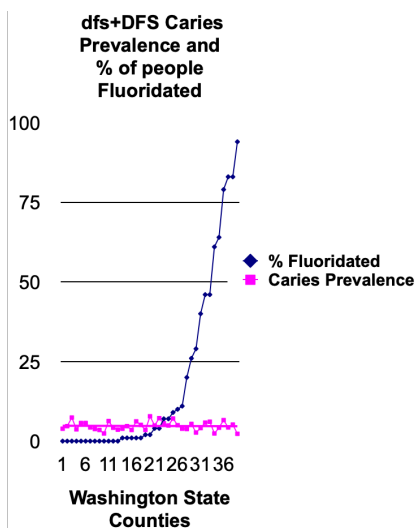
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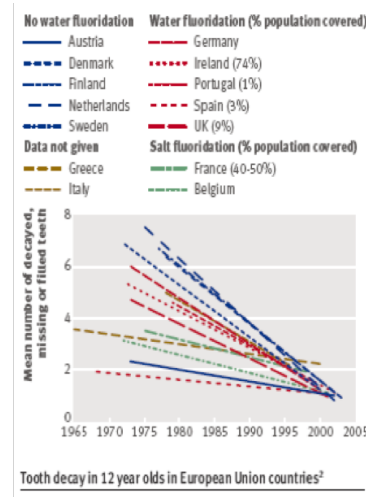
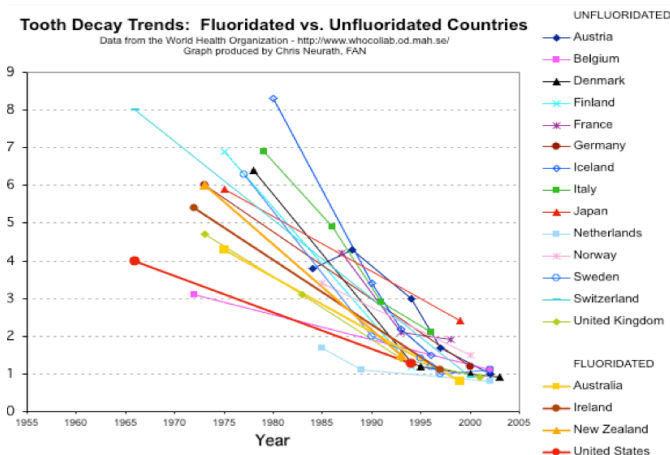
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The Department's study does not support a racial health equity problem but an income problem. Lack of income is not just an oral health problem but a health problem. The Board and Department should focus on income rather than CWF.

Lower income communities have both lower quality of health and less fluoridation. But no science is provided to show common cause. Just because two events happen is not proof they are related.

The second conclusion assumes increased fluoridation will in some way reduce inequity of lower income. More fluoridation will not reduce inequality of disease. The Department does not look at benefit or risk, but how to promote policy, i.e. more CWF regardless of benefit or risk.

One of the Department's recommendations is "Community-based education should focus on the value of water fluoridation." Unless the Department and Board base their education on science, the public will only have less trust for authority. The value of CWF must include both efficacy, dosage, known/expected risks, and individual consent. For the Department and Board to repeat "safe and effective" trust us because we are authority, will convince some but harm many.

Over [4,800 medical and scientific professionals](#) have signed a statement in opposition to fluoridation, including both dental (IAOMT.org and IABDM.org) and medical organizations (ICIMED.org). Has the Board invited any of those professionals to speak on the science and ethics?

The Department's waste of tax-payer money and Board time should receive a D- grade.

My request is to have those opposed to fluoridation provide evidence at a Board meeting. At a minimum, the Department and Board will better understand how to respond to the public's concerns.

Sincerely,

Bill Osmunson DDS MPH

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From: k mooers  
Sent: 1/4/2024 4:20:28 PM  
To: DOH WSBOH  
Cc:  
Subject: Public Comment - Dr Cole and Dr Turner are the BEST!!

External Email

To the board:

I am writing on behalf of Dr Ryan Cole and Dr Michael Turner - these two doctors are the BEST and at 72, and unvaxxed they kept me healthy and never did I get covid. They are brilliant and know medicine, unlike most out there that have been spouting anti-science on the plandemic. They treat patients and save lives. Do nothing to stop their practice. We NEED more like these two docs.

THank you,  
Kathy Mooers  
Vanc, WA

---

From: Arne Christensen  
Sent: 12/13/2023 2:26:21 PM  
To: DOH WSBOH  
Cc:  
Subject: people don't want what Pfizer is selling

External Email

The health department needs to stop acting as a supplemental marketing subsidiary for the covid products sold by Pfizer and Moderna and Novavax. When Pfizer has to keep reducing revenue expectations for both its vaccines and Paxlovid, that's a clear sign that its products don't work nearly as well as it, and public health officials, want us to believe.

Now, why can't the department leave covid to the history books and focus on preventing drug overdose deaths?

---

From: Jotform  
Sent: 12/22/2023 10:36:45 AM  
To: DOH WSBOH  
Cc:  
Subject: Re: Stop The Child Vaccine Mandate Petition - Theresa Smith

External Email

<<https://cdn.jotform.ms/assets/img/logo2021/jotform-logo.png>>

Stop The Child Vaccine Mandate Petition

Name

Theresa Smith

Email

tasmith55@yahoo.com

Zip

98550

You can edit this submission

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Fedit%2F579>

and view all your submissions

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Ftables%2F2>

easily.

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From: Rick North  
Sent: 12/20/2023 10:49:36 AM  
To: DOH WSBOH  
Cc:  
Subject: Response to Dept. of Health presentation on water fluoridation



*attachments\82886B03ACE64E8B\_FAN Fluoride Efficacy Flyer Print FINAL.pdf*

External Email

TO: Washington State Board of Health

FROM: Rick North

RE: Response to Dec. 7, 2023 presentation by Department of Health

This statement is in response to the presentation by the Department of Health at your Dec. 7, 2023 meeting that advocated for expansion of water fluoridation.

My background is in non-profit health management. I worked for the American Cancer Society for 21 years, the last five as CEO of the Oregon chapter. Then, before I retired, I worked for seven years as the founder and director of the Oregon Physicians for Social Responsibility's safe food program. For most of my career, I collaborated closely with large groups of physicians, scientists and dentists. I still do, as a volunteer opposing fluoridation.

For most of my life, I supported fluoridation. I trusted without question the CDC and American Dental Association, its two main promoters, and the organizations that accepted their statements on fluoridation's safety. But after I looked at the science, I changed my position. I had misplaced my trust. The issue is so serious that I've worked nationwide on this subject for the past 11 years, putting in thousands of hours researching its science and history.

I found the Dept. of Health's presentation highly one-sided and inaccurate and wish to present information that emphatically contradicts it. I'll concentrate on health risks of fluoridation, responding to this statement from the Power Point:

"After 65 years in service and hundreds of studies it (fluoridation) continues to show its safety."

This is simply not true. Fluoridation has been vigorously contested by scientific and medical professionals – and many dentists – from its inception in the early 1950's. Here are just two examples:

The National Research Council's report Fluoride in Drinking Water

(<https://nap.nationalacademies.org/catalog/11571/fluoride-in-drinking-water-a-scientific-review-of-epas-standards>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnap.nationalacademies.org%2Fcatalog/11571/fluoride-in-drinking-water-a-scientific-review-of-epas-standards&data=05%7C02%7CWSBOH%40SBOH.WA.GOV%7C9b1e5e0135444557471c08dc018c35a5%7C11d0e>

) is considered the most comprehensive, authoritative resource ever written on the toxicity of ingested fluoride. This 507-page volume, which took three years to complete, was researched and compiled by a blue-ribbon committee of 12 leading scientists. Here are just a few quotes from it:

“. . . it is apparent that fluorides have the ability to interfere with the functions of the brain and the body . . .” (p. 222)

“Fluoride is therefore an endocrine disruptor . . . The chief endocrine effects of fluoride include decreased thyroid function . . .” (pp. 266, 8) (NOTE: Decreased thyroid function – hypothyroidism – afflicts 4% of the population, according to the American Thyroid Association. That means that, if Washington becomes completely fluoridated, 308,000 residents would be in harm's way. Already, at 65% fluoridation, it's a threat to 200,000 Washington residents.)

“Portions of the renal system may therefore be at higher risk of fluoride toxicity than most soft tissues . . . The effect of low doses of fluoride on kidney functions in humans needs to be carefully documented . . .” (p. 303)

Here are just a few quotes from scientists who were on that committee:

Dr. Hardy Limeback, DDS, PhD: “In my opinion, the evidence that fluoridation is more harmful than beneficial is now overwhelming . . .”

(<http://www.offgridaustralia.com/articles/water-fluoridation/statement-water-fluoridation-dr-hardy-limeback-phd-dds>

<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.offgridaustralia.com%2Farticles/water-fluoridation%2Fstatement-water-fluoridation-dr-hardy-limeback-phd-dds&data=05%7C02%7CWSBOH%40SBOH.WA.GOV%7C9b1e5e0135444557471c08dc018c35a5%7C11d0e>

Dr. Robert Isaacson, PhD (dec.): “I had no fixed opinion on whether or not fluoride should be added to drinking water . . . The more I learned the more I became convinced that the addition of fluorides to drinking water was, and is, a mistake.”

([http://www.newmediaexplorer.org/chris/Isaacson\\_My\\_Fluoride\\_position2.pdf](http://www.newmediaexplorer.org/chris/Isaacson_My_Fluoride_position2.pdf)

<[https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.newmediaexplorer.org%2Fchris/Isaacson\\_My\\_Fluoride\\_position2.pdf](https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.newmediaexplorer.org%2Fchris/Isaacson_My_Fluoride_position2.pdf)

)

Dr. Kathleen Thiessen, PhD: “. . . we’re dealing with uncontrolled and unmonitored exposures to an agent that is known to have adverse effects on humans . . . I think you can look at most chapters of this report and say ‘Whoa.’”

(<http://s4780.sites.pressdns.com/news/fluoride-foes-get-validation/>  
<<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fs4780.sites.pressdns.com%2Fnews%2Ffoes-get-validation%2F&data=05%7C02%7CWSBOH%40SBOH.WA.GOV%7C9b1e5e0135444557471c08dc018c35a5>  
)

Fluoride in Drinking Water was published in 2006. We’ve had convincing scientific evidence of fluoride’s toxicity for decades. Yet the government has placed no restrictions on it. Allow me to bring you up to date on just one harm – permanent brain damage, causing IQ loss in children:

The National Toxicology Program (NTP) has intensively reviewed the scientific literature on fluoridation’s neurotoxicity. The NTP is the highest-level, most knowledgeable group in the country studying the issue – taking six years to thoroughly analyze the scientific evidence. The latest version of its report documented that 52 out of 55 studies linked higher fluoride with lower IQs in children. Eighteen out of 19 of the highest quality studies found this link, with seven at levels equivalent to fluoridated water.

Quotes from the report

([https://ntp.niehs.nih.gov/sites/default/files/ntp/about\\_ntp/bsc/2023/fluoride/documents\\_provided\\_bsc\\_w](https://ntp.niehs.nih.gov/sites/default/files/ntp/about_ntp/bsc/2023/fluoride/documents_provided_bsc_w)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fntp.niehs.nih.gov%2Fsites%2Fdef>  
) : “The data support a consistent inverse relation between fluoride exposure and children’s IQ . . . Several of the highest quality studies showing lower IQs in children were done in optimally fluoridated (0.7 mg/L) areas in Canada.” (NOTE: This is the same level at which Washington cities fluoridate.)

Many of the latest studies have shown cognitive harm to unborn children through ingestion of fluoridated water by their mothers. Dr. Linda Birnbaum, retired director of the National Toxicology Program and former president of the national Society of Toxicology, said “new evidence suggests that fluoride is toxic to the developing brain at levels routinely found in the general population.” (<https://www.ehn.org/fluoride-and-childrens-health-2648120286.html>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ehn.org%2Ffluoride-and-childrens-health-2648120286.html&data=05%7C02%7CWSBOH%40SBOH.WA.GOV%7C9b1e5e0135444557471c08dc018c3>  
)

Dr. Dimitri Christakis, a Seattle physician and editor of the Journal of the American Medical Association Pediatrics, as quoted from the Washington Post, “I would not have my wife drink fluoridated water if she were pregnant.”

(<https://fluoridealert.org/news/canadian-mother-offspring-iq-study-national-post/>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffluoridealert.org%2Fnews%2Fcanadian-mother-offspring-iq-study-national->



post%2F&data=05%7C02%7CWSBOH%40SBOH.WA.GOV%7C9b1e5e0135444557471c08dc018c35a5%7C  
)

This is just the tip of the iceberg on the peer-reviewed, published studies documenting health risks from fluoridated water, which has also been linked to diabetes, bone fractures, chemical hypersensitivity, fluorosis and other harmful conditions.

Regarding fluoridation's minimal (if any) effectiveness, I refer you to the Fluoride Action Network's attached one-pager, which is fully referenced. Even if you accepted the CDC's questionable estimate of a 25% cavity reduction, that only equates to half a cavity per child.

But let me be clear. Even if fluoridation was two or three times as effective, it could in no way justify the widespread health risks being inflicted upon us.

As the Washington State Board of Health, I would hope you would require that a substance should be proven safe for everyone before allowing it to be added to drinking water.

It is obvious fluoridation has not been proven safe for everyone. It has not been proven safe for anyone. Contrary to the presentation you heard from the Department of Health, there is compelling scientific evidence it can cause permanent brain damage to children, not to mention links to several other health risks.

Please act as soon as possible to oppose this outdated, dangerous practice.

Please feel free to contact me regarding any questions you may have. I'd also appreciate it if someone would e-mail me back, acknowledging that each member of the Board received this e-mail. Thank you.

Sincerely,

Rick North

Wellesley, MA

503-706-0352



# Is Water Fluoridation Effective?

According to most major sources, estimates of fluoridation effectiveness amount to at most a reduction of only one-half cavity per child. Low end estimates find **no significant reduction at all**. Children aged 6-17 average 2.1 cavities in their permanent teeth<sup>1</sup>:

- Cochrane Collaboration<sup>2</sup> (2015): 26% (**0.5 cavity per child**)
- CDC<sup>3</sup> (2018): 25% (**0.5 cavity per child**)
- Iowa Fluoride Study<sup>4</sup> (2018): **No significant reduction**
- World Health Organization data<sup>5</sup> (2005): **No evidence of fluoridation's effectiveness**



*There is already a consensus including CDC, Cochrane Collaboration, the Iowa Fluoride Study and others that fluoride's effectiveness in preventing cavities is mainly topical (not swallowed).*

The **Cochrane Collaboration** is considered the gold standard of evaluating effectiveness. It said the cavity reduction referenced above was **"based predominantly on old studies and may not be applicable today."**

*"Over 97% of the 155 studies were at a high risk of bias, which reduces the overall quality of the results... We did not identify any evidence... to determine the effectiveness of water fluoridation for preventing caries in adults... There is insufficient evidence to determine whether water fluoridation results in a change in disparities in caries levels across socio-economic status."*

The **Iowa Fluoride Study (IFS)**, funded by the National Institutes of Health, is the most comprehensive, ongoing research project in the U.S., the only one measuring all sources of fluoride ingestion. The 2018 study from IFS referenced above found no significant correlation between ingested fluoride and cavity reduction, further validating a 2009 study<sup>6</sup> from IFS that stated:

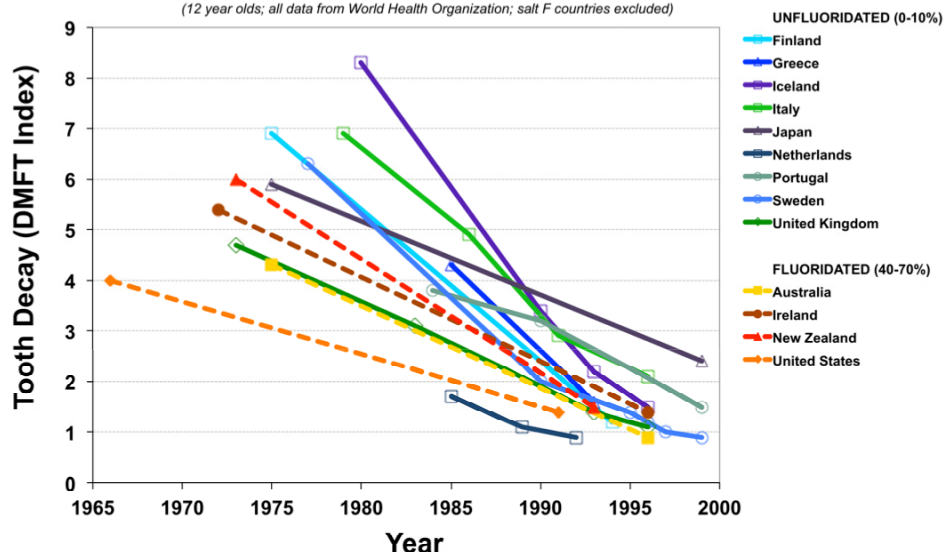
*"... achieving a caries-free status may have relatively little to do with fluoride **intake** (emphasis in the original) ... recommending an 'optimal' fluoride intake is problematic."*

Finally, World Health Organization data show cavity rates in children (age 12) have dropped as much in nations that don't fluoridate (darker solid lines) as in nations that do (red/yellow dotted lines). (See graph)

1. Slade et al, 2018, Journal of Dental Research, <https://www.ncbi.nlm.nih.gov/pubmed/29900806>
2. Cochrane Collaboration, 2015, [https://www.cochrane.org/CD010856/ORAL\\_water-fluoridation-prevent-tooth-decay](https://www.cochrane.org/CD010856/ORAL_water-fluoridation-prevent-tooth-decay)
3. CDC, 2018, <https://www.cdc.gov/fluoridation/index.html>
4. Curtis et al, 2018, Journal of Public Health Dentistry, <https://www.ncbi.nlm.nih.gov/pubmed/29752831>
5. Neurath, 2005, Fluoride, <http://www.fluorideresearch.org/384/files/384324-325.pdf>
6. Warren et al, 2009, Journal of Public Health Dentistry, <https://www.ncbi.nlm.nih.gov/pubmed/19054310>

**Tooth Decay Trends:  
Fluoridated vs. Unfluoridated Countries**

(12 year olds; all data from World Health Organization; salt F countries excluded)



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From: Robyn Meenach  
Sent: 11/20/2023 11:21:36 PM  
To: DOH WSBOH  
Cc:  
Subject: Communicating With Board Members

External Email

Dr. Lutz,

Happy to give you a tour of the Latah creek watershed anytime. You will not find any CAFOs. With the next significant rain event take a flight over the Puget sound, you can make a difference there. Your position of power helped pass a rule destructive to the health and nutrition of Washington's people.

Hal Meenach

509 434 8472

Sent from Mail

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Ffwlink%2F%](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Ffwlink%2F%2F)  
for Windows

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From: Kristina Sawyckyj  
Sent: 11/21/2023 4:34:40 PM  
To: DOH WSBOH,Shabica, Robin E (DOH)  
Cc:  
Subject: Long wait time for DOH complaints

External Email

Board Members,

I reached out to DOH the end of last year to request that DOH investigate the accommodations provided by a healthcare facility in the state of Washington. My case number is 2022-4785.

I do not hear and I have requested reasonable accommodations for effective communication under the ADA for the Virginia Mason HealthCare Facility 43 times now since 2018. I need captioning. Live real-time captioning for in person provider and groups appointments & captioning enabled online for remote appointments.

Virginia Mason has not provided this. I have pictures and emails requesting captioning.

I am writing the DOH Board because I am concerned about the amount of time a complaint around patient healthcare concerns takes within Washington. While I never expected instantaneous actions, it has been almost a year now.

Without captioning, I was surgically cut into without understanding what was going on in 2021, experienced several medication mistakes because of lack of effective communication. I can not read lips under masks and clear masks block muscle movement around mouths, so I still can not understand the full conversation. I can not participate in mental health services because I do not have captioning.

Please help support investigators so they can get to complaints & concerns in a timely manner. Our lives depend on this.

Slachxizax^ malgakux^

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From: bill teachingsmiles.com  
Sent: 11/25/2023 9:24:44 AM  
To: DOH WSBOH  
Cc:  
Subject: Public Comment Fluoridation Osmunson 12 23 A



*attachments\A1A07B5AE32A45C9\_WSBH 12 23 A.pdf*

External Email

Washington State Board of Health, Public Comment, December 2023

Please provide a copy of the attached to each Board Member

Thank you,

Bill Osmunson DDS MPH,

Washington State Board of Health, Public Comment, December 2023

Dear Washington State Board of Health and Department of Health (Board),

December 2023 Public Comment

The [Board's website](#), in part, states: "**Access to community water fluoridation benefits the health of everyone: children, adults, and seniors. Recommendation: Expand and maintain access to community water fluoridation.**"

The Board's claim and recommendation lacks current scientific evidence and support, law or logic and for almost two decades the Board has known their claim is harming the public.

Hearing a Board member say, "but we are not supposed to have to review science" makes the term "Board of Health" at best a rubber stamp of industry.

Instead of reviewing the empirical evidence, science, facts, the Board is trusting industry and others. The Board is ignoring and evading the qualified experts with jurisdiction and knowledge on fluoridation, such as:

**I. The Washington State Board of Pharmacy.** . . . disbanded in part because they agreed with the law and science that fluoride ingested with intent to prevent disease is a prescription drug. Are the Board of Health doctors willing to put your license on the line prescribing the drug for everyone in Washington State without patient consent or being patients of record? That would be unethical. Pharmacists have more training and expertise with toxins, dosage, adverse reactions and inter reactions of toxins than any other licensed profession. You, the Board of Health, do not have publicly released empirical evidence which disagrees with the Board of Pharmacy? The Board of Health is violating science and laws of health.

**II. The U.S. Congress** which has authorized the Food and Drug Administration Center for Drug Evaluation and Research (FDA CDER) to evaluate substances used with intent to prevent disease and prohibit the EPA from adding anything for the treatment of humans.

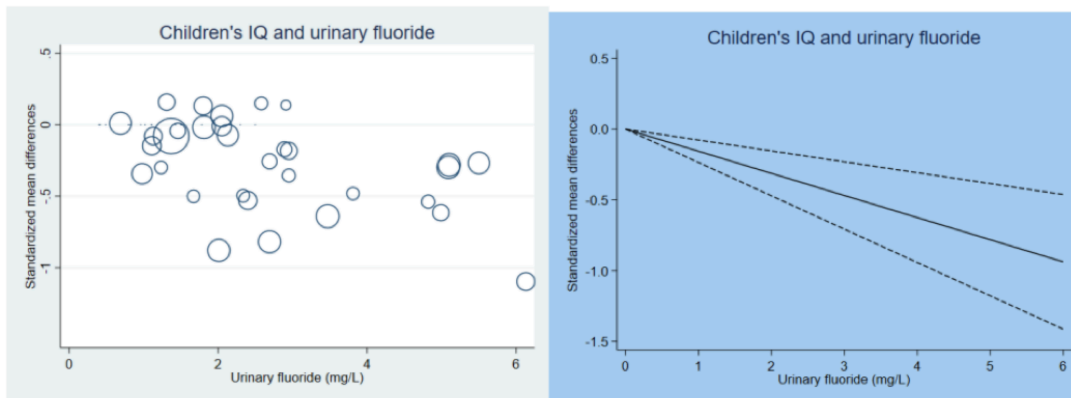
**III. The FDA CDER** has determined fluoride ingestion lacks evidence of efficacy. And the FDA has given warnings to bottled water manufacturers (not FDA CDER approved) the fluoridated water must not be marketed to those under two years of age. The Board of Health is harming the public by disagreeing with authorized regulatory agencies.

**IV. The Environmental Protection Agency scientists** finding over two decades ago that fluoridation borders on a criminal Act because of toxicity and lack of current benefit. And the EPA Dose Response Analysis and Relative Source Contribution of 2010 reporting that most or all infants and toddlers are ingesting too much fluoride.

**V. The National Research Council 2006** report for the EPA that EPA's Maximum Contaminant Level for fluoride was not protective. That's right, fluoride is a contaminant the Board recommends adding to water.

**VI. The National Toxicology Draft Report** of 2023 report of 55 human studies, 52 reported IQ loss a 95% consistency. And their meta-analysis reports IQ loss. As urine fluoride concentration increases, IQ decreases.

### Urinary Fluoride Exposure



**eFigure 18. Pooled Dose-Response Association Between Fluoride in Urine and Standardized Mean Differences in Children's IQ**

Left panel: Circles indicate standardized weighted mean differences in individual studies; size of bubbles is proportional to precision (inverse of variance) of the standardized mean differences. Right panel: Urinary fluoride levels were modeled with a linear random-effects model (solid line). Dashed lines represent the 95 % confidence intervals for the linear model. Please see eTable 2 for characteristics of the studies included in the *dose-response meta-analysis* (studies with urinary fluoride exposure and at least two exposure levels).

Not everyone has the same sensitivity to drugs/toxins or the same health or the same ability to handle drugs/toxins. Some individuals have much more IQ loss with fluoridation and some were probably unaffected. The mean is not protective or representative of each individual. The Board must protect everyone, not just the healthiest and wealthiest, or even like the EPA only consider up to the 90<sup>th</sup> percentile.

**VII. Only one RCT (randomized controlled trial) and no meta-analysis of fluoride's alleged benefit from ingestion has been published.** And the one published RCT reported no statistical benefit from ingesting the fluoride. That's right. NO, NONE, ZERO quality studies reporting dental benefit of fluoride ingestion. Ecological studies of fluoridation are problematic with many flaws. No wonder the FDA said the evidence of efficacy is incomplete.

**VIII. The lack of mechanism of action.** Fluoride cannot go from the blood to the tooth pulp chamber through the calcium rich dentin and enamel to the outside of the tooth where the dental caries are forming and active. Fluoride during swallowing of water is short term and little gets to the lower teeth. The slight increase of fluoride in saliva with water at 0.7 ppm is too dilute to have a caries mitigating effect. Research has not reported a benefit a significant therapeutic effect at 700 ppm let alone 0.7 ppm when drinking water.

**IX. 97% of Europe does not fluoridate their water.** And their dental caries are at a similar rate as fluoridated communities and those states which do not fluoridate their water or least fluoridated.



**The Board appears to trust industry** who profit from the sales of fluoride. We dentists make a great deal of money selling fluoride. . . topical which has good evidence of efficacy. Raising alarms of fluoride toxicity will reduce our income.

**The Board appears to trust the CDC dental division** who are in lockstep with industry and politics, not scientific facts. The CDC does not determine either the efficacy, dosage or safety of any drugs. Congress charged the FDA CDER with that job.

**The Board appears to trust the US Public Health Service** who are soldiers marching to the orders of politicians and industry. The USPHS has no Congressional authority to approve the safety, dosage or efficacy of any drugs and fails to review the scientific evidence.

**The Board appears to trust public health reviews** of fluoridation from like-minded believers rather than digging deep into the science and considering the empirical evidence of efficacy, dosage, safety and ethics of mass medication of fluoride to everyone regardless of health, age, or choice.

The Board must not wash their hands thinking that the voters approved fluoridation from now through eternity regardless of any new science.

Once again, I am calling for the Board to remove their false and knowing misrepresentation of the facts, fake science, lies, from their web page. If that is not immediately done to start protecting the public, Board members must resign.

Bill Osmunson DDS MPH

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From: Jotform  
Sent: 12/22/2023 10:39:30 AM  
To: DOH WSBOH  
Cc:  
Subject: Re: Stop The Child Vaccine Mandate Petition - Theresa Smith

External Email

<<https://cdn.jotform.ms/assets/img/logo2021/jotform-logo.png>>

Stop The Child Vaccine Mandate Petition

Name

Theresa Smith

Email

tasmith55@yahoo.com

Zip

98550

You can edit this submission

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Fedit%2F579>

and view all your submissions

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jotform.com%2Ftables%2F2>

easily.

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From: Arne Christensen  
Sent: 11/21/2023 9:54:46 AM  
To: DOH WSBOH  
Cc:  
Subject: science and credibility

External Email

I will not pay heed to what the Health Department says about covid until Chief Science Officer Tao Shen Kwan-Gett figures out that masks don't stop respiratory viruses, and stops talking about his personal opinions and "confidence" in regard to the covid vaccines and instead discusses precise data from studies of the vaccines. Also, until he stops referring to the non-existent "COVID-19 vaccine." It is not a single vaccine; they are multiple vaccines. Has he forgotten about Moderna and Novavax, and all the other covid vaccines that aren't made by Pfizer?

You people are supposedly experts who can guide us. When the Department can't even communicate intelligibly, it's asking to be ignored.

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From: SCOTT SHOCK

Sent: 1/4/2024 1:12:28 AM

To: DOH Secretary's Office,DOH Office of the Chief of Staff,DOH Office of Innovation and Technology,DOH Office of Prevention Safety and Health,DOH Office of Strategic Partnerships,DOH Office of Health and Science,DOH Office of Public Affairs and Equity,DOH OS Executive Office of Policy Planning and Evaluation,DOH Office of Resilience and Health Security,DOH WSBOH,AGOOmbuds@atg.wa.gov,Ferguson, Bob (ATG)

Cc:

Subject: Florida State Surgeon General Calls for Halt to the Use of COVID-19 mRNA Vaccines



attachments\2E3938F0C603486B\_image.png

External Email

Dear WSDOH and WSBOH Members, and Attorney General's Office,

The Florida State Surgeon General has been a leader in protecting the people of his state against the unsafe mRNA COVID vaccinations. What actions are the WSDOH, WSBOH, and WA AG taking to protect the people of Washington State against these unsafe products, and to gain justice for those injured by these products (including members of my family)? I look forward to your responses.

Scott Shock  
Seattle

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Joseph A. Ladapo, MD, PhD on X: "I am calling for a halt to the use of mRNA COVID-19 vaccines. <https://t.co/olg8VTh6gB>" / X (twitter.com)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2FFLSurgeonGen%2>

Florida State Surgeon General

Calls for Halt in the Use of

COVID-19 mRNA Vaccines

Tallahassee, Fla. – On December 6, 2023, State Surgeon General Dr. Joseph A. Ladapo sent a letter

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.floridahealth.gov%2Fabout%2F06-2023-DOH-Letter-to-FDA-RFI-on-COVID-19-Vaccines.pdf%3Futm\\_medium%3Demail%26utm\\_source%3Dgovdelivery&data=05%7C02%7Cwsboh%40s](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.floridahealth.gov%2Fabout%2F06-2023-DOH-Letter-to-FDA-RFI-on-COVID-19-Vaccines.pdf%3Futm_medium%3Demail%26utm_source%3Dgovdelivery&data=05%7C02%7Cwsboh%40s)

to the United States Food and Drug Administration (FDA) Commissioner Dr. Robert M. Califf and Center for Disease Control and Prevention (CDC) Director Dr. Mandy Cohen regarding questions pertaining to the safety assessments and the discovery

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fosf.io%2Fpreprints%2Fosf%2Fmjd>  
of billions of DNA fragments per dose of the Pfizer and Moderna COVID-19 mRNA vaccines.

The Surgeon General outlined concerns regarding nucleic acid contaminants in the approved Pfizer and Moderna COVID-19 mRNA vaccines, particularly in the presence of lipid nanoparticle complexes, and Simian Virus 40 (SV40) promoter/enhancer DNA. Lipid nanoparticles are an efficient vehicle for delivery of the mRNA in the COVID-19 vaccines

into human cells and may therefore be an equally efficient vehicle for delivering contaminant DNA into human cells. The presence of SV40 promoter/enhancer DNA may also pose a unique and heightened risk of DNA integration into human cells.

In 2007, the FDA published guidance on regulatory limits for DNA vaccines in the Guidance for Industry: Considerations for Plasmid DNA Vaccines for Infectious Disease Indications (Guidance for Industry)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F73667>  
. In this Guidance for Industry, the FDA outlines important considerations for vaccines that use novel methods of delivery regarding DNA integration, specifically:

- \* DNA integration could theoretically impact a human's oncogenes – the genes which can transform a healthy cell into a cancerous cell.
- \* DNA integration may result in chromosomal instability.
- \* The Guidance for Industry discusses biodistribution of DNA vaccines and how such integration could affect unintended parts of the body including blood, heart, brain, liver, kidney, bone marrow, ovaries/testes, lung, draining lymph nodes, spleen, the site of administration and subcutis at injection site.

On December 14, 2023, the FDA provided a written response providing no evidence that DNA integration assessments have been conducted to address risks outlined by the FDA <<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F73667> themselves in 2007. Based on the FDA's recognition of unique risks posed by DNA integration, the efficacy of the COVID-19 mRNA vaccine's lipid nanoparticle delivery system, and the presence of DNA fragments in these vaccines, it is essential to human health to assess the risks of contaminant DNA integration into human DNA. The FDA has provided no evidence that these risks have been assessed to ensure safety. As such, Florida State Surgeon General Dr. Joseph A. Ladapo has released the following statement:

"The FDA's response does not provide data or evidence that the DNA integration assessments they recommended themselves have been performed. Instead, they pointed to genotoxicity studies – which are inadequate assessments for DNA integration risk. In addition, they obfuscated the difference between the SV40 promoter/enhancer and SV40 proteins, two elements that are distinct.

DNA integration poses a unique and elevated risk to human health and to the integrity of the human genome, including the risk that DNA integrated into sperm or egg gametes could be passed onto offspring of mRNA COVID-19 vaccine recipients. If the risks of DNA integration have not been assessed for mRNA COVID-19 vaccines, these vaccines are not appropriate for use in human beings.

Providers concerned about patient health risks associated with COVID-19 should prioritize patient access to non-mRNA COVID-19 vaccines and treatment. It is my hope that, in regard to COVID-19, the FDA will one day seriously consider its regulatory responsibility to protect human health, including the integrity of the human genome."

In the spirit of transparency and scientific integrity, State Surgeon General Dr. Joseph A. Ladapo will continue to assess research surrounding these risks and provide updates to Floridians.

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On September 13, 2023, State Surgeon General Dr. Joseph A. Ladapo provided guidance <[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffloridahealthcovid19.gov%2Fwp-content%2Fuploads%2F2023%2F09%2F20230913-booster-guidance-final.pdf%3Futm\\_medium%3Demail%26utm\\_source%3Dgovdelivery&data=05%7C02%7Cwsboh%40sbh](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffloridahealthcovid19.gov%2Fwp-content%2Fuploads%2F2023%2F09%2F20230913-booster-guidance-final.pdf%3Futm_medium%3Demail%26utm_source%3Dgovdelivery&data=05%7C02%7Cwsboh%40sbh)

against COVID-19 boosters for individuals under 65 and younger. In addition to aforementioned concerns, providers and patients should be aware of outstanding safety and efficacy concerns outlined in the State Surgeon General's previous booster guidance released in September.

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From: Tom Hickey  
Sent: 1/4/2024 10:40:14 AM  
To: DOH WSBOH  
Cc:  
Subject: Cowlitz County Board of Health



attachments\FAFEC8B83F0C4273\_favicon.ico

External Email

Dear Washington State Board of Health members,

At the November meeting of the Cowlitz County Board of Health, State of Washington, the Chairman, Kelly Lane, reported VAERS Data indicating that over 220 people in Washington state have died from Covid vaccines they received the past 3 years.

I don't believe the statement Mr Lane made is true. But this is being reported by the Chair of the Board of Health. He did not indicate that VAERS reporting of adverse events (including death) associated with a vaccine should never be used as evidence that the vaccine caused the death (per the VAERS website and the attestation everyone who wishes to access the data , must view and acknowledge)

The Cowlitz County Board of Health meetings are recorded audiovisual. I have provided a link below to the recording of the November board meeting. I request that you view this recording, specifically during the time from 11:06-12:59 when Mr Lane states :

"as per statistics last night pulled from VAERS system, there are lots of parameters, two stuck out, over last 3 years , 318 people died from vaccine, 222 of them from Covid (67% of total deaths). There is a problem with the vaccine, we need to inform public."

This statement does not seem accurate. The VAERS website makes everyone attest that they understand that a report of an adverse event experienced after a vaccine (including death) does not indicate or prove causation.

Can you please answer the following questions:

-Have there been 222 reported deaths in Washington state that happened after a covid vaccine past 3 years?

-Is it true that CDC/FDA and /or Washington State Board of Health has verified that those deaths were due to the Covid vaccine?

-Have you investigated each case?

-How many of the deaths were actually determined to be due to the vaccine?

-I was able to find from CDC website that 9 people died nationally from covid vaccine (specifically Johnson and Johnson) and that because of those deaths (and other adverse events) the emergency use authorization for the Johnson and Johnson vaccine was removed and that vaccine is no longer being used. Is that correct?

-I was unclear from CDC website how dangerous Pfizer and Moderna vaccines are, but I think the CDC is stating that no one has been confirmed to have died from those vaccines. Is that correct?

I believe the citizens of Cowlitz County deserve to know the actual facts.



I believe the statements made by Mr. Lane, Chair of the Board of Health of Cowlitz County WA , if untrue, are unethical, and perhaps illegal.

It is my understanding that the County Boards of Health in Washington State are , by law-RCW, required to promote public health and work under the jurisdiction of the State Board of Health.

Please take action to insist that the Cowlitz County Board of Health follow the law, report data accurately and consistent with good public health and follow the line.

Mr. Lane should be forced to redact that inaccurate statement attributing all deaths reported to VAERS after Covid vaccines as being due to the vaccine.

Please take this matter seriously, listen to the recording particularly from minute 11:00-13:00 and let me know your conclusions.

Sincerely,

Tom Hickey  
409 S. Dubois Rd  
Ariel WA 98603

Phone 503 975-0286.

I have attached a link to the public audiovisual recording of the meeting of the Cowlitz County Board of Health below

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cowlitzinfo.net%2FWLBOCCF>

cowlitzinfo.net

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cowlitzinfo.net%2FWLBOCCF>

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cowlitzinfo.net%2FWLBOCCF>

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From: Trena Younce  
Sent: 12/16/2023 4:50:57 PM  
To: DOH WSBOH  
Cc:  
Subject: 970FA71F-23CA-4E01-9ACE-E331074B09BA

External Email

I have been set up by a healthcare professional in Washington state and not for the first time to look manually unstable. The first time while living in Delta Junction Alaska by the Younce family

Again in 2017 while living in Willamina Oregon  
Mary Susan Howell also has been known to try it a million times in Wrangell Alaska

I used to carry a copy of my personal bill of rights and my most current successful fasfa application to prove to Sue Howell (Nikodym-Nelson) and Joseph Neil Smith that I am mentally stable and deserve to have personal rights intact.  
Alice Rooney in Wrangell is the only social worker that I have ever dealt with and only as a juvenile

If anyone else claims me as a patient I would like to have them investigated and complaints lodged. The Molloy clinic in Willamina Oregon used to send annual photos to the office of the ombudsman in Oregon. The ankle monitor he gave me as his family member is not on my person.

0 1 15 76 24 47 6  
Sent from my iPhone

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From: bill teachingsmiles.com  
Sent: 12/25/2023 12:50:22 PM  
To: DOH WSBOH  
Cc:  
Subject: The Board appears complicit, violating laws



*attachments\00D42F1AE7524E34\_WSBH 12 25 13.pdf*

External Email

Public comment, December 25, 2023. . . Happy Holidays.

To: The Washington State Board of Health

Presented by Bill Osmunson DDS MPH

The December 7, 2023 Board meeting provided a Department presentation to the Board regarding Oral Health, essentially public perception of fluoridation. Without surprise, the report found most in some areas do not trust the Board or Department. Trying to convince the public to harm themselves is not going to be easy. You will need lots of money to market the lies.

The Department defers to the Board, caving truth to power. Maybe the Department employees would end up like the Washington State Board of Pharmacy if they disagreed with the Board.

The Board appears complicit, an accomplice (certainly an accessory), aiding and abetting fluoridation of public water which is a violation of the Safe Drinking Water Act, Food Drug and Cosmetic Act, unethical and harming most of the public.

EPA - - Too Much Fluoride: The Board trusts the dental lobby rather than the EPA who provided the science (along with empirical evidence in 2010 DRA and RSC) that most children are ingesting too much fluoride during at least part of their lives. The Safe Drinking Water Act prohibits the the EPA from adding anything to the public water which is intended to treat humans. Like the Board, the EPA tries to claim others are

responsible. Just like Donald Trump did not storm the Capital on January 6. However, many of us agree he, as an authority, was complicit in insurrection.

When authorities recommend an action, they cannot claim innocence when the action is found to be illegal. Especially when they have the science, laws, and ethics showing they are harming the public. We can give space for good intentions and ignorance, but dentistry, public health and the Board have the science and now have no excuse.

FDA - - Illegal Drug: The Department trusts endorsements and the dental lobby rather than Congress (FD&C Act), RCW (Washington State Law), the FDA CDER and/or Washington State Board of Pharmacy that fluoride with intent to prevent disease is a drug, prescription drug, unapproved and therefore illegal drug. Why has the FDA CDER not approved fluoride ingestion with intent to prevent dental caries? Why? Ask yourself why? One reason is the Board has never asked the FDA CDER for approval. And the FDA has determined the evidence of efficacy is incomplete (regardless of dosage). The Board would need to show science of efficacy and they cannot to the satisfaction of the FDA CDER.

FDA - - Fluoride Toothpaste A Legal Approved Drug: The Department failed to mention the toothpaste label says "Do Not Swallow" which refers to a quarter milligram of fluoride, the same as each glass of Seattle water.

The Board forces me to ingest in each glass of water the same amount as the FDA CDER warns "Do Not Swallow." Processed foods, unlabeled often contain fluoridated water.

The Board does not provide a label for the fluoridation drug. How much is too much? If a person is swallowing toothpaste or exposed to more fluoride in other sources, how does the Board or patient know how much they are ingesting? The Board simply implies safe and effective at any and all doses.

Quality Research: The Department failed to mention no Phase II or Phase III trials have been published and arguably no Phase I trials showing efficacy. Only one randomized controlled trial has been published and it did not have statistical significance. Fluoridation has not even been approved by the FDA CDER as an experimental drug.

Mechanism of Action: The Department failed to mention research has not found a mechanism for ingested fluoride to get to the the surface of the tooth in therapeutic doses.

The Board's evidence is attempting to tell the public, other than teeth with dental fluorosis, no other cells of the body are harmed. That is a preposterous implausibility. No reasonable scientist would accept such a wild claim. . . unless they were the dental lobby.

For example, the Board's fluoridation is causing premature cell death (apoptosis).

Mitochondria

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F295>

-Mediated Pathway Regulates C2C12 Cell Apoptosis Induced by

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F295>

Fluoride

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F295>

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<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F295>

Fluoride

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F362>

Exposure Provokes

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F362>

Mitochondria

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F362>

-Mediated Apoptosis and Increases Mitophagy in Osteocytes via Increasing ROS

Production.

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F362>

Toxic effects of

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F294>

fluoride

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F294>

on organisms.

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F294>

There are hundreds of studies with similar results: fluoride ingested causes cell death.

Yet the Board blindly trusts the dental lobby and endorsements that ingesting fluoride is safe. Let me explain. Most people would not go to their dentist for brain surgery or to diagnose brain or cellular damage, but the Board goes to the dentists (dental lobby) to

do precisely that.

HHS NTP: The Department trusts the Board and dental lobby rather than the National Toxicology Program who's meta-analysis determined about 3 IQ loss for those in fluoridated communities. Of course some are harmed more and others less.

0.7 ppm vs 1.2 ppm: Most research on fluoridation is historic at 1.2 ppm. Neither the Department nor the Board has given scientific evidence, nor has the dental lobby given evidence that fluoridation at 0.7 ppm is actually reducing dental caries. Historical studies, although low quality, were at higher doses of fluoride than current fluoridation.

Neither the public nor the Board should trust the Department to provide a balanced scientific position on fluoridation. They cannot speak truth to power.

While the science is reporting fluoridation is not safe or even effective, the Board continues to declare fluoridation safe without exception. Anyone with horse sense or reads some science knows there is no highly toxic poison, prescription drug, unapproved FDA CDER drug, which is safe for everyone at any dosage. When the FDA CDER says "Do Not Swallow" fluoride, the same amount the Board recommends in each glass of water, the public has good reason not to trust the Board. The Board has and is harming the developing brain of millions.

Yet the Department has spent hard earned taxpayer money trying to find out what percentage of the public does not believe the Board. How stupid can we in public health be? The public does not believe us because the science does not support us and we fail to read the science. And when we are this anti-science with an unapproved toxic poison, why should the public trust us on anything else such as global warming, nutrition, vaccinations, or sanitation.

The Board must stop protecting policy and start protecting the public by reading the science, laws and ethics, rather than trying to figure out how we can fool the public with our lies.

Friends, you can't keep pushing an illegal drug on everyone without their consent and expect the public to believe and respect us. The ethics is barbaric. The attempt to keep the public away from the science is reminiscent of the dark ages.

When the mitochondria, the "power house of the cell" is harmed and cells are dying, we cannot continue to say fluoridation is either safe or effective.

Please change your web page or delete it.

Bill Osmunson DDS MPH

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[Toxic effects of fluoride on organisms.](#)

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Please change your web page or delete it.

Bill Osmunson DDS MPH

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From: bill teachingsmiles.com  
Sent: 12/19/2023 1:00:52 PM  
To: DOH WSBOH  
Subject: Public Comment: Fluoride exposure

External Email

Dear Board of Health Director and Members:

What does the (Centers for Disease Control) and National Sanitation Foundation( NSF) really believe about the safety of fluoridation under sworn testimony in court?

CDC could not cite evidence of efficacy and NSF has done no testing on the developmental neurotoxicity of fluoride.

What does the National Toxicology Program say about fluoride exposure?:

“Our meta-analysis confirms results of previous meta-analyses and extends them by including newer, more precise studies with individual-level exposure measures. The data support a consistent inverse association between fluoride exposure and children’s IQ.”

AND

[R]esearch on other neurotoxicants has shown that subtle shifts in IQ at the population level can have a profound impact on the number of people who fall within the high and low ranges of the population’s IQ distribution. For example, a 5-point decrease in a population’s IQ would nearly double the number of people classified as intellectually disabled.”

When an unnamed reviewer of the NTP report said the results do not apply to water with fluoride concentrations below 1.5 mg/L, the NTP responded:

"We do not agree with this comment . . . our assessment considers fluoride from all sources, not just water. . . because fluoride is also found in certain foods, dental products, some pharmaceuticals, and other sources . . . . Even in the optimally fluoridated cities. . . individual exposure levels . . . suggest widely varying total exposures from water combined with fluoride from other sources."

A common attempt to confuse the listener is for promoters to attempt to talk only about the fluoride in water and rather than "TOTAL EXPOSURE". No one ingests fluoride from only water. Do not let promoters of fluoride confuse the Board.

The Board of Health is the ultimate authority of Health in Washington State. The Board claims fluoridation is safe and effective, regardless of total water consumed or other sources and provides no label for this legend drug.

CDC: Oral Health Director under oath said he was unable to cite studies showing fluoride is effective when swallowed.

There is only one randomized controlled trial on fluoride's alleged benefit and it did not have statistical significance. He could not cite the highest quality studies because no RCT study exist which reports benefit.

NIH: The National Institute of Health has funded 10 studies on fluoride's harm to the developing brain and all have reported harm.

NTP: The National Toxicology program included 55 human studies on fluoride's developmental neurotoxicity and 52 reported harm to the developing brain, a 95% consistency.

Ignoring science, the Board of Health continues to promote the legend drug at any dosage, without any label, to everyone regardless of their health or age.

My request is for the Board of Health to stop promoting fluoridation on your web site.

Sincerely,

Bill Osmunson DDS MPH

December 7, 2023, Washington State Board of Health Meeting regarding the Department of Health's Oral Health presentation by Shelley Guinn. [Shelley.Guinn@doh.wa.gov](mailto:Shelley.Guinn@doh.wa.gov)

Comments by Bill Osmunson DDS MPH

### Omissions and Factual Errors of the Departments Presentation

But first an essential, a must watch short 6 minute [video by Dr Birnboum](#) Ph.D., D.A.B.T., A.T.S., a microbiologist and board-certified toxicologist. She was director of the National Institute of Environmental Health Sciences (NIEHS) of the National Institutes of Health (NIH), and director of the National Toxicology Program (NTP) from 2009 to 2019.

Prior to her appointment as NIEHS and NTP director in 2009, she spent 19 years at the U.S. Environmental Protection Agency (EPA), where she directed the largest division focusing on environmental health research. Birnbaum started her federal career with 10 years at NIEHS, first as a senior staff fellow in the National Toxicology Program, then as a principal investigator and research microbiologist, and finally as a group leader for the institute's Chemical Disposition Group.

She was an adjunct professor in the Gillings School of Global Public Health and the Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill, as well as in the Integrated Toxicology and Environmental Health Program at Duke University. Dr. Birnbaum was vice president of the International Union of Toxicology, the umbrella organization for toxicology societies in more than 50 countries; former president of the Society of Toxicology, the largest professional organization of toxicologists in the world; and former chair of the Division of Toxicology at the American Society for Pharmacology and Experimental Therapeutics.

She is the author of more than 700 peer-reviewed publications, book chapters, and reports. Birnbaum's research focused on the pharmacokinetic behavior of environmental chemicals, mechanisms of action of toxicants including endocrine disruption, and linking of real-world exposures to health effects.

Dr. Birnbaum has won numerous awards for her work, including being elected to the Institute of Medicine of the National Academies, one of the highest honors in the fields of medicine and health. She was also elected to the Collegium Ramazzini, has two NIH Director's Award, a Women in Toxicology Elsevier Mentoring Award, an EPA Health Science Achievement Award, an American Public Health Association Homer N. Calver Award, a Children's Environmental Health Network Child Health Advocate Award, a Surgeon General's Medallion, and 14 Scientific and Technological Achievement Awards, which reflected the recommendations of EPA's external Science Advisory Board, for specific publications.

Birnbaum is now a Special Volunteer at NIEHS, and conducts research as part of the Mechanistic Toxicology Branch, and is a scholar in residence at Duke University's Nicholas School of the Environment.

During Dr. Birnbaum's tenure at NIEHS and NTP, the Fluoride Action Network was regularly submitting and communicating concerns about fluoride neurotoxicity with her agency and office. In 2020, Dr. Birnbaum joined award-winning researchers Christine Till, Ph.D., and Bruce Lanphear, M.D., MPH, in writing [an OpEd](#) highlighting mounting evidence showing that fluoride is likely impairing brain development and reducing kids' IQ. The video below was recorded during a public Zoom presentation that Dr. Birnbaum made to environmental advocates about her life and her work as part of a webinar series hosted by *The Center for Health, Environment, and Justice*.

Specifically to the Department's presentation at the Board meeting today.

#1. No science on efficacy or safety was presented or discussed. The "elephant in the room" is the silence, lack of science or even comment on efficacy and safety. No Board member asked any question on efficacy and safety. All assumed the rumor is correct or were to scared to speak up. All empirical evidence on efficacy and safety was omitted. The Department assumes fluoridation is safe and effective and the Board promotes the assumption. God forbid the Department would raise concerns on the Board's position.

#2. Cherry-pick the members of a committee or presentation and the results are a foregone conclusion. The Board did not have any opposing voices or presentation of empirical evidence. The Board is listening to the Choir. Suppose, for example, we asked all the Chevy dealers which truck is the best. The answer is a forgone conclusion based on our sampling.

I am requesting equal time for Dr. Birnboum, myself, and/or other experts who have carefully evaluated the "other" side of CWF, to review for the Board some of the risks and lack of benefit of ingesting fluoride.

The Board loses credibility when they refuse to consider all sides of a controversy, especially forced mandated unapproved illegal prescription drug.

The Department provides 5 references to themselves.

#3. The Department has and is spending significant public resources on the public's opinion of fluoridation. Those in the public who read research or critically listen to the Department's presentation will lose trust in the Board and Department. When the FDA says, "Do Not Swallow" and the Board recommends the same amount of fluoride in each glass of CWF, the public simply must not trust the Board.

#4. The Department's survey of public opinion has the intent of how to market policy and opinion rather than supporting policy with good empirical factual evidence, because there is little good research.

#5. Carefully presented conclusions were not presented with factual evidence.

#6. Regarding the **Washington State Oral Health Equity Assessment**.

The CDC Oral Health Division funded a Cochrane evaluation<sup>1</sup> of the best fluoridation efficacy research at the time. They did not evaluate risks or harm. One pertinent conclusion included:

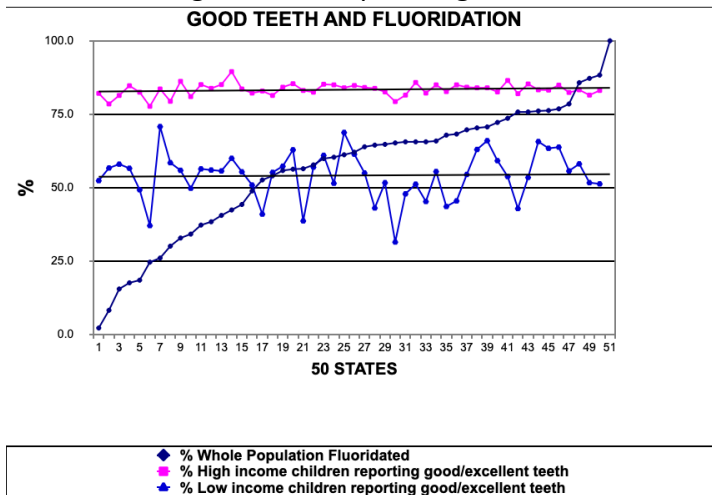
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<sup>1</sup> heozor-Ejiofor Z, Worthington HV, Walsh T, O'Malley L, Clarkson JE, Macey R, Alam R, Tugwell P, Welch V, Glennly A, Water fluoridation to prevent tooth decay, Cochrane Review, June 18, 2015.

*“There was insufficient information available to find out whether the introduction of a water fluoridation programme changed existing differences in tooth decay across socioeconomic groups.”*

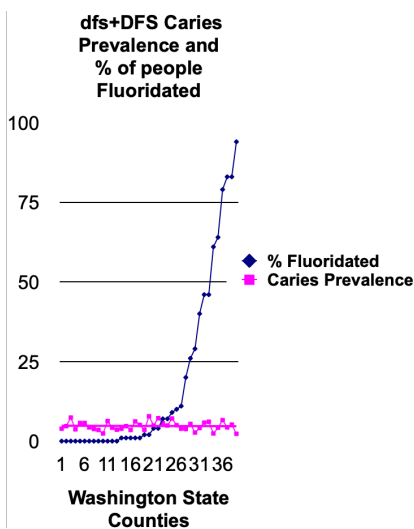
That is essentially an answer to the Department’s survey and the answer was published 7 years ago. Tax-payers could have saved money if the Department simply read the published literature.

Years ago, I plotted the USA states on percentage of their whole population fluoridated and ranked low and high income reported good to excellent teeth.



The rich have better oral health than the poor, but fluoridation has no common cause.

I then ranked all the Washington State Counties based on their reported percentage of the population fluoridated and ranked their rates of decayed, filled surfaces and caries. No matter the access to fluoridation, the caries prevalence is about the same. Having everyone fluoridated would not change the pink line or caries rates.

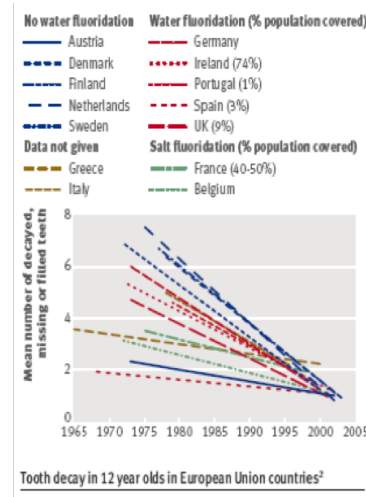
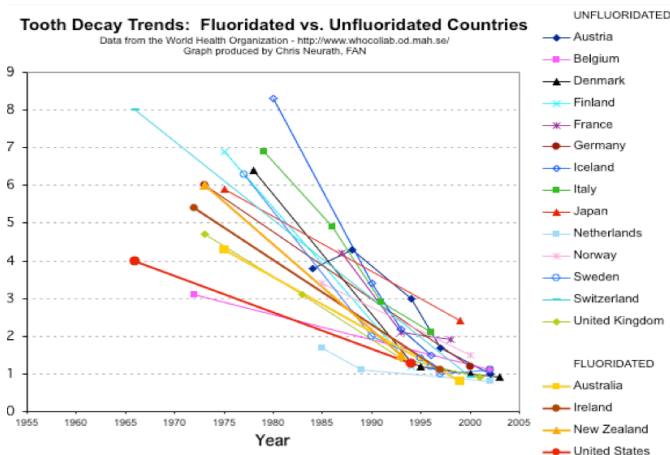




Is that evidence, “proof?” No, but it raises concern.

What about those countries not fluoridating? Remember, most developed countries do not fluoridate their water and 97% of Europe is without fluoridated water.

Plotting caries prevalence with WHO data over about 30 years, fluoride intake has not made a difference and all countries have reduced their caries prevalence to similar low levels. . . regardless of fluoride intake.



There is no quality published research suggesting increased access to fluoridation reduces oral health disparity. ESSB 5693 did not review safety or efficacy, rather assumed safety and efficacy based in part on claims made by the Department and Board.

I have requested a copy of the Department’s report. The report recruited 122 participants in six counties, a sample size too small to have statistical significance. Dividing the counties into “three buckets.”

The purpose was for marketing and promotion, not evaluation of safety or efficacy to see if those on fluoridated water had better oral health or fewer side effects. The Department just assumed and spent time and money on heirarchical evidence, which is considered a “house of cards.”

Quantitatively: No good results.

Qualitatively: The Department uses words like “most believed” which is not factual. More than 50%? 99%?

And the Department uses a “good number had some degree of opposition.” Again, what does a “good number” actually represent, 5% 95%? True, the study was too small to have significance, but the numbers could have been provided by the Department rather than having the Board “trust”. And similar published research should have been provided for comparison. And the Department chalks up the public’s concern of acceptability of the water to the water quality rather than the public’s concern for the fluoride in the water.

The Department's study does not support a racial health equity problem but an income problem. Lack of income is not just an oral health problem but a health problem. The Board and Department should focus on income rather than CWF.

Lower income communities have both lower quality of health and less fluoridation. But no science is provided to show common cause. Just because two events happen is not proof they are related.

The second conclusion assumes increased fluoridation will in some way reduce inequity of lower income. More fluoridation will not reduce inequality of disease. The Department does not look at benefit or risk, but how to promote policy, i.e. more CWF regardless of benefit or risk.

One of the Department's recommendations is "Community-based education should focus on the value of water fluoridation." Unless the Department and Board base their education on science, the public will only have less trust for authority. The value of CWF must include both efficacy, dosage, known/expected risks, and individual consent. For the Department and Board to repeat "safe and effective" trust us because we are authority, will convince some but harm many.

Over [4,800 medical and scientific professionals](#) have signed a statement in opposition to fluoridation, including both dental (IAOMT.org and IABDM.org) and medical organizations (ICIMED.org). Has the Board invited any of those professionals to speak on the science and ethics?

The Department's waste of tax-payer money and Board time should receive a D- grade.

My request is to have those opposed to fluoridation provide evidence at a Board meeting. At a minimum, the Department and Board will better understand how to respond to the public's concerns.

Sincerely,

Bill Osmunson DDS MPH

---

From: Emily Lamb  
Sent: 11/7/2023 4:55:18 PM  
To: DOH WSBOH  
Cc:  
Subject: Statement on Possible Legislative Issues

External Email

Washington Board of Health:

Thank you for publishing information about possible legislative issues you may take up in the next legislative session. It's helpful for understanding your priorities so as Washington State citizens we can weigh in with our perspective.

Toward that end, I'd like to comment on the section of the Statement regarding vaccination. During Covid, we lived through unprecedented intrusion by the state into our personal medical decisions and bodily autonomy. We must move away from top down, command and control state dictates that only serve to increase vaccine hesitancy and erode trust in public health.

Accordingly, in advocating for legislation that "helps reduce the number of children who are out of compliance", the Board must ensure that parents are able to weigh the risk/benefit of any and all vaccinations for their children and have broad authority to decline for personal, religious or health reasons. Any legislation that seeks to limit parental choice must be avoided.

Thank you for the opportunity to review the Board's Statement and comment.

Sincerely,  
Emily Lamb

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From: fmleaman@juno.com  
Sent: 11/7/2023 4:04:05 PM  
To: DOH WSBOH  
Subject: Legislature concerns

External Email

I read your agenda and wanted to address it. Racism is a NOT a public health crisis. To increase funding to support additional environmental justice efforts across state agencies is totally irresponsible. Legislating immunization for our children is EVIL. My wife and I are absolutely against racism of any kind, but that is not what these policies (also known as DEI – Diversity Equity and Inclusion) are. Equity is the expansion of socialism. The statement that Washington cannot achieve equity without environment justice is pure jibberish and socialism. Keep ALL of these agenda items out of our State government and the Department of Health as well.

Mike & Susan Leaman

---

From: Anne Personius  
Sent: 11/7/2023 3:37:12 PM  
To: DOH WSBOH  
Cc:  
Subject: Mandated vaccines

External Email

In Washington, children over 13 could get a Covid "vaccine" without parental consent. The "mature minor doctrine," is in direct conflict with the rights of parents to care for their children. I am very concerned with the idea that students could be given the shot at school without parent knowledge or consent. Children this age are vulnerable, easily manipulated, not mature enough to make healthcare decisions, and their care is still the responsibility of their parents.

The language of bringing children "into compliance" is also very concerning. I am opposed to the idea of requiring students to get the Covid shot to attend public school. I do not want the Covid vaccine to be mandated – for students or anyone! These vaccines are still under emergency authorization and not fully approved by the FDA. The side effects and long term effects on our health are still questionable.

Please honor the rights of parents to do what they feel is best for their children according to their personal and religious convictions.

Thank you,  
Anne Personius  
Wilkeson, WA

---

From: Jan Slansky  
Sent: 11/7/2023 4:06:12 PM  
To: DOH WSBOH  
Cc:  
Subject: concerned grandparent - no COVID vaccine mandates

External Email

Washington State Board of Health:

I am very concerned that students could be given the COVID vaccine at school with parent knowledge or consent. That is not acceptable. Neither is it acceptable to mandate students, teachers or any employee of school districts to be forced to take the COVID vaccine.

Thank you,

Janis E Slansky

253-569-9594

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From: Michael Wright  
Sent: 11/7/2023 3:46:34 PM  
To: DOH WSBOH  
Cc:  
Subject: We do not agree with SBOH that all children and families should be destroyed

External Email

State Board of Health,

We do not agree with SBOH that racism is a public health crisis.

We do not agree with SBOH that racism is a public health crisis when the science clearly indicates this is SBOH political extremism.

We do not agree with SBOH that all children and families should be destroyed.

We do not agree with SBOH that all children and families should be neo Marxists.

We do not agree with SBOH that the state inject experimental injections into children without parental consent.

We do not agree with SBOH that the state inject experimental injections into children without disclosure of injection content.

We do agree that SBOH injection of mass murder jabs is a felony punishable by Nuremberg laws and death by hanging if convicted.

Cease and desist from your mass murder of we the people,  
Michael Wright,  
North Seattle Neighborhood Association

--

"Peace if possible, truth at all costs. Settled science & scientific consensus are oxymoronic. Peer review is censorship by eminence not evidence. Unauthorized use of confidential info is prohibited."

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From: Mark Baratta  
Sent: 11/7/2023 3:07:45 PM  
To: DOH WSBOH  
Subject: concerns re Statement on Possible Legislative Issues

External Email

Hello -

I'm a citizen of the state of Washington, having lived in and around Seattle for decades. I'm concerned about the overreach displayed in your Statement on Possible Legislative Issues, an update to which I believe you'll be discussing at your next meeting.

My concerns involve three areas:

1. The notion that racism is a public health crisis.

This is silly. While you can certainly argue that racism is evil, criminal if acted upon, and a failure of character, it is well beyond the reasonable purview of public health organizations. These organizations have lately been doing a rather poor job at their real mission of sanitation and disease control. Virtue signalling is a waste of resources.

2. Funding "environmental justice" efforts.

Again, this has nothing to do with your core mission, and is simply using taxpayer funds to advance a political agenda.

3. Advocating legislation to force childhood vaccination.

As we're seeing with the many sad cases of young people severely injured by experimental COVID vaccines, it's easy to cause a great deal of harm by forcing injections on people. It appears that at least some board members are MDs, who I think still adhere to the Hippocratic Oath so shouldn't be involved in activities that clearly cause harm. There's also the Nuremberg Code to consider.

Thanks for your consideration, and best regards,

Mark Baratta  
mark@barattadesign.com <mailto:mark@barattadesign.com>  
7014 189th PL SW  
Lynnwood, WA 98036



---

From: Karengraff  
Sent: 11/7/2023 4:06:42 PM  
To: DOH WSBOH  
Cc:  
Subject: Immunizations

External Email

I am against the board implementing processes trying to increase compliance on childhood immunizations.

These programs are removing parents input and the parents own responsibility for their children.

If the parents aren't involved such things as bad reactions to injections are not considered. I have a child that had a bad reaction to pertussis vaccine with a doctors medical exemption for that vaccine. So I am personally aware that there are exceptions that are valid.

I also have noted several vaccine clinics in my area offered and publicized that were easily assessable by families (with incentives) if they wished to participate. At least at these events a parent would be present being aware of what is being done to their children.

As for the COVID vaccine that should not be given at school at all - that has way to many reactions. And it does not prevent transmission- so thus the reason for protecting others in invalid.

And it is ineffective- all of the recent cases of Covid that I have been aware of have been in vaccinated people.

Thank you  
Karen Graff  
WA

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for iOS

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From: Sherry Christensen  
Sent: 11/7/2023 3:04:50 PM  
To: DOH WSBOH  
Cc:  
Subject: Your upcoming year/policies

External Email

Dear Board Members,

I would like to express a few opinions on your agenda items.

First: racism is not a health crisis. Yes, it can be an issue, but in our present volatile environment the term has been so overused that it is losing its true meaning.

Secondly: buying into the money lobby of environmental justice seems once again, not really a health related pursuit--or should be.

Third, and most important: any medical measure that involves injecting a biologic into a child should be ENTIRELY at the discretion of the child's parents or guardians, and not part of a school clinic, nor demanded by you the State Board of Health. Please visit the CDC website that catalogues the reactions and deaths related to the Covid shot. It is not a true vaccine and should never have been called so. Look for VAERS (and know as you do that it is vastly under reported, according to the Pilgrim Study done by Stanford).

Thank you for your time, and I hope, consideration.

Sincerely,  
Sherry Christensen

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From: Garry Blankenship  
Sent: 11/4/2023 9:14:54 AM  
To: hcinfo.infosc@canada.ca,DOH WBOH,OADS@cdc.gov,sheriff@co.clallam.wa.us, Van De Wege,  
Kevin,Annika.Pederson@leg.wa.gov,mozias@co.clallam.wa.us,rjohnson@co.clallam.wa.us,shahidafatin@gm  
Allison 2  
(DOHi),news@peninsuladailynews.com,subscribe@peninsuladailynews.com,feedback@ground.news,oped@  
Herald,  
(DOHi),chutton@heraldnet.com,customerservice@theolympian.com,news@spokesman.com,voice@spokesm  
Cc:  
Subject: How "Vaccines" Get Approved

External Email

[https://www.theepochtimes.com/epochtv/secret-database-cdc-is-hiding-childrens-vaccine-data-expert-says-5521841?utm\\_source=Health&src\\_src=Health&utm\\_campaign=health-2023-11-04&src\\_cmp=health-2023-11-04&utm\\_medium=email&est=RYfNRBluEHWWwVf1DRZLhpfQ%2B0xUFLWTOKnCszejlk35q56unjyiNQK0Z8z](https://www.theepochtimes.com/epochtv/secret-database-cdc-is-hiding-childrens-vaccine-data-expert-says-5521841?utm_source=Health&src_src=Health&utm_campaign=health-2023-11-04&src_cmp=health-2023-11-04&utm_medium=email&est=RYfNRBluEHWWwVf1DRZLhpfQ%2B0xUFLWTOKnCszejlk35q56unjyiNQK0Z8z)

<[https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.theepochtimes.com%2Fepochtv/secret-database-cdc-is-hiding-childrens-vaccine-data-expert-says-5521841%3Futm\\_source%3DHealth%26src\\_src%3DHealth%26utm\\_campaign%3Dhealth-2023-11-04%26src\\_cmp%3Dhealth-2023-11-04%26utm\\_medium%3Demail%26est%3DRYfNRBluEHWWwVf1DRZLhpfQ%252B0xUFLWTOKnCszejlk35q56unjyiNQK0Z8z](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.theepochtimes.com%2Fepochtv/secret-database-cdc-is-hiding-childrens-vaccine-data-expert-says-5521841%3Futm_source%3DHealth%26src_src%3DHealth%26utm_campaign%3Dhealth-2023-11-04%26src_cmp%3Dhealth-2023-11-04%26utm_medium%3Demail%26est%3DRYfNRBluEHWWwVf1DRZLhpfQ%252B0xUFLWTOKnCszejlk35q56unjyiNQK0Z8z)>

The frailties, omissions and conflicts of interest in the vaccine approval process is not just alarming, but totally corrupt. For starters; when a vaccine is tested against a placebo group that placebo group is given a different vaccine - - - not saline, water or a true inert placebo. The CDC will not sponsor a true vaxed vs unvaxed study because the results would invalidate most, if not all, vaccines. Non CDC sponsored vaxed vs unvaxed studies prove far better health in the unvaccinated group. The shameful reality is that vaccines promote chronic disease which is a win - win for pharma. There is no money to be made with cures. Plenty of money in treating disease. Litigation has begun against those knowingly or incompetently distributing these toxic drugs. Ultimately there must be accountability.

Not seeking anonymity,

Garry Blankenship



---

From: Mindy A Stagg  
Sent: 11/7/2023 2:39:33 PM  
To: DOH WSBOH  
Cc:  
Subject: Mental health services in schools

External Email

To whom it may concern at the board meeting,  
Mental health services are very important but do not belong in public schools. Mental Health should be addressed with professionals and parent involvement outside of public school settings. Without the correct supports in place it can be harmful for children.

Mindy Stagg

---

From: Brett Spore  
Sent: 11/7/2023 3:57:05 PM  
To: DOH WSBOH  
Cc:  
Subject: November Board Meeting Points of Interest

External Email

Dear Washington State Board of Health Members,

After taking a moment to review the Legislative Statement, I felt compelled to share my thoughts on a few of the issues being brought up.

I would like to begin with racism. Racism as defined by Webster's Dictionary is "a belief that race is the primary determinant of human traits and capacities and that racial differences produce an inherent superiority of a particular race." The secondary definition of racism as defined by Webster's Dictionary is "racial prejudice or discrimination." Racism is sickening, disgusting and should not exist. With that said, racism is by no means a "public health crisis." The Webster's Dictionary definition of crisis is "the turning point for better or worse in an acute disease or fever." Definition 2 also by Webster "the decisive moment as in a literary plot." This could apply to racism, however, this is not a decisive moment. Increasing funding and adding even more equity policies is not a decisive moment. It is just one more step in the process. It is a continuation of work that was started ages ago. Work that was focused on equality not equity. Definition 3 by Webster "an unstable or crucial time or state of affairs in which a decisive change is impending: one with the distinct possibility of a highly undesirable outcome." Again, this doesn't apply to racism. We are not in a "health crisis" with racism. We are still working toward equality in all aspects of the medical community, but that is not a crisis. It is a process.

I am in support of the proposal set forth under Drinking Water. This seems like something we should all have access to every day no matter where we live in the state. I also support the proposals in the sections labeled Governor's Directive on Lead, Preventing Smoking & Vaping and Oral Health.

Regarding the Immunizations proposal, I want to be clear that I do not agree with the "mature minor doctrine." These kids/teens cannot drive, cannot pay for their own medical, cannot vote, cannot go to war for their country, cannot buy a cigarette, cannot volunteer at most charities, cannot get a job to contribute to society, but they supposedly have the maturity to make their own decisions about their medical choices including whether or not a vaccine is the right thing for them when they don't even know their own medical history well enough to know if they are safe to get a vaccine. "The Board also supports the Department of Health's efforts to promote vaccination against COVID-19 by making these vaccines accessible." With or without parental consent, and that is a major medical problem. Who's going to be liable when a nurse gives a young person a COVID-19 vaccine and the kid has a major reaction? Leave the vaccines to the doctors please.

Regarding Obesity Prevention and Access to Healthy Food: Totally agree on more open spaces that promote health and movement. Instead of "supports maintaining funding for the Fruit and Vegetable Incentive Program, which provides incentives to people with low incomes experiencing food insecurity to support healthy food options." Maybe figure out how to make WA grown produce cost less here than it does for my friends around the

country. Why am I paying more for WA grown apples than my friends many states away? Maybe figure out how to make a pound of strawberries cost less than a gigantic bag of chips. I can buy one bag of chips that will last 2 weeks or 1 pound of strawberries that will last a day. If you really want to help people be less obese, make it affordable. Maybe have more produce available than packaged foods. Look at a grocery store. One little corner is produce; the rest is frozen and packaged goods.

Regarding Increase Access to Health Insurance: Seriously this has benefited the poor, and I am so happy for them. But in the same vein, it has destroyed the middle class. I cannot go to the doctor. My body is falling apart, because I cannot afford to go get things taken care of and yet my friends one notch below me on the income scale get all of their medical for free. There has to be a better way. This system is simply failing.

Regarding Mental Health Services: I am in favor of the online meeting options and your "continued efforts to increase access to these services across our communities." I believe that online access has opened doorways to healing for many who would not go into a facility but will meet online. I do not agree that we should have more mental health professionals IN the schools. A counselor who can then refer the patient to an outside counselor/psychologist would be my preference. Counseling is not "part of basic education." Math. Reading. Writing. Science. History. Those make up BASIC EDUCATION. We need to stop trying to make schools into little communities that hold all the answers for all students. Students should be at school to learn. Period. Paragraph. End of story. Medical. Immunizations. Counseling. This should all happen outside of school hours and off site. Set up relationships with counselors and psychologists to whom the schools would refer students as needed.

Thank you for reading all of this and thank you for being on the board.

Brett Elizabeth Spore

---

From: Lorinda Newton  
Sent: 11/7/2023 3:39:33 PM  
To: DOH WSBOH  
Cc:  
Subject: Legislative Update

External Email

Dear board members,

Parents know best about their children's health. Please do not seek to force more children to accept vaccines. Many vaccines are developed using aborted fetal tissue which violates the religious convictions of many and is morally repugnant.

Trusting in Christ's Truth,

Lorinda Newton

Lorinda's Ponderings on Substack

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2FFlorindakfnewton.substack.com%2Fp/lorinda-newton>>, a blog on God's Word as the foundation for faith, culture, and governing. Two additional newsletters on this Substack:

\* Newton Library Update

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2FFlorindakfnewton.substack.com%2Fp/newton-library-update&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C40227d7ebaf340e51f5208dbdfea9313%7C11d0e217>>, reviews on my library collections, Newton Family Library  
<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.librarycat.org%2Flib%2FNewton>>

\* Reposts from my homeschool blog

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From: Rose & Pedro  
Sent: 11/4/2023 11:01:54 PM  
To: dskaug@icloud.com  
Subject: Fw: International Demonstration for Peace and Freedom!

External Email

-----Forwarded Message-----

From: James Roguski from James Roguski  
<reply+2ai12i&1wei0d&&13f732ba61e1e4398f3ea6fa890a9380c5928e3ab8ed4c4659fb0703d1f67a59@mg

Sent: Nov 4, 2023 12:13 PM  
To: <dornit@peoplepc.com>  
Subject: International Demonstration for Peace and Freedom!

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[REDACTED]  
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PreventGenocide2030.org

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James Roguski

The old system is crumbling, and we must build its replacement quickly.

If you are fed up with the government, hospital, medical, pharmaceutical, media,

industrial complex and would like to help build a holistic alternative to the WHO, then feel free to contact me directly anytime.

JamesRoguski.com

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From: Debby Swecker  
Sent: 11/7/2023 4:59:03 PM  
To: DOH WSBOH  
Cc:  
Subject: Comments to legislative agenda

External Email

Dear Board of Health,  
I totally disagree with your 3 points. Racism is not a health problem. It is a problem in your minds. On a daily basis, in our communities, people get along, appreciate and love each other. Please stop promoting racism.

Children and adults should not be "vaccinated". There are NO studies which show benefit from this and in fact, hundreds of studies showing harm now and who knows for the future. Stop promoting dangerous shots that HAVE NOT BEEN STUDIED!

Thank you.  
Debby Swecker

Sent from my iPhone

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From: Shelly Humbert  
Sent: 11/7/2023 8:09:56 PM  
To: DOH WSBOH  
Cc:  
Subject: BOH November meeting feedback

External Email

Members of the Washington State Board of Health,

I am writing as a concerned Washington State citizen. I see there are several items on your November agenda that could have a lasting negative impact on the entire state and want to voice my concerns.

My first concern is the statement that racism is a public health crisis. Though racism in any form should be opposed, advocating for "equity" IS NOT the same as advocating for anti-racism. Often, it is itself just another form of racism. Adopting the statement that racism is a public health crisis would not only fail to address the real issue, but would give increasing power to subjugate any class those in power deemed necessary in order to attempt make everything equitable. It would silence voices and create a framework where one group would directly take from another, increasing the racism in our state.

Second is the claim that in order to have equity, we must have environmental justice. This is a fallacy and a clear attempt toward making Washington State a socialist government. Taking what an individual has worked for and forcing them to give it someone who is able but has not worked is a blatant form of servitude.

Finally, giving minors vaccinations without parent knowledge or consent is very concerning. Parents are the ones legally responsible for watching out for the physical and mental well being of their children. The government SHOULD NOT intervene, except in the cases of abuse or neglect. A parent's choice in vaccination should not be considered neglect nor abuse.

Please consider everything I have written here and do what is right for Washington State, for our children and for the future and reject all of these items on the agenda.

Thank you,

Michel Humbert  
Spokane WA

---

From: Dan  
Sent: 11/7/2023 8:48:42 PM  
To: DOH WSBOH  
Cc:  
Subject: Regarding Possible Legislative Issues 2023-2024 Biennium

External Email

WA Dept. of Health,

No racism is NOT a health issue; it's something that only matters to racists that choose to make it an issue and in doing so, seek to increase, not decrease discrimination which is already illegal. The only institutionalized racism is the one being attempted to implement. The rest of us care about character so stop dividing society with this social nonsense; this is supposed to be about public health.

Equity is equally dangerous because it's a failed attempt to make us all the same when we're not so we will always have different outcomes based upon upbringing, education, motivation, etc. Stop seeking to expand mediocrity by lowering the bar and making excuses for those who choose not to succeed.

So-called "environmental justice" is another poison pill of that means nothing but empty rhetoric and virtue signaling to further divide society.

"People who get pregnant?" ONLY women get pregnant and the health department should know this w/o rewriting science, biology and reality. "Reproductive justice" in and of itself is unreality; it's not even a thing; it's gobbledygook.

Abortion is not a right; it's murder. It's not a 'women's right' we're dealing with when a woman is pregnant because it's a BABIES rights we're dealing with as it has its own unique DNA apart from the mother and should be protected at all costs.

"Aquatic and Water Facilities". What? How about using common sense w/o ANY legislation and remind parents to teach their children to swim?

"Drinking water". That's what our water districts do w/o the dept. of health interjecting where they don't belong.

"Oral Health". How about eliminating Fluoride from the water we drink because it's a NEUROTOXIN? That would go along way for public health.

"Vaccines?" When they're not properly tested by an industry that is exempt from liabilities; there is not ONE good reason to increase immunization rates for something that may not provide any benefit whatsoever but could cause irreparable harm or death and certainly NOT push these utterly failed Covid 'vaccines'.

"Mental health services". While necessary it should NOT be expanded in the school system.

The Dept. of Health is supposed to deal with 'public health' not social engineering micromanaging of the public based upon fanatically biased, racist, discriminatory and divisive means as we already have enough of that in society w/o having of all things the 'health' department to push the very things that are causing greater problems, not less.

More government and more funding of the dept. of health is NOT the answer. If anything, the health department should be audited, gutted and privatized for it's lost its

meaning as it no longer provides public health but empty, yet ever increasingly expensive platitudes to micromanage the general public.

The proposals are irrational and do not deserve any support from the public or the legislature; it's shameful.

Regards,

Dan Kessler

---

From: Kristan Ashbridge  
Sent: 11/13/2023 4:41:54 PM  
To: DOH WSBOH  
Cc:  
Subject: Child Immunizations - Stop This Requirement - Decades of Testing Need to be Completed First

External Email

Why on earth are you still pushing the jab for children or anyone for that matter?

Shut this propaganda and immunization nonsense down now.  
There is WAY more harm and death to give anyone this jab.

Decades of testing need to be done before anyone even considers implementing this requirement. Stop this requirement, immediately!

---

From: Sheryll Robinson  
Sent: 11/7/2023 7:06:23 PM  
To: DOH WSBOH  
Cc:  
Subject: Upcoming plans

External Email

Racism a public health crisis: I do not believe that our State institutions and health care providers are systemically racist. Are there not already legal protections for all residents of WA? While certain segments of society are in crisis, I do not believe that this is due to racism. Perhaps DOH could focus on drug addiction and homelessness, rather than race. Funding for environmental equity: Before any additional funding is requested or authorized, the public needs a clear definition of these buzz words, and to know precisely how such funding would improve the health of Washingtonians.

Vaccines for students and minors: Only with the knowledge and permission of parents should any vaccines or other health care be provided for a minor. Covid vaccines, for example, are still experimental and have been shown to cause myocarditis. r vaccines or health care from school clinics

Sent from my Verizon, Samsung Galaxy smartphone

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From: melleady  
Sent: 11/8/2023 3:14:40 PM  
To: DOH WSBOH  
Cc:  
Subject: Obesity

External Email

Members of the Washington State Board of Health,

Thank you for today's State Board of Health meeting (Nov. 9, 2023). I am providing comments on two slides that I found relevant to a major driver of health outcomes — obesity. First, during the Department of Health (DOH) briefing, they shared leading causes of death in 2022 on slide#6. Second, during the Health impacts of Climate Change presentation, Spokane County provided their Prioritization Criteria on slide#7.

Obesity is closely linked to many of the Leading Causes of Death (slide #6), including cancers, diseases of the heart, diabetes, and COVID-19; as well as to life expectancy. Obesity also rises to the top of health priorities, based on all the priorities listed on slide#7 from Spokane County.

According to the CDC (1), reporting in September 2023, the Washington obesity rate is 31.7%. And based on data from Kaiser Family Foundation, life expectancy decreased 2.7 years between 2019 and 2021. (2) Both these sources provide a breakdown according to race. They are as follows:

Asians 10% obesity; 83.5 years life expectancy  
Whites 30% obesity; 76.1 years life expectancy  
Hispanics 36% obesity; 77.7 years life expectancy  
Blacks 36% obesity; 70.8 years life expectancy  
Native American & Alaskan Native 43% obesity; 65.2 years life expectancy

As you can see, this connection between increased obesity rates and decreased life expectancy is troubling! According to a JAMA network article published this month (3), Native Americans lost the most years of life expectancy, dropping 6.6 years from 2020 to 2021, with 21% of the Native American deaths due to COVID-19.

We heard again at today's meeting, during the DOH briefing, that pre-existing conditions have a negative impact on COVID-19 outcome. What are these preexisting conditions? This seems a missed opportunity for DOH. In the interest of promoting health, increasing life expectancy, and reducing deaths from COVID-19 and chronic diseases, DOH could produce a reporting looking at the impact obesity has on both chronic and communicable diseases, such as COVID-19.

For a while, my county was reporting covid deaths by pre-existing conditions: yes, no, or unknown. The numbers were stark. In March of 2022, there were 754 COVID-19 deaths in Clark County.

403 had pre-existing conditions  
6 no pre-existing conditions  
345 unknown

I pointed these numbers out at my local board of health meeting, asking for a public health list of pre-existing conditions. Clark County Public Health responded, not by providing a list, but rather by removing the data table from their webpage! I found this troubling.

I hope you will find this information interesting and useful, as you focus attention on the most impactful drivers of health in Washington.

Sincerely,  
Melissa Leady

#### Sources

1. <https://www.cdc.gov/obesity/data/prevalence-maps.html>  
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From: barbara schile  
Sent: 11/8/2023 11:11:00 AM  
To: DOH WSBOH  
Cc:  
Subject: Mandatory vax

External Email

As a parent and grandparent I oppose mandatory covid Vax for student's to attend school.

Barbara Schile 253.350.1613

Sent from my Verizon, Samsung Galaxy smartphone

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From: Amie Beisel  
Sent: 11/8/2023 11:18:29 AM  
To: DOH WSBOH  
Cc:  
Subject: No more vaccine requirements

External Email

Dear Board,

We, the parents, grandparents, guardians and friends of the children of WA state do not need more vaccines nor regulations concerning them. Our children are being parented by us, not the Board of Health and we will see to it that they are compliant to our standards for what is best for them, not a government organization that is not raising them!

We urge you to not implement any further vaccine regulations.

Sincerely,  
Amie & Dave Beisel

---

From: Sarah Hiam  
Sent: 11/10/2023 3:23:05 PM  
To: DOH WSBOH  
Cc:  
Subject: Multiple concerns

External Email

To Whom It May Concern:

I'm aware that the DOH recently held a meeting discussing multiple important issues.

First and foremost on my mind is the covid vaccine and the need to bring our state's children into compliance. This is an enormous waste of time. The covid shot doesn't prevent illness, as we all know by now. It provides no protection to others. In low risk children, this "vaccine" carries more risk of harm (myocarditis, neurologic disease, disproportionate response to bacterial and viral infections) than the actual virus does. Please, just drop this entire issue. Those who want to be vaccinated, can be. It serves no purpose to mandate a shot like this, when it functions no differently than a flu shot. The covid vaccine debacle will lead to a rise in other preventable diseases against which vaccines work, as parents will no longer allow their children to receive any vaccines. Trust in public health is very, very low. I don't know when, if ever, you'll earn it back. You're risking the health of countless children if you require the covid shot for school attendance.

Re: your push for DEI in public health and our state's policies, stop it. This entire situation is a manufactured crisis that will further divide our population along ideological lines. Please focus on repairing your tarnished reputation and stop promoting a victimhood mentality among our state's population.

Sarah Hiam

Sent from Yahoo Mail on Android

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From: Kim  
Sent: 11/8/2023 9:47:51 AM  
To: DOH WSBOH  
Cc:  
Subject: DB8C088C-16B1-4207-97EE-A2393BB55518

External Email

I am deeply concerned about your statement that racism is a public health crisis! Every time government uses racism as an excuse to promote ANY policy, it only creates racism. Instead of focusing on race, you should be focusing on merit. ALL people should be taught that success in life is based solely on the effort each individual makes, not on fictional stories of abuse. We should never teach anyone that government owes them anything. Governments sole purpose is to protect our God given rights. Please stop segregating our country. Kim

---

From: ryan.holland43  
Sent: 11/7/2023 5:25:16 PM  
To: DOH WSBOH  
Cc:  
Subject: Meeting concerns

External Email

I'm made aware about minor influence to get vaccinated without knowledge of the parent. It is the lawful responsibility of parents to be of their children's health. This goes against parental rights. I ask you please do not support or move forward with this decision. Thank you.

Ryan Holland

Sent via the Samsung Galaxy Z Fold2 5G, an AT&T 5G smartphone



---

From: Ann-Margaret  
Sent: 11/7/2023 9:26:49 PM  
To: DOH WSBOH  
Cc:  
Subject: Vaccinations

External Email

To the members of the Board,

Please vote "No" to increasing vaccinations and making the Covid vaccine injection (which is not actually a vaccine) more readily available.

Our children face a huge amount of vaccines up to the age of 18. These vaccines are dangerous because of the load of medicine and adjuvant they contain for the size of the patient. The ingredients are egregious and harmful to humans and especially to our smallest humans; the children.

The Covid shot has been proven by research and medical data published in medical journals to be harmful and has not prevented people from becoming infected with Covid. In fact, Pfizer just released public information that the Covid shot has caused myocarditis.

Please vote "No" at your meeting and stop the harm caused by these injections.

Ann Garner

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From: Kelley Flaherty  
Sent: 11/8/2023 5:54:24 AM  
To: DOH WSBOH  
Cc:  
Subject: COVID Vaccinations are Dangerous

External Email

Dear Board of Health,

I personally know people severely injured by the experimental COVID vaccines. One of them had a brain bleed due to the vaccine induced microclots. This caused a stroke and this formerly healthy lady is now wheelchair bound.

Please do not push these experimental products on school children. Not only are the immediate adverse events at a high rate, but the long-term affects are unknown. If you push these products on our children you are engaging in a short sighted and immoral act.

Thank you,

Kelley Flaherty  
Bellingham WA

Sent from my iPad

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From: Jack Odell  
Sent: 11/7/2023 7:38:25 PM  
To: DOH WSBOH  
Cc:  
Subject: Oppose Covid immunization for children

External Email

I am very much opposed to requiring or urging children to be vaccinated for covid. This is a dangerous precedent, and goes against medical and scientific practices, as it would open up these children to be experimental subjects. Remember, the covid "vaccines" are still experimental, and much is still unknown. And, of course, factoring in the many deaths from "unknown causes" among the young, since the rollout of these "vaccines", wouldn't it be prudent to NOT open up a pandora's box when dealing with the life and health of children? Adults (not to mention children) are not informed as to the risks of such shots, and the ingredients are not as yet published. Why all the secrecy? Please do not put our children at risk. Please wait for more data to be released, and for sudden deaths among children (and adults) to be researched.

Respectfully,  
Judy Odell  
7510 Foster Slough Rd, Snohomish, WA 98290

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From: Jennifer Ringenbach  
Sent: 11/8/2023 7:46:04 AM  
To: DOH WSBOH  
Cc:  
Subject: immunization, other

External Email

please tell me - when does this end? How much data has to come out about the faulty trials Pfizer performed; how many studies confirming kids are not catching and spreading COVID; how many people have to die suddenly and how many young people have to suffer such things as myocarditis for you people to drop the Covid "vaccine" issue?

We do not want these vaccines forced on us and our children. We have made that clear time and time again. And the more you push, the less we want any vaccines. The more you push something we know to be ineffective and dangerous, the less we trust you, the less we will believe anything you say again. If you're concerned about the number of children with lower overall vaccine rates, you only have yourselves to blame for that.

Regarding racism as a public crisis...the crisis is all this DE&I mentality which is not at all about making all people equal which I wholeheartedly support, but rather about pushing divisiveness and punishing white kids in particular. We really have gotten to the point where some people are held responsible for things that happened long before they were born while others are not being held responsible for actual crimes they're committing today. Please stop this insanity. Racism is an issue, but it is not a public health crisis that should be addressed by the State Board of Health. We need to approach this correctly and find the right way to bring everyone together so we all truly are treated equally; not push an agenda that is doing the exact opposite.

Thank you.

Sent from my iPhone

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From: Kathy Dickson  
Sent: 11/8/2023 7:43:51 AM  
To: DOH WSBOH  
Cc:  
Subject: Comments for Your Agenda of 11-8-23

External Email

Good Morning State Board of Health. I have a few comments on your agenda today:

\* Advancing Equity in State Government. I was incredulous to find this comment on your agenda. This is not a health issue but a political call to action. The very uttering - so to speak - of this statement advances not a health concern but a political ideology and all actions that fall from it are fruit of the poisoned tree. "The Board recognizes .... how do you recognize? Where is the proof? What horrible things are happening? The casual use of this statement seeks to inflame emotions on an issue that DOES NOT BELONG in your wheelhouse. "...prioritizes and operationalizes equity".... This implies that you would welcome placing this issue - again, a political ideology and not a health issue - above all others. Where is your concern for true health issues affecting the people of Washington State? How about those long waits in the ERs? How about not being able to get services for months? How about not being able to discharge patients when it is time due to a lack of stepped down care beds? How about fentanyl? Please turn your heads from politics to healthcare and remove this from your legislative agenda. Racism - while is never to be desired, neither is it a public health crisis.

\* HEAL ????? Really? Again a call to support a political ideology. At least your were restrained enough to  
"Listen and Learn." My tax dollars are being spent on your participation in an arena that is not your wheelhouse. The Board of Health has sufficient issues to keep it occupied and focused. While everyone and every agency likes more money, these are my tax dollars being spent on superfluous issues. "Washington cannot achieve equity".... Equity is a phantom unicorn, and nothing more than a thinly veiled attempt to advance socialism. Please turn your heads from politics to healthcare and remove this from your legislative agenda

\* And finally the children - : "...bring children into compliance".... plus mental health services. A two-fold whammy depriving parents of their rights for their children and placing the children in harm's way. . I cannot support mandating COVID 19 "vaccination" for children, especially with the possibility expanded school "services" being able to administer these without parental consent. The COVID 19 "vaccine" and its numerous "boosters, DO NOT prevent the disease. You of all groups should understand that it is a virus and constantly mutating and therefore all the boosters in the universe do nothing but chase the current iteration. Documented harm and death in vaccinees has shown that it should be a parental decision and not a mandate, Yes, increase access to mental health for children, but do not place it in schools where it does not belong. This is simply another wedge between children and the parents. Schools are - or used to be - for education, let's please get them back to that goal.

Thank you

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From: Mary Salamon  
Sent: 11/8/2023 9:39:40 AM  
To: DOH WSBOH  
Cc:  
Subject: Compliance of Covid immunizations

External Email

Dear WSBOH,

I am writing about my concern about considering any mandatory COVID vaccines for students.

With the recent research on the side effects of this vaccine, I'm surprised that this would be a topic that needs to be addressed.

One of the severe effects of the COVID vaccine is cardiac arrest.

Here are recent examples of students who have died.

Oct.11, 2023 - Texas - 12-year-old Isabelle Marie Herrera died suddenly on Oct.11, 2023. "Isabelle got her vaccine today! So proud of her!" "My sweet, precious Isabelle passed away this morning". Isabelle's mom found her unresponsive while getting ready for a normal school day; she died in Cook Children's Hospital.

Sep.22, 2023 - Greeneville, TN - 12 year old Kaden Gunter, football player at Greeneville Middle school collapsed during football practice with a "cardiac emergency" and died suddenly on Sep.22, 2023

Sep.22, 2023 - Tracy, CA - 13 year old Heather Freligh was taking a test when she slumped over her desk and collapsed on the floor with cardiac arrest.

Sep.29, 2023 - Ohio - 17 year old Breanne McKean died suddenly during homecoming festivities Sep.29, 2023 "after collapsing at Mapleton High School football field with medical emergency, where she was part of the homecoming court

Oct.2, 2023 - Savannah, GA - 15 year old Kashaun Allen suffered a medical emergency during a football game and died suddenly on Oct.2, 2023

Remember, 1:30 children may have subclinical myocarditis from one COVID-19 mRNA Vaccine (which increases their risk of cardiac arrest):

Study #1 - Thailand study (2022, Mansanguan)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F2414-6366%2F7%2F8%2F196&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cc36810f714764b4927ba08dbe0202>> 202 boys ages 13-18, from two different schools, 7 of them developed subclinical myo/pericarditis after 2nd Pfizer COVID-19 mRNA dose. That's 1 in 30 per Pfizer dose.

Study #2 - Swiss Study (2023, Muller)

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F374>> - 777 healthcare workers had Moderna COVID-19 mRNA booster shot, 22 had evidence of myocardial injury (22/777 = 1 in 35 per Moderna dose)

Please remove your compliance of COVID immunizations for students from your agenda.

Mary Salamon

Everett, WA

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From: Lisa  
Sent: 11/8/2023 5:16:05 AM  
To: DOH WSBOH  
Cc:  
Subject: DEI Agenda

External Email

I will keep this simple; please do not accept the DEI agenda in any legislation!

Lisa Hunting

Sent from my iPad



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From: Julie Wyatt  
Sent: 11/7/2023 9:02:08 PM  
To: DOH WSBOH  
Cc:  
Subject: Legislative Statements

External Email

To Whom it May Concern,

As a parent I am very concerned that the Washington Board of Health wants to closely monitor and have their hand in the immunization records of children. This is a personal decision between parents and their doctor. In a free society, the state has no right to label children "out of compliance". Please reconsider this statement that has been made.

Julie Wyatt

Sent from my iPhone

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From: T.L. Stead  
Sent: 11/8/2023 10:05:33 AM  
To: DOH WSBOH  
Cc:  
Subject: Legislation concerns

External Email

To whom it may concern,  
My name is Tonya-Leigh Stead, I am the mother of a 9 year old boy. We live in Whatcom County, Washington. I strongly oppose the mental health being brought into schools, along with everything that goes with it.  
I am also STRONGLY OPPOSED to the vaccination compliance you are proposing. After everything that has come to light about the immunizations recently, and personally knowing people who have lost their children or loved ones to the shot, or have been seriously injured due to it, I cannot subject my child to such horrendous torture.  
Thank you



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From: rchristy70  
Sent: 11/8/2023 11:18:09 AM  
To: DOH WSBOH  
Cc:  
Subject: "no" COVID VAX for kids

External Email

To the WA State Board of Health:

As you begin deliberations for possible upcoming decisions, we please do NOT require a COVID VAX for children. This was considered last year and should never be considered again. It is documented that "typical" children are NOT seriously hurt by COVID. The VAERS reporting system documents many ADVERSE effects in children who received the COVID VAX.

-Christy Robertson

Sent with Proton Mail

<<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpr.tn%2Fref%2FZHTFR5DFJJS0&d>>  
secure email.

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From: john@thetruthpage.org  
Sent: 11/7/2023 6:10:02 PM  
To: DOH WSBOH  
Cc:  
Subject: Public Comment

External Email

Dear WSBH,

I just received copy of your "Statement of the Board on Possible Legislative Issues 2023-2024 Biennium".

While it is past the noted deadline for my opinions to be registered as public comment, I am writing in the hopes they will be considered.

Public Trust

After going through the Covid 19 experience, I have to admit that my confidence and trust in "Public Health" authorities is highly eroded. I know I am not alone in this sentiment. It has given me cause to look closer at our different agencies granted authority in this area. For instance:

\* Local Health Officer Authority

"local health administrators, and officers have a statutory duty to carry out the state's public health laws and rules"

"The Board opposes legislation that diminishes local health officer duties or authorities"

I agree that local health officers authority should not be diminished, but because they serve the local community, that same local community should have the ability to make health decisions autonomously without one size fits all state dictates. So in that regard I strongly disagree with the current system and would like to see STATE authority diminished and LOCAL authority increased.

Scope

I want to express how disappointed I am to see the attempts to expand the scope of the mission of the WSBOH into areas that I certainly don't think are appropriate. While each of you as individual citizens may well petition and move for your own opinions, using the authority of this board to advance causes outside the scope of public health seems to be an abuse and further erodes my trust and confidence in this board and our health system overall. Confidence in our public health systems is critical. These are just a few statements that I find very troubling:

- \* "The Board recognizes that racism is a public health crisis"
- \* ""Washington cannot achieve equity without [environmental justice]"
- \* "The Board supports legislation that helps reduce the number of children who are out of compliance"
- \* "The Board supports efforts to make mental health services readily available to youth in Washington and increase social and emotional supports in schools."

We learned a lot from the Covid 19 crisis and I implore you reconsider your positions and efforts to move outside the scope of public health in these ways. You will further erode the public trust and find that you will be viewed as authoritarian and responded to appropriately.

Sincerely,

John Leslie

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From: MarkRichard  
Sent: 11/14/2023 12:51:15 AM  
To: DOH WSBOH  
Cc:  
Subject: Conservative Ladies Of WA

External Email

Dear BOH,

I am appalled by your stances and proposals regarding DEI and child inoculations without parental consent. I stand firmly with all the Conservative Ladies of WA against your idiotic and dangerous proposals.

Sincerely,  
Mark Richard  
4817 E Gleneagle Ln  
Spokane, WA 99223

Sent from my iPad

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From: Barb Moberg  
Sent: 11/7/2023 5:37:06 PM  
To: DOH WSBOH  
Cc:  
Subject: Topics for November board meeting

External Email

I would like to address a couple of topics you will no doubt discuss at tomorrow's meeting.

First I am against everything you will be discussing about equity, environmental justice and immunizations.

Equity= SOCIALISM. Plain fact you steal from one and give to someone else. It is based on skin color, gender or how much you make. Once a great country based on equality for all now it is DEI or socialism.

First racism is not a public health hazard. You will do and say anything to tear us apart. We don't need any legislation to increase equity in this state.

I don't believe we need any increase in funds to support environmental justice. Waste of taxpayer money and it is all funneled to DEI and equity and certain groups get special favors.

Immunizations... parents have a right to know if their children are receiving shots. Covid shots should not be part of the state's immunization requirements for our children. The government both federal and state lied to us about the "vaccine". It did not and will not prevent COVID. Requiring children to have the shot we know also can put children at risk. Too many unexplained deaths of youth especially males from the shot.

Again I am opposed to the above mentioned topics being considered at this meeting. Stick to health issues and ditch the social justice garbage.

Barb Moberg  
Bonney Lake WA

Sent from my iPad



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From: Rachel Berry  
Sent: 11/7/2023 6:24:32 PM  
To: DOH WSBOH  
Cc:  
Subject: Nov meeting

External Email

To whom it may concern,

This is incredibly concerning to see what is on the agenda for tomorrow's meeting. As stated before from many families the possibility of mandating a vaccine is against our freedoms. Our bodies are ours alone and under God. Not the state under any circumstances. WE do not want YOU to tell us what to do or what to inject into our bodies. These shots create more harm than good and your agenda is clear.

I would also like to bring up the racial injustice that this board is trying to push on the state. It's ridiculous and unnecessary. If you feel the need to help the state listening to the people IN the state would be your first step. It's ridiculous that you won't even agree to do that.

Hopefully this meeting will actually be about what the people in the state want and not what you'd like for personal gains.

R Berry

---

From: lauriely  
Sent: 11/8/2023 9:33:36 AM  
To: DOH WSBOH  
Cc:  
Subject: Is environmental racism a priority in public health?

External Email

Hello, I proposed that environmental racism and environmental equity are very low on the public health spectrum of priorities. We have lots of areas in which people need help. The nutrition is severely lacking, exercise is severely lacking, and there are areas in which death is becoming much more frequent. We need to analyze the death reports and analyze autopsies and see where the issues are. I promise it will not be in the area of environmental racism or environmental equity. Thank you. Laurie Buhler, Douglas County

Sent from Proton Mail mobile

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From: Jennifer Zehrung  
Sent: 11/8/2023 9:38:37 AM  
To: DOH WSBOH  
Cc:  
Subject: RE; Immunization

External Email

BOH,  
I do not support the BOH supporting legislation for immunization compliance. Stay out of our healthcare decisions. Each family should decide what is right for them and use informed consent to make their medical decisions. Kids and adults should not be forced to take medical products by force. Yes, vaccines are a product!  
Thank you,  
The Zehrung Famiky

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From: Chris Kellie  
Sent: 11/11/2023 3:08:29 PM  
To: DOH WSBOH  
Cc:  
Subject: Vaccine, Equity and Liberal BS

External Email

To whom it may concern,  
Again, overstepping your boundaries with this crap you push down our throats. Yet public school's struggle as they loose students because of crap you're pushing. It's only a matter of time until this EVIL state implodes in on itself. The proof of the pharmaceutical companies hidden data is coming to light more and more regarding COVID vaccines. Shame on you for ignoring it. God save the children of Washington State.  
My entire family is on the verge of getting out of this hellhole and getting our freedom back in a State that actually supports the Constitution. I pray you have an ounce of integrity and quit perusing "racism is a public crisis" begonia. Washington State promotes/creates racism the way you govern. WE ARE NOT RECIST.  
No doubt this letter will fall on a def, ignorant, self unaware, panel.  
Signed a "sick of the BS" WA state resident,  
Kellie Rizzi

Sent from my iPhone

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From: Kim  
Sent: 11/8/2023 9:50:55 AM  
To: DOH WSBOH  
Cc:  
Subject: 1B4B7818-A4A3-4A2F-88B4-C0D2E57F1EFE

External Email

STOP forcing any "vaccinations" on anyone! It is a medical decision which should be left solely to each individual, not crooked politicians and pharmaceutical companies

Kim

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From: Santrelle  
Sent: 11/7/2023 11:07:22 PM  
To: DOH WSBOH  
Cc:  
Subject: Agenda Concerns

External Email

To Whom It May Concern,

After looking at an overview of the agenda proposed for the November BOH meeting, several items are concerning for myself and many in my community.

The term "out of compliance" in reference to families where parents have decided not to follow the state's recommended guidelines for childhood vaccines is alarming. Are vaccines optional or are they not? The language suggests that a choice other than what the state "suggests" is unacceptable.

In addition, I will take this opportunity to communicate the strong stance of many of us that the COVID-19 vaccine not be mandated in our state.

Thank you for your time,

-Debra Schwulst

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From: Samuel Dickerson  
Sent: 11/7/2023 5:42:50 PM  
To: DOH WSBOH  
Cc:  
Subject: Legislative Statement Update

External Email

Dear WA State Board of Health Members,

I'm writing from concern of unintentional consequences of proposed statements the Board is considering in it's upcoming meeting. These include "racism", vaccine "compliance" (referring to minors), and nebulous terms such as "equity" being used as guiding principles for the Board.

There is no public health emergency regarding racism: Full stop. This is one of the least racist countries in the world. It is the MOST prosperous country in the world for immigrants and their families. Nowhere in the world are people better able to achieve their dreams than America: Full stop. The belief that America is an "institutionally" racist country is a marxist lie! And yes, it IS marxism.

Vaccine coercion is morally wrong and ineffective! The Boards belief that continuing boosting and initial vaccination of the COVID-19 shot is going to eliminate or effectively control the spread or severity of COVID-19 has been shown to be incorrect. This "vaccine" is not the be all and end all we've been promised. There's no need to force parents or minor students to get the shot. And coercing people when there's no clear health benefit is moral hazard on the part of the government.

Finally, "equity" is the new and veiled term for socialism (or, marxism)! How socialism and environmental policy intertwine I have no idea--but it can't be good. The goal of any government should NOT be to achieve a fully equitable proportionment of wealth among citizens. But rather to create "just" policy that encourages truth and transparency. Thus resulting in a level playing field that benefits all citizens equally. Dividing the pie equally amongst person's discourages investment and entrepreneurship.

Thank you for hearing my concerns. Please vote against any statements that lead the Board down this inadvisable path. Thank you.

Sincerely,

Samuel Dickerson-Edgington  
Yakima, WA

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From: lauriely  
Sent: 11/8/2023 9:30:53 AM  
To: DOH WSBOH  
Cc:  
Subject: Is racism a public health crisis?

External Email

Racism is not a public health crisis. I am against racism of any kind. However, there are many other ways to help people in various races rather than put them in a emergency or victim status. Let's put our thinking caps on and think about things like health, education, and resiliency. Let's leave mental health services to mental health agencies. Let us have public health relate to things that actually cause physical problems and death. There are plenty of those to deal with. Thank you. Laurie Buhler, Douglas County

Sent from Proton Mail mobile



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From: DEBBIE ERICKSON  
Sent: 11/8/2023 5:12:28 AM  
To: DOH WSBOH  
Cc:  
Subject: HEAL Act

External Email

Please vote against ANY legislation which endorses forcing vaccines on children if they wish to attend public schools. As school enrollment drops in Washington state, it is obvious that policies that replace parental decision making for school age children is one of the primary reasons. Please vote against all legislation that that supports these policies.

Sent from my iPad

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From: BadBlanche Dawson  
Sent: 11/7/2023 8:34:35 PM  
To: DOH WSBOH  
Cc:  
Subject: Reviewing the Statement of the Board on Possible Legislative Issues

External Email

Dear Dept of Health Board members,

I am generally glad there is such a concept as looking out for health of the public, think of ignorance throughout human history over something like hygiene, where would we be without caring individuals such as yourselves? I understand that any govt bureaucracy could use more funding especially when it's important to keep pace with the times, both cultural and in science. Hence the reason for reviewing the Statement of the Board on Possible Legislative Issues 2023-2024 Biennium.

My concern today is your desire to increase funding surrounding covid vaccination awareness for children. I have looked at documentation from recent FOIA requests the Court ordered released from Pfizer's archives and I must say I am at a complete loss over the fact any Board of Health would still recommend covid vaccination given what these docs reveal about the safety, efficacy and harm still being caused by these injections. Rather than expanding your program, why not put the effort into studying the latest science yourself instead of taking the word of some federal agency who stands to gain financially by pushing this product; the conflict of interest alone should raise suspicions.

Sincerely,

Julie Dawson

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From: WHITNEY MASON  
Sent: 11/8/2023 8:20:18 AM  
To: DOH WSBOH  
Cc:  
Subject: Proposed legislative issues - please reconsider top priorities

External Email

Please consider adjusting your legislative priorities to:

drug overdoses/illegal drugs  
obesity  
diabetes  
cancer/turbo cancer

Thank you,  
Whitney Mason

---

From: Kd Jojo  
Sent: 11/7/2023 5:19:21 PM  
To: DOH WSBOH  
Cc:  
Subject: Racism, Environmental Justice, and Immunizations

External Email

Dear Washington State Board of Health,

I'm sad to see how far from health you have strayed. It's outlandish to me that racism is even on your agenda. This is NOT a public health issue that YOU should be discussing. It is a complete abuse of power to try and harness this topic into your department, I will say the same for ENVIRONMENTAL JUSTICE. If so then why don't you do something about the SUGAR everyone is consuming or the GMO foods? Maybe think of pesticides we are consuming or the terrible processed foods, seed oils, etc. You have become a hijacked agency that goes against health and is attempting to hijack issues/concerns outside of your realm to try and put in unlawful laws/orders.

As for vaccines and trying to get more kids vaccinated have you even looked at what these 84 shots are doing to kids? The noble lie is just a big pharma lie to earn more money for their coffers. If you truly cared about public health you would investigate the real concerns and harms these shots are causing. You won't, because you aren't a public health department but a politicized department corrupted by Big Pharma and Billionaires who pretend to be philanthropists all while raking in billions in personal profits.

Catherine Jodoin  
Ferndale WA 98248

---

From: Bill Cooper  
Sent: 11/7/2023 6:32:40 PM  
To: DOH WSBOH  
Cc:  
Subject: Board of Health Priorities

External Email

I will be brief and to the point.

1. We are not a racist society and race has no part of health.
2. You have no business mandating what kids' health concerns you want to oversee; that is the decision of the parents, not yours
3. DEI has no place in health; health concerns are mandated based on health concerns. If you believe there is a race problem in health, you caused it.

This nonsense of taking over the roles of parents is simply wrong; you need to manage the Board in terms of health, period. Get your personal politics out of this.

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From: dmarietmv@aol.com  
Sent: 11/9/2023 7:37:15 AM  
To: DOH WSBOH  
Cc:  
Subject: Childhood Immunizations Can Be Slightly Delayed

External Email

Dear Washington State Board of Health,

Children now get many more immunizations at a much faster rate than they did in the 1950s and 60s. I'm from that generation, and I did fine, and have enjoyed good health.

Getting several shots close together can be stressful for children. I believe that if parents want to slightly delay some shots, it should be okay.

Sincerely,

Diane Thom

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From: Dale Hansen  
Sent: 11/7/2023 6:12:48 PM  
To: DOH WSBOH  
Cc:  
Subject: Wa. Board of health priorities

External Email

I take issue with any new proposal from the board of health. Quit playing communist games,leave our kids to their parents and do health care not political mind manipulation. We don't have a racist problem,or a climate problem or a covid problem,we have an out of control government over reach problem.You don't own us,your supposed to serve us,but not like you screwed up the whole covid debacle.No Thanks.



## **Paj Nandi, MPH**

Board Member, Health and Sanitation

A native of India, Paj Nandi has lived in the U.S. for over 25 years and happily calls Seattle home. Early in his career, Paj worked in childhood education (India) and tuberculosis prevention (Thailand) and learned firsthand the value and efficacy of using culturally relevant and community-rooted approaches to improve health. Paj earned his Bachelor of Science degree in Community Health Education from Western Washington University and a Master of Public Health degree from the George Washington University in Washington D.C.

Paj is a seasoned public health practitioner, leader, and strategist with over 20 years of experience. He currently serves as an Associate Vice President at Desautel Hege (DH) Communications where he provides strategic counsel and leads key initiatives to advance equity-centered communications and DEI practices. Previously, he served as the Director of Community Relations and Equity for the Washington State Department of Health (DOH). As an agency leader, he advised the Secretary of Health, the State Health Officer, and other agency leaders on key equity and community relations issues and represented DOH on the Governor's Interagency Council on Health Disparities from 2016 to 2021. He also directed his team's work on various equity and social justice strategic initiatives, including during the COVID-19 pandemic response. In addition, Paj built and sustained partnerships with the Governor's Office, non-governmental entities, community-based organizations, and academic partners, with an emphasis on achieving health equity, centering community voices, and eliminating structural inequities.

Paj's prior experience at DOH, in healthcare, and private sectors include leading and managing statewide chronic disease prevention and management programs; working on maternal, child and adolescent health campaigns and priorities; and leading enterprise-wide employee health and wellness benefits efforts. He also served on the Board of the Washington State Public Health Association for seven years, including a term as President in 2016-17 and briefly served as faculty on the Health and Wellbeing Curriculum Committee for Leadership Tomorrow, a program designed to cultivate the next generation of Puget Sound leaders.

As part of exploring new pathways within public health practice, Paj recently co-founded a small, independent consulting firm specializing in health equity strategy, The Upstream Group. He also holds a Clinical Faculty position at the University of Washington's School of Public Health and has previously taught at the Gillings School of Public Health at the University of North Carolina – Chapel Hill and the Evergreen State College.

At home, Paj enjoys spending time with his husband, their cat, and singing with his music circle.





## **Ashley Bell**

Equity and Engagement Manager

Ashley Bell joined the Washington State Board of Health as the Equity and Engagement Manager in December of 2023. She brings with her a background in behavioral health and health equity policy, with an emphasis on equitable rulemaking. Before joining SBOH, Ashley worked for the Department of Health in Health Systems Quality Assurance as their Equity and Social Justice Manager, where she was focusing on equitable rulemaking and community engagement.

Ashley is born and raised in Alaska, where many of her experiences have shaped how she interacts with the world. She elevates community voice and uses stories with data to give insight into different experiences. Ashley received her Bachelor of Arts in Psychology through the University of Alaska Anchorage, where she specialized in working with individuals with substance use disorders from disadvantaged communities with barriers to achieving their full health potential. She later received her Master of Public Administration through Villanova University, with an emphasis on equitable leadership and civic engagement in policy in a government setting.



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OFFICE OF FINANCIAL MANAGEMENT

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November 9, 2023

Patty Hayes, Chair  
Washington State Board of Health  
P.O. Box 47990  
Olympia, WA 98504-7990

Dear Chair Hayes:

Thank you for contacting Governor Inslee to request funding in the 2024 supplemental budget for the Environmental Justice Council's recommendations related to school environmental justice.

We are working with the Governor to develop his budget requests to the Legislature. I can assure you that we will carefully consider your advocacy for these items in our deliberations.

Again, thank you for writing.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Schumacher", with a long horizontal flourish extending to the right.

David Schumacher  
Director



# PREPROPOSAL STATEMENT OF INQUIRY

## CR-101 (October 2017) (Implements RCW 34.05.310)

Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER  
STATE OF WASHINGTON  
FILED

DATE: November 28, 2023

TIME: 12:37 PM

WSR 23-24-016

**Agency:** Washington State Board of Health

**Subject of possible rule making:** Chapter 246-650 WAC, Newborn Screening. The Washington State Board of Health (Board) is considering adding Guanidinoacetate methyltransferase deficiency (GAMT) and Arginase 1 deficiency (ARG1-D) to the list of mandatory conditions for newborn screening conducted by the Department of Health (Department).

**Statutes authorizing the agency to adopt rules on this subject:** RCW 70.83.050

**Reasons why rules on this subject may be needed and what they might accomplish:** The Board has the authority under RCW 70.83.050 to define and adopt rules for screening Washington-born infants for hereditary conditions. WAC 246-650-010 defines the conditions, and WAC 246-650-020 lists the conditions for which all Washington-born newborns are to be screened. GAMT deficiency and ARG1-D are rare inherited metabolic conditions that can result in severe disability and in some cases death if not detected and treated early. Early diagnosis of GAMT deficiency and ARG1-D through newborn screening is essential to save lives and to improve the quality of life for impacted infants and their families.

**Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies:** None

**Process for developing new rule (check all that apply):**

- Negotiated rule making
- Pilot rule making
- Agency study
- Other (describe) The Board will use a collaborative rulemaking approach in developing the proposed rules.

**Interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication by contacting:**

Name: Molly Dinardo	(If necessary) Name:
Address: PO Box 47990, Olympia, WA 98504-7790	Address:
Phone: 564-669-3455	Phone:
Fax: 360-236-4088	Fax:
TTY: 711	TTY:
Email: <a href="mailto:molly.dinardo@sboh.wa.gov">molly.dinardo@sboh.wa.gov</a>	Email:
Web site:	Web site:
Other:	Other:

Additional comments: To be added to the listserv for notifications regarding this rulemaking, email Molly.Dinardo@sboh.wa.gov with the subject line "Newborn Screening – GAMT & ARG1-D."

**Date:** 11/28/2023

**Name:** Michelle A. Davis

**Title:** Executive Director, Washington State Board of Health

**Signature:**

A handwritten signature in black ink that reads "Michelle A. Davis". The signature is written in a cursive style with a large, looped initial "M".

# WASHINGTON STATE BOARD OF HEALTH

## ENVIRONMENTAL HEALTH COMMITTEE SPECIAL MEETING SUMMARY NOTES

**What:** Environmental Health Committee

**When:** December 15, 2023

**Participating:** Board of Health (Board) members Patty Hayes, Kate Dean, Mindy Flores, and Paj Nandi; Board staff Michelle Davis, Andrew Kamali, Stuart Glasoe, Molly Dinardo, Michelle Larson, Ashley Bell, and Melanie Hisaw; Department of Health (Department) staff Joe Laxson, Jeremy Simmons, Jocelyn Jones, Juan Gamez Briceño, Todd Phillips, and Katitza Holthaus. Other Department staff and members of the public attended the meeting.

### Summary Notes:

#### Committee Chair Selection

- Participating Members unanimously selected Member Kate Dean as Chair of the Environmental Health Committee.

#### General Updates

- Andrew Kamali, Board staff, facilitated discussion of the Committee's tentative 2024 meeting schedule:
  - Thursday, February 8, 2:00 - 4:00 p.m.
  - Thursday, May 9, 10:00 a.m. - 12:00 p.m.
  - Thursday, September 12, 10:00 a.m. - 12:00 p.m.
  - Wednesday, December 11, 10:00 a.m. - 12:00 p.m.Members agreed to revisit plans for the December meeting later in the year.
- Joe Laxson, Department staff, gave an overview of the upcoming supplemental legislative session and noted numerous issues where there could be bills of interest to the Board and Department. Pre-filed bills are beginning to appear. The first day of the session is Monday, January 8, 2024. Member Dean asked about the school rules relative to the session and the Environmental Justice Council. Joe and Michelle Davis shared perspectives on the status of the issues and work.

#### Preview January Board Meeting

- Stuart Glasoe, Board staff, introduced the two agenda items related to on-site sewage systems (OSS) and chapter 246-272A WAC. Regarding the public hearing on the proposed OSS rules, Stuart noted that the staff is actively  
(Continued on the next page)

Environmental Health Committee  
Special Meeting Summary Notes

processing public comments and readying meeting material. Regarding the sixth OSS emergency rule, Stuart noted that Board action would again be needed to avoid a break in this policy before the permanent rules are adopted and take effect. Jeremy Simmons, Department staff, briefly previewed the draft hearing presentation, focusing mainly on key issues and recommended changes to the rule language. Stuart noted that all recommended rule language changes are non-substantive. Member Patty Hayes voiced support for property transfer inspections and advised staff to carefully describe the requirement and how it would work. Member Dean asked for confirmation that members would see the summary of comments and recommended changes. Stuart said the meeting materials will include both a PDF of all comments and a summary of comments and staff recommendations.

- Andrew described the status of the water recreation rulemaking and updated members on the formerly accepted rulemaking petition about barrier height at pools and compliance with the Americans with Disabilities Act (ADA). Andrew explained that Department staff have worked to resolve matters at the facility where the concerns originated. Member Hayes commented that it's a bigger issue than this one facility and our rules need to align with the ADA. Andrew agreed and briefly spoke about applying a lens of equity and accessibility to rulemaking.
- Andrew described the status of work organizing a five-person panel on indoor air quality and its importance to public health for mitigating respiratory illness. Andrew outlined the panel, said it will parallel the panel on climate change at the Board's November meeting, and added that it will likely be a more technical discussion.
- Andrew gave a brief update and said the agency decided to hold off on addressing the school environmental health and safety rules, chapters 246-366 and 366A WAC, at the Board's January meeting. Member Dean asked about limitations and strategies for keeping momentum on the topic. Michelle Davis said staff continue to closely monitor things, the agency has years of recommendations to work from, and we will aim to provide more information on our approach in January.

### **Other Rulemaking Updates**

- Stuart discussed working with Jocelyn Jones of the Department to develop a timeline for the shellfish sanitation rulemaking, chapter 246-282 WAC, and possible completion in 2024. Target milestones include a Board update in March, a Board briefing and proposed rule filing in August, and a public hearing in November. Stuart noted that draft rules may be circulated by March.
- Andrew introduced the interrelated issues of chapter 246-205 WAC, Decontamination of Illegal Drug Sites, and chapter 246-360, Transient Accommodations, which transitioned to updates by Juan Games Briceño and

## Environmental Health Committee Special Meeting Summary Notes

Todd Phillips, Department staff, with a focus on the drug cleanup rules. The discussion reinforced the dated nature of the existing rules and their poor fit with current concerns and drug cleanup needs that involve transient accommodations and other situations. Staff explained that the Board and Department staff are completing and will soon discuss respective reviews of the existing rules, and the Department is helping to set up a technical committee to address various aspects of the issues. Member Hayes asked when it would make sense to do a baseline briefing for the Board. Andrew said one is tentatively scheduled for March. Member Hayes and others mentioned the Board's legislative statement and the possible need for legal changes to support the anticipated rulemaking.

- Joe Laxson and Katitza Holthaus, Department staff, discussed the Department's rulemaking to implement 2SHB 1470 regarding private detention facilities, which applies to one immigrant detention facility in Tacoma. Staff described efforts to visit the facility which have been denied due to ongoing litigation, efforts reaching out to interested parties and advocacy groups, and initial tactics framing up this unique and challenging rulemaking after filing the CR-101 in November. Member Dean asked if rulemaking might assist in accessing and inspecting the facility. Joe replied that the rules will help establish standards for different issues and inspections, but access may need to rely more on the law.
- Molly Dinardo, Board staff, updated the Committee on plans to produce the next State Health Report. The next report is due to the Governor's Office by July 1, 2024, which means the Board will have to adopt an updated report by its June meeting. Molly will brief the Board at its January meeting. Member Paj Nandi asked how the report is used. Molly said it helps serve as a platform for policy advocacy on select issues and Michelle Davis, Board Executive Director, added that the report goes to the legislature and Governor's office. Member Hayes mentioned substance use and behavioral health as priority issues and voiced support showcasing the American Indian Health Commission's approach with these issues. Member Mindy Flores offered to serve as the sponsor for the project.

### **Committee Member Comments, Questions, and Next Steps**

- The next committee meeting is tentatively scheduled for February 2024.

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# WASHINGTON STATE BOARD OF HEALTH

**What:** Health Promotion (HP) Committee

**When:** December 7, 2023

**Participating:** Board of Health (Board) Members Dimyana Abdelmalek, Kelly Oshiro, and Steve Kutz; Board staff Molly Dinardo, Andrew Kamali, Michelle Davis, Melanie Hisaw, and Michelle Larson; Department of Health (Department) staff; and approximately 8 members of the public also attended the meeting.

## **Summary Notes:**

### **Rulemaking Updates and Other Project Updates**

- Molly Dinardo, Board staff, shared an overview of active Board rulemaking projects and provided updates on two recent rulemaking filings.
- The first update was related to the Board's auditory screening standards for K-12 schools in Washington. Molly stated that on October 18, 2023, the Board filed a CR-101, Preproposal Statement of Inquiry, to notify interested parties that the Board is considering amending the auditory screening sections of Chapter 246-760 WAC. Molly shared that since the CR-101 has been filed, staff can now begin the rule review and interested parties work on this project.
- The second rulemaking update was that on November 28, 2023, the Board filed a CR-101 to move forward with adding Guanidinoacetate methyltransferase (GAMT) deficiency and Arginase 1 deficiency (ARG1-D) to the list of mandatory conditions for newborn screening conducted by the Department. Molly said that Board staff are working closely with Department staff to identify a timeline for this work.
- There were no Committee Member comments or questions regarding these updates. Member Kelly Oshiro thanked staff for the project updates.

### **Emerging Topics for Upcoming Board Meetings**

- Board staff previewed upcoming health promotion topics that will be addressed at the Board's January 10, 2024, meeting.
- Molly shared that in November, Board staff received a petition for rulemaking requesting that the Board amend its K-12 vision screening standards (Chapter 246-760 WAC) to include screening for color vision deficiency for all students enrolled in Washington schools. Molly clarified that color vision deficiency is also called color blindness and that this petition will be brought to the Board for consideration in January. Molly also provided some background information on

(Continued on the next page)



## Health Promotion Committee Special Meeting Summary Notes

the Board's vision screening standards and recent updates made to the rules in 2017. Molly asked if Committee Members had any questions about the petition or if there was specific information Members would like staff to make sure will be covered in the January briefing. There were no Committee Member questions regarding the petition request.

- Andrew Kamali, Board staff, shared that staff are in the process of organizing a panel on the topic of indoor air quality (IAQ) to learn how it is impacting Washington State. Andrew K. stated that the purpose of this panel is to convene a panel of subject matter and technical experts to share their knowledge on IAQ to help inform the Board's work. Andrew K. outlined the groups and agencies invited to participate in the panel and noted this panel will follow a similar structure to the Board's panel on climate change from the November meeting.
- Member Dimyana Abdelmalek asked if there would be a local health officer on the panel. Andrew K. clarified that there would be a panelist from a local health jurisdiction.
- Board staff mentioned that at the January meeting, the Department would be presenting information about their legislative priorities for 2024. Staff then asked Committee Members if it would be helpful also to invite other partner agencies to attend and share their priorities for the upcoming session.
- Members Oshiro and Abdelmalek stated that they would be interested in hearing from other partner agencies.

### **2024 Legislative Session Check-In**

Board staff included a quick check-in on two items related to the 2024 legislative session.

#### **FIRST**

- Board staff reminded Committee Members that the Board's draft legislative statement is out for review, and that staff have asked for Board Member comments and feedback by the following week. Staff asked if Board Members had any questions about the statement or if they had any feedback they wanted to highlight.
- Member Oshiro said the legislative statement seemed comprehensive and thanked staff for their work.
- Member Abdelmalek agreed and commented that the legislative statement reflects issues and priorities heard from local communities, such as opioids, environmental justice, school health, and health equity.
- Member Steve Kutz agreed that the statement seems comprehensive and covers topics the Board has discussed. Member Kutz commented that it would be interesting to look back and assess what impact the Board's statement has had on topics and legislation tracked throughout the years.

Health Promotion Committee  
Special Meeting Summary Notes

- Molly said that it would be interesting and reminded Committee Members that Board legislative statements represent the Sense of the Board and guide staff and Board Members in their communications on legislative and budget proposals that affect the Board's rules, its State Health Report recommendations, and strategic plan.
- Member Kutz also stated interest in tracking what's happening with the Board's school rules.
- Michelle Davis, Board Executive Director, expressed appreciation for Board Member comments and mentioned the legislative statement will be brought before the full Board in January for final review and adoption. Michelle also shared that over the past week, the Legislature had at least three work sessions related to school funding. Michelle said that staff are monitoring these sessions and will send Committee Members updates throughout the session.
- Member Kutz inquired about levies and home price increases, especially in rural communities, and commented on the disproportionate impacts tax increases can have on people with fixed incomes.
- Michelle said that if helpful, staff could send the links to the recordings from the school funding work sessions to Committee Members.

SECOND

- Molly reminded Committee Members that every two years, the Board must produce a State Health Report to highlight public health priorities and recommendations for the following biennium. Molly mentioned that the next State Health Report is due to the Governor's Office by July 1, 2024. Molly noted that school environmental health and safety has been a consistent priority throughout the years and could be included in this next report.
- Molly asked Committee Members to start thinking about the upcoming State Health Report and to identify priorities and topics they want to elevate and include in the next report for the Governor's Office and Legislature. Molly shared the list of priorities from the 2022 report, and past State Health Report topics and recommendations.
- Member Kutz brought up the topic of flavored vaping products and that youth access to these products remains a serious public health problem. Member Kutz stated that the Board should continue to include decreasing youth access to flavored vaping products as a priority topic.
- Member Oshio agreed and suggested that the Board include maternal and pregnant person health as a topic area.
- Member Abdelmalek recommended including priority topics related to youth behavioral health and substance use disorder.

**Informational Briefing – Oral Health Equity in Washington**

Health Promotion Committee  
Special Meeting Summary Notes

- Board staff introduced Andrew Guinn, the State Oral Health Program Coordinator in the Division of Prevention and Community Health at the Department, to provide an overview of the Department's Oral Health Program and information about current projects.
- Andrew G. also summarized the research methods, findings, and recommendations from a recent Oral Health Equity Assessment the Department submitted to the Legislature in September 2023. The assessment was required by the passage of Engrossed Substitute Senate Bill 5693 (ESSB 5693), a budget proviso that directed the Department to conduct this analysis. Andrew G. noted that the Department was given a year to complete this report, and they partnered with researchers from the University of Washington's School of Dentistry and Public Health to complete the assessment. Andrew G. noted that the full report is available on the compared Department's website.
- Member Abdelmalek thanked Andrew G. for the presentation and inquired if, in the assessment, participants were asked about perceptions of bottled water or filtered water compared to regular tap water. Andrew G. stated that it didn't appear from the list of 14 questions that participants were asked specifically about perceptions of bottled water or filtered water.
- Member Abdelmalek asked a follow-up question regarding whether there was a difference in perception between municipal tap water that was fluoridated versus non-fluoridated. Andrew G. stated the counties selected for the study were divided between three buckets, and not everyone in the study knew if they had fluoridated water in their community.
- Staff thanked Andrew G. for the presentation and asked if a copy of the presentation could be shared with Committee Members. Andrew G. said yes.

**Committee Member Comments, Questions, and Next Steps**

- Board staff closed the meeting by discussing a proposed Health Promotion Committee schedule for 2024. Staff suggested keeping the same meeting schedule the Committee followed in 2023, meeting the first Thursday of every quarter from 2-4 pm.
- Committee Members approved the tentative schedule for 2024, and agreed to meet the first week of February, May, September, and December of 2024 from 2-4 pm.

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Washington's 35 local health jurisdictions serve as the frontline responders to public health emergencies and threats, conveners that help communities implement health promotion and disease prevention strategies, and protectors that are committed to building healthy, safe, and thriving communities.

## Supplemental Budget Priorities



### Septage Capacity Risk Analysis

WSALPHO supports one-time funding to study and assess septage treatment capacity in our state.

- Current comprehensive plans do not require an assessment of septage treatment capacity, under-representing the actual capacity across the state
- Understanding existing treatment capacity and future needs is critical for infrastructure planning that supports development
- Poor treatment capacity can result in illegal disposal and improper maintenance of septic systems, leading to environmental contamination and increased homeowner costs



### School Environmental Justice

Our kids need safe and healthy school learning environments. **Please support implementing the Environmental Justice Council's recommendations:**

- Remove the budget proviso that blocks school environmental health and safety rules
- Fund localized school environmental health programs
- Dedicate state dollars for core facility upgrades in overburdened communities
- Create minimum standards for health and safety measures in schools

### Foundational Public Health Services (FPHS)



Local health jurisdictions are the frontline defenders against public health threats, responding to natural disasters and emergencies, and preventing exposures to environmental hazards. Strong core programs and services assures everyone, everywhere in Washington State has a nimble and responsive public health system that works to achieve vibrant and thriving communities. **We are grateful for the ongoing support for FPHS!**

### POLICY CONTACTS

Jaime Bodden  
Managing Director  
jbodden@wsac.org

Brynn Brady  
Contract Lobbyist  
brynn@ceibaconsulting.com

WSALPHO  
206 10th Ave SE  
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www.wsalpho.org

Washington's 35 local health jurisdictions serve as the frontline responders to public health emergencies and threats, conveners that help communities implement health promotion and disease prevention strategies, and protectors that are committed to building healthy, safe, and thriving communities.

## Policy Priorities



### Technical Change to WA Vaccine Association Definitions

The Department of Health and the Washington Vaccine Association (WVA) work together to publicly purchase vaccine, eliminating cost barriers for childhood vaccinations. The narrow definition of vaccine in statute prevents the WVA from purchasing immunizations developed by new and innovative technologies. WSALPHO supports the technical fix to address this language in order to:

- Supply all childhood vaccines recommended by the Advisory Committee on Immunization Practices
- Eliminate healthcare provider costs to purchasing, storing, and administering vaccines
- Reduce cost barriers to receiving childhood vaccinations for overburdened and vulnerable families



### Increasing Access to Syphilis Treatment

WSALPHO supports a statutory change in RCW.18.360 to temporarily allow Medical Assistants to treat syphilis when:

- Access to care is limited and/or
- Rates of infection exceed those typically observed in an area or population by >25%

Allowing MAs to treatment syphilis during telehealth visits, as part of field outreach, community events, and syringe exchange programs will improve health outcomes among high-risk populations, including pregnant people which will reduce the number of congenital syphilis cases in Washington.



### Child Death Review Teams

WSALPHO supports modernizing Washington's child death review statute (RCW 70.05.170) to:

- Strengthen the language for LHJs to collect or access records and data from other sources to aid in the review process
- Provide clarification for participants who are mandated reporters
- Expand the age for reviews to include 18 years of age
- Enhance local and state collaboration to inform statewide prevention initiatives and recommendations

## POLICY CONTACTS

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# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Patty Hayes, Board Chair

**Subject:** Rulemaking Petition Update – 246-260-031 WAC, General design, construction, and equipment for all water recreation pool facilities.

## Background and Summary:

The State Board of Health's (Board) authority under RCW 70.90.120 requires the Board to adopt rules governing safety, sanitation, and water quality for water recreation facilities. The rules include requirements for facility design. Beginning in 2016, the Board initiated rulemaking for revision of Chapters 246-260 and 246-262 WAC ([CR-101](#)) and has established a Technical Advisory Committee (TAC) in conjunction with the Department of Health (Department).

On June 12, 2023, the Board received a petition for rulemaking from Elizabeth M. Stumpf requesting the amendment of WAC 246-260-031, General design, construction, and equipment for all water recreation pool facilities. The petition specifically requested that the Board amend the rule to address barrier latch height at water recreation facilities to comply with the Americans with Disabilities Act (ADA), which specifies that a latch handle should not exceed 48 inches in height. The petition states that the change is needed to ensure equal access for individuals who use wheelchairs.

At the August 2023 Board meeting, the Board accepted the petition for rulemaking to amend WAC 246-260-031 to be considered as part of the ongoing rulemaking for water recreation facilities and directed staff to notify the requestor of its decision. The Board further requested that the Department direct the TAC to prioritize this section of the rules and brief the Board of the TAC's findings by January 2024.

I have invited Andrew Kamali (Board Staff) and Dave DeLong (Department Staff) to provide an update to the Board on the work that has been completed to date.

## Recommended Board Actions

This is an informational update, where no action is needed by the Board.

## Staff

Andrew Kamali

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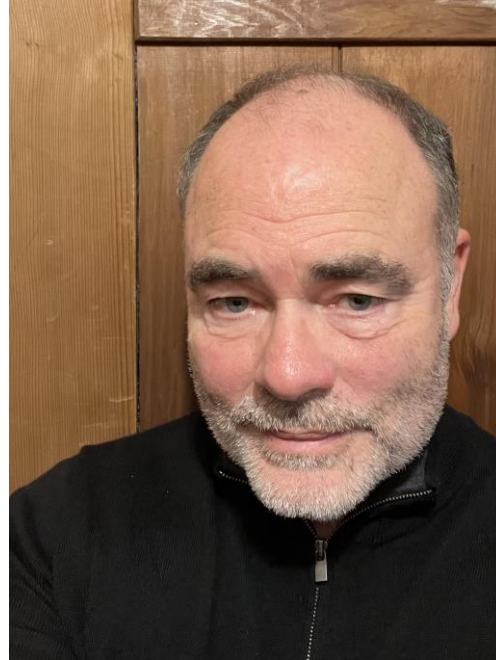
# **WATER RECREATION FACILITY PETITION FOR RULE REVISION**

David DeLong, WRF Program Lead



## Water Recreation Program Lead

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**David DeLong**

[david.delong@doh.wa.gov](mailto:david.delong@doh.wa.gov)



@WADeptHealth

# The Immediate Problem

- A health club facility with access to the pool through doors with a 60-inch-high latch.
- To allow access the health club would block the doors in an open position.
- Action taken: DOH worked with LHJ to correct the problem within the current regulatory framework.



# The Ongoing Problem

- The existing code language requires latches are:
  - Continuously locked with key or code access if less than 60 inches high; or
  - 60 inches high.
- Actions taken:
  - Invite petitioner to TAC meetings.
  - Proposed rule language to better support ADA access.



# Proposed Rule language

“All public access gates or doors serving as part of an ...ENCLOSURE *and* an ACCESSIBLE ROUTE shall be the self-locking type operated by means of a key, electronic opener, or combination lock with latches between 34 and 48 inches high or

Self-latching devices that are not self locking must be at least 60 inches above the ground and are only allowed on ENCLOSURE gates and doors that are *not* ACCESSIBLE ROUTES.”

## Intent:

- Reverse the focus from 60-inch-high latch to locked doors.
- Increase the # of accessible doors and gates at facilities.
- Allow 60-inch-high latch as an option only when a door or gate is not on an “accessible route”.

Questions?

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# Washington State Board of Health

## 2024 State Health Report

January 10, 2024

**Molly Dinardo (she/her)**

Health Policy Advisor

**Hannah Haag (she/her)**

Community Engagement  
Coordinator



# Washington State Board of Health State Health Report (SHR)

- **RCW 43.20.100** requires that the Board submit a report to the Governor's Office by July 1 of every even-numbered year to identify public health priorities and legislative action for the following biennium.
- The Board meets this requirement by submitting its State Health Report.
- The purpose of the State Health Report is to highlight strategic directions and high-level initiatives anticipated in the upcoming biennium for the Governor and Legislature.





# 2022 Recommendations

1. Improving Public Health's Response to Health Inequities through Data Reform.
2. Removing Barriers to Health Care Insurance and Care Coverage.
3. Improving Access to Culturally and Linguistically Appropriate Health Services.
4. Making School Environments Healthy and Safe.
5. Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products.
6. Strengthening Washington's Public Health System Through Continued Investments.



WASHINGTON STATE   
**BOARD OF HEALTH**

**2022 STATE HEALTH REPORT**



# Topic Areas for the 2024 State Health Report

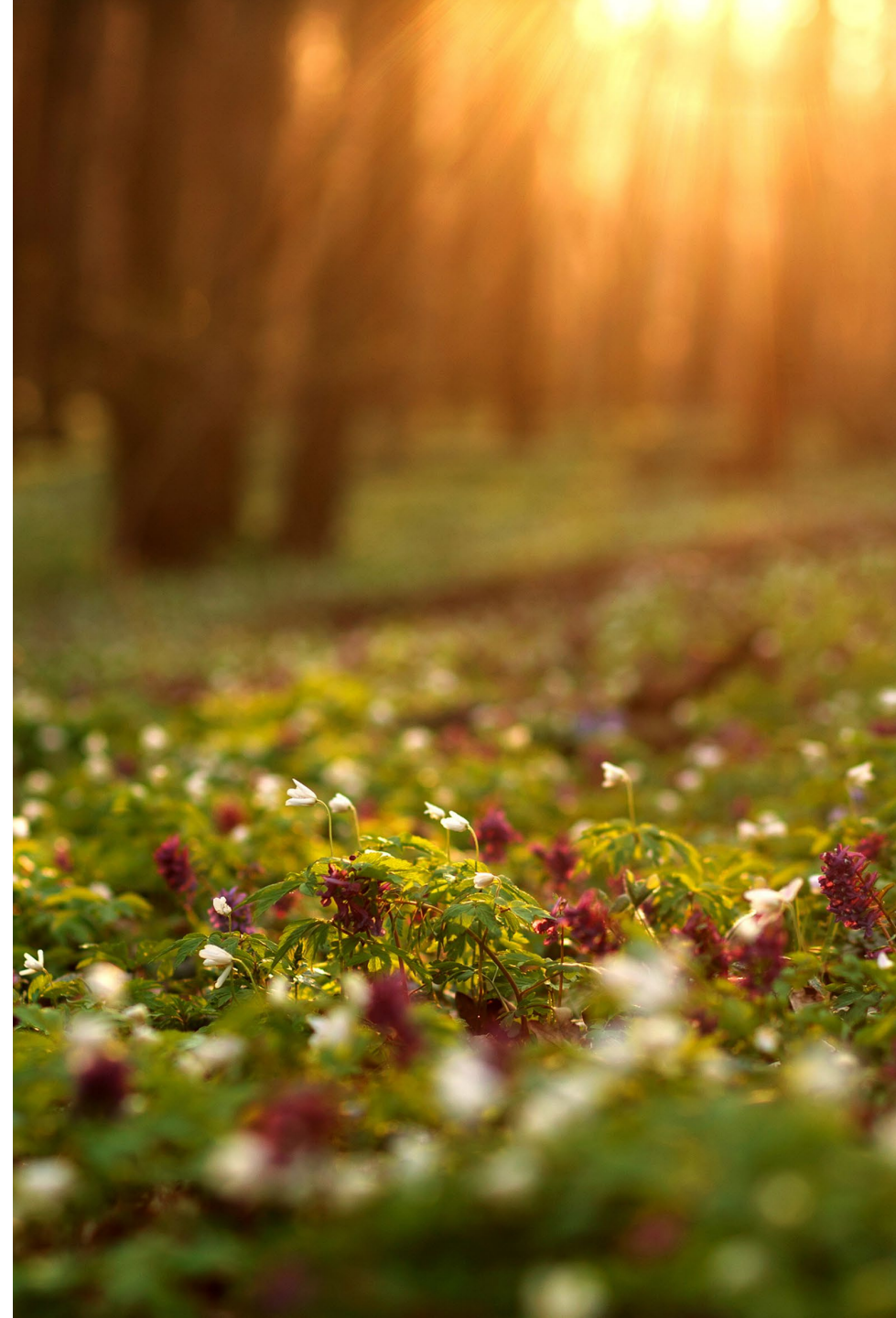
- School Environmental Health and Safety
- Environmental Justice and Climate Change
- Pregnant Person Health and Mortality Prevention
- Racism as a Public Health Crisis and Promoting Health Equity
- Behavioral Health and Substance Use and Contamination Prevention
- Data Disaggregation
- Continued Investments in the Public Health System and Foundational Public Health Services (FPHS)



# Community Engagement Process

## GOAL:

A 2024 State Health Report that is informed by and reflective of the priorities of communities in Washington State.



We expect that our **recommendations will change** based on what we hear from community voices.

The **community voices** we are seeking out come from those who:

- Have experience with the topics in the State Health Report.
- Are affected by the recommendations in the State Health Report.
- Come from overburdened communities.<sup>1</sup>
- Experience a disproportionate impact from the Social Determinants of Health.



1. Statutory definition from RCW 70A.02.010 - "Overburdened community" means a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts, and includes, but is not limited to, highly impacted communities.

# Activities



## Community Storytelling Panel

- An opportunity for Board Members to hear directly from community members.
- Gain deeper knowledge about proposed State Health Report topics.
- Proposed for March 2024 meeting.



## One-on-one Trusted Messenger Conversations

- Provide additional context and information.
- Allow Board staff to gain in-depth knowledge in specific recommendation areas that the panel may not address.



## Accountability

- Responsiveness Summary.
- Notice of State Health Report release sent to all participants.
- Community Compensation.

# 2024 State Health Report Proposed Timeline

## January 2024

Finalize List of 2024  
SHR Topics

## February 2024

Research and  
Community  
Outreach

## March 2024

SHR Community  
Storytelling Panel

## March-April 2024

1:1 Conversations  
and Finalize SHR  
Recommendations

## April-May 2024

Report Drafting,  
Editing, and  
Formatting

## June 2024

Present Report to  
the Board for  
Review and  
Adoption

## July 2024

Submit Report to  
the Governor's  
Office

## July-Sept 2024

Disseminate SHR  
and Report Back to  
Community

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| **THANK YOU**

# Appendix: Past State Health Report Topics and Recommendations

SBOH SHR Year	Topics and Recommendations
2010	<ol style="list-style-type: none"> <li>1. Restore stability to the state's public health system</li> <li>2. Encourage policies that promote healthy behaviors</li> <li>3. Promote healthy and safe environments</li> <li>4. Implement the state action plan to end health disparities</li> <li>5. Focus health care reform on delivering preventive services</li> <li>6. Integrate prevention policies across state agencies</li> </ol>
2012	<ol style="list-style-type: none"> <li>1. Strengthen the public health system.</li> <li>2. Increase access to preventative services.</li> <li>3. Reduce health disparities.</li> <li>4. Encourage policies that promote healthy behaviors.</li> <li>5. Promote healthy and safe environments.</li> </ol>
2014	<ol style="list-style-type: none"> <li>1. Oral health.</li> <li>2. Language access.</li> <li>3. Health Impact Reviews.</li> </ol>
2016	<ol style="list-style-type: none"> <li>1. Foundational Public Health Services (FPHS).</li> <li>2. Promoting health equity in WA state.</li> <li>3. Advancing school health (environmental health and safety, and preventative screenings).</li> </ol>
2018	<ol style="list-style-type: none"> <li>1. Strengthen and transform WA's public health system</li> <li>2. Improving health by decreasing the use of tobacco and vapor products.</li> <li>3. Continue to combat opioid use disorder.</li> <li>4. Equity in state government.</li> <li>5. End AIDS by 2020.</li> <li>6. Make school environments healthy and safe for WA students.</li> </ol>
2020	<ol style="list-style-type: none"> <li>1. Strengthen and transform WA's public health system.</li> <li>2. Improve health by decreasing the use of tobacco, nicotine, and vapor products.</li> <li>3. Dismantle racism and improve equity in state government.</li> <li>4. Make school environments healthy and safe for WA students.</li> </ol>





WASHINGTON STATE   
**BOARD OF HEALTH**

**2022 STATE HEALTH REPORT**



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# EXECUTIVE SUMMARY



## EXECUTIVE SUMMARY

Since 1891, the Washington State Board of Health (Board) has been responsible for providing recommendations for legislative action related to improving the public's health. The Board has produced a biennial State Health Report since 1977. The purpose of the report is to identify "public health priorities for the ensuing biennium and such legislative action as it deems necessary." RCW 43.20.100 requires the Board to produce the report in even numbered years for the Governor's review and approval. The Board's 2022 State Health Report focuses on:

### **Improving Public Health's Response to Health Inequities through Data Reform.**

Recommendations include:

- Providing adequate funding to the Office of Equity to lead a community-centered process aligned with Washington's pro-equity and anti-racism (PEAR) plan and playbook to develop enterprise-wide standards for the collection, analysis, storage, and protection of disaggregated demographic data, starting with race and ethnicity data.
- Directing and providing funding to state agencies to enhance interoperability of data systems to facilitate the collection, analysis, storage, and protection of uniform, disaggregated demographic data.
- Actively monitoring and participating in opportunities to advocate for improvements in federal standards for interoperability and disaggregated demographic data collection.

### **Removing Barriers to Health Care Insurance and Care Coverage.**

Recommendations include:

- Expanding access to health insurance for individuals at least 19 years of age who are income-eligible, regardless of immigration status.
- Employing strategies identified by the Tubman Center for Health and Freedom to ensure access to the type of health care services that members of marginalized communities most rely on, including but not limited to: requiring insurers to cover to cost of health care utilized by Washington communities, including complementary and alternative medicine (CAM), employing health care providers from the communities they are serving, incentivizing providers who use the health care that communities who have been historically or are currently marginalized prefer to use, and removing systemic barriers to care, such as cost and insufficient provider networks, so that communities can access timely, culturally based care.

### **Improving Access to Culturally and Linguistically Appropriate Health Services.**

Recommendations include:

- Expanding culturally and linguistically appropriate health care services, including but not limited to prescription information translation and increased access to interpretation services for medical appointments.
- Provide funding to establish a task force made up of public health, health care, community-based organizations, and appropriate state agencies to conduct an assessment and develop a baseline report regarding the provision of culturally and linguistically appropriate and accessible formats for communities served, as well as recommendations for improvement as applicable.

### **Making School Environments Healthy and Safe.**

Recommendations include:

- Removing the budget proviso that prevents revision and implementation of the Board's school environmental health and safety rules.
- Requiring the Department of Health, local health jurisdictions, OSPI, and the Board to work together to conduct a school environmental health and safety review and needs assessment to inform updates to the K-12 School Health and Safety Guide as well as future rulemaking.
- Prioritizing funding for K-12 school HVAC system maintenance and necessary upgrades to minimize transmission of contaminants and communicable diseases.
- Actively monitoring and participating in opportunities to advocate for federal indoor air quality standards in the built environment.

## EXECUTIVE SUMMARY (cont'd)

### Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products.

Recommendations include:

- Prohibiting the sale of all flavored nicotine and tobacco products to the public, including vapor products, to reduce the appeal and use of these products by youth and young adults.
- Considering the regulation of flavored combustible and vapor cannabis products to reduce the appeal and use of these products by youth and young adults.

### Strengthening Washington's Public Health System through Continued Investments.

Recommendations include:

- Prioritizing continued and expanded foundational public health investments in the 2023-2025 biennium as well as future biennia to ensure Washington's governmental public health system can continue to 1) assess and control communicable diseases and enhance environmental public health services and 2) improve services over the life course and improve business capacities.

It should be noted that the 2022 report highlights some issues and recommendations that were highlighted by the Board in prior reports. This is because these issues were not adequately addressed in previous biennia.

While there are numerous topics that deserve to be highlighted in this report—mis- and disinformation and trust in the public health system; the impact of structural racism, sexism, and ableism on the public's health; effects of climate change in Washington; injury and violence prevention; and substance misuse and prescription drug overdose, to name a few—the 2022 report highlights actionable, statewide public health policy initiatives and recommendations deserving of the Governor's and Legislature's attention over the next biennium.

### Acknowledgements

We would like to thank the community groups and public health partners that Board staff met with to understand their public health priorities. Where applicable, their voices have been incorporated into this report.



# RECOMMENDATIONS



## RECOMMENDATION 1: Improving Public Health’s Response to Health Inequities through Data Reform

Health equity exists when all people can attain their full health potential and no one is disadvantaged from achieving this potential because of their skin color, country of origin, level of education, sex, gender, sexual orientation, age, religious or spiritual beliefs, job, neighborhood, socioeconomic status, and disability.<sup>1</sup> Data are core to making visible the longstanding inequities in our health care system and their impacts on our communities, particularly Black and Indigenous communities and communities of color.

Lack of data collection capacity, particularly disaggregated data, erases and further harms groups that have been most impacted by inequities. The Board and the Governor’s Interagency Council on Health Disparities have heard from communities for years that they feel invisible. For example, advocates for finer data collection and reporting of Asian populations (e.g., Filipino, Indonesian, Japanese, Lao, Pakistani, Vietnamese) often feel completely unseen and unheard in the data when they are lumped into the broad “Asian” reporting category. Often these populations share many of the health inequities experienced by other groups, as well as unique health experiences not typically reported, but they are not seen when the data are aggregated into one broad category. Among other harms, this impedes their ability to apply for and receive grant funding to address the inequities in their communities. Communities have consistently asked us to collect data in a more disaggregated way.

Disaggregated data that reveal inequities across and within groups are instrumental for public health efforts related to preventing and controlling other diseases and conditions. However, collection of demographic data in Washington is currently decentralized and inconsistent, often working within the parameters of outdated federal data standards.

The Federal Office of Management and Budget (OMB) established the current minimum standards for collecting race and ethnicity data in 1997. The OMB standard consists of two reporting categories for ethnicity (Hispanic or Latino, Not Hispanic or Latino) and five reporting categories for race (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). OMB encourages additional granularity where it is supported by sample size and as long as the additional detail can be aggregated back to the minimum standard set of race and ethnicity categories.

Data disaggregation, collecting data in greater detail, is an essential part of identifying and eliminating health inequities, undoing institutional racism, and advancing equity within public health and the broader governmental system. Collection and analysis of disaggregated data helps the governmental public health system identify and address health inequities and prioritize resources to communities. Further, democratizing data and allowing communities to use their own data to mobilize for action and achieve transformative change in programs, policies, and services, is a crucial step in dismantling existing structures of power and returning control of data to the people that allow it to exist.<sup>2</sup>

COVID-19 shed a bright light on the systemic and structural inequities in the health care and public health systems. Collection and use of disaggregated data was, and continues to be, vital to identifying impacted populations. Together disaggregated data and qualitative data—stories from disproportionately impacted communities—support effective public health responses, including partnering with communities on outreach, prevention, and access to care. Without these data, the public health system cannot effectively and equitably respond to a public health crisis.

As highlighted by the 2020 Office of Equity Task Force, the COVID-19 pandemic laid bare the inequities and contradictions in our systems. In the most devastating way, the pandemic has reinforced an undeniable truth: we can only be as healthy as our communities which are most marginalized and furthest from opportunity. As with other crises, the impact and burden have been disproportionately shouldered by tribes, communities of color, immigrant communities, communities with lower income and wealth accumulation, the LGBTQIA+ community, the disability community, and vulnerable labor forces. As a stark example, agricultural and food processing workers exist at the paradoxical intersection of being essential and underserved. This is not by coincidence—health inequities and barriers to information, testing, and health care are manifestations of systemic discrimination and institutional oppression that have long privileged some at the expense of others.<sup>3</sup>

<sup>1</sup> Definition is informed by the Department of Health’s Health Equity Workgroup

<sup>2</sup> [Data Democratization: The Unsung Hero of Health Equity](#). Health Leads, June 2020. Accessed July 2022.

<sup>3</sup> [Office of Equity Task Force Final Proposal](#). Governor’s Interagency Council on Health Disparities, 2020. Accessed July 2022.

## RECOMMENDATION 1:

### Improving Public Health’s Response to Health Inequities through Data Reform (cont’d)

In March 2021, the Board adopted revisions to chapter 246-101 WAC, Notifiable Conditions. Included among the many updates to this chapter of rule is the requirement for health care providers and facilities, laboratories, and local health jurisdictions to report patient-identified disaggregated race, ethnicity, and language data as standard reportable data components that must accompany a report of a notifiable condition to public health authorities. The rules, which go into effect January 1, 2023, include four reporting categories for the patient’s ethnicity, 72 reporting categories for the patient’s race, and 50 categories for the patient’s preferred language.

Notifiable conditions reporting is one piece of a broader system of public health data collection. Public health and health care partners lack unified data standards that allow for timely, consistent collection and sharing of disaggregated data. Within existing data sets, there can be inconsistencies (e.g., data are missing altogether) and inaccuracies (e.g., aggregating American Indian and Alaska Native identities into the white reporting category). Lack of consistency and standardization in data collection hinders data sharing and data integration – where information can be linked across data sets to give a more informative, meaningful picture of how people live their lives – and prevents public health from performing comparison analyses or longitudinal studies to address health inequities.

These data are only as good as the public health system’s ability to receive and analyze them for meaningful use. Interoperability – the ability for systems to share and exchange data – of public health data systems must be prioritized. There is an urgent need to not only standardize the type of data collected but the way data are used and shared among public health agencies and programs. The Board recognizes the need to simultaneously assess all health-related data systems from an agency level and to work with community partners, other state agencies, federal partners, and tribes to identify next steps toward synchronizing the collection and protection of disaggregated demographic data across multiple data sources. The sheer scope and magnitude of this longer-term, systemwide effort is tantamount to data collection reform. Systemic problems deserve and require systemic solutions.

Community leadership and tribal consultation are critical to this work. Trusted messengers clearly communicated to the Board during its Notifiable Conditions rulemaking the need and urgency to collect demographic variables in health-related datasets that more accurately reflect communities in Washington. This requires going beyond more traditional data variables and response options (e.g., broad categories for race, ethnicity, sex, and language) to include variables such as housing status, country of origin, tribal affiliation and Indigenous background, veteran status, sexual orientation, gender, occupation, income, and disability status. Variables such as these can provide keen insight into the social and political determinants of health.

This requires centering community voice in decision making regarding the collection of detailed demographic data. Further, indigenous data sovereignty is the right of a nation to govern the collection, ownership, and application of its own data. It derives from tribes’ inherent right to govern their peoples, lands, and resources.<sup>4</sup> Therefore, consultation with Washington’s 29 tribes and two urban Indian health programs is essential to protect tribal data sovereignty.

#### The Board recommends the Governor and Legislature take action to:

- Provide adequate funding to the Office of Equity to lead a community-centered process aligned with Washington’s pro-equity and anti-racism (PEAR) plan and playbook to develop enterprise-wide standards for the collection, analysis, storage, and protection of disaggregated demographic data, starting with race and ethnicity data.
- Direct and provide funding to state agencies to enhance interoperability of data systems to facilitate the collection, analysis, storage, and protection of uniform, disaggregated demographic data.
- Actively monitor and participate in opportunities to advocate for improvements in federal standards for interoperability and disaggregated demographic data collection.

<sup>4</sup> [United States Indigenous Data Sovereignty Network](#). Accessed July 2022.



## RECOMMENDATION 2: Removing Barriers to Health Care Insurance and Care Coverage

Despite significant gains in health insurance coverage after the implementation of the Affordable Care and Patient Protection Act's (ACA) and subsequent Medicaid expansion in 39 states, about ten percent of Americans do not have health insurance.<sup>5</sup>

During 2019 and 2020, the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics observed that 14.4 percent of U.S. adults aged 18–64 years were uninsured. Among all race and Hispanic origin subgroups, those adults most likely to be uninsured were Hispanic (30.4%) followed by non-Hispanic Black (14.6%), non-Hispanic White (9.7%), and non-Hispanic Asian (7.8%) adults. Among the Hispanic origin subgroups included, those most likely to be uninsured were of Central American (42.2%) origin followed by Mexican or Chicano (33.6%) origin. Adults of Cuban (22.7%) origin were more likely to be uninsured than those of Puerto Rican (14.8%) and Dominican (12.9%) origin.<sup>6</sup>

In 2019, Washington's uninsured rate was 6.5%<sup>7</sup> and rates varied by county.<sup>8</sup> Although significantly higher than the recent lowest uninsured rates set in 2016–17, the 2019 rate is still lower than the state's uninsured rate before the implementation of the ACA major health coverage expansion components in 2014. Still, inequities remain. For example, the uninsured rate of the Hispanic population (16.8%) in 2019 was nearly four times as high as the uninsured rate for non-Hispanic Washingtonians (4.5%) that same year.<sup>9, 10</sup>

Uninsured adults are less likely to receive preventive services for chronic conditions such as diabetes, cancer, and cardiovascular disease. Similarly, children without health insurance coverage are less likely to receive appropriate treatment for conditions like asthma or critical preventive services such as dental care, immunizations, and well-child visits that track developmental milestones.<sup>11</sup>

Health care costs are a key factor in deciding whether to seek care. About four in ten U.S. adults say they have delayed or gone without medical care in the last year due to cost, with dental services being the most common type of care adults report putting off due to cost.<sup>12</sup> Strategies to increase insurance coverage rates are critical for making sure more people get important health care services, including preventive care and treatment for chronic illnesses.<sup>13</sup>

During the 2021 legislative session, Board staff conducted a Health Impact Review (HIR)<sup>14</sup> of House Bill (HB) 1191. The proposal would have required the Health Care Authority to extend Apple Health coverage by creating a new, state-only funded plan for all individuals, regardless of immigration status, who are at least 19 years of age, have a countable income equal to or below 133% of the federal poverty level, are not incarcerated, and are not eligible for categorically needy medical assistance as defined in the Social Security Title XIX State Plan. The HIR noted that evidence indicated that HB 1191 would likely increase access to health insurance for individuals at least 19 years of age who are income-eligible, regardless of immigration status, and that some eligible individuals may enroll in health insurance, which would likely increase access to and use of healthcare services, improve health outcomes, and decrease health inequities by immigration status.

5 [Health Insurance Coverage in the United States: 2020](#). United States Census Bureau, September 2021. Accessed July 2022.

6 QuickStats: Percentage of Uninsured Adults Aged 18–64 Years, by Race and Selected Hispanic Origin Subgroup — National Health Interview Survey, United States, 2019–2020. MMWR Morb Mortal Wkly Rep 2022;71:834. DOI: <http://dx.doi.org/10.15585/mmwr.mm7125a3>

7 [Washington State Health Services Research Project: Statewide Uninsured Rate Remained Unchanged from 2018 to 2019](#). Research Brief No. 98, December 2020. Washington State Office of Financial Management. Accessed July 2022.

8 [2012–19 County Uninsured Rates Chart Book: Washington State](#). Washington State Office of Financial Management Health Care Research Center, February 2021. Accessed July 2022.

9 [Washington State Health Services Research Project: Statewide Uninsured Rate Remained Unchanged from 2018 to 2019](#). Research Brief No. 98, December 2020. Washington State Office of Financial Management. Accessed July 2022.

10 Note: more recent data on the uninsured rates in Washington State and nationally are challenging to interpret as the COVID-19 pandemic significant impacts on health insurance coverage due to high unemployment rates and underreporting.

11 [Healthy People 2020: Access to Health Services](#). U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed July 2022.

12 [Americans' Challenges with Health Care Costs](#). Kaiser Family Foundation, July 2022. Accessed July 2022.

13 [Healthy People 2030: Health Care Access and Quality](#). U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed July 2022.

14 A Health Impact Review (HIR) is an objective, non-partisan, evidence-based tool that provides the Governor and Legislators with information about how proposed legislation may impact health and health equity.

## RECOMMENDATION 2:

### Removing Barriers to Health Care Insurance and Care Coverage (cont'd)

Ensuring access to the full range of reproductive health care is critical in light of the Supreme Court's decision on *Dobbs v. Jackson Women's Health Organization*, in which the court held that the U.S. Constitution does not confer a right to abortion and effectively overruling both *Roe v. Wade* and *Planned Parenthood v. Casey*. In 2018, Board staff conducted a literature review on inequities in reproductive health care access. Staff identified 45 unique barriers to reproductive health care access, including insurance status and coverage, difficulty navigating the insurance system, cost of care and other associated costs, and limited language access and lack of culturally and linguistically appropriate services.<sup>15</sup> Many of the identified barriers still exist today --- a troubling reality given our national maternal mortality crisis.<sup>16</sup>

Section 1332 of the ACA permits a state to apply for a State Innovation Waiver (also referred to as section 1332 waiver) to pursue innovative strategies for providing residents with access to high quality, affordable health insurance while retaining the basic protections of the ACA. On May 13, 2022, Washington submitted a section 1332 waiver application that would allow anyone, regardless of immigration status to purchase insurance coverage through the Washington Health Benefit Exchange.<sup>17</sup> If approved, the Exchange expects a 1.1% to 1.4% increase per year in access to marketplace coverage as well as state-funded premium assistance for newly eligible individuals through the year 2033.<sup>18</sup> The Board supports efforts such as these to expand insurance coverage and access to health care for all Washington residents.

However, those who are covered by health insurance are not immune to the burden of health care costs. About one-third of insured adults worry about affording their monthly health insurance premium, and 44% worry about affording their deductible before health insurance kicks in.<sup>19</sup> Further, inadequate health insurance coverage is one of the largest barriers to health care access, and the unequal distribution of coverage contributes to health inequities.

Mainstream insurance coverage typically does not cover complementary and alternative medicine (CAM) services such as massage therapy, acupuncture, herbal medicine, or traditional or indigenous medicine – services that may be more sought out by communities who have been historically or are currently marginalized. Discrimination in health care settings (e.g., unfair and disrespectful treatment by a health care provider, or discrimination based on ability to pay, type of insurance, ability to speak English, racial/ethnic background, and gender) has been significantly associated with the use of herbal medicines.<sup>20</sup> Among Black adults, racial discrimination was associated with greater CAM use, regardless of institutional setting. In other words, discrimination in any institutional context (settings such as work, education, law enforcement, and the service sector) has an important effect on health care behavior of Black adults, including the choice to look beyond conventional sources of health care.<sup>21</sup>

In 2021, the Tubman Center for Health and Freedom (TCHF), in partnership with Byrd Barr Place and other community-based organizations around Puget Sound, conducted a mixed method research survey to examine the ways in which the communities that are most often marginalized by the mainstream medical system tend to and care for the health and wellness of themselves and their family members.<sup>22</sup> The Wellness Equity by Lifting-up Local Under-reported Solutions (WELL US) study highlights a lack of insurance coverage for preferred care modalities, overall sense of dissatisfaction with health insurance coverage, and major barriers to seeking medical attention including cost, racism or harassment, fear of discrimination, inability to find a provider, and language barriers.

15 [Report to the Legislature: Literature Review on Inequities in Reproductive Health Care Access](#). Governor's Interagency Council on Health Disparities, January 2019. Accessed August 2022.

16 Gingrey JP. Maternal Mortality: A US Public Health Crisis. *Am J Public Health*. 2020 Apr; 110(4):462-464. doi: 10.2105/AJPH.2019.305552. PMID: 32159977; PMCID: PMC7067092.

17 [Washington Section 1332 Waiver Application](#). Washington Health Benefit Exchange, June 2022. Accessed July 2022.

18 Ibid.

19 [Americans' Challenges with Health Care Costs](#). Kaiser Family Foundation, July 2022.

20 Thorburn S, Faith J, Keon KL, Tippens KM. Discrimination in health care and CAM use in a representative sample of U.S. adults. *J Altern Complement Med*. 2013 Jun; 19(6):577-81. doi: 10.1089/acm.2012.0586. Epub 2013 Jan 11. PMID: 23308362; PMCID: PMC3673613.

21 Shippee TP, Schafer MH, Ferraro KF. Beyond the barriers: racial discrimination and use of complementary and alternative medicine among Black Americans. *Soc Sci Med*. 2012 Apr; 74(8):1155-62. doi: 10.1016/j.socscimed.2012.01.003. Epub 2012 Feb 18. PMID: 22386637; PMCID: PMC3341177.

22 [Wellness Equity by Lifting-up Local Under-reported Solutions \(WELL US\) Study](#). The Tubman Center for Health & Freedom. Accessed July 2022.

## RECOMMENDATION 2: Removing Barriers to Health Care Insurance and Care Coverage (cont'd)

The study also found that BIPOC, disabled and LGBTQIA+ community members utilize significant amounts of what is considered “alternative” medicine<sup>23</sup> and that vitamins and supplements are widely used to support health in marginalized communities.<sup>24</sup>

Expanding insurance coverage and ensuring that coverage meets the needs of Washington’s diverse communities are essential to improving the health and wellness of our residents and reducing health inequities.

### The Board recommends the Governor and Legislature take action to:

- Expand access to health insurance for individuals at least 19 years of age who are income-eligible, regardless of immigration status.
- Employ strategies identified by TCHF to ensure access to the type of health care services that members of marginalized communities most rely on, including but not limited to:
  - Requiring insurers to cover to cost of health care utilized by Washington communities, including CAM.
  - Employ health care providers from the communities they are serving.
  - Incentivize providers who use the health care that communities who have been historically or are currently marginalized prefer to use.
  - Remove systemic barriers to care, such as cost and insufficient provider networks, so that communities can access timely, culturally based care.

<sup>23</sup> TCHF’s study recognizes that CAM or “alternative” medicine is not alternative for all communities, and that CAM is only referred to as “alternative” in comparison to mainstream medicine.

<sup>24</sup> [Wellness Equity by Lifting-up Local Under-reported Solutions \(WELL US\) Study](#). The Tubman Center for Health & Freedom. Accessed July 2022.

## RECOMMENDATION 3: Improving Access to Culturally and Linguistically Appropriate Health Services

Adequate health insurance alone cannot remove every barrier to care, and regardless of coverage, culturally and linguistically appropriate services (CLAS) must be provided to all patients.

In 2004, the U.S. Department of Health and Human Services' Office of Minority Health (OMH) developed CLAS Standards to advance health equity, improve quality of services, and work toward the elimination of health disparities. Standards were updated in 2013. The principal standard of CLAS is to provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs.<sup>25</sup>

OMH evaluated national CLAS implementation and found that CLAS activities such as hiring skilled interpreters; training staff; and collecting race, ethnicity, and language data can be costly to organizations. However, it is more costly not to implement the Standards because of adverse patient outcomes and the financial burden of errors and inefficiencies that CLAS can reduce.<sup>26</sup>

Research has consistently demonstrated the persistent gap in the provision of culturally and linguistically appropriate care and the impact on equity and health outcomes.<sup>27</sup> The absence of culturally and linguistically appropriate care can impact the quality-of-care delivery for limited English proficiency (LEP) patients by increasing time to treatment, reducing quality of patient-provider communication, increasing risk of adverse events, and increasing hospital lengths of stay.<sup>28, 29, 30</sup>

During the 2022 legislative session, the Board conducted a Health Impact Review (HIR) of ESHB 1852. The proposal would have required the Pharmacy Quality Assurance Commission to adopt rules establishing requirements for the translation of prescription drug labels and prescription information. The HIR noted that evidence indicated the proposal would have the potential to result in more pharmacies providing translated prescription drug labels and other prescription information, improving access to culturally and linguistically appropriate services for some people with limited English proficiency (LEP), which would likely improve health outcomes and decrease health inequities. The bill passed the House and died in the Senate.

From September 2013 through August 2015, the Governor's Interagency Council on Health Disparities received a grant from the federal Office of Minority Health to raise awareness and promote adoption of the CLAS Standards. During the two-year grant period, Council staff provided information, resources, technical assistance, and training on the CLAS Standards to several state agencies and other public and private health-related organizations.<sup>31</sup>

In addition to these training modules, there have been a variety of tools designed to ensure culturally and linguistically appropriate care. For example, the U.S. Department of Health and Human Services' Office of Minority Health houses a variety of free continuing education and e-learning programs for health care administrators, providers, and other personnel; the American Academy of Pediatrics has developed a Culturally Effective Toolkit for providers; the Cross Cultural Health Care Program based out of Seattle provides training and consulting on culturally competent communication and practices across cultures and languages in health care; Washington State managed

25 [Think Cultural Health: National Culturally and Linguistically Appropriate Services Standards](#). U.S. Department of Health and Human Services. Accessed July 2022.

26 [Awareness, Knowledge, Adoption, and Implementation of the National CLAS Standards in Health and Health Care Organizations Evaluation Project: Summary of Key Findings](#). U.S. Department of Health and Human Services, Office of Minority Health. Accessed July 2022.

27 Ethn Dis. 2020 Autumn; 30(4): 603–610. Published online 2020 Sep 24. doi: 10.18865/ed.30.4.603

28 Divi C, Koss RG, Schmaltz SP, Loeb JM. Language proficiency and adverse events in US hospitals: a pilot study. *Int J Qual Health Care*. 2007;19(2):60-67. 10.1093/intqhc/mzl069

29 John-Baptiste A, Naglie G, Tomlinson G, et al.. The effect of English language proficiency on length of stay and in-hospital mortality. *J Gen Intern Med*. 2004;19(3):221-228. 10.1111/j.1525-1497.2004.21205.x

30 Lindholm M, Hargraves JL, Ferguson WJ, Reed G. Professional language interpretation and inpatient length of stay and readmission rates. *J Gen Intern Med*. 2012;27(10):1294-1299. 10.1007/s11606-012-2041-5 10.1007/s11606-012-2041-5

31 [CLAS Standards Training and Resources](#). Governor's Interagency Council on Health Disparities. Accessed July 2022.

## RECOMMENDATION 3:

### Improving Access to Culturally and Linguistically Appropriate Health Services (cont'd)

care plans have cultural awareness plans and committees to guide their work; community health boards are employing initiatives to provide culturally relevant information to their communities; and the Department of Health is currently implementing Engrossed Substitute Senate Bill 5229 (Chapter 276, Laws of 2021) which requires health professions to adopt rules to require their licensees to complete health equity continuing education training at least once every four years.

Despite the abundance of training resources available, there is currently no indicator to measure levels of access to CLAS in health care and public health throughout Washington State. The Board believes that understanding the current provision of CLAS across the state by major health care and hospital systems, independent health care providers, public health clinics, community-based organizations, and more, is key to improving patient experience and health outcomes as well as reducing health inequities.

#### **The Board recommends the Governor and Legislature take action to:**

- Expand culturally and linguistically appropriate health care services, including but not limited to prescription information translation and increased access to interpretation services for medical appointments and emergency room visits.
- Provide funding to establish a task force made up of public health, health care, community-based organizations, and appropriate state agencies to conduct an assessment and develop a baseline report regarding the provision of culturally and linguistically appropriate health care services for communities served, as well as recommendations for improvement as applicable.

## RECOMMENDATION 4: Making School Environments Healthy and Safe

RCW 43.20.050(2)(d) requires the Board to adopt rules for environmental health and safety in all schools, and the Board has done so since 1960. The Board initiated rulemaking in 2004 in response to significant public comment that chapter 246-366 WAC, Primary and Secondary Schools, was outdated and needed to be modernized to address issues related to indoor air quality, drinking water safety, and safety in areas such as laboratories and playgrounds. In July 2009, the Board adopted an updated set of rules, chapter 246-366A WAC, Environmental Health and Safety Standards for Primary and Secondary Schools, that would establish consistent, statewide standards to help assure that schools are designed, built, and maintained to protect children and help prevent illness and injury. That same year, the Legislature suspended implementation of the rules, citing concerns with the financial impact of the new rules, through a budget proviso:

The department of health and the state board of health shall not implement any new or amended rules pertaining to primary and secondary school facilities until the rules and a final cost estimate have been presented to the legislature, and the legislature has formally funded implementation of the rules through the omnibus appropriations act or by statute.<sup>32</sup>

Unfortunately, suspension of rule implementation has been included in each state operating budget since the 2009-2011 biennium. With the budget proviso in place, the Board can neither implement the 2009 rules, nor can it update these rules to address environmental health factors such as indoor air quality, climate change, and more with the most up-to-date science.

During the 2021-2022 school year, 295 public school districts<sup>33</sup> served 1,091,429 students<sup>34</sup> and 758 private schools served 104,426 students<sup>35</sup> in Washington. In a typical school year, students spend over 1,000 hours in school facilities, not including after-school activities. Children are disproportionately impacted by changes in their environment, and these impacts are often amplified by racial inequities that further drive health inequities.

Environmental public health professionals play a critical role in helping identify risks, potential problems, and solutions to improve health and safety. Regular health and safety inspections can help identify air quality issues and assess for toxins and other hazards to help prevent illness and injury. Prior to the COVID-19 pandemic, only twelve of Washington's thirty-five local health jurisdictions had established school environmental health and safety programs. These programs have been negatively impacted by the pandemic as resources have had to shift from activities like school safety inspections to COVID-19 response.

Indoor air quality is a key component of student health and performance. However, ventilation rates in most schools are below recommended levels, and growing evidence shows positive impacts of outdoor air ventilation. Improved indoor air quality, from either outdoor air ventilation or removal of pollution sources, results in improved student performance. Board staff completed a review of literature in October and November 2021 related to air quality and academic performance.

- Indoor air quality in school settings may impact student performance through multiple pathways, including through impacts to respiratory health outcomes and absenteeism. Available evidence also suggests that indoor air quality in school settings may impact student performance directly.
- Math and reading scores are significantly impacted by a number of indoor air quality metrics, including the type of HVAC system, particulate counts, carbon dioxide concentration, and ventilation rates.
- School location and outdoor air quality may also contribute to indoor air quality, which could exacerbate existing educational inequities.

<sup>32</sup> [Engrossed Substitute Senate Bill 5693](#), Section 222(1); Chapter 297, Laws of 2022

<sup>33</sup> [About School Districts](#). Washington Office of Superintendent of Public Instruction. Accessed July 2022.

<sup>34</sup> [Washington State Report Card: State Summary, 2021-2022 School Year](#). Washington Office of Superintendent of Public Instruction. Accessed July 2022.

<sup>35</sup> [Best Washington Private Schools \(2022\)](#). Private School Review. Accessed July 2022.

## RECOMMENDATION 4: Making School Environments Healthy and Safe (cont'd)

The COVID-19 pandemic continues to highlight the importance of ventilation to reduce transmission and spread of respiratory illnesses. The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) maintains standards about ventilation and standards on some of the air contaminants that can be involved in indoor air quality problems, but there are currently no federal minimum standards for indoor air quality or the broader built environment.<sup>36</sup>

As we attempt to emerge from the pandemic, we must prioritize indoor air quality and ventilation. Although billions of federal dollars were made available to assist schools during the pandemic, early rounds of COVID-19 relief funds did not prioritize indoor air or ventilation infrastructure in K-12 schools. The Board is pleased that additional federal support will be provided to schools through the American Rescue Plan Act (ARPA). The ARPA includes providing technical assistance to schools, including a Clean Air in Buildings Checklist that all buildings can use to improve indoor ventilation and air filtration, as well as the opportunity for schools, public buildings, and state, local, and tribal governments to make ventilation improvements and upgrades using ARPA funds.<sup>37</sup>

Climate change will worsen existing indoor environmental problems and indoor air quality, and it may introduce new problems as the frequency or severity of adverse outdoor conditions change. Warmer temperatures and shifting weather patterns have led to more frequent and severe wildfires, and Washington has experienced a significant increase in poor air quality days due to wildfire smoke. Children, particularly those with pre-existing diseases such as asthma and diabetes, are especially at risk for experiencing adverse health effects from smoke exposure.<sup>38</sup>

Children also suffer directly from the increased severity and duration of heat waves. Studies performed in multiple countries have shown an increase in child morbidity and mortality during extreme heat events. There is a >90% chance that by the end of the 21st century, average summer temperatures will exceed the highest temperatures ever recorded in many regions across the world, putting children and their families at increasing risk of heat injury.<sup>39</sup>

Climate change is also increasing the frequency and severity of other extreme weather events, such as extreme precipitation, flooding, and storms, which can result in damage to buildings and allow water or moisture to enter indoor environments. Increased indoor dampness and humidity can lead to increases in mold, dust mites, bacteria, and other biological contaminants indoors. Extreme weather events can also create conditions that support increases in and the spread of pests and infectious agents that can make their way indoors.<sup>40</sup>

Schools are a community hub that provides shelter from adverse weather events and wildfire smoke, and protecting the health and safety of students, faculty, and administrators is a key component to protecting the broader community. Ensuring our state's minimum standards for school environmental health and safety are up to date and reflect the best possible science are critical to equitably identifying and addressing the most common environmental causes of injuries and illnesses in Washington schools in a rapidly changing climate.

### The Board recommends the Governor and Legislature take action to:

- Remove the budget proviso that prevents revision and implementation of the Board's school environmental health and safety rules.
- Require the Department of Health, local health jurisdictions, OSPI, and the Board to work together to conduct a school environmental health and safety review and needs assessment to inform updates to the K-12 School Health and Safety Guide as well as future rulemaking.
- Prioritize funding for K-12 school HVAC system maintenance and necessary upgrades to minimize transmission of contaminants and communicable diseases.
- Actively monitor and participate in opportunities to advocate for federal indoor air quality standards in the built environment.

36 [Indoor Air Quality](#). United States Department of Labor, Occupational Safety and Health Administration. Accessed July 2022.

37 [National COVID-19 Preparedness Plan](#). The White House. Accessed July 2022.

38 [Which Populations Experience Greater Risks of Adverse Health Effects Resulting from Wildfire Smoke Exposure?](#) U.S. Environmental Protection Agency, November 2021. Accessed August 2022.

39 Paulson, J. A., et al. Global Climate Change and Children's Health. *Pediatrics*, 136(5), 992–997. 2015. <https://doi.org/10.1542/peds.2015-3232>

40 [Indoor Air Quality and Climate Change](#). United States Environmental Protection Agency, December, 2021. Accessed July 2022.

## RECOMMENDATION 5: Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products

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Smoking and tobacco products are the leading cause of preventable disease, disability, and death in the United States. Cigarette smoking in particular is responsible for more than one in five deaths per year the United States<sup>41</sup> and Washington State.<sup>42</sup> The Board recognizes exposure to all forms of inhaled products, including tobacco, vaporized nicotine products with electronic devices, and cannabis smoking have an adverse effect on health, which worsens with long-term use.

Youth and young adults under age 18 years are far more likely to start using tobacco than adults; nearly 9 out of 10 adults who smoke started by age 18. According to the U.S. Surgeon General, there is a strong association between the use of e-cigarettes, cigarettes, and the use of other burned tobacco products by young people.<sup>43</sup>

Despite decreasing use of tobacco products generally among middle and high school students in recent years, e-cigarettes, or vapor products, have been the most commonly used tobacco product among youth since 2014.<sup>44</sup> Nationally, about one out of every 35 middle school students, and about one out of every nine high school students reported current (i.e., past 30 days) use of e-cigarettes.<sup>45</sup>

The 2021 Washington State Healthy Youth Survey found that vapor products are the most common nicotine product used by youth. The prevalence of current (i.e., past 30-day) vapor product use among 6th graders (3%), 8th graders (5%), 10th graders (8%), and 12th graders (15%) significantly increased from 2018.<sup>46</sup>

The effects of nicotine exposure during youth and young adulthood can be long-lasting and can include lower impulse control and mood disorders. The nicotine in vapor products can prime young brains for tobacco use and addiction to other drugs.<sup>47</sup> Preventing youth initiation of tobacco and other nicotine use is critical to stem the tide of tobacco-related mortality, morbidity, and economic costs.<sup>48</sup>

Research consistently shows that flavors, and associated advertising, contribute to the appeal, initiation, and use of tobacco and nicotine products, including vapor products, particularly among adolescents and young adults.<sup>49, 50, 51</sup> According to the National Youth Tobacco Survey, among students who reported current use of any tobacco product, 79.1% (high school: 80.2%; middle school: 74.6%) reported using flavored tobacco product(s) in the past 30 days.

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41 [Smoking & Tobacco Use Fast Facts](#). Centers for Disease Control and Prevention, June 2021. Accessed July 2022.

42 [Tobacco and Vapor Products Data and Reports](#). Washington State Department of Health. Accessed July 2022.

43 [Fact Sheet: E-Cigarette Use Among Youth and Young Adults, A Report of the Surgeon General](#). U.S. Department of Health and Human Services, Office of the Surgeon General. Accessed August 2022.

44 [Smoking & Tobacco Use: Youth and Tobacco Use](#). Centers for Disease Control and Prevention, March 2022. Accessed July 2022.

45 Gentzke AS, Wang TW, Cornelius M, et al. Tobacco Product Use and Associated Factors Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021. *MMWR Surveill Summ* 2022;71(No. SS-5):1–29. DOI: <http://dx.doi.org/10.15585/mmwr.ss7105a1>

46 [Washington State Healthy Youth Survey 2021 Results](#). Accessed July 2022.

47 [Know the Risks: E-Cigarettes and Young People](#). U.S. Department of Health and Human Services, Office of the U.S. Surgeon General. Accessed August 2022.

48 Ibid.

49 Huang L. L., Baker H. M., Meernik C., et al. Impact of non-menthol flavours in tobacco products on perceptions and use among youth, young adults and adults: a systematic review. *Tob Control*. 2017;26(6):709-719.

50 Garrison K. A., O'Malley S. S., Gueorguieva R., et al. A fMRI study on the impact of advertising for flavored e-cigarettes on susceptible young adults. *Drug Alcohol Depend*. 2018;186:233-241.

51 Goldenson N. I., Kirkpatrick M. G., Barrington-Trimis J. L., et al. Effects of sweet flavorings and nicotine on the appeal and sensory properties of e-cigarettes among young adult vapers: Application of a novel methodology. *Drug Alcohol Depend*. 2016;168:176-180



## RECOMMENDATION 5: Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products (cont'd)

At the request of members of the Legislature, Board staff have conducted multiple HIRs in recent years that found evidence that prohibiting the sale of flavored vapor products is likely to decrease initiation and use of these products among adolescents and young adults. Most recently, HIRs of the following legislative proposals introduced during the 2020 legislative session.

### House Bill 1932, Concerning vapor products.<sup>52</sup>

Among other requirements, this bill would have prohibited the sale of flavored vapor products and flavored cannabis vapor products and regulated vapor product advertising.

#### Strong evidence

- Prohibiting the sale of flavored vapor products will likely decrease initiation and use of vapor products among adolescents and young adults
- Decreasing initiation and use of vapor products among adolescents and young adults will likely decrease initiation and use of tobacco products among these populations.

#### Very strong evidence

- Decreasing use of vapor products among adolescents and young adults will likely improve health outcomes
- Decreasing use of tobacco products among adolescents and young adults will improve health outcomes.

### House Bill 2454<sup>53</sup> and companion Senate Bill 6254<sup>54</sup>, Relating to protecting public health and safety by enhancing the regulation of vapor products.

Among other requirements, these bills would have banned the sale of vapor products containing vitamin E acetate and flavored vapor products, other than tobacco flavored products.

#### Very Strong evidence

- Prohibiting the sale of flavored vapor products will likely decrease initiation and use of vapor products among adolescents and young adults
- Decreasing initiation and use of vapor products among adolescents and young adults will likely decrease initiation and use of tobacco products among these populations
- Decreasing use of vapor products among adolescents and young adults will likely improve health outcomes
- Decreasing use of tobacco products among adolescents and young adults will improve health outcomes.

<sup>52</sup> [Health Impact Review of HB 1932, Concerning vapor products \(2019 Legislative Session\)](#). Washington State Board of Health, September 2019. Accessed July 2022.

<sup>53</sup> [Health Impact Review of HB 2454, Relating to protecting public health and safety by enhancing the regulation of vapor products \(2020 Legislative Session\)](#). Washington State Board of Health, January 2020. Accessed July 2022.

<sup>54</sup> [Health Impact Review of SB 6254, Relating to protecting public health and safety by enhancing the regulation of vapor products \(2020 Legislative Session\)](#). Washington State Board of Health, January 2020. Accessed July 2022.

## RECOMMENDATION 5: Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products (cont'd)

There has been promising movement to limit or prohibit youth use of tobacco, nicotine, and vapor products in recent years. In 2019, the Washington State Legislature passed Engrossed House Bill 1074 (Chapter 15, Laws of 2019), which raised the minimum age of purchase for tobacco and vapor products to 21 years. This law went into effect January 1, 2020.

In April 2022, the State of Washington settled a lawsuit against JUUL Labs, Inc., which controls more than 70% of the U.S. e-cigarette market share, for allegedly violating the Consumer Protection Act and Washington's vapor products legislation (RCW 70.345) by marketing flavored vapor products to youth. As a result of the settlement, JUUL must pay Washington \$22.5 million, stop advertising that appeals to youth – including most social media promotion – accurately market the nicotine content and effects of the nicotine in its products, and implement a robust secret shopper program and online purchase age verification.<sup>55</sup> Additionally, the U.S. Food and Drug Administration issued marketing denial orders to JUUL for all their products currently marketed in the United States. The FDA cited JUUL's premarket tobacco product applications lacked sufficient evidence regarding the toxicological profile of the products to demonstrate that marketing of the products would be appropriate for the protection of the public health.<sup>56</sup>

Furthermore, the Board supports the FDA's proposal to prohibit menthol as a characterizing flavor in cigarettes as described in Docket No. FDA-2021-N-1349, Tobacco Product Standard for Menthol in Cigarettes. As articulated in the proposed rule, research shows that restricting the range of flavored tobacco products benefits youth tobacco prevention efforts. In 2009, Congress prohibited the use of characterizing flavors (except tobacco and menthol) in cigarettes due to the appeal of those products to youth. Following passage of this law, while overall smoking rates decreased, the use of menthol cigarettes increased, suggesting that the remaining flavor continued to hold appeal to youth and adult smokers.<sup>57</sup> The proposed rule prohibiting menthol closes this loophole and removes the only remaining flavored cigarette (except tobacco) available in the United States.

The tobacco industry aggressively targets its marketing to certain populations, including young people, women, and racial and ethnic minority groups, particularly Black people. These groups are more likely to smoke menthol cigarettes compared to other population groups.<sup>58</sup> The tobacco industry strategically and aggressively targeted the Black community with menthol cigarettes for decades, including placing more advertising in predominantly Black neighborhoods and publications, and appropriating culture in marketing.<sup>59</sup> Non-Hispanic Black or African American people who smoke cigarettes, regardless of age, are more likely to smoke menthol cigarettes than people of other races or ethnicities who smoke cigarettes.<sup>60</sup> It is estimated that approximately 40% of excess deaths due to menthol cigarette smoking in the U.S. between 1980 - 2018 were those of African Americans.<sup>61</sup>

Washington legalized the sale, purchase, and use of recreational cannabis for people 21 years of age and older in 2012. Per the 2021 Healthy Youth Survey, approximately 1% of 6th graders, 3% of 8th graders, 7% of 10th graders, and 16% of 12th graders have reported using cannabis in the past 30 days.<sup>62</sup> Given the well documented role of flavors in encouraging tobacco use among youth and young adults, the Board believes emerging cannabis control policies should consider lessons from tobacco control to prevent youth cannabis use. In a 2019-2020 survey of eight Northern and Central California public high schools, a substantial proportion of adolescent cannabis users are choosing flavored cannabis products, including both combustible and aerosolized products.<sup>63</sup> Researchers acknowledge restrictions that prohibit sales of any characterizing flavors, such as recent local and state restrictions on the sale of flavored tobacco products could help address rising adolescent interest in new tobacco products and cannabis use.<sup>64</sup>

55 [AG Ferguson: JUUL must pay Washington \\$22.5 million over its unlawful advertising practices](#). Washington State Office of the Attorney General, April 2022. Accessed July 2022.

56 [FDA Denies Authorization to Market JUUL Products](#). U.S. Food and Drug Administration, June 2022. Accessed July 2022.

57 Courtemanche C.J., Palmer M.K., Pesko M.F. Influence of the Flavored Cigarette Ban on Adolescent Tobacco Use. *American Journal of Preventive Medicine*. 2017;52(5):e139-e146.

58 [Menthol Smoking and Related Health Disparities](#). Centers for Disease Control and Prevention, June 2022. Accessed August 2022.

59 [Why tobacco is a racial justice issue](#). Truth Initiative, August 2020. Accessed August 2022.

60 [Menthol Smoking and Related Health Disparities](#). Centers for Disease Control and Prevention, June 2022. Accessed August 2022.

61 Ibid.

62 [Washington State Healthy Youth Survey 2021 Results](#). Accessed July 2022.

63 Werts M, Urata J, Watkins SL, Chaffee BW. Flavored Cannabis Product Use Among Adolescents in California. *Prev Chronic Dis* 2021;18:210026. DOI: <http://dx.doi.org/10.5888/pcd18.210026>

64 Ibid.

## RECOMMENDATION 5: Decreasing Youth Use of Tobacco, Nicotine, and Vapor Products (cont'd)

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The Board believes that the potential reduction in morbidity and mortality by banning flavored nicotine and tobacco products, including vapor products, could greatly improve the health and welfare of people in Washington, particularly youth and young adults. Local governments are restricted by preemption from prohibiting or restricting flavors within their jurisdictions. Therefore, the State needs to take this action to protect future generations from a lifetime of nicotine addiction.

**The Board recommends the Governor and Legislature take action to:**

- Prohibit the sale of all flavored nicotine and tobacco products to the public, including vapor products, to reduce the appeal and use of these products by youth and young adults.
- Consider the regulation of flavored combustible and vapor cannabis products to reduce the appeal and use of these products by youth and young adults.

## RECOMMENDATION 6: Strengthening Washington’s Public Health System through Continued Investments

Washington State has a fundamental responsibility to protect the public’s health.<sup>65</sup> The governmental public health system, comprised of the Board, Department of Health, local health jurisdictions, and sovereign tribal governments, has a critical and unique public safety role that is focused on protecting and improving the health of families and communities. As a system, we work to help people live healthier, longer lives. When our people are healthier, the economic health and vitality of our communities is improved.

Washington’s governmental public health system provides unique services to communities across the state. The public relies on and expects this system to identify disease outbreaks early and prevent them from spreading; keep our food and drinking water safe; and work with community partners to plan, prioritize, and implement services that meet the communities’ greatest needs and make the best use of resources. In order to achieve a fully functioning public health system that can provide these services, the state must adopt and fund the Foundational Public Health Services (FPHS), so they are available in every community.

In 2018, a statewide FPHS baseline assessment was conducted to identify the degree to which FPHS is currently implemented and operating, estimated costs and funds needed for full implementation, and services most likely to benefit from possible new service delivery models.<sup>66</sup> The baseline assessment determined that no foundational program or capability is fully or significantly implemented across all responding agencies. This suggests that FPHS in Washington State do not currently meet the condition of “must exist everywhere, to work anywhere.”<sup>67</sup> There was wide variability in service gaps across agencies and statewide system. The baseline assessment estimated the total cost to implement FPHS statewide was nearly \$600 million, with a funding shortfall of approximately \$225 million.

The legislature has begun addressing the chronic underfunding and resulting detrimental effects on people, communities, and the state’s economy. Over the past few biennia, the legislature allocated funds toward FPHS infrastructure with historic investments during the 2021-2023 biennium:

Biennium	Amount <sup>68</sup>
2017-2019 .....	\$18 million
2019-2021 .....	\$28 million
2021-2023 .....	\$125 million

A portion of the 2017-2019 biennial budget funds appropriated by the Legislature was invested in new service delivery models by funding four shared service demonstration projects. These projects focused on sharing staff, expertise, and technology across LHJs to deliver specific FPHS in communicable disease and assessment.

Investments during the 2019-2021 biennium provided much needed capacity for the governmental public health system to pivot and rapidly respond to the COVID-19 pandemic. The COVID-19 pandemic has illustrated the importance of a fully funded and functional public health system. While investments from previous and current biennia have made some critical improvements that positioned the public health system to respond to COVID-19 better than it would have without these funds, chronic underfunding of FPHS resulted in the system continuing to play catch-up in response to a global pandemic. The COVID-19 pandemic has emphasized the need to adequately fund FPHS and shift focus from reactive, crisis-driven strategies to more proactive strategies to protect and preserve public health.

65 RCW 43.70.512

66 Note: tribes were not included in the baseline assessment as they were engaged in a tribally-driven process to define FPHS delivery framework, costs, and gap analysis.

67 Washington State Public Health Transformation Assessment Report, BERK Consulting, September 2018. Accessed July 2022.

68 \$15 million for FPHS, \$3 million to implement the Governor’s lead directive.

## RECOMMENDATION 6:

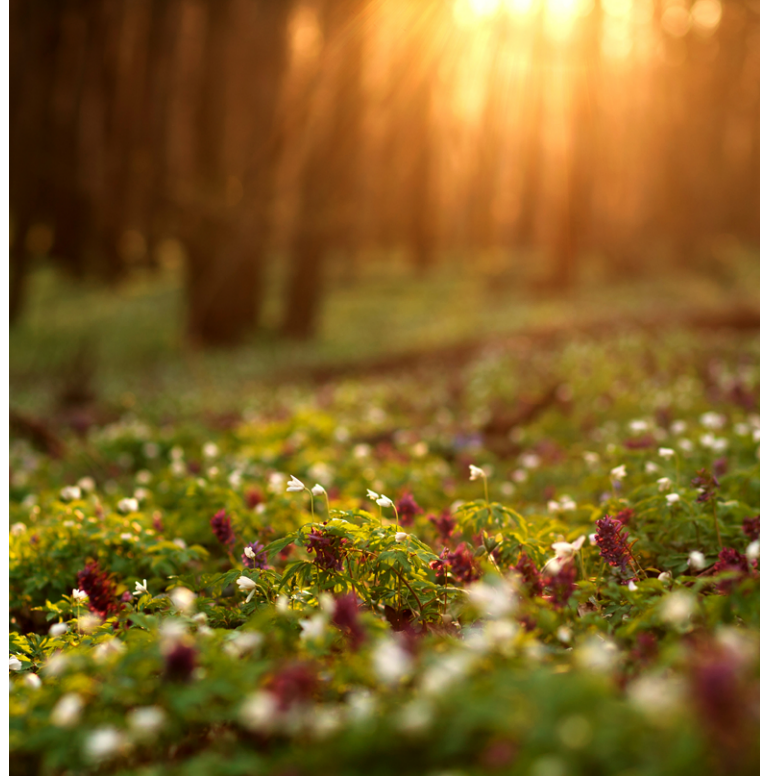
### Strengthening Washington's Public Health System through Continued Investments (cont'd)

Most recently, FPHS funding in the current biennium has helped expand capacity and services provided by the governmental public health system. Examples include environmental public health data, planning, land use, and inspections; cross-cutting capabilities such as information technology, emergency preparedness, surveillance, and community partnership; and communicable disease data, planning, and investigations; public health lab investments, and promoting immunizations.

The investments in FPHS, first with one-time funding and subsequently with ongoing funding is an important step forward. However, even with historic investments by the legislature, more is needed to fully fund FPHS and protect the public's health.

#### **The Board recommends the Governor and Legislature take action to:**

- Prioritize continued and expanded foundational public health investments in the 2023-2025 biennium as well as future biennia to ensure Washington's governmental public health system can continue to 1) assess and control communicable diseases and enhance environmental public health services and 2) improve services over the life course (e.g., chronic disease, injury prevention, maternal and child health) and improve business competencies (e.g., technology, leadership, facilities and operations).



# WASHINGTON STATE BOARD OF HEALTH

[www.sboh.wa.gov](http://www.sboh.wa.gov)



## **RCW 43.20.100**

### **Biennial report.**

The state board of health shall report to the governor by July 1st of each even-numbered year including therein suggestions for public health priorities for the following biennium and such legislative action as it deems necessary.

[ 2009 c 518 § 23; 1977 c 75 § 44; 1965 c 8 § 43.20.100. Prior: 1891 c 98 § 11; RRS § 6007.]

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Patty Hayes, Board Chair

**Subject:** Indoor Air Quality Panel

## Background and Summary:

Under RCW 43.20.050(1), the State Board of Health (Board) is directed to serve as a public forum. The Board is committed to monitoring the health effects of indoor air quality (IAQ) and is hosting a panel to engage with technical experts and learn how IAQ is evolving in Washington and how it may impact those who reside in and visit Washington.

Indoor air quality impacts every person in Washington State. The COVID-19 pandemic highlighted the importance of ventilation to reduce transmission and spread of respiratory illness. IAQ also has impacts across a broad spectrum of areas, including learning outcomes, respiratory health, and extreme climate conditions. Most people in the U.S. spend about 90 percent of their time indoors.<sup>1</sup> Thus, much of their exposure to airborne pollutants occurs indoors.<sup>1</sup> Concentration of some pollutants indoors is 2 to 5 times higher than outdoors.<sup>2</sup>

The Board will hear from experts and organizations about how our understanding of IAQ has changed in Washington, including what has been learned from the pandemic and where they see the future of IAQ heading. The Board will also learn about plans or efforts that organizations are engaged in to help improve IAQ. This is an opportunity for the Board to hear concerns and experiences from different experts, so the Board can align future initiatives with the needs of people living in Washington state. The concerns and experiences shared by panel members will also help the Board to prioritize topics to focus on within their authority related to IAQ.

The Panel consists of representatives of organizations from across local, state, and national levels, and includes:

- Eric Vander Mey – Delta E Consulting
- Brandon Kemperman – Public Health Seattle King County
- Nancy Bernard – Department of Health

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<sup>1</sup> Fann N., Brennan T., Dolwick P., et al. Ch. 3: Air Quality Impacts. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Washington, DC: U.S. Global Change Research Program; 2016:69-98.

<sup>2</sup> Rentz A., Rosen A. How States Can Better Regulate Indoor Air Quality. 2023. <https://publichealth.jhu.edu/2023/regulating-indoor-air-quality>. Accessed 10.19.2023

(Continued on the next page)



- Ben Omura – State Building Code Council
- Erin McTigue – Environmental Protection Agency Region 10

This informational briefing involves no Board action. The information shared will be used to inform the future work of the Board. Board staff will keep panel members informed about how their shared insights have impacted the work of the Board.

#### Staff

Andrew Kamali

To request this document in an alternate format or a different language, please contact the Washington State Board of Health, at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov) TTY users can dial 711.

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## Health Impacts of Indoor Air Quality Panel SBOH Public Meeting - January 10, 2024

### Eric Vander Mey

Eric Vander Mey  
PE, LEED AP  
Principal | Engineering  
Delta E Consulting

Eric has over 25 years of mechanical system design and construction experience with both MEP consultants and design build mechanical contractors in Western Washington. He is a regional expert at leading integrative design teams on mid-rise and high-rise commercial office and residential multi-family mixed-use projects in Washington State. Eric in his current role at Delta E Consulting leads the technical engineering design for high-performance buildings for the following markets: office, laboratory, multi-family residential, student housing, hospitality/hotel, education, assembly, retail, restaurant, and other commercial building types. Eric has been deeply involved in the development of both the Washington and Seattle Energy Codes over the last 15 years while representing mechanical engineers on the Washington State Building Code Council (from 2011 to 2020) and Seattle Construction Codes Advisory Board (2008 to Present).

### Brandon Kemperman

Brandon Kemperman, [CIH](#), CSR, CPSI (he/him)  
Healthy Building Science Advisor  
School Environmental Health & Safety Program  
Public Health – Seattle & King County  
Environmental Health Services Division



## Health Impacts of Indoor Air Quality Panel SBOH Public Meeting - January 10, 2024

### Nancy Bernard

Nancy P. Bernard, MPH, REHS, CPSI  
Program Manager  
School Environmental Health and Safety, Indoor Air Quality  
Environmental Public Health Division, Washington State Department of Health

Nancy Bernard, MPH, REHS, CPSI manages the WSDOH Indoor Air Quality and School Environmental Health and Safety Programs, providing technical assistance, resources, and training for local health jurisdiction and K-12 school staff. Areas addressed include IAQ, wildfire smoke, asthma triggers, integrated pest management, noise control, lighting, communicable and zoonotic diseases, cleaning, disinfection, playgrounds, lab, art, and shop safety, hazardous materials, and school design. She has a MPH in Environmental Health Sciences from Tulane University, a BS in Environmental Health and a BA in Health Education from the University of Washington, and served on the Lake Washington School District Board of Directors from 1997-2017.

### Ben Omura

Ben Omura, B.S. Mechanical Engineering; PE, LEED AP BD+C  
State Building Code Council

Ben is a Mechanical Engineer and Principal at Stantec providing consulting engineering services and was recently appointed to the State Building Code Council representing Mechanical Engineers. A Washington State native, Ben has extensive experience providing design and review services for commercial offices, data centers, education, municipal, high-rise and mid-rise residential buildings throughout the state and nationally.

### Erin McTigue

Erin McTigue, MPH  
Indoor Air Specialist & Smoke Management Coordinator, EPA Region 10

Erin works for EPA Region 10's air program, which covers Alaska, Idaho, Oregon, and Washington. Erin has been with the Region for 13 years. She is the lead for smoke management, which includes wildfire, prescribed fire, agricultural burning, and related public health and air quality issues. She is also in the Indoor Environments Program, where her specific focus is on supporting the Region's 272 Tribes and urban indigenous populations on indoor air quality and public health. Erin has a Master's in Public Health from University of Wisconsin-Madison and lives with her husband and two young daughters on Vashon Island.

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
246-205-541	Decontamination of Illegal Drug sites	3) Mercury of less than or equal to 50 nano grams per cubic meter in air; and (4) Volatile organic compounds (VOCs) of 1 part per million total hydrocarbons and VOCs in air.
<b>FOOD CODE</b>		
246-215-04315	Equipment – Ventilation hood systems, adequacy (FDA Food Code 4-301.14)	Ventilation hood systems and devices must be sufficient in number and capacity to prevent grease or condensation from collecting on walls and ceilings.
246-215-06245	Functionality – Heating, ventilating, air conditioning system vents (FDA Food Code 6-202.12).	Heating, ventilating, and air conditioning systems must be designed and installed so that make-up air intake and exhaust vents do not cause contamination of food, food-contact surfaces, equipment, or utensils.
246-215-06345	Ventilation – Mechanical (FDA Food Code 6-304.11).	If necessary to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes, mechanical ventilation of sufficient capacity must be provided.
246-215-06515	246-215-06515 Methods – Cleaning ventilation systems, nuisance and discharge prohibition (FDA Food Code 6-501.14).	(1) Intake and exhaust air ducts must be cleaned and filters changed so that they are not a source of contamination by dust, dirt, and other materials. (2) If vented to the outside, ventilation systems may not create a public health hazard or nuisance or unlawful discharge.

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>TRANSIENT ACCOMMODATIONS</b>		
246-360-120	Heating and cooling.	(1) The licensee must provide a safe, adequate means of maintaining an ambient air temperature of at least 65 degrees Fahrenheit in each lodging unit.(2) A licensee providing a cooling system must keep the system safe, clean, and in good working condition.(3) All air filters must be cleaned or replaced regularly or as needed.
246-360-140	Ventilation.	1) The licensee must provide ventilation in all lodging units, kitchen areas, bathrooms, water closet rooms, and laundry rooms.(2) All areas of the building must be ventilated to minimize odors and moisture. The ventilation system must be in compliance with the Washington Ventilation and Indoor Air Quality Code, chapter 51-13 WAC.
<b>SCHOOLS</b>		
246-366-080	Ventilation.	(1) All rooms used by students or staff shall be kept reasonably free of all objectionable odor, excessive heat or condensation.(2) All sources producing air contaminants of public health importance shall be controlled by the provision and maintenance of local mechanical exhaust ventilation systems as approved by the health officer.

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>SCHOOLS</b>		
246-366-090	Heating.	The entire facility inhabited by students and employees shall be heated during school hours to maintain a minimum temperature of 65 degrees Fahrenheit except for gymnasiums which shall be maintained at a minimum temperature of 60 degrees Fahrenheit.
246-366-100	Temperature control.	Heating, ventilating and/or air conditioning systems shall be equipped with automatic room temperature controls.
246-366A-070	Moisture control, mold prevention, and remediation.	(3) When mold growth is observed or suspected, use recognized remediation procedures such as those provided by the Environmental Protection Agency (Mold Remediation in Schools and Commercial Buildings, EPA 402-K-01-001, March 2001). Begin recognized procedures within twenty-four hours to: a) Identify and eliminate the cause of the moisture or water contributing to the mold growth; b) Dry the affected portions of the school facility; c) Investigate the extent of the mold growth, including evaluation of potentially affected materials and surfaces inside walls and under floor coverings, when moisture or water has entered those spaces; d) Minimize exposure to indoor mold spores and fragments until mold remediation is complete using methods including, but not limited to, containment and negative air pressure.

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>SCHOOLS</b>		
246-366A-090	Heating and ventilation — Construction requirements.	<p>(1) Provide mechanical exhaust ventilation that meets or exceeds the requirements in chapter 51-52 WAC at locations intended for equipment or activities that produce air contaminants of public health importance.(2) Situate fresh air intakes away from building exhaust vents and other sources of air contaminants of public health importance in a manner that meets or exceeds the requirements in chapter 51-52 WAC. Sources of air contaminants include bus and vehicle loading zones, and might include, but are not limited to, parking areas and areas where pesticides or herbicides are commonly applied.(3) Use materials that will not deteriorate and contribute particulates to the air stream if insulating the interior of air handling ducts. Insulation materials must be designed to accommodate duct cleaning and exposure to air flow without deteriorating. This subsection does not apply if the local permitting jurisdiction received a complete building permit application within three years after the effective date of this section.(4) Use ducted air returns and not open plenum air returns consisting of the open space above suspended ceilings.</p>

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>SCHOOLS</b>		
246-366A-160	Laboratories and shops — Construction requirements.	<p>7) Provide mechanical exhaust ventilation in hazardous material storerooms, and in laboratories and shops where equipment or activities may produce air contaminants of public health importance.(8) When activities or equipment in laboratories or shops produce air contaminants of public health importance, provide an appropriate source capture system to prevent those contaminants from entering the student's breathing zone. These activities and equipment include, but are not limited to, spray painting, welding, pottery kilns, chemistry experiments, and wood-working.(9) Design ventilation systems to operate so that air is not recirculated and does not flow from the laboratory or shop to other parts of the school facility. Open plenum air returns consisting of the space above suspended ceilings in laboratories and shops must not be used to recirculate air to other parts of the school facility.</p>



## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>CAMPS</b>		
246-376-070	Showers and laundry facilities in resident camps.	The shower rooms shall be well lighted and ventilated and have interior surfaces of light colored, washable material.
246-376-090	Sleeping and living quarters.	(1) All sleeping and living quarters shall be ventilated so as to be maintained free from objectionable odors. (3) No room used for sleeping purposes shall have less than 400 cubic feet of air space for each occupant.(4) All cabin or dormitory type sleeping rooms shall contain a minimum floor space of 40 sq. ft. per occupant. Ventilation shall be provided to all bedrooms or dormitories equivalent to an outside opening of 2-1/2 sq. ft. per person.

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>WATER RECREATION</b>		
246-260-031	General design, construction, and equipment for all WRF pool facilities.	<p>(17) <b>Disinfection equipment:</b></p> <p>(e) Chlorine rooms must have mechanical exhausting ventilation that includes: Air inlets located as far as possible from fan intakes to promote good air circulation patterns; A minimum of one air change per minute in the chlorine room when fan is operating; A remote switch outside the room or a door-activated switch to turn on fan before entering; Suction for fan near the floor; Exhaust vents located to prevent chlorine contaminated air from being drawn into supply air; and Screened chlorinator vents.</p> <p>(g) A self-contained breathing apparatus designed for use in chlorine atmospheres caused by chlorine leaks must be available in an area accessible to the operator outside the chlorine room. The apparatus must be maintained in accordance with department of labor and industry standards. If procedures are established for immediate evacuation and the owner has a written agreement with emergency service fire districts or other approved organizations within the area for promptly responding to chlorine leaks, then breathing protection is not required at the pool facility.</p>
246-260-031	Water Recreation Facilities	<p>(19) <b>Ventilation:</b> Owners shall provide adequate ventilation (in conformance with ASHRAE standards for pools and decks) to maintain air quality and to prevent moisture buildup in indoor areas. Design considerations must include maintaining negative pressure in the pool and deck area; providing adequate total airflow for acceptable air distribution; and preventing short-circuiting of fresh air return to exhaust.</p>

## Rules related to Indoor Air Quality

Washington Administrative Code Number	Rule Title	Rule Language
<b>WATER RECREATION</b>		
246-260-111	Water quality standards, analysis, and sample collection.	(8) Additional tests. Owners shall perform any additional tests of WRF pool water or air required by the department or local health officer to assure public safety.
246-260-131	Operation of water recreation facilities.	(10) Environmental conditions. Owners shall monitor various environmental conditions affecting the facility or potentially affecting the health and safety of users. Owners shall close the WRF or take other appropriate action in response to adverse environmental factors, (e.g., electrical storms, fog, wind, and visibility problems) to ensure that the health and safety of users are protected.



Washington State Board of Health  
Indoor Air Quality Panel

## Washington State Building Code Council Updates



## Agenda

1. SBCC Intro
2. 2021 WA Code Changes
3. What's Next?

# STATE BUILDING CODE COUNCIL (SBCC)



- SBCC was created to provide independent analysis and recommendations to the State legislature and Governor's office to adopt code measures that promote the health, safety and welfare of the people of Washington State.
- State building codes are updated on a 3-year cycle
  - 2024 code adoption cycle starts January 2024
  - Group 1 codes planned to reviewed and posted for public comment by January 2025
- Council members represent design, construction, elected officials and members of the public
- TAGs (technical advisory groups) are formed to address subset of codes and are tasked with reviewing and crafting amended code language
- Proposed code changes are reviewed by TAGs, standing committees and then by the Council for adoption
- All proposal must include economic impact analysis. Proposals with significant changes may be reviewed by the Economic Workgroup made up of TAG chairs
- The SBCC provides written interpretations of the codes to local enforcement officials upon request

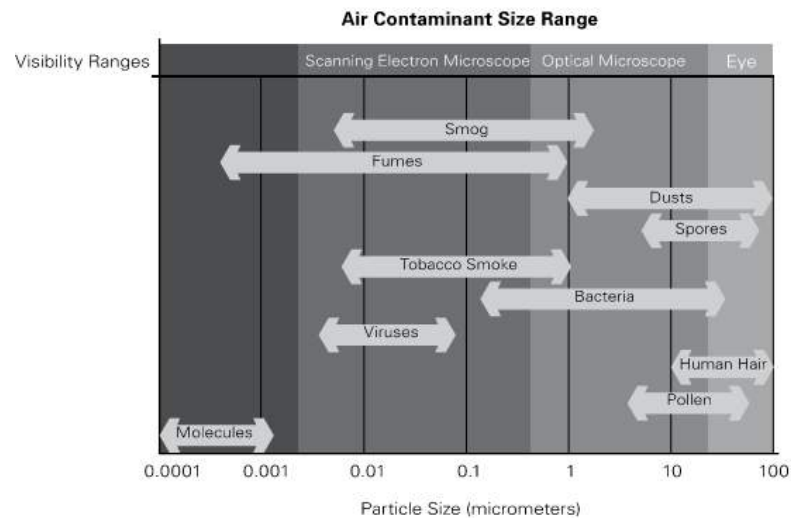
# 2021 CODE CYCLE — RESIDENTIAL COOKING

- 2021 WMC Section 403.4.7, 2021 WRC M1505
- Similar to Title 24 requirements based on LBNL research
- Electric vs. gas range
- Enclosed vs. non-enclosed kitchens
- More airflow, better capture efficiency to offset quantity and spread of contaminants
- HVI, AHAM listed range hood products



# 2021 CODE CYCLE — FILTRATION

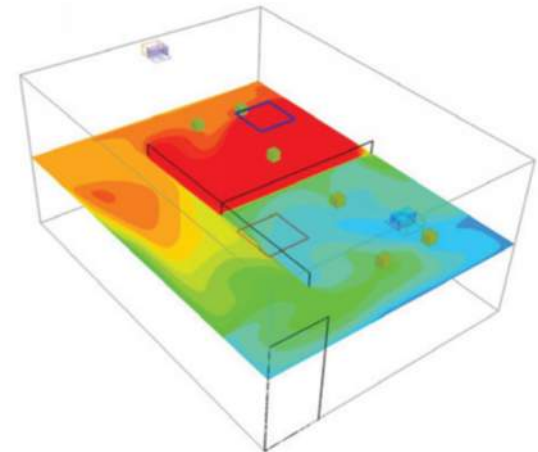
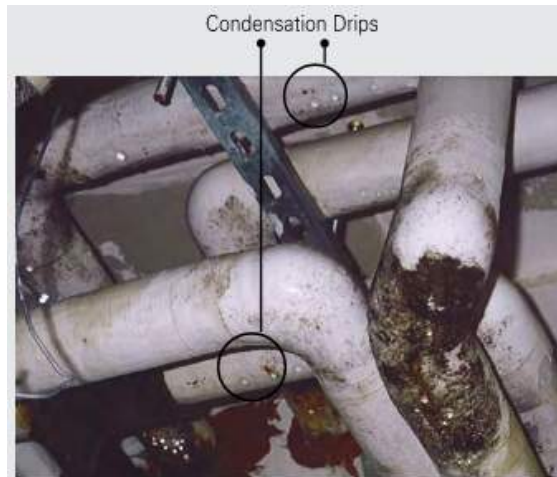
- 2021 WMC Section 605
- Filter requirements for air handlers and ventilation systems
- MERV 13 for Group A, B, E, M, R and I occupancies
- MERV 8 for Group F, H, S and U occupancies
- MERV 4 for unducted air handlers and fan coil units





# 2024 CODE CYCLE — WHAT'S NEXT?

- Occupied standby controls (SEC C403.8.7 / 90.1-2022)
- Transfer air classification (T24 120.1(g))
- Mandatory duct leakage testing for multifamily (T24-2022 160.3(d)2)
- Indoor dewpoint temperature limitations (ASHRAE 62.1-2022 5.12)
- ASHRAE 241 Control of Infectious Aerosols – Infection Risk Management Mode





# SCHOOL INDOOR AIR QUALITY

Nancy P. Bernard, MPH, REHS, CSPI  
SBOH IAQ Panel 1.10.2024

# Washington State Department of Health School Environmental Health & Safety Program

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## Our Mission

To protect and improve the  
Environmental Health and Safety  
condition of schools in Washington state.



# School Environmental Health & Safety

- **Animals**
- **Control of Communicable & Zoonotic Diseases**
  - Disinfection and Green Cleaning
- **Hazardous Chemicals**
  - Arts, Science Labs, CTE
- **Indoor Air Quality**
  - Asthma, Mold, Ventilation, Filtration
- **Injury Prevention**
  - Athletics, Playgrounds, Fall Protection
- **Integrated Pest Management**
- **Lighting**
- **Noise**
- **Thermal Comfort**



# DOH School Environmental Health & Safety Program

## Provide technical support & training

- Local Health Jurisdictions (LHJs)
- Schools

## Authority

- RCW 43.20.050(2)(c) Adopt rules controlling public health related to environmental conditions **including but not limited to heating, lighting, ventilation, sanitary facilities, cleanliness and space in all types of public facilities including but not limited to** food service establishments, **schools**, institutions, ...
- State Board of Health [Chapter 246-366 WAC:](#)  
[Chapter 246-366A WAC:](#)
- DOH / OSPI K12 Health & Safety Guide  
2000, 2003 – current edition. Being updated this year.

# Air Quality - Health



[Environmental Factor - May 2021: Indoor air a neglected source of chemical, particulate exposures \(nih.gov\)](#)

# History – School IAQ in WA

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- Work began in earnest in the 1990's
  - DOH EPH hired an IAQ Specialist
- EPA Tools for Schools – annual meetings in DC, toolbox
- Collaborative work/inspections with DOH
  - WSU Energy Support Operations building scientist, NW Clean Air Agency, NEW Educational Service District 101, Puget Sound Workers' Comp Trust
- Statewide School EHS meetings in 2001, 2002, 2003
- Statewide School IAQ workgroup
- DOH IAQ Best Practices Manual 2003
- CDC Asthma Grant
- Continual collaborative production of resources, workshops, training videos

# IAQ Work in Schools

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- Reduce Asthma triggers and Allergens
  - Eliminate scented sprays/plug-ins/candles
- Safe & effective cleaning and disinfection
- Prevent mold growth/remove safely
- Reduce animals in schools
- Integrated Pest Management
  - Reduce use of pesticides
  - Prevent pests – lice, bed bugs, roaches, etc.
- Targeted exhaust ventilation for contaminants
  - Science, arts, career and technical education
    - Pottery kilns, 3-D printers, Laser printers, Lead soldering
- Improve ventilation and filtration

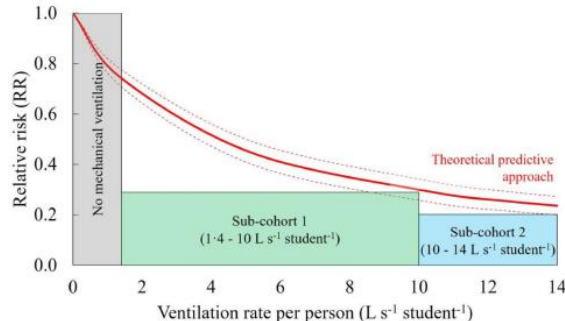


# Where Are We Now

- The pandemic taught us the importance of ventilation.
  - Infectious viral particles are carried in air streams.
- The pandemic reinforced the need for improvement.

## Italian schools study

- 10,000+ classrooms
- 316 retrofitted with mechanical ventilation
- Covid infection rates 80% lower in mechanically ventilated classrooms with 10 – 14 L/s-pers
- 12-15% reduction per unit of ventilation



## Increasing ventilation reduces SARS-CoV-2 airborne transmission in schools: a retrospective cohort study in Italy's Marche region

Luca Ricolfi<sup>1,3</sup>, Luca Stabile<sup>5</sup>, Lidia Morawska<sup>4</sup>, Giorgio Buonanno<sup>6,4,\*</sup>

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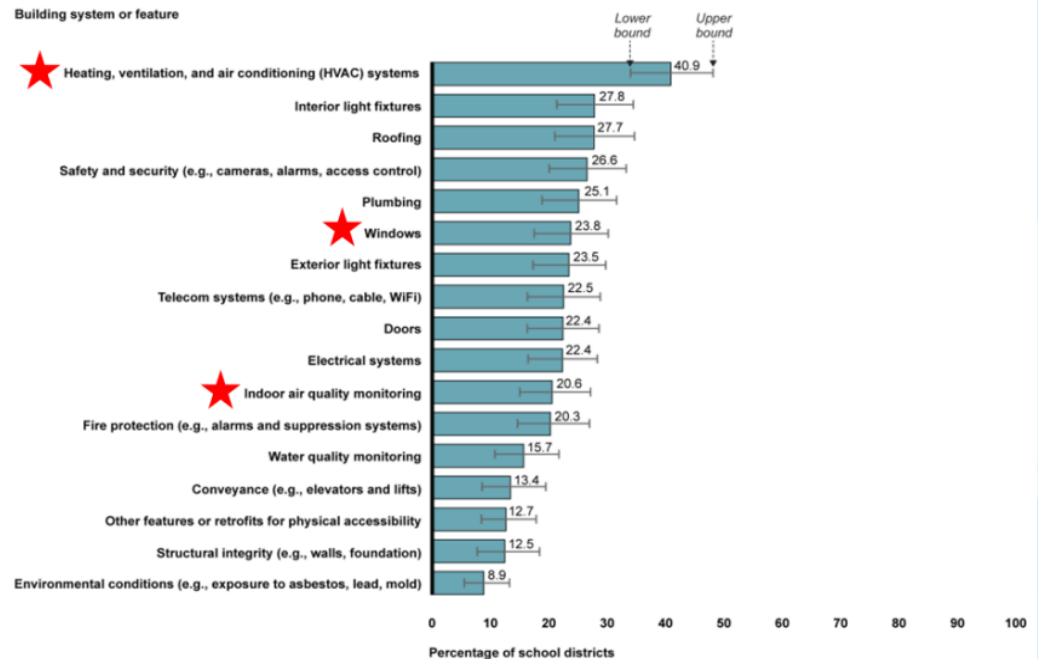
Preprint - <https://arxiv.org/abs/2207.02678>

# What We Have Learned

## School Maintenance Was A Problem Before COVID

- ▶ General Accountability Office study on condition of US schools (June 2020)
- ▶ Maintenance or replacement needs
  - ▶ HVAC - #1
  - ▶ Windows - #6
  - ▶ IAQ monitoring #11
- ▶ Poor maintenance impacts IAQ and energy use, increases infection risk

Figure 2: Estimated Percentage of School Districts in Which at Least Half the Schools Need Updates or Replacements of Key Building Systems or Features



<https://www.gao.gov/assets/710/707374.pdf>

# Ventilation Standards

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## Dilution – **Minimum** Standards for Schools

- ASHRAE 62.1
  - ~15 cfm/person of air
  - ~17 cfm/person of air for science labs (directly exhausted, but supply can be recirculated from non-lab/shop areas)
  - ~19 cfm/person of air for art and wood/metal shops (directly exhausted, but supply can be recirculated from non-lab/shop areas)
- World Health Organization: 21 cfm/person
- SBOH School Rule WAC 246-366-080 Ventilation
  - All rooms used by students or staff shall be kept reasonably free of all objectionable odor, excessive heat or condensation.
  - All sources producing air contaminants of public health importance shall be controlled by the provision and maintenance of local mechanical exhaust ventilation systems as approved by the health officer.

# Ventilation Guidance

## Dilution

### Improving Dilution in Building with Central HVAC System

- Have HVAC System Inspected and Balanced
  - Frequently identified problems:
    - Outside air dampers were not working correctly
    - Filters needed changing, or were not seated correctly
    - Building Automation System (BAS) was not operating correctly
    - Demand control system was not disabled
    - Heating/cooling coils were dirty/damaged
- System should deliver 5-6 air changes per hour
- Reduce recirculation of indoor air, maximize outdoor air

# Ventilation Guidance

## Filtration

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- ASHRAE Filter Rating of MERV **13+** in HVAC unit
  - **Filter the return (infectious particle removal) and outside air (air pollution/wildfire smoke)**
    - Not just to protect the unit –
    - Deepest pleat possible – less resistance
    - Tight fit – NO LEAKS
    - Change as needed
- Additional
  - Vacuums with HEPA filters
  - Portable HEPA filter air purifiers in the nurse's office/isolation room (no additive technologies)
- [Wildfires and Indoor Air Quality in Schools and Commercial Buildings | Indoor Air Quality \(IAQ\) | US EPA](#)

# Thank You

Nancy P Bernard, MPH, REHS, CPSI  
Nancy.Bernard@doh.wa.gov

Resources available:  
[www.doh.wa.gov/schoolenvironment](http://www.doh.wa.gov/schoolenvironment)  
Join my list serve for timely information!



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).

**resources**





### What's Happening Now

- [Children and Youth Activity Guide for Air Quality](#)
- [FAQ for Children and Youth Activity Guide for Air Quality](#)
- [Quality](#)
- [COVID-19 Testing in Schools](#)
- [Healthy Youth Survey Registration](#)
- [Register Now - November 7 School](#)
- [Environmental Health and Safety Workshop \(PDF\)](#)
- [School Workshop Agenda \(Word\)](#)

### Key Resources

- [Immunization](#)
- [COVID-19 Guidance K-12 & Child Care](#)
- [Mental and Behavioral Health](#)

## Resources by Topic



[Enhance Safe and Healthy Environments](#)



[Promote Healthy Behaviors](#)



[Manage Health Conditions](#)



[Prevent Injury and Violence](#)



[Promote Healthy Decision Making](#)



[Additional Resources](#)

## Enhance Safe and Healthy Environments



# Enhance Safe and Healthy Environments

[Expand all](#)

**Air Quality**



**Animals and Pest Management**



**Infection Prevention, Cleaning, and Disinfecting**



**Career and Tech Ed, Arts, and Science**



**Contaminants**



**Facility and Construction**



**Playgrounds and Playfields**



**Rules and Regulations**



**Student Health and Safety**



- [School Environmental Health and Safety Workshops](#)
- [Subscribe to Email Updates on School Environmental Health and Safety Information](#)
- [Program and Contact Information for School and Environmental Health and Safety Program](#)

# Healthy Air Quality in Schools - Tips for Administrators, Custodians, and Teachers

## Healthy Air Quality in Schools



Achieving healthy air quality in schools takes administrators, custodians, and teachers working together. Good ventilation and source control of pollutants means healthy indoor air quality.

### General Tips

- Teachers and staff need to know who to contact for indoor air quality concerns in the school.
- There should be a written school or district indoor environmental quality plan that includes indoor air quality and integrated pest management.
- Notify school or district indoor air quality contact or maintenance staff if you detect odors or dust from locations such as shops, copy rooms, science labs, laminators, locker rooms, graphic arts, custodial supply rooms, storage areas, combustion equipment, kitchens, or bus exhaust. Document your concerns.
- Immediately report any water leaks, water stains, damp materials, or unusual odors (such as musty or moldy smells) to maintenance staff.
- Maintenance staff should respond to water leaks and moisture problems within 24 hours.
- Relative humidity levels between 30 and 50 percent are better for health. Low relative humidity leads to dry eyes and respiratory irritation. High relative humidity allows dust mites to grow and promotes condensation.
- Dispose of food wastes promptly in covered containers.

### Ventilation

- Operate the ventilation system continually when the school is in use, including during custodial work. Supply at least 15 cubic feet per minute per person of fresh outside air whenever the school is in use. See [WSU Energy Program's Good Ventilation is Essential for a Healthy and Efficient Building \(PDF\)](http://www.energy.wsu.edu/Portals/0/Documents/Good_Ventilation_is_Essential.pdf) ([www.energy.wsu.edu/Portals/0/Documents/Good\\_Ventilation\\_is\\_Essential.pdf](http://www.energy.wsu.edu/Portals/0/Documents/Good_Ventilation_is_Essential.pdf)).
- An occupied room is considered to be receiving the minimum amount of fresh air when indoor carbon dioxide (CO<sub>2</sub>) levels are approximately 700 parts per million (ppm) over outside ambient CO<sub>2</sub> levels. See [WSU Energy Program's Measuring Carbon Dioxide Inside Buildings \(PDF\)](http://www.energy.wsu.edu/Portals/0/Documents/Measuring_CO2_Inside_Buildings-Jan2013.pdf) ([www.energy.wsu.edu/Portals/0/Documents/Measuring\\_CO2\\_Inside\\_Buildings-Jan2013.pdf](http://www.energy.wsu.edu/Portals/0/Documents/Measuring_CO2_Inside_Buildings-Jan2013.pdf)).
- Maintain three feet of clearance around unit ventilators and do not put items on top of them to block airflow.
- Change ventilation filters regularly. Use the highest rated, deepest pleat filters the system can accommodate.
- Check to make sure that supply air diffusers, exhaust, and return grills are not blocked. They should be clean and dry.
- Don't turn off unit ventilators – ask maintenance staff to repair noisy units, control temperatures, and control drafts.
- Monitor windows – they should not show condensation except on the very coldest of days.
- Don't allow vehicle idling on school property.
- Maintenance staff should follow integrated pest management strategies. Don't use pesticides in the building.

### Control Asthma Triggers

#### Reduce Animal Allergens, including Dust Mites

- Animals shouldn't be classroom residents and should only come to school for educational purposes.
- Use integrated pest management practices to prevent cockroach and rodent infestations.
- Store food in tightly sealed containers.
- Seal all cracks and crevices.
- Grate all foundation and roof ventilation.
- Use barriers to discourage birds roosting.
- Wash stuffed animals and blankets in hot water every two weeks, or remove them.

### Control Dust

- All outside doors should have large entry mat barriers (walk-off mats) outside and just inside the door. The mats should provide at least four to seven footfalls.
- Maintain cleanable surfaces and avoid clutter. Put loose items into plastic boxes with lids that can be wet-wiped.
- Damp-wipe surfaces weekly with a micro-fiber cloth.
- Don't hang items from the ceiling T-bars without special clips to prevent fraying fiberglass. Remove or clean items when dusty.
- Discourage clutter by removing as many unnecessary dust-collecting items as possible.
- Use pre-mixed and pre-wetted clay art supplies whenever possible to reduce dusts.
- Replace fabric upholstered furniture with furniture easily dusted.
- Remove area rugs that cannot be regularly cleaned and that trap dirt and moisture.

### Reduce Chemicals

- Don't use permanent, solvent-based or scented pens, markers, and board cleaners. Use water-based, unscented, crayon-based, or low-odor items.
- Don't use room deodorizing sprays, plug-ins, scented candle warmers, scented reeds, candles, incense, therapeutic oils, or potpourris.
- Don't use urinal cakes in bathrooms.
- Avoid spray adhesives, contact cement, and volatile paints. If spray adhesives are necessary, use hexane and toluene-free products. Wear solvent-resistant gloves. Spray in an area with local exhaust ventilation and away from children. See [King County's Selecting Safer Art Adhesives](http://www.kingcounty.gov/Portals/0/Documents/Art/Art_Adhesives.pdf) ([www.hazwastehelp.org/publications/publications\\_detail.aspx?DocID=z%2F7o%2f2BLUUM%3d](http://www.hazwastehelp.org/publications/publications_detail.aspx?DocID=z%2F7o%2f2BLUUM%3d)).
- Don't bring chemicals, cleaners, or disinfectants from home. Use only those provided by the school or district.
- Never use air-cleaning devices that generate ozone. Ozone is a respiratory irritant.
- Discourage the use of perfumes, colognes, body sprays and other strongly scented personal care products.
- Hazardous chemicals in laboratories, chemical storages, shops, art rooms, and any other areas need to be properly stored and managed to prevent air contamination.

### Carpet Care

- Whenever possible, don't allow food or beverages in classrooms. If possible, vacuum daily (when children are not present). Use a vacuum with a HEPA (high efficiency particulate air) filter – or use HEPA vacuum bags. Having both is even better.
- Avoid use of area rugs. They can trap moisture and dirt under them. Clean carpets thoroughly with truck-mounted hot water and steam extraction once or twice per year.
  - Spot treat carpet as needed first.
  - Use the minimum amount necessary of low-odor and low-sudsing carpet shampoo.
  - All shampoo and cleaner needs to be thoroughly extracted until the water runs clean.
  - Carpet should dry thoroughly within 24 to 48 hours after cleaning.

### Resources

- [School Environmental Health and Safety, Department of Health](http://www.doh.wa.gov/schoolenvironment) ([www.doh.wa.gov/schoolenvironment](http://www.doh.wa.gov/schoolenvironment))
- [School Indoor Air Quality Best Management Practices Manual, 2003 \(PDF\)](http://www.doh.wa.gov/Documents/Pubs/333-044.pdf) ([www.doh.wa.gov/Documents/Pubs/333-044.pdf](http://www.doh.wa.gov/Documents/Pubs/333-044.pdf))
- [Integrated Pest Management for Schools, WSU](http://schoolipm.wsu.edu/) (<http://schoolipm.wsu.edu/>)
- [Creating Healthy Indoor Environments in Schools, EPA](http://www.epa.gov/iaq/schools/index.html) ([www.epa.gov/iaq/schools/index.html](http://www.epa.gov/iaq/schools/index.html))
- [Taking Asthma Care To School, Washington Asthma Initiative \(PDF\)](http://www.waasthma.org/wp-content/uploads/2014/05/AMES2014Final.pdf) (<http://www.waasthma.org/wp-content/uploads/2014/05/AMES2014Final.pdf>)
- [Art Hazards, King County Local Hazardous Waste Management Program](http://www.hazwastehelp.org/ChemToxPesticides/artchemicals.aspx) (<http://www.hazwastehelp.org/ChemToxPesticides/artchemicals.aspx>)

## Cleaning for Health in the Classroom Best Practices for Teachers



School Environmental Health and Safety Program

School custodial staff is responsible for cleaning schools. Some teachers choose to do additional cleaning. Here is how to ensure those efforts tackle dirt and germs safely and effectively.

### Teach good handwashing habits - the #1 way to keep germs from spreading.

Use plain soap and water for handwashing – before eating, after using the bathroom, after recess, etc. Antibacterial soap is not recommended. Use plain fragrance-free soap. When there is no access to a sink, as on a field trip, alcohol-based (at least 60% alcohol, dye-free and fragrance-free) hand sanitizer or alcohol-based sanitizer wipes can be used. Hand sanitizers are not a substitute for handwashing. They are not effective when hands are dirty or greasy.

#### Cleaning for Health benefits all

- Lowers absenteeism
- Increases productivity
- Improves indoor air quality
- Reduces asthma and allergy triggers

#### Good to know:

- Kids are more vulnerable to chemical exposures.
- Many common cleaning products have ingredients that can harm health, especially the lungs.

### Know the difference between Cleaning, Sanitizing, and Disinfecting.

#### Use the right product for the task:

- **CLEANING** removes dirt and most germs. Use soap and water. A third party certified green cleaner is preferred. In the classroom, cleaning is the focus.
- **SANITIZING** reduces germs to safe levels, for example in food service environments. Food code regulations have specific requirements for sanitizers in the cafeteria and kitchen.
- **DISINFECTING** kills most germs, depending on the type of chemical, and only when used as directed on the label.
- In schools, custodial staff use disinfectants and sanitizers regularly only in high-risk areas – nurse’s office, bathrooms, cafeterias, kitchens, drinking fountains, sink and door handles, and athletic facilities; preferably, when students are not present. Overuse does not provide any additional protection and can expose students and staff to harmful chemicals.

### Teachers can rely on basic *cleaning* to remove dirt and germs in the classroom.

If staff, besides trained custodial staff, needs to assist with classroom cleaning, they should use a school or district provided basic cleaner. A third party certified green cleaner is preferred.

- Custodial staff can make a simple all-purpose cleaner for classrooms. Mix one teaspoon of fragrance-free dish soap in a spray bottle filled with water. Spray on surface and scrub with paper towels or a microfiber cloth. Rinse and wipe dry to remove any residue.
- Microfiber cleaning cloths improve cleaning – the removal of dirt and germs. Dampened with water they are great dust removers. With soap and water, they remove most germs.
- Disinfecting is the responsibility of school custodial staff. They are trained to use disinfectants in a safe and effective manner and to clean up potentially infectious materials and body fluid spills – blood, vomit, feces, and urine. Contact your custodian or school nurse if students are ill and your classroom needs cleaning and disinfection. If teachers use disinfectants, the district must provide training and supply the appropriate cleaner and sanitizer or disinfectant.

Students should never use disinfectants. Disinfectant wipes should not be used to clean hands. This includes Clorox wipes.

#### If students are helping:

- They should only use soap and water.
- Fragrance-free baby wipes could be used for quick cleaning.
- Most store-bought cleaning products are not safe for children to use.

## Cleaning for Health in the Classroom Frequently Asked Questions



School and Indoor Air Quality Program

### How does cleaning reduce germs?

Cleaning works by removing dirt and organic matter that contains and protects germs. Soap breaks down oils and allows dirt, contaminants, and germs to be more easily removed. Cleaning with soap, water, and a microfiber cloth will remove most germs.

### Why is handwashing better than hand sanitizer?

Soap and rubbing hands together under running water removes oil, dirt, and harmful surface germs. Hand sanitizer does not remove dirt in which germs hide and only kills a few easy-to-kill ones.

### Why use plain soap for handwashing?

Antibacterial ingredients, in particular triclosan and quaternary ammonia compounds (quats), only kill a few types of germs and are unnecessary when washing hands. It doesn’t matter if germs are alive or dead when they are washed down the drain.

### What about non-alcohol hand sanitizers?

The U.S. Centers for Disease Control and Prevention only recommends hand sanitizers with at least 60% alcohol. Non-alcohol ones are even less effective than alcohol hand sanitizers.

### How does this guidance affect fall classroom supply request lists?

#### Okay to Request

- Fragrance-free baby wipes.
- Paper towels (recycled content preferred).

#### DO NOT Request

- Disinfecting wipes.
- Non-alcohol-based hand sanitizer.

### What are the issues with disinfecting wipes?

- Disinfecting wipes are often overused. They are not appropriate for general cleaning when an all-purpose cleaner or soap and water would suffice.
- Disinfecting wipes (e.g. Clorox, Lysol) usually contain quats and fragrance chemicals. These ingredients can trigger asthma and are associated with adverse health effects.
- Disinfectants can give a false sense of security because when they are not used exactly to label instructions, they don’t work properly. Most disinfecting wipes require the surface to be cleaned first, and then remain visibly wet 4-10 minutes (dwell time) to be effective, requiring multiple wipes.

### Why is it important to use fragrance-free products in school?

Fragrance is one of the most frequently identified allergens, can irritate the respiratory system, cause headaches, and exacerbate asthma.

### What’s so great about microfiber cloths?

Their split fibers create more surface area and are superior for removing dust, dirt, and germs. They are reusable and can be laundered or washed by hand.

### Why should teachers not bring common cleaning products (including bleach) from home into the classroom?

- Some common cleaning products are dangerous when mixed. Never mix bleach with ammonia, acids, or other disinfectants. An example: Comet, containing bleach, would react with Windex, which contains ammonia, to form poisonous vapors.
- Common household cleaners and disinfectants may not be appropriate for schools and may cause allergic reactions or have other health impacts.
- Schools and districts must have a Safety Data Sheet for each chemical used in the school.

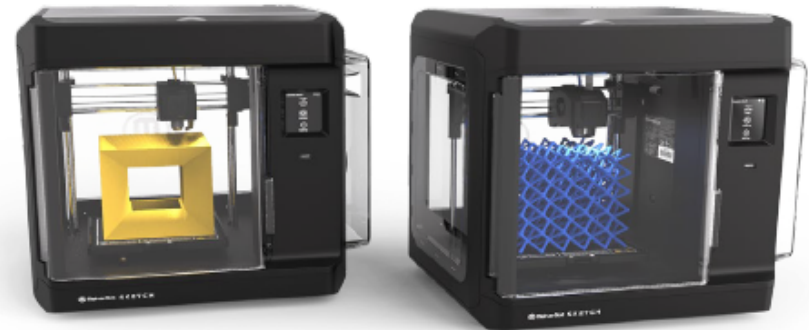
# Using 3D Printers Safely



Three dimensional (3D) printers are a great education tool. They provide rapid prototyping and the ability to create small-scale manufacturing for various lessons in science, technology, engineering, math, and art. Although a great educational tool, 3D printers produce hazardous byproducts including fine and ultra-fine particulates, volatile organic compounds, and heavy metals.

When using 3D printers, required safety precautions protect students from inhaling hazardous particles and chemical vapors and avoid physical hazards such as burns, cuts, and pinches. The State Board of Health Rule for Primary and Secondary Schools, [WAC 246-366-080](#), requires 3D printers to have local mechanical exhaust ventilation.

A recent National Institute of Safety and Health (NIOSH) study evaluated the hazards associated with using different 3D printers and recommended ways to minimize exposure to these hazards. This document focuses on the safe use of fused filament fabrication (FFF) 3D printers (functionally similar to fused deposition modeling, or FDM printers), which are most common in K–12 schools.



Two examples of FFF 3D printers.

[Using 3D Printers Safely \(wa.gov\)](#)



## Healthy Air for Healthy Schools

### Use Only:

- Approved chemicals, cleaners, or disinfectants provided by the school or district. Never bring in products from home.
- Fragrance-free soap and water or fragrance-free baby wipes to clean surfaces. Disinfection is for trained custodians with approved effective products.
- Pens, markers, and board cleaners that are water-based, unscented, crayon, or low-odor.
- Spray paints and spray glues where there is mechanical exhaust ventilation.

### Avoid Products That Reduce Air Quality — Do Not Use:

- Room deodorizing sprays, plug-ins, scented candle warmers, scented reeds, candles, incense, essential oils, or potpourris.
- Air-cleaning devices that generate ozone or are called "ionizers" – ozone is a respiratory irritant.
- Perfumes, colognes, body sprays and other strongly scented personal care products.
- Permanent, solvent-based, or scented pens, markers, and board cleaners.
- Disinfectant wipes.
- Urinal cakes.
- Rubber cement or spray adhesives with hexane or toluene.



Using classroom products that are free of airborne irritants means healthy indoor air quality!

- > Eliminate unnecessary chemicals.
- > Reduce asthma and headaches.
- > Increase attendance and performance!

Learn more at [www.doh.wa.gov/schoolenvironment](http://www.doh.wa.gov/schoolenvironment)



DOH 333-243 August 2019

For people with disabilities, this document is available on request in other formats.

Call 1-800-525-0127 (TDD/TTY call 711).

# Essential Oils

## Guidance for Healthy Classrooms



### Are Essential Oils Beneficial?

Many people use essential oils as aromatherapy with the intent to treat various health conditions like pain, anxiety, asthma, and ADHD. However, systematic reviews of essential oils research have not found enough evidence to suggest they successfully treat any health issue (8).

### Are Essential Oils Safe to Use?

Essential oils can adversely affect the health and safety of students and staff in the classroom and can be dangerous. They contain compounds that can aggravate asthma in students; and they emit hazardous volatile organic compounds such as acetaldehyde, limonene, toluene, pinene, and camphene, all of which worsen asthma (9; 10; 1; 6; 3). They also can cause respiratory irritation, headaches and throat, eye, and nose irritation. Inhaling certain essential oils can cause pneumonia (6; 3).

Keeping essential oils in the classroom can be dangerous. When swallowed, eucalyptus, sage, and camphor oil can cause seizures, and lavender oil can cause a coma (12). Additionally, lavender oil and tea tree oil were shown to cause abnormal or premature breast development in girls and boys when applied to the skin or inhaled (5; 11).



### Recommendations

Avoid using all essential oils and other fragranced products in the classroom. Use fresh air and good ventilation to reduce exposure to respiratory pathogens, chemicals, and odors. Increased fresh air supply and air filtration have been shown to improve health and test scores. Open windows for additional air or use fans pointed out of windows and doors to improve ventilation, being careful not to circulate across students.

Some schools, school districts, or early learning programs have established policies or procedures that may prohibit essential oils. Schools and districts should adopt a policy or procedure prohibiting staff from bringing in and using any chemicals that are not pre-approved or provided by the district. Always consult with your school, program, or school district to ensure compliance with their policies/procedures.

### References

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### How to Avoid Allergies

Essential oils can cause allergic reactions when applied to the skin. This table (adapted from (2)) contains examples of essential oils that have caused allergic contact dermatitis (allergy). All essential oils should be avoided for a healthy classroom environment.

Angelica	Cassia	Elemi	Juniper berry	Neem	Rosemary	Tangerine
Aniseed	Cedarwood	Eucalyptus	Laurel leaf	Neroli	Rose	Tea tree
Bay	Chamomile	Frankincense	Lavandin	Niaouli	Rosewood	Thuja
Bergamot	Cinnamon	Galbanum resin	Lavender	Nutmeg	Sage	Thyme
Black cumin	Citronella	Geranium	Lemongrass	Orange	Sandalwood	Turpentine
Black pepper	Clary sage	Ginger	Lemon	Palmarosa	Silver fir	Valerian
Cajeput	Clove	Grapefruit	Litsea cubeba	Patchouli	Spearmint	Vetiver
Calamus	Coriander fruit	Guaiacwood	Lovage	Peppermint	Spike lavender	Ylang ylang
Cananga	Costus root	Hinoki	Mandarin	Petitgrain bigarade	Star anise	Zdravetz
Cardamom	Cypress	Hyssop	Melissa	Pine needle	Sweet basil	
Carrot seed	Dwarf pine	Jasmine absolute	Myrrh	Ravensara	Sweet marjoram	

DOH 333-307 October 2022

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Thank you for joining us in February for our webinar: [\*A National Conversation on Indoor Air & K-12 Schools During the COVID-19 Pandemic.\*](#)

Today, the Johns Hopkins Center for Health Security at the Bloomberg School of Public Health released a new report calling on kindergarten through 12th grade (K-12) school administrators to urgently invest in ways to provide healthy air in schools to increase safety during the COVID-19 pandemic and potential future respiratory disease outbreaks, as well as to improve student learning.



May 2021

[Tips to Improve Indoor Ventilation in K-12 Schools to Help Reduce COVID-19 Transmission \(centerforhealthsecurity.org\)](#)

The new report, [\*School Ventilation: A Vital Tool to Reduce COVID-19 Spread\*](#), reviews how improvements in building ventilation can reduce the risks of disease transmission. The report also summarizes current ventilation guidelines for K-12 schools and shares the results of an analysis finding that ventilation improvements are a cost-effective public health measure compared to enhanced (“deep”) cleaning that focuses on surfaces.

# Schools For Health – How School Buildings Influence Student Health, Thinking and Performance



Schools For Health

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## SCHOOLS



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SCHOOL OF PUBLIC HEALTH







## New Video Released

Watch our 8 Minute Video on the Importance of  
Filtration in Schools



[The Importance of Filtration In Schools - YouTube](#)

[Importance of Ventilation in Schools - YouTube](#)

Children spend a large portion of their day indoors at school. Ensuring adequate filtration and ventilation in classrooms is essential and will help support the health and productivity of students and teachers.



## **Placeholder for Presentation**

*Added as soon as received from partner agency.  
May be updated up to 48 hours after the meeting.*



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May be updated up to 48 hours after the meeting.*

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Kate Dean, Environmental Health Committee Chair

**Subject:** Rules Hearing—On-Site Sewage Systems, Chapter 246-272A WAC

## Background and Summary:

Among other powers and duties, RCW 43.20.050 gives the State Board of Health (Board) rulemaking authority for on-site sewage systems with design flows less than three thousand five hundred gallons per day. The Board's rules for On-Site Sewage Systems, chapter 246-272A WAC, set comprehensive standards for the siting, design, installation, use, care, and management of these small on-site sewage systems. The Washington Department of Health (Department) and local health jurisdictions jointly administer the rules.

In January 2018, the Department briefed the Board on its most recent review of the rules and recommended updating the rules. The Board filed a CR-101, Preproposal Statement of Inquiry, on March 6, 2018, as WSR 18-06-082, to explore and consider revisions to the rules.

Staff developed a process to update the rules, including extensive work with a diverse advisory committee known as the On-Site Rule Revision Committee. In addition, staff facilitated public review of draft revisions and conducted other outreach to gather input on the revised rules. Staff updated the Board on the rulemaking in November 2019 and January 2023, and provided a final formal briefing in October 2023. The Board filed the CR-102, Proposed Rules, on October 25, 2023, as WSR 23-22-062.

Today's agenda item includes a brief presentation on the rulemaking process and proposed rules by Jeremy Simmons, Manager of the Department's On-Site Wastewater Management Program. The presentation also summarizes written public comments received on the proposed rules and staff responses and recommendations for your consideration. The presentation will be followed by a public hearing allowing additional public testimony on the proposed rules and finally Board discussion and possible action on the proposed rules.

## Recommended Board Actions:

The Board may wish to consider and amend, if necessary, one of the following motions. The recommended motion(s) is provided for the Board's ease of reference. The Board may develop a different motion as necessary.

(continued on the next page)

The Board adopts the proposed amendments to chapter 246-272A WAC, On-Site Sewage Systems, as published in WSR 23-22-062 with the revisions agreed upon at today's meeting, if any, and directs staff to file a CR-103, Order of Adoption, and establish an effective date for the rules.

OR

The Board continues discussion of possible adoption of proposed amendments to chapter 246-272A WAC, On-Site Sewage Systems, as published in WSR 23-22-062, to its next meeting.

**Staff**

Andrew Kamali

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). TTY users can dial 711.

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REVISION OF CHAPTER 246-272A WAC  
State Board of Health Hearing  
January 2024

Presenter

---

**Jeremy Simmons**

**Manager**

Wastewater Management Section  
Division of Environmental Public Health  
Office of Environmental Health and Safety

[Jeremy.Simmons@doh.wa.gov](mailto:Jeremy.Simmons@doh.wa.gov)



# Presentation Overview

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- Rulemaking History
- 2017 Rule Review
- Proposed Rule – Key Changes
- Public Comment
- Public Comment – Recommended Changes
- Implementation Schedule

# Rulemaking History

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- 1960: First On-site Sewage Systems (OSS) Rule.
- 1974: Permits required for installation and repair of OSS.
- 1989: Higher treatment required for repairs of marine shoreline OSS.
- 1994: Higher treatment required for new installations on sensitive sites and nonconforming repairs.
- 2005: Required treatment to be determined based on site conditions. Required proprietary products to be registered with the department.

# 2017 Rule Review

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WAC 246-272A-0425 requires DOH to:

- Evaluate the effectiveness of the rule every four years.
- Determine if revisions are needed.
- Report recommendations to the state board of health and local health officers.
- The rule was reviewed in 2009 and 2013, with the finding that no revisions were needed.
- In 2017 we concluded the review with the finding that revisions were needed.

# Key Changes

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- Local management plans
- Field verification of proprietary products
- Property transfer inspections
- Repairs
- Remediation
- Minimum lot sizes
- Product supply chain issues

# Proposed Rule

---

## Local Management Plans

- Review plans every 5 years.
- Sea level rise and phosphorus impacted areas added to list of enhanced OSS management areas.
- No change for non-Puget Sound LHJs.

## Field Verification of Proprietary Products

- Sample disinfecting and nitrogen treating products.

## Property Transfer Inspections

- Beginning 2 years after the rule effective date, all OSS must be inspected at time of property transfer.
- LHJ may waive requirement if the OSS is up-to-date with routine inspections.

# Proposed Rule

---

## Repairs

- Expanded the definition of “minor repair” to allow low-risk routine repairs to be completed without a permit.
- Incorporated requirements from RCW 43.20.065.

## Remediation

- LHJs may allow remediation practices/technologies to restore a failed drainfield.

# Proposed Rule

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## Minimum Lot Sizes

- Minimum lot sizes for new developments increased by between 500 and 1,000 sq. ft.
- Minimum usable land area requirement for new developments.
- Allowance to make lots smaller if nitrogen treatment is added.
- Clarified that LHJs may permit an OSS on a preexisting lot of record that does not meet current minimum land area requirements only if it meets all requirements of chapter 246-272A WAC without the use of a waiver.

## Product Supply Chain Issues

- Allow necessary repairs of proprietary products with components that the product was not tested and registered with.
- Requires an Engineer to attest that repairs will not impact performance or maintenance.

# Public Comment

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- Public comment – No changes
- Trends in comments
- Public Comment – Recommended changes



# Public Comment Summary – No Changes

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## Topic: Various editorial suggestions

Comment example: Revise rules to cover situations when information submitted by the proprietary product manufacturer is false, erroneous, or unrepresentative.

Comment example: Please clarify the difference between wells and nonpublic drinking water wells.

Comment example: Subsection WAC 246-272A-0265(2) seems as though it could be consolidated in subsection (1).

## Topic: Various technical suggestions

Comment example: Maximum drainfield bed width should be expanded to 12 feet due to the common usage of gravelless chambers and their typical widths.

Comment: Connect drainfield lateral pipes every 10 feet to equalize flow.

# Public Comment Summary – No Changes

---

## Topic: Permitting

Comment: Artificial Intelligence (AI) should be used for OSS siting and design.

Comment: Requiring the vertical datum on site plans is impractical.

Comment: Requiring survey techniques/tools, such as an elevation benchmark will add to costs of inspections.

## Topic: Operation and Maintenance

Comment: Require service maintenance holes for proprietary pretreatment devices.

Comment: Install long-sweep ells to grade at the end of each drainfield lateral to aid in flushing and jetting of laterals.

# Public Comment Summary – No Changes

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## Topic: Local Management Plans

Comment: What standards will be used to review plans?

Comment: There is no standard for mitigating phosphorus impacts.

Comment: Support for updates to Local Management Plan section.

## Response:

The Department will develop guidance for reviewing local management plans and for areas where phosphorus is a contaminant of concern.

# Public Comment Summary – No Changes

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## Topic: Product Testing Requirements

Comment: EPA Method 1664 is inappropriate to register Category 2 products. Recommend using NSF/ANSI Standard 40 instead.

## Response:

The Department recommends no change to the proposed rule at this time. This suggestion requires additional engagement with the industry and plans to be addressed in a separate rule update in the near future.

## Public Comment Summary – Opposition

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Topic: Opposition to Property Transfer Inspections

Comment: Too much extra cost and oversight.

Comment: RCW 70A.105.030 gives property owners a clear right to deny entry onto their property.

Response:

The Department believes the benefits will outweigh the costs. This is already a part of the purchase and sale agreement governing real estate sales in Washington. There is no requirement to have OSS inspected at property transfer if it is current with routine inspection requirements.

# Public Comment Summary – Recommended Changes

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Topics: Various editorial, spelling, and stylistic

Comment Examples:

- Ensure consistent use of mL (little m, big L) for milliliter abbreviation.
- Ensure the use of oxford commas.
- 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.
- Ensure the abbreviation for Escherichia coli is *E. coli*. Big E, dot, space, little c, all italics.
- Confirm with DOH Style guide that dates do or do not the “st” or “nd” after the number. Ex. December 31st vs December 31.

Response: Make corrections

# Public Comment Summary – Recommended Changes

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## Topic: Definitions

Comment: The definitions for “detention pond” and “infiltration pond” should be added for clarification of the Table IV setbacks.

Response: Add the following definitions:

“Detention pond” means an earthen impoundment used for the collection and temporary storage of incoming stormwater runoff.

“Infiltration ponds” means an earthen impoundment used for the collection, temporary storage, and infiltration of incoming stormwater runoff.

# Public Comment Summary – Recommended Changes

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## Topic: Definitions

Comment: For consistency, amend definition of “Fill” to insert "soil" before "dispersal component".

Response: Change definition of Fill to:

"Fill" means unconsolidated material that:

- (a) Meets soil types 1-6 textural criteria and is used as part of a ((soil)) dispersal component;
- (b) Is used to change grade or to enhance surface water diversion; or
- (c) Is any other human-transported material.



# Public Comment Summary – Recommended Changes

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## Topic: Definitions

Comment: For the definition of “Failure” replace "septic" with "septage".

Response: Change the definition of Failure to:

"Failure" means a condition of an OSS or component that threatens the public health by inadequately treating sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include:

- (a) Sewage on the surface of the ground;
- (b) ((Sewage)) ((Septic)) backing up into a structure caused by slow soil absorption of septic tank effluent;
- (c) Sewage leaking from a sewage tank or collection system;
- (d) Cesspools or seepage pits where evidence of groundwater or surface water quality degradation exists;
- (e) Inadequately treated effluent contaminating groundwater or surface water; or
- (f) Noncompliance with standards stipulated on the permit.

# Public Comment Summary – Recommended Changes

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## Topic: Reference Changes

Comment: “NSF” officially changed its name to NSF International. Change definition of NSF to: NSF International.

Response: Change as suggested.

## Topic: Reference Changes

Comment: 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.

Response: Change as suggested

# Public Comment Summary – Recommended Changes

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Topic: Editorial Changes

Comment: Footnotes for Table II are missing

Response: Add footnotes

Topic: Editorial Changes

Comment: References in WAC 246-272-0200(4)(d) are incorrect and should be changed to reference section WAC 246-272A-0200(2)

Response: Make correction

# Public Comment Summary – Recommended Changes

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## Topic: Editorial Changes

Comment: The products registration section (WAC 246-272A-0120) should reference the list of registered on-site treatment and distribution products constitutently with the rest of the chapter.

Response: Change WAC 246-272A-0120(7) to:

(7) The department shall maintain a list of (~~(proprietary treatment)~~) ((registered on-site treatment and distribution)) products meeting the registration requirements established in this chapter.

## Topic: Editorial Changes

Comment: In WAC 246-272A-0230(1) add “s” after designer or remove the “s” after engineer to make consistent singular or plural.

Response: Make correction.

# Public Comment Summary – Recommended Changes

---

## Topic: Editorial Changes

Comment: In Table XI, ensure leading zeros are used and that footnotes reference the correct subsection.

Response: Add leading zeros to Table XI. Correct Table XI footnote reference from WAC 246-272A-0234(6) to WAC 246-272A-0234(7).

## Topic: Editorial Changes

Comment: WAC 246-272A-0280(4)(e) erroneously references WAC 246-272A-0014 and WAC 246-272A-0016.

Response: Change WAC 246-272A-0280(4)(e) to:

(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-0015) (~~WAC 246-272A-0014 or 246-272A-0016~~);

# Public Comment Summary – Recommended Changes

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## Topic: Editorial Changes

Comment: WAC 246-272A-0420(2)(b) erroneously includes the word “consistent”. This should be removed.

Response: Change WAC 246-272A-0420(2)(b) to:

(b) Upon review, if the department finds that the waivers previously granted are inconsistent, (~~consistent~~) with the standards in, and the intent of these rules purposes of this chapter, and DS&G for granting waivers,

# Public Comment Summary – Recommended Changes

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## Topic: Technical Changes

Comment: 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.

Response: Change as suggested.

# Public Comment Summary – Recommended Changes

---

## Topic: Technical Changes

Comment: Add provision allowing the department to remove a proprietary product's approval if the manufacturer provides false, erroneous, or unrepresentative information to the department.

Response: Change WAC 246-272A-0100(3) to:

The department may remove, restrict, or suspend a proprietary product's approval for use based on failure to meet required standards or conditions of approval (or if the information provided by the manufacturer is false, erroneous, or unrepresentative of the approved product)).



# Implementation Schedule

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- Supply chain emergency rule provisions – Effective 31 days after filing CR-103
- Property Transfer Inspection requirement – Effective February 1, 2027
- The remainder of the rule – Effective 1 year after filing the CR-103



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# PROPOSED RULE MAKING

**CR-102 (July 2022)**  
**(Implements RCW 34.05.320)**  
Do **NOT** use for expedited rule making

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER  
STATE OF WASHINGTON  
FILED

DATE: October 25, 2023

TIME: 10:17 AM

WSR 23-22-062

Agency: State Board of Health

Original Notice

Supplemental Notice to WSR

Continuance of WSR

Preproposal Statement of Inquiry was filed as WSR 18-06-082 ; or

Expedited Rule Making--Proposed notice was filed as WSR \_\_\_\_\_; or

Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1); or

Proposal is exempt under RCW \_\_\_\_\_.

**Title of rule and other identifying information:** On-Site Sewage Systems, Chapter 246-272A WAC. The State Board of Health (board) is proposing amendments to address changes to existing requirements, including requirements governing local management plans, repairs, registration of proprietary treatment products, minimum lot sizes, treatment levels, and licensing of operations and maintenance providers. The proposed rule establishes new requirements, including requirements for field verification of proprietary products, property transfer inspections, remediation, and product supply chain issues. The proposed rule also makes several editorial updates to improve clarity and repeals obsolete rules.

**Hearing location(s):**

Date:	Time:	Location: (be specific)	Comment:
1/10/2024	1:30 pm	<b>In-person location:</b> Department of Health 111 Israel Road SE, Tumwater, WA, 98501. Town Center 2, Rooms 166 & 167  <b>Virtual:</b> To register <a href="https://us02web.zoom.us/webinar/register/WN_FvTsOSBvRbqMrlyz2Ky4mA">https://us02web.zoom.us/webinar/register/WN_FvTsOSBvRbqMrlyz2Ky4mA</a>	The rules hearing will be hybrid. Individuals may attend either virtually or in-person.

**Date of intended adoption:** 1/10/2024 (Note: This is **NOT** the **effective** date)

**Submit written comments to:**

Name: Peter Beaton  
Address: PO Box 47824, Olympia WA 98504-7824  
Email: peter.beaton@doh.wa.gov  
Fax: N/A  
Other: <https://fortress.wa.gov/doh/policyreview>  
By (date) November 28, 2023

**Assistance for persons with disabilities:**

Contact: Melanie Hisaw  
Phone: (360) 236-4104  
Fax: N/A  
TTY: N/A  
Email: Melanie.hisaw@sboh.wa.gov  
Other:  
By (date) January 2, 2024

**Purpose of the proposal and its anticipated effects, including any changes in existing rules:** The board is proposing amendments to chapter 246-272A WAC to address changes to existing requirements, including requirements governing local management plans, repairs, registration of proprietary treatment products, minimum lot sizes, treatment levels, and licensing of operations and maintenance providers. The proposed rule establishes new requirements, including requirements for field

verification of proprietary products, property transfer inspections, remediation, and product supply chain issues. The proposed rule also makes several editorial updates to rule language to improve clarity and repeals obsolete rules. The proposed rules are necessary to maintain enforceable standards for the design, construction, installation, operation, maintenance, and monitoring to ensure properly functioning onsite sewage systems.

**Reasons supporting proposal:** WAC 246-272A-0425 requires the Department of Health (department) to review the rules every four years to determine the overall effectiveness, areas needing revision, and to report the results and recommendations back to the board and local health officers. The department replicated the process used in previous reviews and found that revisions to the rule were needed to address several issues. The proposed rules are needed to protect public health by minimizing the potential exposure to sewage and the adverse effects of discharges on ground and surface waters.

**Statutory authority for adoption:** RCW 43.20.050(3), RCW 70A.105, RCW 70A.110, RCW 43.20.065

**Statute being implemented:** RCW 43.20.050(3), RCW 70A.105, RCW 70A.110, RCW 43.20.065

**Is rule necessary because of a:**

Federal Law?  Yes  No  
Federal Court Decision?  Yes  No  
State Court Decision?  Yes  No

If yes, CITATION:

**Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters:** None

**Type of proponent:**  Private  Public  Governmental

**Name of proponent:** (person or organization) State Board of Health and Department of Health

**Name of agency personnel responsible for:**

	Name	Office Location	Phone
Drafting:	Peter Beaton	Department of Health, 111 Israel Road SE, Tumwater, WA, 98501	(360) 236-3150
Implementation:	Jeremy Simmons	Department of Health, 111 Israel Road SE, Tumwater, WA, 98501	(360) 236-3346
Enforcement:	Jeremy Simmons	Department of Health, 111 Israel Road SE, Tumwater, WA, 98501	(360) 236-3346

**Is a school district fiscal impact statement required under [RCW 28A.305.135](#)?**  Yes  No

If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name:  
Address:  
Phone:  
Fax:  
TTY:  
Email:  
Other:

**Is a cost-benefit analysis required under [RCW 34.05.328](#)?**

Yes: A preliminary cost-benefit analysis may be obtained by contacting:  
Name: Peter Beaton  
Address: Department of Health, PO Box 47824, Olympia WA 98504-7824  
Phone: (360) 236-3150  
Fax: N/A  
TTY: 711  
Email: peter.beaton@doh.wa.gov  
Other:

No: Please explain:

## Regulatory Fairness Act and Small Business Economic Impact Statement

Note: The [Governor's Office for Regulatory Innovation and Assistance \(ORIA\)](#) provides support in completing this part.

### (1) Identification of exemptions:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see [chapter 19.85 RCW](#)). For additional information on exemptions, consult the [exemption guide published by ORIA](#). Please check the box for any applicable exemption(s):

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.061](#) because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with and describe the consequences to the state if the rule is not adopted.

Citation and description:

This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by [RCW 34.05.313](#) before filing the notice of this proposed rule.

This rule proposal, or portions of the proposal, is exempt under the provisions of [RCW 15.65.570\(2\)](#) because it was adopted by a referendum.

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025\(3\)](#). Check all that apply:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(b)<br>(Internal government operations) | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(e)<br>(Dictated by statute)  |
| <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(c)<br>(Incorporation by reference)                | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(f)<br>(Set or adjust fees)   |
| <input checked="" type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(d)<br>(Correct or clarify language)    | <input type="checkbox"/> <a href="#">RCW 34.05.310</a> (4)(g)<br>(i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit) |

This rule proposal, or portions of the proposal, is exempt under [RCW 19.85.025\(4\)](#) (does not affect small businesses).

This rule proposal, or portions of the proposal, is exempt under RCW \_\_\_\_\_.

Explanation of how the above exemption(s) applies to the proposed rule: The following sections of the proposed rule are exempt under RCW 34.05.310(4)(d): WAC 246-272A-0001, WAC 246-272A-0005, WAC 246-272A-0007, WAC 246-272A-0010, WAC 246-272A-0013, WAC 246-272A-0170, WAC 246-272A-0240, WAC 246-272A-0265, WAC 246-272A-0310, WAC 246-272A-0425, WAC 246-272A-0430, and WAC 246-272A-0440. WAC 246-272A-0420 is exempt under RCW 34.05.310(4)(b).

### (2) Scope of exemptions: *Check one.*

The rule proposal is fully exempt (*skip section 3*). Exemptions identified above apply to all portions of the rule proposal.

The rule proposal is partially exempt (*complete section 3*). The exemptions identified above apply to portions of the rule proposal, but less than the entire rule proposal. Provide details here (consider using [this template from ORIA](#)):

The rule proposal is not exempt (*complete section 3*). No exemptions were identified above.

### (3) Small business economic impact statement: *Complete this section if any portion is not exempt.*

If any portion of the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

- No Briefly summarize the agency's minor cost analysis and how the agency determined the proposed rule did not impose more-than-minor costs.
- Yes Calculations show the rule proposal likely imposes more-than-minor cost to businesses and a small business economic impact statement is required. Insert the required small business economic impact statement here:

**A brief description of the proposed rule including the current situation/rule, followed by the history of the issue and why the proposed rule is needed. A description of the probable compliance requirements and the kinds of professional services that a small business is likely to need in order to comply with the proposed rule.**

Chapter 246-272A WAC, On-Site Sewage Systems, regulates the location, design, installation, operation, maintenance, and monitoring of on-site sewage systems (OSS). There are approximately 950,000 OSS in Washington that produce around 340,000,000 gallons of wastewater per day. This rule protects public health by minimizing both the potential for exposure to sewage from on-site sewage systems, and the adverse effects of discharges from on-site sewage systems on ground and surface waters.<sup>1[1]</sup>

Local health officers (LHOs) have three options to enforce chapter 246-272A WAC. They can: adopt their own local code; adopt this rule by reference; or defer to chapter 246-272A WAC. The State Board of Health (board) is authorized under RCW 43.20.050 to adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage

<sup>1[1]</sup> Internal Document "2018 Socioeconomic Impact Survey of Hammersley Inlet Shellfish Growers." Available Upon Request.

systems with design flows of less than three thousand five hundred gallons per day. The Washington State Department of Health (department) implements these rules. The department is required to review chapter 246-272A WAC every four years to evaluate the effectiveness of the rules and determine areas where revisions may be necessary. The department is also required to provide the results of the review along with recommendations to the board and local health officers. This requirement was adopted in 2005 and the department completed its first evaluation in 2009 and a subsequent evaluation in 2013. Both evaluations concluded with the finding that no revisions were necessary.<sup>2[2]</sup>

In 2017, the department conducted an evaluation of the existing OSS rule, including gathering feedback on the rules from local health partners and interested parties. In December 2017, the department published the following report on the findings: 2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-Site Sewage Systems.<sup>3[3]</sup> The report identified seven key issues and several minor issues that should be considered for possible revision in rulemaking. The seven key issues were: Definitions, Local management plans, Property transfer inspections, Application of treatment levels, Ultraviolet light disinfection effectiveness and approval, Horizontal setbacks (system location) and Statewide service provider licensing. The department briefed the board in January 2018 and the Board directed staff to file a CR-101, Preproposal Statement of Inquiry. Staff filed the CR-101 as WSR 18-06-082 on March 6, 2018.<sup>4[4]</sup>

The Washington state legislature passed Senate Bill 5503 in the 2019 legislative session, and it was codified as RCW 43.20.065.<sup>5[5]</sup> The bill addressed repair and replacement of failed systems and system inspections. The law has been addressed in the rulemaking.

To assist and inform the rule revision process, and to ensure that chapter 246-272A WAC consistently promotes safe and effective operation of OSS, the board requested input and review from a statewide representation of diverse interested parties. The department formed the On-Site Rule Revision Committee (ORRC) in June 2018 to serve as this group and foster communication and cooperation between interested parties. The ORRCs role was informal and advisory to the department in this rulemaking. The ORRC proposed, made recommendations, and gave input to the rule. ORRC members include representatives from industry, regulators, consumers, and academia. Two subcommittees were formed to advise on policy and technical issues. The department drafted issue papers on several key topics for both subcommittees. These subcommittees worked on topics, held votes on topics, and ultimately made recommendations to the entire ORRC. The ORRC used a majority rule when considering amendments that were forwarded to the department. There were proposals with unanimous support and others with a simple majority.

The ORRC met nine times between June 2018 and February 2020 as a full committee and the department convened many associated subcommittee meetings that reported out to the full ORRC. The department shared a draft with interested parties for informal review and comment. In addition, the department conducted three in-person and one web-based public workshops concluding in October 2019. Based on comments received, the department made several changes to the draft rules. The department worked with environmental health directors from different areas of the state on the ORRC and separately to help fine tune the draft rules.

**The objectives of the proposed OSS rules are to:**

- Incorporate the most recent science and technology standards for OSS;
- Ensure OSS are inspected periodically in all areas of the state to determine whether they are functioning properly to avoid contamination and environmental degradation resulting from a failure; and
- Establish a mechanism for local and state governments to enforce OSS practices that protect the environment and residents of WA state from OSS safety hazards.

The department assumes businesses will have to hire professional engineers, designers, installers, pumpers, and maintenance service providers in various situations to prepare documents and to provide other professional services as described in the significant analysis.

**Identification and summary of which businesses are required to comply with the proposed rule using the North American Industry Classification System (NAICS).**

**SBEIS Table 1. Summary of Businesses Required to comply to the Proposed Rule**

NAICS Code <sup>6[6]</sup>	NAICS Business Description	Number of businesses in Washington State	Minor Cost Threshold <sup>7[7]</sup>
541330	Engineering Services	1,717	\$7,717
562991	Septic Tank and Related Service	118	\$2,661

<sup>2[2]</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>3[3]</sup> [2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-site Sewage Systems](#)

<sup>4[4]</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>5[5]</sup> [RCW 43.20.065: On-site sewage system failures and inspections—Rule making](#)

<sup>6[6]</sup> U.S. Census Bureau, [North American Industry Classification System](#) (NAICS).

<sup>7[7]</sup> Governor’s Office for Regulatory Innovation and Assistance, Regulatory Fairness Act Tools & Guidance, [Minor Cost Threshold Calculator](#)

327390	Other Concrete Product Manufacturing	49	\$15,846
326199	All Other Plastics Product Manufacturing	98	\$18,869
562998	All Other Miscellaneous Waste Management Services (Maintenance Service Providers)	42	\$14,287
238910	Site Preparation Contractors	2,373	\$4,017
333318	Commercial and Service Industry Machinery Manufacturing (Manufacturers)	109	\$9,003
531210	Offices of Real Estate Agents and Brokers	2,751	\$3,168
237210	Land Subdivision	195	\$4,213

**Analysis of probable costs of businesses in the industry to comply with the proposed rule and includes the cost of equipment, supplies, labor, professional services, and administrative costs. The analysis considers if compliance with the proposed rule will cause businesses in the industry to lose sales or revenue.**

**Sectional Analysis:** The sectional analysis includes sections that result in compliance costs to businesses. It does not include sections where businesses provide services to customers, for example the costs of completing an inspection of an OSS for a client. This is because costs are passed to the clients and clients pay for these additional costs, in this case OSS owners will pay the cost of the services. These costs are not included in this analysis because businesses elect to provide these services and are not obligated to do so. The department anticipates that most new requirements will not cause businesses to lose sales or revenue, with potential exceptions.

**Cost Survey:** To help better understand the costs of each section of the rule, the department developed a cost survey surveying local government environmental health directors, wastewater program staff, and industry members associations that represent them. Cost survey details and methodology are outlined in the Significant Analysis (available upon request).

**WAC 246-272A-0120 Proprietary treatment product registration—Process and requirements.**

**Description:** This section establishes the required content and submittal process for manufacturers to use to register their products.

**Cost:** The department received survey responses from nine manufacturers. The department also does not collect cost estimates for non-compliance events so did not complete a survey on the cost of the compliance plan because this only applies if a manufacturer is having problems. SBEIS Table 2 shows the estimated costs for maintenance service providers of taking a pair of samples for E. coli or fecal coliform. Only one of six manufacturers indicated they would hire a third-party contractor to take the required 25 sample sets during a routine maintenance visit due to logistical restrictions. Additionally, 6 out of 11 manufacturers indicated that they already maintain a company website so posting required materials was solely cost to update websites. Six manufacturers provided cost estimates to post the materials. The table does not include the cost of 25 pairs of samples. The department contacted and received cost information for 50 samples. The department was given a cost of \$28 to \$65 per sample<sup>8[8]</sup> depending on the test technique; for a total cost for 50 samples ranging between \$2,000 and 3,250. <sup>9[9]</sup>

**SBEIS Table 2. Estimated cost to adhere to the Field Verification component of the proprietary treatment product registration, process, and requirements\* (from SA Table 6)**

Description	Cost Frequency	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Cost to collect a pair (one influent AND one effluent) of samples, during a routine maintenance service visit NOT including travel	Unit	5	4.28 - 47.50	24	23.66	16.65
Cost to collect a pair (one influent AND one effluent) of samples, during a non-routine maintenance service visit (including travel)	Unit	5	For one pair 50 – 292  For 25 pairs 1,250 - 7,300	65	147.10	122.81
Cost to take the pair of influent and effluent samples to the lab	Unit	5	68.50 – 190	120	126.90	50.82

Cost to complete a product field verification process report (not including sampling costs)	Unit	6	144 - 48,000	3188	10,353	18,682
Cost to hire a service provider or a third-party sampler to collect 25 pairs of samples	Unit	6	5,225 - 100,000	20,000	34,038	35,936
Cost to post required materials on website	One-time	6	20 – 450	65	141	170

\*In the past two years the department has received applications for four treatment productions and one distribution product, which helps to estimate the total cost.

**Potential impact on Businesses:** Manufacturers of treatment units will need to arrange for sampling of at least 25 installations of each of their products that are registered as providing DL1, DL2, or TLN treatment. Manufacturers may conduct this sampling or hire a third party to conduct it. It will entail developing a sampling plan, contacting owners and arranging for site visits, collecting samples, delivering samples to a laboratory for analysis, and writing a report synthesizing the laboratory results. If the results demonstrate that the product does not meet the registered treatment level, the product will be reassessed and may be reassigned to a treatment level or be removed from registration. If it is removed from registration, it can no longer be sold in Washington.

### **WAC 246-272A-0200 Permit requirements**

**Description:** This section specifies the permit application content when a person proposes the installation, repair, modification, connection to, or expansion of an OSS. The proposed change adds a requirement for site maps to include 1) horizontal separations as noted in Table IV in the rule, 2) an elevation benchmark, and 3) relative elevations of system components.

**Cost:** SBEIS Table 3 and Table 4 show the anticipated one-time cost for designers and engineers to add the specified items to their designs. The results of our survey found that 34 of 40 Designer respondents already include these new components in their site plans. Therefore, they would not have additional costs to comply with the rule. The department received survey responses from 10 designers and 10 engineers about adding new elements to designs. SBEIS Table 3 & SBEIS Table 4 presents the estimated costs.

**SBEIS Table 3. Estimated cost to Designers to adhere to permit requirements (from SA Table 7)**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
One-time cost to add horizontal separations as noted in Table IV into design process	4	6.25-900	250	352	385
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>Low-end range**</b>	4	6.25-500	175	164	122
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>High-end range**</b>	4	12.50-500	225	241	209
One-time cost to add elevation benchmark as noted in Table IV into design process*	10	6.25-1,200	150	306	409
One-time cost to add relative elevations of system components as noted in Table IV into design process*	7	6.25-900	81	223	316
Unit cost to add relative elevations of system components on one site map* <b>Low-end range**</b>	7	6.25-512	150	170	188
Unit cost to add relative elevations of system components on one site map* <b>High-end range**</b>	6	12.50 - 368	170	368	503

8[8] Range: \$28 per sample (Lewis County) to \$65 per sample. [AmTest Laboratories](#) quoted \$40/sample.

9[9] \$28 X 50 samples = \$1,400, \$65 X 50 samples = \$3,250.



\*These are items covered under WAC 332-130-145 (1).

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

**SBEIS Table 4. Estimated cost to Professional Engineers to adhere to permit requirements (from SA Table 8)**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
One-time cost to add horizontal separations as noted in Table IV into design process	8	180 - 22,500	11,050	10,765	7,531
One-time cost to add elevation benchmark as noted in Table IV into design process	10	150 - 8,000	800	1,620	2,348
Unit cost to add elevation benchmarks on one site map <b>Low-end range**</b>	9	37.50 - 3,250	390	731	1,014
Unit cost to add elevation benchmarks on one site map <b>High-end range**</b>	9	300 - 5,200	700	1,351	1,531
One-time cost to add relative elevations of system components as noted in Table IV into design process*	6	200 - 8,000	795	1,932	3,019

\*These are items covered under WAC 332-130-145(1).

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

**Potential impact on Businesses:** Designers and engineers will need to incorporate the new items required as part of a permit application and site plan. The department anticipates that there will be an initial period of added costs, effort, and learning while designers and engineers incorporate the new requirements into their practices and routines. However, over time, these requirements are expected to become part of their routine data collection and reporting with marginal impacts.

**WAC 246-272A-0210 Location**

**Description:** This section establishes minimum horizontal separations (distance) in Table IV of this section for septic tanks, drainfield and building sewers to various water sources to prevent pollution. The proposed change includes adding any or all of the following components to a site map if they exist on the site: 1) non-public in-ground water containment vessels, 2) closed geothermal loop or pressurized non-potable water line, 3) lined stormwater detention pond; 4) unlined stormwater infiltration pond; or 5) Subsurface stormwater infiltration or dispersion component.

**Cost:** The department received survey responses from 4 designers and 8 engineers on the cost of adding any or all the new source types to site maps. SBEIS Table 5 presents the estimated costs.

**SBEIS Table 5. Estimated cost to include any of all source types to a site map (from SA Table 9)**

Description	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
<b>Designer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	4	6.25 - 900	250	352	385
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range*</b>	4	6.25 - 500,241	175	164	122
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range*</b>	4	12.50 - 500	225	241	209
<b>Engineer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	8	180 - 22,500	11,050	10,766	7.531

One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range*</b>	7	0 - 6,000	520	1,207	2,129
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range*</b>	7	300 - 72,000	900	11,121	26,850

\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost to compliance.

**Potential impact on Businesses:** The proposed setbacks will impact some developments (individual lots and subdivisions). By requiring additional setbacks, this may restrict how these lots can be laid out (require house placement in different area or potentially the size/footprint of the house). Conceivably, this could prevent the development of a lot if the extent of threats to water sources, with their associated setbacks, resulted in no viable building site unless the applicant requested and received a waiver. This impact is difficult to predict because it depends on the existence of the newly proposed components on the protected sources list.

**WAC 246-272A-0270 Operation, monitoring, and maintenance—Owner responsibilities.**

**Description:** This section describes what owners must do for operating, monitoring, maintaining, and inspection of their OSS to minimize the risk of failure and threat to public health.

**Cost:** If the property owner is in compliance with routine inspection requirements,<sup>10[10]</sup> and the inspection was completed by a third-party inspector, there will likely be no additional costs.

**Potential impact on Businesses:** There is expected to be minimal impact to realtors. Real estate purchases in Washington are contracted through a Purchase and Sale Agreement (PSA) form. This form requires an inspection of the OSS. Buyers are currently allowed to waive this requirement. The realtor is responsible for ensuring that the PSA is completed and recording that either the OSS is inspected, or that the buyer has waived the OSS inspection. Under the proposed revisions, the buyer would no longer be permitted to waive the OSS inspection and the realtor would be responsible for recording that the inspection was complete. To reiterate the above, if the property owner is not in compliance with routine inspection requirements there will likely be no additional costs, if the property owner is not in compliance with routine inspection requirements the additional cost to realtors would be time for the owner to bring the OSS into compliance with routine inspection requirements.

**WAC 246-272A-0320 Developments, subdivisions, and minimum land area requirements.**

**Description:** This section establishes minimum land area requirements when proposing land developments or subdivisions. The proposed amendments have potential costs to businesses by: 1) Increasing minimum lot size, 2) Reducing the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies, 3) Establishing minimum useable land area as a new requirement, and 4) Updating requirements for sub-sized lots. For a more detailed description of these changes see the Significant Analysis.

**Cost:**

**Part 1 Increase minimum lot size:** The department developed tables that show the modest impact of the proposed increase of minimum lot size to lots that can be subdivided (shown in the Significant Analysis). The proposed increase ranges from 500 square feet to 1,000 square feet, depending on soil type. As an example, for soil type 2, the change will require a landowner to have a minimum of .30 of an acre lot to create a lot compared to the .29 acre (1/100 of an acre impact) and for a 10-lot subdivision the minimum size of subdividable lot would have to be 11/100 of acre larger.

**Potential impact on Businesses:** In general, the department does not anticipate that the proposed rule will impact developers' sales/revenue. The department acknowledges that there could be potential scenarios where developers are affected by the rule but in general most subdivisions will not be affected. The potential impact of the rule could be seen if the development is over 20 acres AND the developer is developing the lots to be as small as possible.

**Part 2 Reduce the maximum unit volume of sewage per day per acre:** SBEIS Table 6 describes the change from 3.5 to 3.35 maximum volumes of sewage per day per acre for non-residential uses on lots served by public water supplies. To understand the costs, SBEIS Table 6 and SBEIS Table 7 outline the maximum unit volume of sewage per acre under the current and proposed rule.

**SBEIS Table 6. Calculation of maximum unit volume of sewage per acre under current rule (from SA Table 20)**

Current Rule	
Known Variables	Minimum Lot Size = 12,500 sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre

per acre for non-residential uses on lots served by public water supplies	$43,560 \text{ sq ft} / 12,500 \text{ sq ft} = 3.48 \approx 3.5$ Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage $3.5 \text{ Unit Volumes of Sewage per Acre} \times 450 \text{ gallons per day} = \mathbf{1,575 \text{ Gallons of Sewage per Day per Acre}}$

**SBEIS Table 7. Calculation of maximum unit volume of sewage per acre under proposed rule (from SA Table 21)**

Proposed Rule	
Known Variables	Minimum Lot Size = 13,000 sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage per acre for non-residential uses on lots served by public water supplies	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre $43,560 \text{ sq ft} / 13,000 \text{ sq ft} = 3.35$ Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage $3.35 \text{ Unit Volumes of Sewage per Acre} \times 450 \text{ gallons per day} = \mathbf{1,508 \text{ Gallons of Sewage per Day per Acre}}$

The proposed amendment maximum quantity of sewage that can be generated by non-residential uses on lots served by public water supplies is therefore reduced from 1,575 gallons per day per acre to 1,508 gallons per day per acre. This is a reduction of 67 gallons per day per acre (a decrease of about 4%).

Potential impact on Businesses: The department is unable to estimate how this will affect businesses. The department acknowledges that businesses could be impacted by the rule by the reduction of 67 gallons of sewage per day per acre.

**Part 3 Establish minimum useable land area as a new requirement:** The cost to designers to incorporate the proposed minimum useable land requirement into an OSS design was collected during the cost survey, but as the costs will likely be passed onto the consumer and not be a cost to businesses, the department did not include the cost in this section.

Potential impact on Businesses: Lots created for commercial usage that will be served by an OSS will be required to have a minimum area of land that is usable for an OSS. Land subdivisions that will be served by OSS will need to be planned and configured so that each lot contains the required minimum usable land area.

**Part 4 Update requirements for sub-sized lots:** The amendments are based on the premise that lots sized in compliance with Table XI in the rule adequately protect groundwater and surface water resources from nitrogen impacts. Smaller lot sizes are allowed if nitrogen is treated at the same proportion that the lot is smaller than the Table XI requirement. This allows OSS to be installed on lots that do not meet Table XI's requirements (sub-sized lots) while ensuring that groundwater and surface water is protected. Using this methodology, new planned developments can be designed with lots as small as half the size of Table XI's minimum lot sizes by installing nitrogen treatment technology that takes the place of the land area that is otherwise used to treat and dilute nitrogen. Developers may choose to pay more for OSS which treats nitrogen in exchange for using less land area and get more lots from a subdivision.

Potential impact on Businesses: Developers may choose to pay more for OSS that treats nitrogen in exchange for using less land area. The result is more lots from a subdivision and a higher cost OSS on each lot.

#### **Summary of all Costs**

Due to the large number of requirements of the proposed rule, coupled with the fact that many of the requirements do not universally apply to businesses, many costs are indeterminate, and it is not possible to compute the total incremental costs of the revised rules. The department anticipates that most new requirements will not cause businesses to lose sales or revenue, with potential exceptions as noted in this document.

#### **Analysis on if the proposed rule may impose more than minor costs for businesses in the industry. Includes a summary of how the costs were calculated.**

Yes, the costs of the proposed rule are greater than the minor cost threshold (SBEIS Table 8).

**Summary of how this determination was made.**

SBEIS Table 8 shows the reported estimated costs of selected sections of the rule (that will affect businesses) and that the proposed rule will likely impose more than minor costs for businesses in the industries.

**SBEIS Table 8. Summary of costs to businesses**

NAICS name/number	Minor Cost Threshold (\$)	Requirement/section	Reported Estimated Cost (\$)*
Engineers / 541330	\$7,117	One-time cost to incorporate the items that you currently do not include from current Table IV into the design process (WAC 246-272A-0210)	\$10,000
			\$12,100
			\$15,625
			\$16,900
			\$22,500
Manufacturers / 33318	\$9,003	Cost to hire a service provider or a third-party sampler to collect 25 pairs of samples (WAC 246-272A-0120)	\$20,000
			\$20,000
			\$50,000
			\$100,000

\*Each cost listed represents an individual response from the survey. Results are not intended to be summed but intended to be the cost to each individual business to comply with the individual rule section.

**Determination on if the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule.**

Yes, the department believes the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule.

**Explanation of the determination**

The department makes this determination based on examining cost per employee criteria. Many of the cost are comparable for small and large businesses. Therefore, because smaller businesses have fewer employees, their cost per employee will be higher (disproportionate) than the cost per employee of larger businesses.

Thoughts on disproportionate impacts to small businesses:

Installers will need to incorporate new requirements into their installation practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. This may cause some uncertainties for installers as contracts are bid and accepted under the rule's new requirements. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed to customers with no long-term negative impacts on installers.

Engineers and Designers will need to incorporate new requirements into their design practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. This may cause some uncertainties for engineers and designers as contracts are bid on and accepted under the rule's new requirements. Engineering firms and designers are generally adept at learning new requirements and applying their costing structure to ensure that costs are covered, and profits maintained and appropriate margins. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed on to customers with no long-term negative impacts to engineers or designers.

Maintenance Service Providers are often some of the largest companies involved in the onsite sewage industry. Maintenance service providers will need to incorporate new requirements into their installation practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. In particular, new requirements for inspections may be challenging for maintenance service providers to incorporate into their practices and costing structures. This may cause some uncertainties for maintenance service providers as service is provided under the rule's new requirements. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed to customers with no long-term negative impacts on installers.

Manufacturers vary from very small and local to very large and international. Manufacturers of disinfecting proprietary treatment products will be required to conduct field verification of all of their registered products. This is a new requirement and practice and may elevate costs to manufacturers as they undertake field verification of their products. Over time, the new requirements are expected to become common practice with costs minimized and processes streamlined. The department assumes most costs will be passed to customers with no long-term negative impacts to manufacturers. Some manufacturers may elect to adjust their prices to offset the projected impacts while others are expected to wait to review impacts before adjusting prices.

Realtors will need to ensure that OSS property transfer inspections happen for all property sales, unless you are already in compliance with routine inspection requirements in the rule. This is already part of their work. The Purchase and Sale Agreement that accompanies all property sales includes an OSS inspection addendum. The new requirements will preclude buyers from waiving this inspection. There is expected to be little to no long-term negative impact to realtors.

Developers will need to plan subdivisions with slightly larger lot sizes if they are subdividing/building at the minimum lot sizing (i.e., the maximum density) allowed. The number of lots created from a subdivision would be impacted if the lots were the smallest size allowed and the subdivision was over 20 acres. The department does not have information on the frequency of this type of subdivision required to make a determination of the disproportionate impact to small businesses but anticipates that the impacts would be marginal when compared to proceeds from sale of lots.

**If the proposed rule has a disproportionate impact on small businesses, the following steps have been identified and taken to reduce the costs of the rule on small businesses. If costs cannot be reduced an explanation has been provided below about why the costs cannot be reduced.**

**1. Reducing, modifying, or eliminating substantive regulatory requirements.**

The department convened the on-site rule revision committee (ORRC). Its members took great interest in minimizing the impact of the draft rules by reducing, modifying, and eliminating the requirements when appropriate. The ORRC included eight representatives from industry, including manufacturers, installers, designers, engineers, maintenance service providers and realtors. The department also was aware and considered the impact of every provision when drafting the rules.

**2. Simplifying, reducing, or eliminating recordkeeping and reporting requirements.**

Similar to above, the ORRC was very aware and attempted to limit the impact to all parties when drafting the rules and attempted to simplify, reduce and eliminate recordkeeping and reporting requirements when possible.

**3. Reducing the frequency of inspections.**

The rule does not require inspections of any businesses. OSS is required to be inspected to protect public health. Most OSS are owned and operated by private residential owners. Some businesses are served by an OSS. The proposed rule requires all OSS to be inspected at the time of property transfer. The proposal allows the local health officer to remove the property transfer inspection for any OSS that is in compliance with routine inspections requirements that are already required for all OSS. This will significantly reduce the frequency of inspections.

**4. Delaying compliance timetables.**

The department plans to recommend delaying the effective date of most provisions in the rule by one year to enable local health officers, industry practitioners, and interested parties to work on implementation. The department also plans to recommend delaying implementation of the property transfer inspection provision by two additional years to allow more time to prepare for implementation. The board will take these recommendations into consideration at the time of the public hearing and rule adoption.

**5. Reducing or modifying fine schedules for noncompliance; or**

The proposed rules do not add any new fining authority or new fine schedules.

**6. Any other mitigation techniques including those suggested by small businesses or small business advocates.**

Several changes that will reduce burdens and save costs for small businesses are included in the proposed rule. Some of the proposed improvements include:

- Streamlining and digitizing the proprietary product renewal process;
- Adding testing and registration options for proprietary products;
- Adding a provision that manufacturers of proprietary products can use replacement components that their products have not been tested with in cases of supply chain or manufacturing disruption; and
- Adding an allowance for local health officers to develop a policy allowing remediation practices.

**Description of how small businesses were involved in the development of the proposed rule.**

The ORRC included eight representatives from industry, including manufacturers, installers, designers, engineers, maintenance service providers and realtors. Each of these representatives represented the interests of small businesses. The ORRC gave input on all aspects of the draft rule that was released for informal comment. The department received and reviewed several comments from small businesses and small business advocates. The department made adjustments to the draft rule to reduce burdens and perceived burdens noted by commentators.

The department also developed a proposed revision to include the new proprietary product field verification requirement as proposed by the ORRC to the standards document that details the processes of registering proprietary products. The department invited all manufacturers that currently have registered proprietary treatment products in Washington, as well as representatives of the state and national manufacturers' associations, to participate in a workgroup to draft this document.

**The estimated number of jobs that will be created or lost in result of the compliance with the proposed rule.**

The impact of the revised rules on jobs is indeterminate. However, as the rule increases the number of inspections, this could result in increased employment for inspectors, pumpers, and maintenance service providers.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Peter Beaton

Address: Department of Health, PO Box 47824, Olympia WA 98504-7824  
Phone: (360) 236-3150  
Fax: N/A  
TTY: 711  
Email: peter.beaton@doh.wa.gov  
Other:

**Date:** October 24, 2023

**Name:** Michelle Davis, MPA

**Title:** Executive Director, Washington State Board of Health

**Signature:**

A handwritten signature in cursive script that reads "Michelle A. Davis". The signature is written in black ink on a white background.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0001 Purpose, objectives, and authority.** (1) The purpose of this chapter is to protect the public health by minimizing:

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

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

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

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

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

(3) The state board of health is authorized under RCW 43.20.050 to establish minimum requirements for the department of health and local boards of health, and consistent with RCW 43.70.310 integrating the preservation of public health with protection of the environment in order to endorse policies in common.

(4) This chapter is intended to coordinate with other applicable statutes and rules for the design of (~~on-site sewage systems~~) OSS under chapter 18.210 RCW and chapter 196-33 WAC.

(5) This chapter is intended to coordinate with other applicable statutes for land use planning under chapters 36.70 and 36.70A RCW, and the statutes for subdivision of land under chapter 58.17 RCW.

(6) The local health officer may designate low-lying marine shorelines in their jurisdiction.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0005 Administration.** The local health officers and the department shall administer this chapter under the authority and requirements of chapters 70.05, 70.08, (~~(70.118,)~~) 70.46, 70A.105, 70A.110, and 43.70 RCW. RCW 70.05.060(7) authorizes local health officers to charge fees for the administration of this chapter.

NEW SECTION

**WAC 246-272A-0007 Applicability.** (1) The local health officer:

(a) Shall apply this chapter to OSS for treatment, siting, design, installation, and operation and maintenance measures treating sewage and dispersing effluent from residential sources with design flows up to 3,500 gallons per day;

(b) May apply this chapter to 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 residential sources;

(c) May not apply this chapter to industrial wastewater.

(2) The department shall apply the requirements of this chapter for the registration of proprietary treatment and distribution products.

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

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

(b) Remains valid for a period of not more than five years from the date of approval or issuance, or remains valid for an additional year beyond the effective date of this chapter, whichever has the most lenient expiration date; and

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

(4) This chapter does not apply to facilities regulated as reclaimed water use under chapters 90.46 RCW and 173-219 WAC.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0010 Definitions.** (~~((1) Acronyms used in this chapter:~~

~~"ANSI" means American National Standards Institute.~~

~~"BOD" means biochemical oxygen demand, typically expressed in mg/L.~~

~~"CBOD<sub>5</sub>" means carbonaceous biochemical oxygen demand, typically expressed in mg/L.~~

~~"FC" means fecal coliform, typically expressed in number colonies/100 ml.~~

~~"LOSS" means a large on-site sewage system (see chapter 246-272B WAC).~~

~~"NSF" means National Sanitation Foundation International.~~

~~"O&G" (formerly referred to as FOG) means oil and grease, a component of sewage typically originating from food stuffs (animal fats or vegetable oils) or consisting of compounds of alcohol or glycerol with fatty acids (soaps and lotions). Typically expressed in mg/L.~~

~~"OSS" means on-site sewage system.~~

~~"RS&G" means recommended standards and guidance.~~

~~"SSAS" means a subsurface soil absorption system.~~

~~"TAC" means the technical advisory committee established in WAC 247-272A-0400.~~

~~"TN" means total nitrogen, typically expressed in mg/L.~~

~~"TSS" means total suspended solids, a measure of all suspended solids in a liquid, typically expressed in mg/L.~~

~~"USEPA" means United States Environmental Protection Agency.~~

~~(2) Definitions used in this chapter:)~~

The definitions used in this section apply throughout this chapter unless the context clearly indicates otherwise:

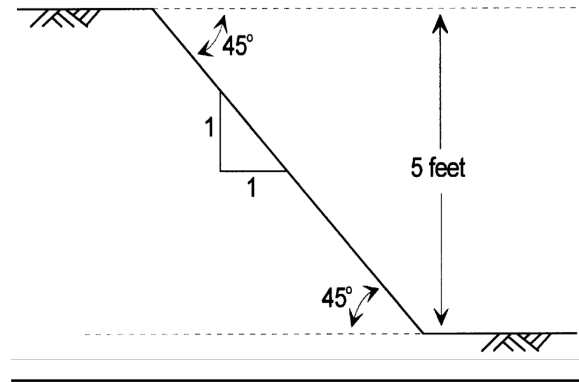
(1) "Additive" means a commercial product added to an ((on-site sewage system)) OSS intended to affect the performance or aesthetics of an ((on-site sewage system)) OSS.

(2) "ANSI" means American National Standards Institute.



(3) "Approved" means a written statement of acceptability issued by the local health officer or the department.

(4) "Bank" means any naturally occurring slope greater than 100 percent (45 degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows:



(5) "Bed" means a soil dispersal component consisting of an excavation with a width greater than three feet.

(6) "Black water" means any waste from toilets or urinals.

(7) "BOD" means biochemical oxygen demand, typically expressed in mg/L.

(8) "Building drain" means that part of the lowest piping of a building's drainage system that receives the discharge of sewage from pipes inside the walls of the building and conveys it to the building sewer beginning two feet outside the building wall.

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

(10) "CBOD<sub>5</sub>" means carbonaceous biochemical oxygen demand, typically expressed in mg/L.

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

(12) "Conforming system" means any (~~on-site sewage system~~) OSS or component, meeting any of the following criteria:

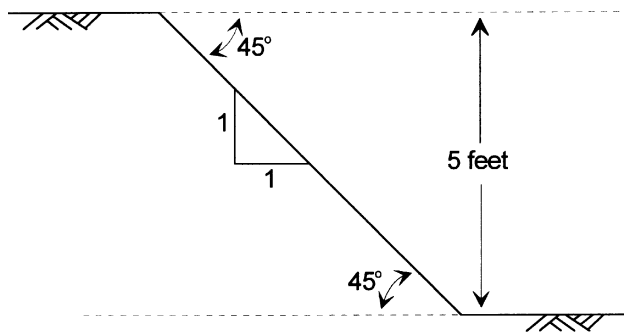
(a) In full compliance with new construction requirements under this chapter; or

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

(c) Permitted by the waiver process under WAC 246-272A-0420 (~~that assures public health protection by higher treatment performance or other methods~~).

(13) "Cover material" means soil placed over a soil dispersal component composed predominately of mineral material with no greater than (~~ten~~) 10 percent organic content. Cover material may contain an organic surface layer for establishing a vegetative landscape to reduce soil erosion.

(14) "Cuts (~~and/or banks~~)" means any (~~naturally occurring or~~) artificially formed slope greater than (~~one hundred~~) 100 percent (~~(forty-five)~~) 45 degrees) and extending vertically at least five feet from the toe of the slope to the top of the slope as follows:



(15) "Department" means the Washington state department of health.

(16) "Designer" means a person who matches site and soil characteristics with appropriate on-site sewage technology. Throughout this chapter this term applies to both ~~((on-site sewage treatment system))~~ OSS designers licensed under chapter 18.210 RCW and professional engineers licensed under chapter 18.43 RCW.

(17) "Design flow" means the maximum volume of sewage a residence, structure, or other facility is estimated to generate in a ~~((twenty-four-hour))~~ 24-hour period. It incorporates both an operating capacity and a surge capacity for the ~~((system))~~ OSS during periodic heavy use events. The sizing and design of the ~~((on-site sewage system))~~ OSS components are based on the design flow.

(18) "Development" means the creation of a residence, structure, facility, subdivision, site, area, or similar activity resulting in the production of sewage.

(19) "Disinfection" means the process of destroying pathogenic microorganisms in sewage through the application of ultraviolet light, chlorination, or ozonation.

(20) "Distribution technology" means any arrangement of equipment ~~((and/))~~ or materials that distributes sewage within an ~~((on-site sewage system))~~ OSS.

(21) "DL" means disinfection level.

~~((("Drain field" see subsurface soil absorption system (SSAS) and soil dispersal component.))~~

(22) "Drainrock" means clean washed gravel or crushed rock ranging in size from three-quarters inch to two and one-half inches ~~((7))~~ and containing no more than two percent by weight passing a US No. 8 sieve and no more than one percent by weight passing a US No. 200 sieve.

(23) "DS&G" means department standards and guidance.

(24) "*E. coli*" means *Escherichia coli* bacteria. Counts of these organisms are typically used to indicate potential contamination from sewage or to describe a level of needed disinfection, typically expressed as colony forming units/100 ml.

(25) "Effluent" means liquid discharged from a ~~((septic))~~ sewage tank or other ~~((on-site sewage system))~~ OSS component.

(26) "EPA" means United States Environmental Protection Agency.

(27) "Expanding clay" means a clay soil with the mineralogy of clay particles, such as those found in the Montmorillonite/Smectite Group, which causes the clay particles to expand when they absorb water, closing the soil pores, and contract when they dry out.

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

(a) Causes the sewage quantity or quality to exceed the existing design flow of the ~~((on-site system))~~ OSS, for example, when a resi-

dence is increased from two to three bedrooms or a change in use from an office to a restaurant; or

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

(29) "Extremely gravelly" means soil with (~~sixty~~) 60 percent or more, but less than (~~ninety~~) 90 percent rock fragments by volume.

(30) "Failure" means a condition of an (~~on-site sewage system~~) OSS or component that threatens the public health by inadequately treating sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include:

(a) Sewage on the surface of the ground;

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

(c) Sewage leaking from a sewage tank or collection system;

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

(e) Inadequately treated effluent contaminating groundwater or surface water; or

(f) Noncompliance with standards stipulated on the permit.

(31) "Fecal coliform" or "FC" means bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests. Counts of these organisms are typically used to indicate potential contamination from sewage or to describe a level of needed disinfection (~~Generally~~) typically expressed (~~as colonies per~~) in colony forming units/100 ml.

(32) "Fill" means unconsolidated material that:

(a) Meets soil types 1-6 textural criteria and is used as part of a dispersal component;

(b) Is used to change grade or to enhance surface water diversion; or

(c) Is any other human-transported material.

(33) "Flood plain" means an area that is low-lying and adjacent to a stream or river that is covered by water during a flood.

(34) "GPD" means gallons per day.

(35) "Gravelly" means soils with (~~fifteen~~) 15 percent or more, but less than (~~thirty-five~~) 35 percent rock fragments by volume.

(~~"Gray water" means sewage from~~) (36) "Greywater" means sewage from any source in a residence or structure that has not come into contact with toilet or urinal wastes, including bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. (~~It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes.~~)

(37) "Groundwater" means subsurface water occupying the zone of saturated soil, permanently, seasonally, or as the result of the tides. Indications of groundwater may include:

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

(b) Spots or blotches of different color or shades of color interspersed with a dominant color in soil, caused by reduction and oxidation of iron. These color patterns are redoximorphic features, commonly referred to as mottling. Redoximorphic features often indicate the intermittent presence of groundwater and may indicate poor aeration and impeded drainage. (~~Also see "water table."~~)

(38) "Holding tank sewage system" means an (~~on-site sewage system which~~) OSS that incorporates a sewage tank without a discharge

outlet, the services of a sewage pumper/hauler, and the offsite treatment and disposal for the sewage generated.

(39) "Hydraulic loading rate" means the amount of effluent applied to a given treatment step, (~~in this chapter~~) expressed as gallons per square foot per day or ((+)gal/sq.ft./day((+)).

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

(41) "Infiltrative surface" means the surface within a treatment component or soil dispersal component to which effluent is applied and through which effluent moves into original, undisturbed soil or other porous treatment media.

(42) "Installer" means a person approved by the local health officer to install (~~on-site sewage systems~~) an OSS or OSS components.

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

(44) "LOSS" means a large on-site sewage system under chapter 246-272B WAC.

(45) "Maintenance" means the actions necessary to keep the (~~on-site sewage system~~) OSS components functioning as designed.

(46) "Maintenance service provider" means a management entity certified by the local health officer and conducts a comprehensive analysis of an OSS.

(47) "Malfunction" means a damaged or deficient previously conforming OSS component that may be corrected by means of a minor repair.

(48) "Massive structure" means the condition of a soil layer in which the layer appears as a coherent or solid mass not separated into peds of any kind.

(49) "mg/L" means milligrams per liter.

(50) "ml" means milliliter.

(51) "Minimum usable land area" means the minimum land area within the minimum lot size required per development using an OSS, which is based on soil type and type of water supply. Minimum usable land area is free of all physical restrictions and meet minimum vertical and horizontal separations.

(52) "Minor repair" means the repair or replacement of any of the following existing damaged or malfunctioning OSS components except that the repair or replacement of a sewage tank, treatment component, or soil dispersal component is not considered a minor repair:

(a) Control panels;

(b) Building sewers;

(c) Any other portions of tightline in the OSS;

(d) Risers and riser lids;

(e) Sewage tank baffles;

(f) Effluent filters;

(g) Sewage tank pumps and lids;

(h) Pump control floats; and

(i) OSS inspection boxes and ports.

(53) "Moderate structure" means well-formed distinct peds evident in undisturbed soil. When disturbed, soil material parts into a mixture of whole peds, broken peds, and material that is not in peds.

(54) "Modification" means the alteration of an existing OSS component that does not result in an expansion of the system. A modification is not considered a repair.

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

(~~"On-site sewage system" (OSS) means an integrated system of components, located on or nearby the property it serves, that conveys, stores, treats, and/or provides subsurface soil treatment and dispersal of sewage. It consists of a collection system, a treatment component or treatment sequence, and a soil dispersal component. An on-site sewage system also refers to a holding tank sewage system or other system that does not have a soil dispersal component.~~)

(56) "NSF" means National Sanitation Foundation International.

(57) "O&G" means oil and grease, a component of sewage typically originating from food stuffs such as animal fats or vegetable oils, or consisting of compounds of alcohol or glycerol with fatty acids such as soaps and lotions, typically expressed in mg/L.

(58) "Operating capacity" means the average daily volume of sewage an OSS can treat and disperse on a sustained basis. The operating capacity, which is lower than the design flow, is an integral part of the design and is used as an index in OSS monitoring.

(59) "Ordinary high-water mark" means the mark on lakes, streams, springs, and tidal waters, found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland with respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter. The following (~~definitions~~) conditions apply where the ordinary high-water mark cannot be found:

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

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

(60) "OSS" means on-site sewage system, an integrated system of components, located on or nearby the property it serves, which conveys, stores, treats, and provides subsurface soil treatment and dispersal of sewage. It consists of a collection system, a treatment component or treatment component sequence, and a soil dispersal component. An OSS also refers to a holding tank sewage system or other system that does not have a soil dispersal component. The term "on-site sewage system (OSS)" does not include any system regulated by a water quality discharge permit issued under chapter 90.48 RCW.

(61) "PAG" means policy advisory group.

(62) "PDP" means product development permit.

(63) "Ped" means a unit of soil structure such as blocks, column, granule, plate or prism formed by natural processes.

(64) "Person" means any individual, corporation, company, association, society, firm, partnership, joint stock company, or any governmental agency, or the authorized agents of these entities. For the

purposes of WAC 246-272A-0430 and 246-272A-0440, a person is defined to include:

(a) Applicant;

(b) Reapplicant;

(c) Permit holder; or

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

(i) Board members;

(ii) Officers;

(iii) Managers;

(iv) Partners;

(v) Association members;

(vi) Agents; and

(vii) Third persons acting with the knowledge of such persons.

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

(66) "Platy structure" means soil that contains flat pedes that lie horizontally and often overlap. This type of structure (~~will~~) impedes the vertical movement of water.

(67) "Pressure distribution" means a system of small diameter pipes equally distributing effluent throughout (~~a SSAS~~) an OSS, as described in the (~~department's "Recommended Standards and Guidance") DS&G for Pressure Distribution Systems, ("2001") 2022~~. A subsurface drip system (~~may be used wherever the chapter requires~~) is considered a pressure distribution system.

(68) "Professional engineer" means a person who is currently licensed as an engineer under the provisions of chapter 18.43 RCW.

(69) "Proprietary product" means a sewage treatment and distribution technology, method, or material subject to a patent or trademark.

(70) "Public domain technology" means a sewage treatment and distribution technology, method, or material not subject to a patent or trademark.

(71) "Public sewer system" means a sewerage system:

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

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

(72) "Puget Sound counties" means Clallam, Island, Kitsap, Jefferson, Mason, San Juan, Seattle-King, Skagit, Snohomish, Tacoma-Pierce, Thurston, and Whatcom. All other counties are defined as non-Puget Sound counties.

(73) "Pump chamber" means a watertight receptacle placed after a septic tank, sewage tank, or other treatment facility that contains the required controls and alarms to convey sewage effluent to a treatment or dispersal component.

(74) "Pumper" means a person approved by the local health officer to remove and transport sewage or septage from (~~on-site sewage systems~~) an OSS.

(75) "Record drawing" means an accurate graphic and written record of the location and features of the OSS that are needed to properly monitor, operate, and maintain that system. Also known as an "as-built" drawing.

(76) "Remediation" means any action, approved by the local health officer, which attempts to restore the function of a previously con-

forming OSS dispersal component that has failed. Remediation is not considered:

(a) A minor repair;

(b) A repair;

(c) An additive; or

(d) A treatment or distribution technology that allows the OSS to meet a specific treatment level.

(77) "Repair" means the relocation, replacement or reconstruction of a failed (~~on-site sewage system~~) OSS, or any OSS components not included in the list for a minor repair, which have failed in order to restore the OSS to a nonfailure status.

(78) "Reserve area" means an area of land approved for the installation of a conforming (~~system~~) OSS that is protected and maintained for replacement of the OSS upon its failure.

(79) "Residential sewage" means sewage having the constituency and (~~strength~~) quality typical of (~~wastewater from domestic households~~) residential septic tank effluent consistent with treatment level E identified in Table III in WAC 246-272A-0110.

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

(81) "Rock fragment" means rock or mineral fragments having a diameter of two millimeters or more (~~for example~~). Examples include, gravel, cobbles, stones, and boulders.

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

(83) "Septage" means (~~the mixture of solid wastes, scum, sludge, and liquids pumped from within septic tanks, pump chambers, holding tanks, and other OSS components~~) liquid or solid material removed from sewage tanks, cesspools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, recreational vehicle holding tanks, or similar systems that receive only domestic sewage.

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

(~~"Septic system" see on-site sewage system or OSS.~~)

(85) "Sewage" means any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places.

(86) "Sewage quality" means contents in sewage that include:

(a) CBOD<sub>5</sub>, TSS, and O&G;

(b) Other parameters that (~~can~~) may adversely affect treatment. Examples include pH, temperature, and dissolved oxygen; or

(c) Other constituents that create concerns due to specific site sensitivity. Examples include fecal coliform, E. coli, phosphorus, and nitrogen.

(87) "Sewage tank" means a prefabricated or cast-in-place septic tank, pump (~~tank/dosing~~) chamber, dosing chamber, holding tank, grease interceptor, recirculating filter tank or any other tanks as they relate to (~~on-site sewage systems~~) OSS including tanks for use with proprietary products.

(88) "Soil dispersal component" means a technology that releases effluent from a treatment component into the soil for dispersal, final treatment and recycling.

(89) "Soil log" means a detailed description of soil characteristics providing information on the soil's capacity to act as an acceptable treatment and dispersal medium for sewage.

(90) "Soil scientist" means a person certified by the American Society of Agronomy as a Certified Professional Soil Scientist.

(91) "Soil type" means one of seven numerical classifications of fine earth particles and rock fragments as described in WAC 246-272A-0220 (2) (e).

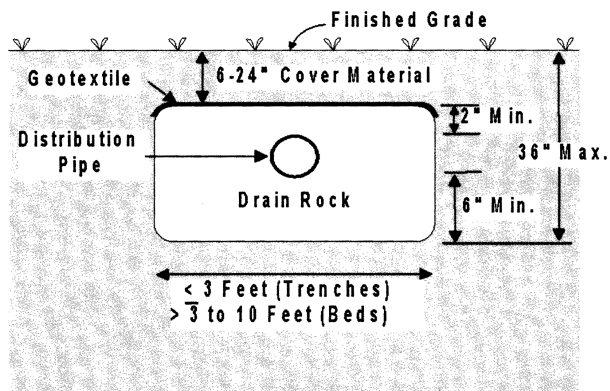
(92) "Standard methods" means the ~~((20th))~~ 23rd Edition of Standard Methods for the Examination of Water and Wastewater, prepared and published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

(93) "Strong structure" means peds are distinct in undisturbed soil. They separate cleanly when soil is disturbed, and the soil material separates mainly into whole peds when removed.

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

(95) "Subsurface drip system" means an efficient pressurized wastewater distribution system that can deliver small, precise doses of effluent to soil surrounding the drip distribution piping ~~((called)), also known as dripline((+)), as described in the ((department's "Recommended Standards and Guidance))~~ DS&G for Subsurface Drip Systems, 2020. ~~(("))~~

~~(("Subsurface soil absorption system" (SSAS) means))~~ (96) "SSAS" means a subsurface soil absorption system that is a soil dispersal component of trenches or beds containing either a distribution pipe within a layer of drainrock covered with a geotextile, or an approved gravelless distribution technology, designed and installed in ~~((original, undisturbed, unsaturated soil providing at least minimal vertical separation as established in this chapter))~~ suitable soil, with either gravity or pressure distribution of the treatment component effluent.



(97) "Suitable" means original, undisturbed, unsaturated soil of soil types 1-6 with at least the vertical separation established in this chapter.

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



(99) "TAG" means the technical advisory group established in WAC 246-272A-0400.

(100) "Timed dosing" means delivery of discrete volumes of sewage at prescribed time intervals.

(101) "TN" means total nitrogen, typically expressed in mg/L.

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

(103) "Treatment component sequence" means any series of treatment components that discharges treated sewage to the soil dispersal component.

(104) "Treatment level" means one of (~~six~~) the following levels (A, B, C, DL1, DL2, DL3, E, & N) (~~used in these rules~~) to:

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

(b) Match site conditions of vertical separation and soil type with treatment components. (~~Treatment levels used in these rules are not intended to be applied as field compliance standards. Their intended use is for establishing treatment product performance in a product testing setting under established protocols by qualified testing entities.~~)

~~"Treatment sequence" means any series of treatment components that discharges treated sewage to the soil dispersal component.)~~

(105) "Trench" means a soil dispersal component consisting of an excavation with a width of three feet or less.

(106) "TSS" means total suspended solids, a measure of all suspended solids in a liquid, typically expressed in mg/L.

(107) "Unit volume of sewage" means:

(a) Flow from a single-family residence;

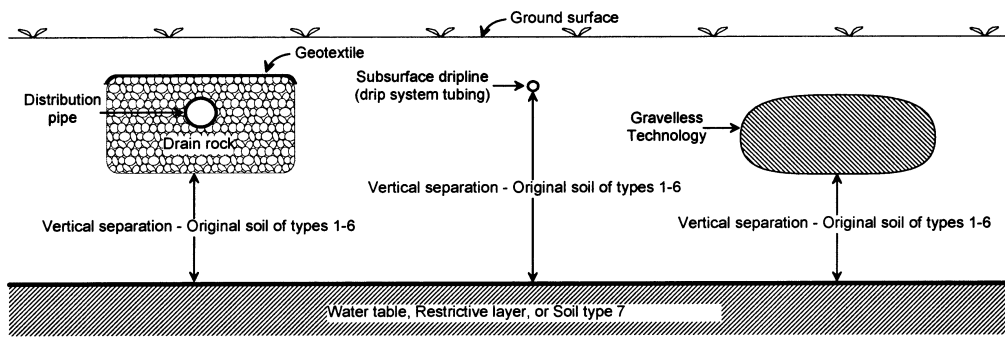
(b) Flow from a mobile home site in a mobile home park; or

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

(108) "Unknown OSS" means an OSS that was installed without the knowledge or approval of the local health jurisdiction, including those that were installed before such approval was required.

(109) "Unpermitted sewage discharge" means the discharge of sewage or treated effluent from an unknown OSS.

(110) "Vertical separation" means the depth of (~~unsaturated, original, undisturbed soil of soil types 1-6~~) suitable soils between the bottom infiltrative surface of a soil dispersal component and the highest seasonal water table, a restrictive layer, or soil type 7 as illustrated below by the profile drawing of subsurface soil absorption systems:



(111) "Very gravelly" means soil containing ~~((thirty-five))~~ 35 percent or more, but less than ~~((sixty))~~ 60 percent rock fragments by volume.

(112) "Water supply protection zone" means the land area around each existing or proposed well site to protect the water supply from contamination.

(113) "Water table" means the upper surface of the groundwater, whether permanent or seasonal. Also see "groundwater" as defined in this section. (( ))

(114) "Well" means any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering or withdrawal of groundwater for agricultural, municipal, industrial, domestic, or commercial use. ~~((Excluded are))~~ The following are not considered a well:

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

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

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

(d) A dewatering well used temporarily for the purpose of a sewage tank or pump chamber installation.

## GENERAL REQUIREMENTS

### NEW SECTION

**WAC 246-272A-0013 Local rules.** (1) The local health officer shall enforce the requirements of this chapter until a local board of health adopts local OSS regulations. A local board of health may adopt and enforce local rules governing OSS when the local regulations are:

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

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

(2) To apply for department approved local OSS regulations a local board of health shall submit the proposed local regulations to the department.

(3) Within 90 days of receipt of proposed local regulations, the department shall:

(a) Approve the proposed regulations; or

(b) Deny the proposed regulations if the department determines local regulations are not consistent with this chapter or less stringent than this chapter and provide specific reasons for the denial.

(4) Upon receipt of department approval, or after 90 days if the department fails to act, the local board may implement adopted regulations. The local board shall provide a copy of the adopted local regulations to the department.

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

(a) Resubmit revised regulations that address the specific reasons for the denial for department consideration; or

(b) Submit a request to the department to review its denial within 120 days from the date the local board of health receives the specific reasons for the denial.

(6) Upon receipt of request for review of the department denial, the department shall:

(a) Acknowledge the receipt of the request within 30 days; and

(b) Form a mutually acceptable advisory panel to review the department denial and reach an agreement within a reasonable time. The panel shall consist of:

(i) One representative from the department;

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

(iii) One member of the TAG.

(7) If good faith efforts to reach agreement are unsuccessful between the department and a local board of health, the local board of health may appeal the denial to the Washington state board of health for resolution.

(8) Nothing in this chapter shall prohibit the adoption and enforcement of more stringent regulations by a local board of health.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0015 Local management ((and regulation)) plans.**

(1) ((By July 1, 2007,)) The local health officer((s of health jurisdictions in the twelve counties bordering)) for each Puget Sound county shall develop a written local management plan ((that will)) to provide guidance to the local health jurisdiction regarding development and management activities for all OSS within the jurisdiction. The ((plan)) department will review the existing OSS local management plans for all Puget Sound counties within two years of the effective date of the rule. If the department determines a plan revision is necessary upon review, the local health officer shall revise the local management plan for all OSS within the local health jurisdiction consistent with subsection (2) of this section.

(2) At a minimum, the local management plan for Puget Sound counties must specify how the local health jurisdiction will:

(a) Progressively develop and maintain an inventory including the type and location of all known OSS in operation within the jurisdiction;

(b) Identify any areas where OSS could pose an increased public health risk. The following areas shall be given priority in this activity:

(i) Shellfish protection districts or shellfish growing areas;

(ii) Sole source aquifers as designated by the ~~((USEPA))~~ EPA;

(iii) Areas in which aquifers used for potable water as designated under the Washington State Growth Management Act ~~((r))~~ under chapter 36.70A RCW are critically impacted by recharge;

(iv) Designated wellhead protection areas ~~((for))~~ in Group A public water ~~((systems))~~ supplies under chapter 246-290 WAC;

(v) Up-gradient areas directly influencing water recreation facilities designated for swimming in natural waters with artificial boundaries within the waters as described by the Water Recreation Facilities Act ~~((r))~~ under chapter 70.90 RCW;

(vi) Areas designated ~~((by the department of ecology))~~ as special protection areas under WAC 173-200-090 ~~((r Water quality standards for groundwaters of the state of Washington))~~;

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

(viii) Frequently flooded areas including areas delineated by the Federal Emergency Management Agency ~~((and))~~ or as designated under the Washington State Growth Management Act ~~((r))~~ under chapter 36.70A RCW;

(ix) Areas where nitrogen has been identified as a contaminant of concern including, but not limited to, the marine waters of Puget Sound; ~~((and))~~

(x) Areas where phosphorous has been identified as a contaminant of concern;

(xi) Areas where sea level rise may impact adequate horizontal separations to surface water; and

(xii) Other areas designated by the local health officer.

(c) Identify operation, maintenance and monitoring requirements commensurate with risks posed by OSS within the geographic areas identified in (b) of this subsection;

(d) ~~((Facilitate education of homeowners regarding their responsibilities under this chapter and provide operation and maintenance information for all types of systems in use within the jurisdiction~~;

(e) Remind and encourage homeowners to complete the operation and maintenance inspections required by WAC 246-272A-0270;

~~((f))~~ Educate OSS owners about their responsibilities to perform OSS operation and maintenance, including information for owners to complete any inspection required by WAC 246-272A-0270;

(e) Maintain records required under this chapter, including ~~((of))~~ all operation and maintenance activities as identified; ~~((and))~~

~~((g))~~ (f) Enforce OSS owner permit application, operation, monitoring and maintenance and failure repair requirements ~~((defined))~~ in WAC 246-272A-0200 ~~((1))~~ (2), 246-272A-0260, 246-272A-0270, 246-272A-0275, and 246-272A-0280 ~~((1 and 2))~~;

~~((h))~~ (g) Describe the capacity of the local health jurisdiction to ~~((adequately))~~ fund the local ~~((OSS plan, including))~~ management plan, which includes a summary of program expenditures by activity, source of funds, a strategy to fill any funding gaps, and the ability to find failing and unknown systems; and

~~((i) Assure that it))~~ (h) Verify that the local management plan was developed ~~((to coordinate))~~ in coordination with the comprehensive

land use plan of the entities governing development (~~(in the health officer's)~~) within the local health jurisdiction.

~~((2) After being approved by the local board of health following a public hearing, the local health officers required to develop a written plan under subsection (1) of this section shall:~~

~~(a) Supply a copy of the plan to the department;~~

~~(b) Supply a copy of the plan to the entities responsible for land use planning and development regulations in the health officer's jurisdiction; and~~

~~(c) Implement the plan described in subsection (1) of this section.~~

~~(3) The plans of local health jurisdictions required to develop a written plan under subsection (1) of this section shall be submitted to the department by July 1, 2007, and shall be reviewed to ensure the elements described in subsection (1) of this section have been addressed. The department shall provide in writing to the local board of health its review of the completeness of the plan.~~

~~(4) For purposes of this chapter, the local health jurisdictions in marine counties are Clallam, Island, Kitsap, Jefferson, Mason, San Juan, Seattle-King, Skagit, Snohomish, Tacoma-Pierce, Thurston and Whatcom.)~~

(3) The department shall review the local management plan for Puget Sound counties at least once every five years. If the department determines plan revision is necessary upon review of the local management plan described in subsection (2) of this section, the department shall notify the local health officer of their findings.

(4) The local health officer for Puget Sound counties shall:

(a) Review and update the local management plan, as necessary, or at least once every five years;

(b) If after the review the local management plan is updated, provide an opportunity for public input on the local management plan;

(c) Following local board of health approval, submit the local management plan to the department for review;

(d) Implement the local management plan;

(e) Submit an annual report to the department including all of the following in a format specified by the department:

(i) Number of OSS;

(ii) Number of unknown OSS identified;

(iii) Number of failures found;

(iv) Number of failures repaired; and

(v) Status of compliance with inspections required by WAC 246-272A-0270;

(f) Supply a copy of the local management plan to the entities responsible for land use planning and development regulations in the local health jurisdiction.

~~(5) The local health officer((s)) for ((all other jurisdictions not required to develop a written plan under subsection (1) of this section)) a non-Puget Sound county shall develop a written local management plan that will provide guidance to the local health jurisdiction regarding development and management activities for all OSS within the jurisdiction. At a minimum the plan shall include:~~

~~(a) A description of the capacity of the local health jurisdiction to provide education and operation and maintenance information for all types of systems in use within the jurisdiction;~~

~~(b) A description of how the local health officer will remind and encourage homeowners to complete the operation and maintenance inspection required by WAC 246-272A-0270; and~~

(c) A description of the capacity of the local health jurisdiction to adequately fund the local OSS plan.

(6) In order to implement the plan described in subsections (1) and (5) of this section, the local health officer shall require the owner of the OSS to:

(a) Comply with additional requirements identified in the plan for the location, design, or performance; and

(b) Comply with the conditions of the operational permit if one is required.

(7) In order to implement the plan described in subsections (1) and (5) of this section, the local health officer may require the owner of the OSS to:

(a) Ensure additional maintenance and monitoring of the OSS;

(b) Provide dedicated easements for inspections, maintenance, and potential future expansion of the OSS; and

(c) Place a notice to title identifying any additional requirements for OSS operation, maintenance and monitoring(~~;~~ and

~~(d) Have an inspection of the OSS at the time of property transfer including the preparation of a "record drawing" if necessary.~~

~~(8) No later than July 1, 2006, the department shall develop guidance on local management programs to assist marine local health jurisdictions in plan development.~~

~~(9) Until such time as the local board of health decides to adopt its own rules, the local health officer shall enforce this chapter. Local boards of health may adopt and enforce local rules and regulations governing on-site sewage systems when the local regulations are:~~

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

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

~~(10) A local board of health shall apply for departmental approval of local regulations by initiating the following procedure:~~

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

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

~~(i) Approve the regulation in writing; or~~

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

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

~~(11) Upon receipt of departmental approval or after ninety days without notification, whichever comes first, the local board may implement adopted regulations. The local board shall provide a copy of the adopted local regulations to the department.~~

~~(12) If the department denies approval of local regulations, the local board of health may:~~

~~(a) Resubmit revised regulations for departmental consideration; or~~

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

~~(13) Upon receipt of written request for review of the departmental denial, the department shall:~~

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

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

~~(i) One departmental employee;~~

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

~~(iii) One member of the technical advisory committee.~~

~~(14) If good faith efforts to reach agreement are unsuccessful, the local board of health may appeal the denial to the Washington state board of health for resolution.~~

~~(15) Nothing in this chapter shall prohibit the adoption and enforcement of more stringent regulations by local health departments.~~

~~(16) In the plan required in subsection (1) of this section and in local regulations, the local health officer may address water conservation and include options for the nonpotable reuse of gray water. Any treatment and dispersal of gray water outside the residence or structure must comply with this chapter).~~

(8) The department shall maintain and update guidance and provide technical assistance to assist local health jurisdictions in local management plan development.

### **( (GENERAL REQUIREMENTS) )**

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

#### **WAC 246-272A-0025 Connection to public sewer system. (1)**

~~((When))~~ Upon the failure of an existing OSS within the service area of a sewer utility, the local health officer shall:

(a) Permit the repair or replacement of the OSS only if a conforming OSS can be designed and installed, excluding OSS designed in compliance with or proposing to use Table X in WAC 246-272A-0280; or

(b) Require connection to a public sewer system if the sewer utility allows the connection and has adequate public sewer services ((are)) available within ((two hundred feet of the residence or facility, the local health officer, upon the failure of an existing on-site sewage system may:

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

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

~~(2) Except as noted in subsection (1) of this section, the owner of a failure shall abandon the OSS under WAC 246-272A-0300 and connect the residence or other facility to a public sewer system when:~~

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

~~(b) The sewer utility allows the sewer connection.~~

~~(3-))~~ 200 feet from where the existing building drain connects to the existing building sewer, or where no building drain exists, within 200 feet from where the sewer line begins, as measured along the usual or most feasible route of access.

(2) The owner of a ~~((residence or other facility))~~ structure served by ~~((a system meeting the requirements of Table IX of this chapter))~~ an OSS permitted as a repair under Table X in WAC 246-272A-0280 shall abandon the OSS ~~((according to the requirements))~~ as specified in WAC 246-272A-0300, and connect the ~~((residence or other facility))~~ structure to a public sewer system when:

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

(b) An adequate public sewer becomes available within ~~((two hundred))~~ 200 feet of the ~~((residence or other facility))~~ existing structure, or in cases where no building drain exists, within 200 feet from where the sewer for the building begins, as measured along the usual or most economically feasible route of access; and

(c) The sewer utility allows the sewer connection.

~~((4))~~ (3) Local boards of health may require a new development to connect to a public sewer system to protect public health.

~~((5))~~ (4) Local boards of health shall require new development or a development with a failing ~~((system))~~ OSS to connect to a public sewer system if it is required by the comprehensive land use plan or development regulations.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0100 Sewage technologies.** (1) The department ~~((may develop recommended))~~ shall maintain standards and guidance ~~((to assist))~~ for local health officers ~~((in permitting different types of))~~ to permit sewage treatment and distribution technologies ~~((including the following four broad categories:~~

~~(a) Public domain treatment technologies (e.g., sand filters);~~

~~(b) Proprietary treatment products (e.g., aerobic treatment systems and packed bed filters);~~

~~(c) Public domain distribution technologies (e.g., gravel or generic gravel substitutes, gravity and pressure distribution methods and materials);~~

~~(d) Proprietary distribution products (e.g., subsurface dripline products or gravelless distribution products)).~~

(2) ~~((All types of))~~ Before the local health officer permits sewage technologies, the sewage technologies must ~~((have either standards))~~ be registered for use as described in this chapter, have standards for use as described or referenced in this chapter, or ~~((departmental recommended standards and guidance before the local health officer may permit them. Recommended standards and guidance may include information and detail such as:~~

~~(a) Application;~~

~~(b) Design;~~

~~(c) Installation;~~

~~(d) Operation, monitoring and maintenance;~~

~~(e) Performance expectations; and~~

~~(f) Sources of information.))~~ have DS&G describing sewage technologies uses as maintained by the department.

(3) The department may remove, restrict, or suspend a proprietary product's approval for use based on failure to meet required standards or conditions of approval.



**WAC 246-272A-0110 Proprietary treatment products—(~~Certification and~~) Eligibility for registration.** (1) Manufacturers shall register (~~their~~) a proprietary treatment product(~~s~~) with the department using the process described in WAC 246-272A-0120 before (~~the~~) a local health officer may permit (~~their~~) use of the product.

(2) To (~~qualify~~) be eligible for product registration, manufacturers desiring to sell or distribute proprietary treatment products in Washington state shall:

(a) Verify product performance through testing using the testing protocol established in Table I (~~and register their product with the department using the process described in WAC 246-272-0120~~) of this section;

(b) Report product test results of influent and effluent sampling obtained throughout the testing period (including normal and stress loading phases) for evaluation of constituent reduction according to the requirements in Table II of this section;

(c) Demonstrate product performance according to the requirements in Table III of this section. All (~~thirty-day~~) 30-day averages and geometric means obtained throughout the test period must meet the identified threshold values to qualify for registration at that threshold level; and

(d) (~~For registration at levels A, B, and C~~) Verify bacteriological reduction according to WAC 246-272A-0130 for product registration utilizing disinfection levels DL1, DL2, and DL3.

(3) Manufacturers verifying product performance through testing according to the following standards or protocols shall have product testing conducted by a testing facility accredited by ANSI:

(a) (~~ANSI/NSF~~) NSF/ANSI Standard 40(—): Residential Wastewater Treatment Systems;

(b) NSF/ANSI Standard 41: Non-Liquid Saturated Treatment Systems;

(c) NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation; (~~or~~)

(d) (~~Protocol~~) NSF/ANSI Standard 245: Residential Wastewater Treatment Systems - Nitrogen Reduction; or

(e) NSF/ANSI Standard 385: Residential Wastewater Treatment Systems - Disinfection Mechanics for Bacteriological Reduction described in WAC 246-272A-0130.

(4) Manufacturers verifying product performance through testing according to (~~the following standards or protocols shall have product testing conducted by a testing facility meeting the requirements established by the Testing Organization and Verification Organization, consistent with the test protocol and plan:~~

~~(a) EPA/NSF Protocol for the Verification of Wastewater Treatment Technologies; or~~

~~(b) EPA Environmental Technology Verification Program protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction.)~~ EPA Method 1664, Revision B and using a wastewater laboratory certified by the Washington department of ecology shall provide supporting information, including flow data, and influent and effluent quality sampling results from a minimum of three installations with similar design loading to demonstrate product performance to Category 2 standards.

(5) Treatment levels ((used in these rules are not intended to be applied as field compliance standards. Their intended use is for establishing)) established in Table III of this section are intended to establish treatment product performance in a product testing setting under established protocols by qualified testing entities. Field compliance standards for proprietary treatment products shall follow the requirements in WAC 246-272A-0120(5).

(6) Manufacturers may submit a written request to substitute components of a registered product's construction in cases of supply chain shortage or similar manufacturing disruptions impacting installations, operation, or maintenance. The substitution request must include a report stamped, signed, and dated by a professional engineer demonstrating the substituted component will not negatively impact performance or diminish the effect of the treatment, operation, and maintenance of the original registered product. If approved, substitution is authorized until rescinded by the department.

(( **TABLE I** ))  
**Table I**

<b>Testing Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Required Testing Protocol</b>
<b>Category 1</b> Designed to treat ((sewage with strength typical of a residential source when)) septic tank effluent ((is)) anticipated to be equal to or less than treatment level E.	((ANSI/NSF)) NSF/ANSI 40—Residential Wastewater Treatment Systems ((protocols)) versions dated between ((July 1996 and the effective date of these rules)) <u>January 2009 and May 31, 2021</u>
<b>Category 2</b> Designed to treat ((high-strength sewage when septic tank)) effluent ((is)) or sewage with sewage quality parameters anticipated to be greater than treatment level E.  (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	((EPA/NSF Protocol for the Verification of Wastewater Treatment Technologies/ EPA Environmental Technology Verification (April 2001))) <u>EPA Method 1664, Revision B (February 2010)</u>
<b>Category 3</b> Black water component of residential sewage (such as composting* and incinerating** toilets).	NSF/ANSI Standard 41: Non-Liquid Saturated Treatment Systems ((September 1999)) <u>Versions dated between February 2011 and May 31, 2021</u>  **NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation (April 2000)
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	((Protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction/EPA Environmental Technology Verification Program (November, 2000))) <u>NSF/ANSI Standard 245: Residential Wastewater Treatment Systems – Nitrogen Reduction (Versions dated between January 2018 and May 31, 2021)</u>

(( **TABLE II** ))  
**Table II**

<b>Test Results Reporting Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Testing Results Reported</b>
<b>Category 1</b> Designed to treat ((sewage with strength typical of a residential source when)) septic tank effluent ((is)) anticipated to be equal to or less than treatment level E.	Report <u>the following</u> test results of influent and effluent sampling obtained throughout the testing period for evaluation of ((constituent)) reduction ((for the parameters:)) <u>of CBOD<sub>5</sub><sup>2</sup>, and TSS:</u>

**Test Results Reporting Requirements for Proprietary Treatment Products**

	<ul style="list-style-type: none"> <li><input type="checkbox"/> Average</li> <li><input type="checkbox"/> Minimum</li> <li><input type="checkbox"/> Median</li> <li><input type="checkbox"/> 30-day Average (for each month)</li> <li><input type="checkbox"/> Standard Deviation</li> <li><input type="checkbox"/> Maximum</li> <li><input type="checkbox"/> Interquartile Range</li> </ul> <p>For <u>evaluation of</u> bacteriological reduction performance(☺):  <u>Report complete treatment component sequence testing as described in Table III, Category 1.</u></p> <p>For <u>evaluation of performance meeting treatment level DL1:</u>  <u>(1) Report fecal coliform test results of influent and effluent sampling by geometric mean from samples drawn within ((thirty)) 30-day or monthly calendar periods, obtained from a minimum of three samples per week throughout the testing period. See WAC 246-272A-0130.</u>  <u>(2) Report complete testing results for supplemental bacteriological reduction technology<sup>1</sup> when the required treatment levels for fecal coliform in Table III, Category 1 are not met by the primary proprietary treatment product.</u></p> <p>For <u>evaluation of performance meeting treatment levels DL2 or DL3:</u>  <u>(1) Report fecal coliform test results of influent and effluent sampling by geometric mean from samples drawn within 30-day or monthly calendar periods, obtained from a minimum of three samples per week throughout the testing period as described in WAC 246-272A-0130; or</u>  <u>(2) Report complete testing results for supplemental bacteriological reduction technology<sup>1</sup> when the required treatment levels for fecal coliform in Table III, Category 1 are not met by the primary proprietary treatment product.</u></p> <p>For <u>all options</u>, test report must also include the individual results of all samples drawn throughout the test period.</p>
<p><b>Category 2</b> Designed to treat ((high-strength sewage when septic tank)) effluent ((is)) or sewage with sewage quality parameters anticipated to be greater than treatment level E.                   (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, <u>atypical</u> residences, etc.)</p>	<p>Report all individual test results and full test average values of influent and effluent sampling obtained throughout the testing period for the <u>evaluation of reduction of</u>: CBOD<sub>5</sub>, TSS and O&amp;G. Establish the treatment capacity of the product tested in pounds per day for CBOD<sub>5</sub>.</p>
<p><b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).</p>	<p>Report test results on all required performance criteria according to the format prescribed in the NSF test protocol described in Table I.</p>
<p><b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b></p>	<p>Report test results on all required performance criteria according to the format prescribed in the test protocol described in Table I.</p>

(( ~~TABLE III~~ ))  
**Table III**

((Product Performance Requirements for Proprietary Treatment Products						
Treatment Component/Sequence Category	Product Performance Requirements					
<p><b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than treatment level E.</p>	<p><b>Treatment System Performance Testing Levels</b></p>					
	<p><b>Parameters</b></p>					
	<p><b>Level</b></p>	<p><b>CBOD<sub>5</sub></b></p>	<p><b>TSS</b></p>	<p><b>O&amp;G</b></p>	<p><b>FC</b></p>	<p><b>TN</b></p>
	<p><b>A</b></p>	<p>10 mg/L</p>	<p>10 mg/L</p>	<p>—</p>	<p>200/100 ml</p>	<p>—</p>

<b>((Product Performance Requirements for Proprietary Treatment Products</b>						
<b>Treatment Component/Sequence Category</b>	<b>Product Performance Requirements</b>					
	<b>B</b>	15 mg/L	15 mg/L	—	1,000/100 ml	—
	<b>C</b>	25 mg/L	30 mg/L	—	50,000/100 ml	—
	<b>D</b>	25 mg/L	30 mg/L	—	—	—
	<b>E</b>	125 mg/L	80 mg/L	20 mg/L	—	—
	<b>N</b>	—	—	—	—	20 mg/L
	Values for Levels A – D are 30-day values (averages for CBOD <sub>5</sub> , TSS, and geometric mean for FC.) All 30-day averages throughout the test period must meet these values in order to be registered at these levels. Values for Levels E and N are derived from full test averages.					
<b>Category 2</b> Designed to treat high-strength sewage when septic tank effluent is anticipated to be greater than treatment level E.  (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	All of the following requirements must be met:  (1) All full test averages must meet Level E; and (2) Establish the treatment capacity of the product tested in pounds per day for CBOD <sub>5</sub> .					
<b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).	Test results must meet the performance requirements established in the NSF test protocol.					
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Test results must establish product performance effluent quality meeting Level N, when presented as the full test average.))					

<b>Product Performance Requirements for Proprietary Treatment Products</b>							
<b>Treatment Component/Sequence Category</b>	<b>Product Performance Requirements</b>						
<b>Category 1</b> Designed to treat effluent anticipated to be equal to or less than treatment level E.	<b>Treatment System Performance Testing Levels</b>						
		<b>Parameters</b>					
	<b>Level</b>	<b>CBOD<sub>5</sub> mg/L</b>	<b>TSS mg/L</b>	<b>O&amp;G mg/L</b>	<b>FC col/100 mL</b>	<b>TN mg/L</b>	<b><i>E. coli</i> cfu/100 mL</b>
	<b>A</b>	10	10	—	—	—	—
	<b>B</b>	15	15	—	—	—	—
	<b>C</b>	25	30	—	—	—	—
	<b>DL1</b>	25	30	—	200	—	126
	<b>DL2</b>	—	—	—	1,000	—	—
	<b>DL3</b>	—	—	—	50,000	—	—
	<b>E</b>	228	80	20	—	—	—
	<b>N</b>	—	—	—	—	30 (or 50% reduction based on mass loading as required in WAC 246-272A-0320)	—

<b>Product Performance Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Product Performance Requirements</b>
	<p>Values for Levels A - D are 30-day values (averages for CBOD<sub>5</sub>, TSS, and geometric mean for FC.) All 30-day averages throughout the test period must meet these values in order to be registered at these levels.</p> <p>Values for Levels E and N are derived from full test averages.</p>
<p><b>Category 2</b> Designed to treat high-strength sewage when septic tank effluent is anticipated to be greater than treatment level E.</p> <p>(Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)</p>	<p>All of the following requirements must be met:</p> <p>(1) All full test averages must meet Level E; and</p> <p>(2) Establish the treatment capacity of the product tested in pounds per day for CBOD<sub>5</sub>.</p>
<p><b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).</p>	<p>Test results must meet the performance requirements established in the NSF test protocol.</p>
<p><b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b></p>	<p>Test results must establish product performance effluent quality meeting Level N, when presented as the full test average.</p>

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0120 Proprietary treatment product registration—Process and requirements.** (1) Manufacturers shall register (~~their~~) proprietary treatment (~~product(s)~~) products with the department by submitting a complete registration application for review and approval in the format provided by the department, including:

(a) Manufacturer's name, mailing address, (~~street address and~~) phone number, email address, and website address;

(b) Contact (~~individual's~~) person's name, title, mailing address, (~~street~~) email address, and phone number. The contact (~~individual~~) person must be vested with the authority to represent the manufacturer in this capacity;

(c) Name, including specific brand and model, of the proprietary treatment product;

(d) A description of the function of the proprietary treatment product along with any known limitation on the use of the product;

(e) Product description and technical information, including process flow drawings and schematics; materials and characteristics; component design specifications; design capacity, volumes and flow assumptions and calculations; components; dimensioned drawings and photos;

(f) For treatment systems in Category 2, daily capacity of the model or models in pounds per day of CBOD<sub>5</sub>;

(g) Siting and installation requirements;

(h) Detailed description, procedure and schedule of routine service and system maintenance events;

(i) Estimated operational costs for the first five years of the treatment component's life. This ~~((shall))~~ must include both estimated annual electricity costs, and routine maintenance costs, including replacement of parts;

(j) Identification of information subject to protection from disclosure of trade secrets;

(k) Most current dated copies of product brochures ((&)) and manuals: Sales & Promotional; Design; Installation; Operation & Maintenance; and Homeowner Instructions;

(l) The most recently available product test protocol dated no earlier than the dates in WAC 246-272A-0110 Table I and the results report;

(m) A signed and dated certification by the manufacturer's agent specifically including the following statement, "I certify that I represent (INSERT MANUFACTURING COMPANY NAME) and I am authorized to prepare or direct the preparation of this application for registration. I attest, under penalty of law, that this document and all attachments are true, accurate, and complete. I understand and accept that the product testing results reported with this application for registration are the parameters and values to be used for determining conformance with Treatment System Performance Testing Levels established in chapter 246-272A WAC";

(n) A signed and dated certification from the testing entity including the statement, "I certify that I represent (INSERT TESTING ENTITY NAME), that I am authorized to report the testing results for this proprietary treatment product. I attest, under penalty of law, that the report about the test protocol and results is true, accurate, and complete"; and

(o) The fee described in WAC ~~((246-272A-990))~~ 246-272-2000.

(2) Products within a single series or model line, ~~((+))~~ sharing distinct similarities in design, materials, and capacities ~~((+))~~, may be registered under a single application, consistent with the provisions of their test protocol for the certification of other products within a product series. Products outside of the series or model line must be registered under separate applications.

(3) Upon receipt of ~~((an))~~ a registration application the department shall:

(a) Verify that the application is complete including dated and current copies of all of the required manuals; and

(b) If ~~((complete))~~ approved, place the product on the department's list of ((proprietary)) registered on-site treatment and distribution products.

(4) All registrations are valid for up to one year, expiring on December 31<sup>st</sup> of each year. Fees are not prorated.

(5) In order to renew a proprietary treatment product technology registration, a manufacturer shall:

(a) Apply for renewal of product registration using the ~~((form or in the))~~ format provided by the department ~~((-))~~;

(b) Submit ~~((the results of))~~ any of the following applicable reports:

(i) A retesting ~~((, if the product has completed retesting))~~ report from the testing entity according to the protocol required for registration ~~((and a report from the testing entity has been issued since initial registration or previous renewal. Renewal shall be based on the most recent test results.))~~ as identified in this section;

(ii) A field verification performance report as identified in the proprietary products DS&G, dated the effective date of the rule. If field performance results demonstrate that the product has failed to meet the requirements in the DS&G, the manufacturer shall report to the department describing the reasons for the failure to meet the requirements consistent with the DS&G;

(c) Provide an ~~((affidavit))~~ attestation to the department verifying whether or not the product has changed over the previous year. If the product has changed, the ~~((affidavit))~~ attestation must also include a full description of the changes. If the product has changed in a way that affects performance, the product may not be renewed and shall meet the requirements for initial registration~~((-))~~;

(d) Provide a statement that all required dated manuals are current, or submit the updated and dated new manuals; and

(e) Submit the fee established in WAC ~~((246-272A-990))~~ 246-272-2000.

(6) As part of product registration renewal, the department shall:

(a) Request field assessment comments from local health officers no later than October 31st of each year. These comments may include concerns about a variety of field assessment issues, including:

(i) Product function, including verification of field performance testing as identified in the DS&G;

(ii) Product reliability~~((r))~~; and

(iii) Problems arising with operation and maintenance;

(b) Discuss with the ~~((TAC))~~ TAG any field assessment information that may impact product registration renewal;

(c) Notify the manufacturer of any product to be discussed with the ~~((TAC))~~ TAG, prior to discussion with the ~~((TAC))~~ TAG, regarding the nature of comments received; ~~((and))~~

(d) Renew the product registration unless:

(i) The manufacturer of a product does not apply for renewal; or

(ii) The department, after deliberation with the ~~((TAC))~~ TAG, concludes product registration renewal should not be given or should be delayed until the manufacturer submits information that satisfactorily answers concerns and issues; and

(e) Provide a compliance plan to the manufacturer within 90 days based on departmental concerns of public health risk related to the product.

(7) The department shall maintain a list of proprietary treatment products meeting the registration requirements established in this chapter. The product registration is a condition of approval for use.

(8) Manufacturers shall have readily accessible product information for designers, ~~((homeowners,))~~ regulators, ~~((system))~~ OSS owners and other interested parties ~~((about their product))~~ posted on the manufacturer's website including the most current dated version of:

(a) Product manuals;

(b) Design instructions;

(c) Installation instructions;

(d) Operation and maintenance;

(e) ~~((Homeowner))~~ Owner instructions; and

(f) How to locate a list of representatives and manufacturer certified maintenance service providers, if any.

**WAC 246-272A-0130 Bacteriological reduction.** This section establishes the requirements for registering bacteriological reduction processes.

(1) Manufacturers shall, for the purpose of product registration as described in WAC 246-272A-0110 and 246-272A-0120 (~~for meeting treatment levels A, B, or C, verify bacteriological reduction performance by sampling for fecal coliform.~~

~~(a) For products not yet tested according to ANSI/NSF Standard 40 testing protocol dated July 1996 or later, the requirements of both ANSI/NSF Standard 40 and the protocol specified in subsection (2) of this section for verifying bacteriological reduction must be met.~~

~~(b) For products that have been tested according to ANSI/NSF Standard 40 dated July 1996 or later but have not yet been tested for bacteriological reduction, treatment performance of the treatment product or sequence may be established based on test results for CBOD<sub>5</sub> and TSS obtained from the previous ANSI/NSF Standard 40 testing and bacteriological reduction performance based on testing according to the protocol in subsection (2) of this section. Provided that the testing entity must verify the influent wastewater stream throughout the bacteriological testing period meets the influent threshold levels for CBOD<sub>5</sub> and TSS required by ANSI/NSF Standard 40 testing protocol):~~

~~(a) For meeting treatment levels DL1 verify bacteriological reduction performance by sampling for fecal coliform or *E. coli*.~~

~~(b) For meeting treatment level DL2 or DL3, verify bacteriological reduction performance by sampling for fecal coliform.~~

(2) All test data submitted for product registration shall be produced by an ANSI accredited, third-party testing and certification organization whose accreditation is specific to on-site wastewater treatment products. Bacteriological reduction performance must be determined (~~while~~) either:

(a) According to the procedures in NSF/ANSI Standard 385 for supplemental bacteriological reduction; or

(b) Concurrent with testing protocol. The treatment product or treatment component sequence (~~is tested~~) testing according to the ((ANSI/NSF)) NSF/ANSI Standard 40 testing protocol. ((During this))

(3) Testing under subsection (2)(b) of this section shall be completed in compliance with the following requirements ((apply)):

(a) Collect samples from both the influent and effluent streams, identifying the treatment performance achieved by the full treatment process, ((+)) component or sequence((+));

(b) Obtain influent characteristics falling within a range of  $10^{(4)}$  -  $10^8$  fecal coliform/100 mL or  $10^2$  -  $10^6$  *E. coli*/100 mL calculated as ((thirty)) 30-day geometric means during the test((+));

(c) Test the influent to any disinfection unit and report the following at each occasion of sampling performed in (d) of this subsection:

(i) Flow rate;

(ii) pH;

(iii) Temperature;

(iv) Turbidity; and

(v) Color((-))



(d) Obtain samples for fecal coliform or E. coli analysis during both the design loading and stress loading periods identified by NSF/ANSI Standard 40. Grab samples shall be collected from both the influent and effluent on three separate days of the week. Each set of influent and effluent grab samples must be taken from a different dosing time frame, either ((+))morning, afternoon, or evening((+)), so that samples have been taken from each dosing time frame by the end of the week((-));

(e) Conduct analyses according to standard methods;

(f) Report the geometric mean of fecal coliform or E. coli test results from all samples taken within ((thirty)) 30-day or monthly calendar periods;

(g) Report the individual results of all samples taken throughout the test period design and stress loading; and

(h) Report all maintenance and servicing conducted during the testing period, including for example, instances of cleaning a UV lamp, or replenishment of chlorine chemicals.

((+3)) (4) Manufacturers may register products in treatment levels ((A)) DL1 and ((B)) DL2 using disinfection.

((+4)) (5) Manufacturers may not register products for treatment level ((C)) DL3 using disinfection.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0140 Proprietary distribution products—Certification ((and registration)) requirements.** (1) ((Manufacturers shall register proprietary distribution products, including gravelless distribution products and subsurface dripline products, with the department before the local health officer may permit their use.

~~(2) Manufacturers desiring to sell proprietary distribution products shall certify that the product(s) meets the standards established in this chapter and register their product(s) with the department using the process described in WAC 246-272A-0145.~~

~~(3)) Proprietary distribution products, including gravelless distribution products and subsurface dripline products, must be registered with the department before permitting, sale, and use. To be eligible for registration as described in WAC 246-272A-0145, products must first be certified as described in this section.~~

(2) To be certified, proprietary gravelless distribution products shall:

(a) Be constructed or manufactured from materials that are nondecaying and nondeteriorating and do not leach chemicals when exposed to sewage and the subsurface soil environment;

(b) Provide liquid storage volume at least equal to the storage volume provided within the ((thirty)) 30 percent void space in a ((twelve)) 12-inch layer of drainrock in a drainrock-filled distribution system. This storage volume must be established by the gravelless distribution products, ((system)) OSS design and installation and must be maintained for the life of the ((system)) OSS. This requirement may be met on a lineal-foot, or on an overall system design basis;

(c) Provide ((suitable)) effluent distribution to the infiltrative surface at the soil interface; and

(d) Maintain the integrity of the trench or bed. The material used, by its nature and its manufacturer-prescribed installation procedure, must withstand the physical forces of the soil sidewalls, soil backfill and the weight of equipment used in the backfilling.

~~((4))~~ (3) Proprietary subsurface dripline products shall:

(a) Be warranted by the manufacturer for use with sewage and for resistance to root intrusion~~((-))~~;

(b) Incorporate emitters with a maximum nominal rated discharge of 1.3 gallons per hour. Emitter discharge rate may be controlled either by use of pressure-compensating emitters or with a pressure regulator~~((-))~~; and

(c) Be color-coded purple to identify that the pipe contains non-potable water from a sewage source.

(4) To be certified by the department, the manufacturer must submit:

(a) A signed and dated statement by the manufacturer's agent specifically including the following statement, "I certify that I represent (INSERT MANUFACTURING COMPANY NAME) and I am authorized to prepare or direct the preparation of this application for product registration. I attest, under penalty of law, that this document and all attachments, are true, accurate, and complete."

(b) A signed and dated statement from the licensed professional engineer including the statement, "I certify that I represent (INSERT PROFESSIONAL ENGINEERING FIRM NAME), that I am authorized to certify the performance characteristics for the proprietary distribution product presented in this application. I attest, under penalty of law, that the technology report is true, accurate, and complete."

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0145 Proprietary distribution product registration**

**—Process and requirements.** (1) Manufacturers shall register their proprietary distribution ~~((product(s)))~~ products with the department by submitting a complete application for review and approval in the format provided by the department, including:

(a) Manufacturer's name, mailing address, ~~((street address, and))~~ phone number, email address, and website address;

(b) Contact ~~((individual's))~~ person's name, title, mailing address, ~~((street))~~ email address, and phone number. The contact ~~((individual))~~ person must be vested with the authority to ~~((act as))~~ represent the agent of the manufacturer in this capacity;

(c) Name, including specific brand and model, of the proprietary distribution product;

(d) A description of the function of the proprietary distribution product along with any known limitations on ~~((its))~~ the use of the product;

(e) Product description and technical information, including schematics; materials and characteristics; component design specifications; design capacity, volumes and flow assumptions and calculations; components; dimensioned drawings and photos;

(f) Siting and installation requirements;

- (g) Detailed description, procedure and schedule of routine service and system maintenance events;
- (h) Identification of information subject to protection from disclosure of trade secrets;
- (i) Most current, dated copies of product brochures and manuals: Sales & Promotional; Design; Installation; Operation & Maintenance; and ((Homeowner)) Owner Instructions;
- (j) For gravelless chamber systems a quantitative description of the actual exposed trench-bottom infiltrative surface area for each model seeking registration;
- (k) A statement from a professional engineer that certifies the technology meets the standards established in WAC 246-272A-0140;
- (l) ~~((A signed and dated certification by the manufacturer's agent specifically including the following statement, "I certify that I represent (INSERT MANUFACTURING COMPANY NAME) and I am authorized to prepare or direct the preparation of this application for product registration. I attest, under penalty of law, that this document and all attachments, are true, accurate, and complete."~~
- ~~(m) A signed and dated certification from the licensed professional engineer including the statement, "I certify that I represent (INSERT PROFESSIONAL ENGINEERING FIRM NAME), that I am authorized to certify the performance characteristics for the proprietary distribution product presented in this application. I attest, under penalty of law, that the technology report is true, accurate, and complete."~~
- ~~(n))~~ The fee established in WAC ((246-272A-0990)) 246-272-2000.
- (2) Products within a single series or model line, ((+)) sharing distinct similarities in design, materials, and capacities ((+)), may be registered under a single application. Products outside of the series or model line must be registered under separate applications.
- (3) Upon receipt of an application the department shall:
- (a) Verify that the application is complete, including dated and current copies of all required manuals; and
- (b) If ~~((complete))~~ approved, place the product on the list of ~~((proprietary))~~ registered on-site treatment and distribution products.
- (4) All registrations are valid for up to one year, expiring on December 31st of each year. Required fees are not prorated.
- (5) In order to renew a proprietary distribution product registration, a manufacturer ~~((must))~~ shall:
- (a) Apply for renewal of product registration using the form or in the format provided by the department;
- (b) Provide an ~~((affidavit))~~ attestation to the department verifying whether or not the product has changed over the previous year. If the product has changed, the ~~((affidavit))~~ attestation must also include a full description of the changes. If the product has changed in a way that affects performance, the product may not be renewed and shall meet the requirements of initial registration; ~~((and))~~
- (c) Provide a statement that all required dated manuals are current, or submit the updated and dated new manuals; and
- (d) Submit the fee established in WAC ((246-272A-0990)) 246-272-2000.
- (6) As part of product registration renewal, the department ~~((shall))~~ will:
- (a) Request field assessment comments from local health officers ~~((no later than October 31st))~~ before November 1st of each year. These comments may include concerns about a variety of field assessment is-

sues, including product function, product reliability, and problems arising with operation and maintenance;

(b) Discuss with the ((TAC)) TAG any field assessment information that may impact product registration renewal;

(c) Notify the manufacturer of any product to be discussed with the ((TAC)) TAG, prior to discussion with the ((TAC)) TAG, regarding the nature of comments received; ((and))

(d) Renew the product registration unless:

(i) The manufacturer of a product does not apply for renewal; or

(ii) The department, after deliberation with the ((TAC)) TAG, concludes product registration renewal should not be given or should be delayed until the manufacturer submits information that satisfactorily answers concerns and issues; and

(e) Provide a compliance plan to the manufacturer within 90 days based on departmental concerns of public health risk related to the product.

(7) The department shall maintain a list of proprietary distribution products meeting the registration requirements established in this chapter. The product registration is a condition of approval for use.

(8) Manufacturers shall have readily accessible product information for designers, ((homeowners,)) regulators, ((system)) OSS owners and other interested parties ((about their product)) posted on the manufacturer's website including the most current dated version of:

(a) Product manuals;

(b) Design instructions;

(c) Installation instructions;

(d) Operation and maintenance;

(e) ((Homeowner)) Owner instructions; and

(f) How to locate a list of representatives and manufacturer certified maintenance service providers, if any.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0170 Product development permits.** (1) A local health officer may issue a ((product development permit (PDP))) PDP for any proprietary treatment component or sequence to be used during a development period. ((In order)) To protect public health during the development period, a complete ((system)) OSS meeting the requirements of this chapter and the site must already be installed. The ((product)) component or sequence under development may then be added to the treatment system allowing the ((product)) developer to gather data about ((the product's)) performance in the field. The PDP allows ((product)) developers to explore ((and develop)) new technologies prior to product testing and registration under WAC 246-272A-0110 and 246-272A-0120. The PDP is not an alternative to testing and registration.

(2) An ((application)) applicant for a PDP ((shall include)) must submit an application to the local health officer including all of the following:

(a) Proof of an existing conforming ((system)) OSS in compliance with all local requirements, or a permit for a conforming ((system))

OSS. The conforming ((~~system~~)) OSS must be installed in its entirety before the PDP becomes valid;

(b) A description of the product under development including performance goals and a description of how the system will be used to treat sewage;

(c) ((~~Documentation of~~)) Financial assurance ((~~that will cover~~)) covering the correction of any potential public health threats or environmental damage resulting from the use of the product under development. Instruments of financial assurance include:

(i) An irrevocable letter of credit in the amount required by the local health officer issued by an entity authorized to issue letters of credit in Washington state;

(ii) Cash or security deposit payable to the local health jurisdiction in the amount required by the local health officer; or

(iii) Any other financial assurance that satisfies the local health officer.

(d) Documentation signed by the owner of the proposed product development site allowing access to the local health officer for inspection of the site; and

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

(3) The local health officer may ((~~stipulate~~)) impose additional requirements for a PDP necessary to ((~~assure~~)) safeguard the performance of the conforming ((~~system~~)) OSS, including providing performance data to the local health officer.

(4) A PDP is a site-specific permit. Product development at multiple sites requires a PDP for each site.

(5) During the term of the PDP, product development, testing and sampling are under the full control of the product developer and all data collected is considered proprietary information.

(6) A PDP is valid for one year and may be renewed by the local health officer.

(7) The product development period is over when the original PDP or any subsequently renewed permits have expired. At this time, the product developer:

(a) Shall, at the direction of the local health officer, remove the product under development from the site, reestablishing all appropriate plumbing and power connections for the conforming ((~~system~~)) OSS.

(b) May subject the product to performance testing described in WAC 246-272A-0110 ((~~in order~~)) to allow the product to be eligible for registration with the department.

(8) The local health officer may revoke or amend a PDP:

(a) If the continued operation or presence of the product under development:

(i) Presents a risk to ((~~the~~)) public health or the environment;

(ii) Causes adverse effects on the proper function of the conforming ((~~system~~)) OSS on the site; or

(iii) Leaks or discharges sewage on the surface of the ground.

(b) If the developer fails to comply with any requirements stipulated on the permit by the local health officer.

(9) The local health officer may charge fees adequate to administer the PDP program.

**WAC 246-272A-0200 Permit requirements.** (1) (~~Prior to beginning the construction process~~) A permit is not required for a minor repair. The local health officer may require the owner to submit information regarding any activities defined as a minor repair for record-keeping purposes.

(2) Except for a minor repair, a person proposing the installation, repair, modification, connection to, or expansion of an OSS, shall (~~report the following~~) 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(~~(7)~~). For example, new installation, repair, expansion, modification, or operational;

(vii) Source of sewage(~~(7)~~). 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(~~(7)~~);

(c) A dimensioned site plan of the proposed initial ((system)) OSS, the reserve area and those areas immediately adjacent that contain characteristics impacting design including:

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

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

(iii) General topography and(~~(7)~~) 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 ((system)) OSS placement, including legal access documents if any component of the OSS is not on the lot where the sewage is generated;  
(~~and~~

(~~(vi)~~) (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 ((system)) 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; ((and))

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

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

~~((2) A permit is not required for replacement, addition, or modification of broken or malfunctioning building sewers, risers and lids, sewage tank lids, sewage tank baffles, sewage tank pumps, pump control floats, pipes connecting multiple sewage tanks, and OSS inspection boxes and ports where a sewage tank, treatment component, or soil dispersal component does not need to be replaced. The local health officer may require the owner to submit information regarding these activities for recordkeeping purposes.))~~

(3) The local health officer may develop the information required in subsection ~~((1))~~ (2) of this section if authorized by local ~~((regulations))~~ rules.

(4) The local health officer shall:

(a) Respond to an application within ~~((thirty))~~ 30 days as required in RCW 70.05.074~~((-))~~;

(b) Permit only public domain treatment technologies that ~~((have departmental RS&G.))~~ are described in this chapter or in a current DS&G;

(c) Permit only proprietary products that are registered by the department ~~((. During the period of transition from the list of approved systems and products to the registered list, the local health officer may permit products on the list of approved systems and products.~~

~~((e))~~;

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

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

~~((e))~~ (f) Specify the expiration date on the permit. The expiration date may not exceed five years from the date of permit issuance;

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

~~((g))~~ (h) If requiring an operational permit, state the period of validity and the date and conditions of renewal including any required field compliance.

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

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

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

(c) ~~((Failure to meet))~~ Noncompliance with the conditions of the permit, this chapter or any local ((regulations)) rules.

~~(6) ((Before the local health officer issues a permit for the installation of an OSS to serve more than one development, the applicant shall show:~~

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

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

~~(i) A recorded easement allowing access for construction, operation, monitoring maintenance, and repair of the OSS; and~~

~~(ii) Identification of an adequate financing mechanism to assure the funding of operation, maintenance, and repair of the OSS.)~~ An applicant for a permit to install an OSS serving more than one development must submit an application that proves the OSS:

(a) Is owned or managed in perpetuity by a public entity;

(b) Is described in a separate writing including, but not limited to, an easement, covenant, contract, or other legal document authorizing access for construction, operation maintenance, and repair; and

(c) If owned privately, is adequately financed.

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

(8) The local health officer may stipulate additional requirements for a particular permit if necessary ~~((for))~~ to protect public health ~~((protection))~~.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0210 Location.** (1) ~~((Persons))~~ OSS shall ~~((design and install OSS))~~ be designed and installed to meet at least the minimum horizontal separations shown in Table IV, Minimum Horizontal Separations:

**Table IV  
Minimum Horizontal Separations**

Items Requiring Setback	From edge of soil dispersal component and reserve area	From sewage tank and distribution box	From building sewer, and nonperforated distribution pipe
Well <del>((or suction line))</del>	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
<u>Nonpublic drinking water well</u>	<u>100 ft.</u>	<u>50 ft.</u>	<u>50 ft.</u>
Public drinking water spring or surface water measured from the ordinary high-water mark	200 ft.	200 ft.	100 ft.



Items Requiring Setback	From edge of soil dispersal component and reserve area	From sewage tank and distribution box	From building sewer, and nonperforated distribution pipe
<u>Nonpublic drinking water spring or surface water ((used as drinking water source)) measured from the ordinary high-water mark<sup>1</sup></u>	100 ft.	50 ft.	50 ft.
<u>Nonpublic, in-ground, drinking water containment vessel<sup>3</sup></u>	<u>20 ft.</u>	<u>10 ft.</u>	<u>10 ft.</u>
<u>Pressurized water supply line or easement for water supply line</u>	10 ft.	10 ft.	10 ft.
<u>Closed geothermal loop<sup>4</sup> or pressurized nonpotable water line</u>	<u>10 ft.</u>	<u>10 ft.</u>	<u>10 ft.</u>
Decommissioned well (decommissioned in accordance with chapter 173-160 WAC)	10 ft.	N/A	N/A
Surface water measured from the ordinary high-water mark	100 ft.	50 ft.	10 ft.
Building foundation/in-ground swimming pool	10 ft.	5 ft.	2 ft.
Property or easement line	5 ft.	5 ft.	N/A
<u>Lined<sup>5</sup> stormwater detention pond<sup>6</sup></u>			
<u>Down-gradient<sup>7</sup>:</u>	<u>30 ft.</u>	<u>N/A</u>	<u>N/A</u>
<u>Up-gradient<sup>7</sup>:</u>	<u>10 ft.</u>	<u>N/A</u>	<u>N/A</u>
<u>Unlined<sup>8</sup> stormwater infiltration pond<sup>6</sup> (up or down-gradient)<sup>7</sup></u>	<u>100 ft.</u>	<u>50 ft.</u>	<u>10 ft.</u>
<u>Irrigation canal or irrigation pond (up or down-gradient)</u>	<u>100 ft.</u>	<u>50 ft.</u>	<u>10 ft.</u>
Interceptor/curtain drains/foundation drains/drainage ditches			
Down-gradient <sup>2</sup> :	30 ft.	5 ft.	N/A
Up-gradient <sup>2</sup> :	10 ft.	N/A	N/A
<u>Subsurface stormwater infiltration or dispersion component<sup>6</sup></u>			
<u>Down-gradient<sup>7</sup>:</u>	<u>30 ft.</u>	<u>10 ft.</u>	<u>N/A</u>
<u>Up-gradient<sup>7</sup>:</u>	<u>30 ft.</u>	<u>10 ft.</u>	<u>N/A</u>
Other site features that may allow effluent to surface			
Down-gradient <sup>2</sup> :	30 ft.	5 ft.	N/A
Up-gradient <sup>2</sup> :	10 ft.	N/A	N/A
Down-gradient cuts or banks with at least 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change	25 ft.	N/A	N/A
Down-gradient cuts or banks with less than 5 ft. of original, undisturbed soil above a restrictive layer due to a structural or textural change	50 ft.	N/A	N/A
<u>((Other adjacent)) Soil dispersal components((<del>subsurface stormwater infiltration systems</del>)) serving a separate OSS</u>	10 ft.	N/A	N/A

<sup>1</sup> If surface water is used as a public drinking water supply, the designer shall locate the OSS outside of the required source water protection area.

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

(2) ((If any condition indicates)) When conditions indicate a greater potential for contamination or pollution, the local health officer may increase the minimum horizontal separations. Examples of

such conditions include, but are not limited to, excessively permeable soils, unconfined aquifers, shallow or saturated soils, dug wells, and improperly abandoned wells.

(3) The local health officer may allow a reduced horizontal separation to not less than two feet from where the property line, easement line, ~~((in-ground swimming pool,))~~ or building foundation is up-gradient.

(4) The local health officer may require an applicant to demonstrate the OSS meets (a), (b), or (c) of this subsection when determining if a horizontal separation to a minimum of 75 feet between an OSS dispersal component and ((an individual)) a water well, ((individual)) spring, or surface water that is not a public water source ((can be reduced to a minimum of seventy-five feet, by the local health officer, and be described as a conforming system upon signed approval by the health officer if the applicant demonstrates)) is allowed:

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

(b) Design and proper operation of an OSS ~~((system-assuring))~~ with enhanced treatment performance beyond that accomplished by meeting the vertical separation and effluent distribution requirements described in Table VI in WAC 246-272A-0230 ~~((Table VI));~~ or

(c) Evidence ~~((of protective conditions involving both))~~ the OSS satisfies the requirements of (a) and (b) of this subsection.

(5) Persons shall design ~~((and/))~~ or install a soil dispersal component only if:

(a) The slope is less than ~~((forty-five))~~ 45 percent ~~((+twenty-four))~~ or 24 degrees ~~((+))~~;

(b) The area is not subject to:

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

(ii) Cover by impervious material;

(iii) Vehicular traffic; or

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

(c) Sufficient reserve area for replacement exists to treat and dispose one hundred percent of the design flow;

(d) The land is stable; and

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

(6) The local health officer may approve a sewer transport line within ten feet of a water supply line if the sewer line is constructed in accordance with section ~~((C1-9))~~ C1-9.1 of the department of ecology's "*Criteria For Sewage Works Design*," ~~((December 1998))~~ 2008.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0220 Soil and site evaluation.** (1) Only professional engineers, designers, or local health officers may perform soil

and site evaluations. Soil scientists may only perform soil evaluations.

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

(a) Report:

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

(A) The initial soil dispersal component; and

(B) The reserve area.

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

(iii) The topography of the proposed initial ~~((system))~~ OSS, the reserve area, and those areas immediately adjacent that contain characteristics impacting the design;

(iv) The drainage characteristics of the proposed initial ~~((system))~~ OSS, the reserve area and those areas immediately adjacent that contain characteristics impacting the design;

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

(vi) The existence of designated flood plains ~~((and))~~;

(vii) Other areas identified in the local management plan required in WAC 246-272A-0015; and

~~((vii))~~ (viii) The location of existing features affecting ~~((system))~~ OSS placement, such as, but not limited to:

(A) Wells ~~((and suction lines))~~;

(B) Water sources and supply lines;

(C) Surface water and stormwater infiltration areas;

(D) Abandoned wells;

(E) Outcrops of bedrock and restrictive layers;

(F) Buildings;

(G) Property lines and lines of easement;

(H) Interceptors such as footing drains, curtain drains, and drainage ditches;

(I) Cuts, banks, and fills;

(J) Driveways and parking areas;

(K) Existing OSS; and

(L) Underground utilities;

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

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

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

(e) Classify the soil as in Table V, Soil Type Descriptions:

~~((TABLE V))~~ **Table V**  
**Soil Type Descriptions**

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

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

(a) Prepare the soil log excavation to:

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

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

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

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

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

(4) The local health officer:

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

(b) May require water table measurements to be recorded during months of probable high-water table conditions, if insufficient information is available to determine the highest seasonal water table;

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

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

(e) May require another site and soil evaluation if the site has been altered since the initial site and soil evaluation was submitted to the local health officer.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0230 Design requirements—General.** (1) ~~((On-site sewage systems may))~~ OSS must only be designed by professional engineers, licensed under chapter 18.43 RCW, or ~~((on-site sewage treatment system))~~ OSS designer~~((s))~~, licensed under chapter 18.210 RCW, except:

(a) If at the discretion of the local health officer, a resident owner of a single-family residence not ~~((adjacent to))~~ within 200 feet of a marine shoreline is allowed to design ~~((a system))~~ an OSS for that residence; or

(b) If the local health officer performs the soil and site evaluation, the health officer ~~((is allowed to))~~ may design ~~((a system))~~ the OSS.

(2) The designer shall use the following criteria when developing a design for an OSS:

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

(b) Sewage tanks ~~((have been reviewed and approved by the department))~~ are in compliance with chapter 246-272C WAC;

(c) Drainage from the surface, footing drains, roof drains, sub-surface stormwater infiltration systems, and other nonsewage drains is prevented from entering the OSS, the area where the OSS is located, and the reserve area;

(d) The OSS is designed to treat and disperse the sewage volume as follows:

(i) For single-family residences:

(A) The operating capacity is based on 45 gpd per capita with two people per bedroom~~((-))~~; i

(B) The minimum design flow per bedroom per day is the operating capacity of ~~((ninety))~~ 90 gallons multiplied by 1.33 to account for a 33 percent surge capacity. This results in a minimum design flow of ~~((one hundred twenty))~~ 120 gallons per bedroom per day~~((-))~~; i

(C) ~~((A factor greater than 0.33 to account for surge capacity may be required by))~~ The local health officer~~((-))~~ may require a factor greater than 33 percent to account for surge capacity;

(D) The minimum design flow of the OSS is 240 gpd; and

(E) The local health officer may require an increase of the design flow for dwellings with anticipated greater flows, such as larger dwellings~~((-~~

~~E))~~ The minimum design flow is two hundred forty gallons per day-); or

(ii) For single-family residences with one additional dwelling served by the same OSS:

(A) All requirements in (d) (i) of this subsection apply;

(B) The minimum design flow for one additional dwelling is 120 gallons per bedroom; and

(C) The local health officer may require an increase of the design flow for dwellings with anticipated greater flows; or

(iii) For three or more dwellings served by the same OSS:

(A) All requirements in (d)(i) of this subsection apply;

(B) The minimum design flow for the first dwelling is 240 gallons per day;

(C) The minimum design flow for each additional dwelling is 120 gallons per bedroom;

(D) The local health officer may require an increase of the design flow for dwellings with anticipated greater flows; and

(E) The local health officer shall require documentation including, but not limited to, an easement, covenant, contract, or other legal document authorizing access for construction, operation, maintenance, and repair; or

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

(e) The OSS is designed to address sewage quality as follows:

(i) For all systems, the designer shall consider:

(A) CBOD<sub>5</sub>, TSS, and O&G;

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

(C) The sensitivity of the site where the OSS will be installed. Examples include areas where fecal coliform constituents can result in public health concerns, such as shellfish growing areas, designated swimming areas, and other areas identified by the local management plan required in WAC 246-272A-0015(~~(-)~~); and

(D) Nitrogen contributions. Where nitrogen has been identified as a contaminant of concern by the local management plan required in WAC 246-272A-0015, it (~~shall~~) must be addressed through lot size (~~(and/or)~~) treatment, or both.

(ii) For OSS treating sewage from a nonresidential source, the designer shall provide the following information showing:

(A) (~~Information to show~~) The sewage is not industrial wastewater;

(B) (~~Information regarding~~) The sewage effluent quality and identifying chemicals found in the sewage (~~that~~) effluent are not found in sewage effluent from a residential source; and

(C) A site-specific design providing the necessary treatment (~~level equal to that required of~~) equaling required treatment of sewage effluent quality from a residential source;

(f) The vertical separation (~~to be~~) used to establish the treatment levels and application rates. The selected vertical separation (~~shall~~) must be used consistently throughout the design process(~~(-)~~); and

(g) Treatment levels:

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

(ii) Disinfection may not be used (~~to achieve the fecal coliform requirements to meet:~~

~~(A) Treatment levels A or B in Type 1 soils; or~~

- ~~(B) Treatment level C~~ )):  
 (A) To achieve DL1 or DL2 in type 1 soils; or  
 (B) DL3.

~~((TABLE VI))~~ **Table VI**  
**Treatment Component Performance Levels and**  
**Method of Distribution<sup>1</sup>**

Vertical Separation in inches	Soil Type		
	1	2	3-6
12 < 18	A & DL1 - pressure with timed dosing	B & DL2 - pressure with timed dosing	B & DL2 - pressure with timed dosing
≥18 < 24	B & DL2 - pressure with timed dosing	<del>((B))</del> C & DL3 - pressure with timed dosing	<del>((B))</del> C & DL3 - pressure with timed dosing
≥24 < 36	B & DL2 - pressure with timed dosing	C & DL3 - pressure with timed dosing	E - pressure with timed dosing
≥36 < 60	B & DL2 - pressure with timed dosing	E - pressure	E - gravity
≥60	C & DL2 - pressure	E - gravity	E - gravity

<sup>1</sup>The treatment component performance levels correspond with those established for treatment components under the product testing requirements in WAC 246-272A-0110.

(3) The coarsest textured soil within the vertical separation selected by the designer (~~(shall)~~) determines the minimum treatment level and method of distribution.

(4) The local health officer shall not approve designs for:

- (a) Cesspools; or
- (b) Seepage pits.

(5) The local health officer may approve a design for the reserve area different from the design approved for the initial OSS, if both designs meet the requirements of this chapter for new construction.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0232 Design requirements—Septic tank sizing.** Septic tanks (~~(shall)~~) must:

(1) Have at least two compartments with the first compartment liquid volume equal to one-half to two-thirds of the total liquid volume. This standard may be met by one tank with two compartments or by two single compartment tanks in series.

(2) Have the following minimum liquid volumes:

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

~~((TABLE VII))~~ **Table VII**

**Required Minimum Liquid Volumes of Septic Tanks**

<b>Number of Bedrooms</b>	<b>Required Minimum Liquid Tank Volume in Gallons</b>
<del>((3</del>	900
<b>4</b>	1000))
<b>≤4</b>	<u>1,000</u>
<b>Each additional bedroom</b>	250

(b) For OSS treating sewage from a residential source, other than one single-family residence, ~~((two hundred fifty))~~ 250 gallons per bedroom with a minimum of ~~((one thousand))~~ 1,000 gallons;

(c) For OSS treating sewage from a nonresidential source, three times the design flow.

(3) Comply with chapter 246-272C WAC.

NEW SECTION

**WAC 246-272A-0233 Design requirements—Pump chambers.** (1) All pump chambers, except pump basins, must be designed to meet the following requirements:

(a) Have a minimum volume of 1,000 gallons;

(b) Provide an internal volume to account for the design flow, full-time pump submergence, space for sludge accumulation below the pump inlet and emergency storage volume of at least 75 percent of the design flow;

(c) Follow any applicable DS&G or proprietary product design manual for all OSS components included in the pump chamber; and

(d) Comply with chapter 246-272C WAC.

(2) For the purposes of this section, "pump basin" means a water-tight receptacle that contains a pump to convey sewage from a limited use area that is separate from the main wastewater sewer pipe leaving a structure, to the main treatment component of an OSS; typically much smaller than a pump chamber and separate from the main sewer pipe due to elevation restrictions. Pump basins are intended for limited, specialized uses, and not intended as a replacement or substitute for a pump chamber. Pump basins must be in compliance with chapter 246-272C WAC.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0234 Design requirements—Soil dispersal components.** (1) All soil dispersal components, except one using a subsurface dripline product, ~~((shall))~~ must be designed to meet the following requirements:

(a) Maximum hydraulic loading rates ~~((shall be based on the rates))~~ described in Table VIII, Maximum Hydraulic Loading Rate;

~~((TABLE VIII))~~



**Table VIII**  
**Maximum Hydraulic Loading Rate**

		<u>Column A</u>	<u>Column B</u>
<u>Soil Type</u>	<u>Soil Textural Classification Description</u>	<u>Loading Rate for Residential Septic Tank Effluent Using Gravity or Pressure Distribution gal./sq. ft./day</u>	<u>Loading Rate for Residential Effluent Meeting Treatment Level C &amp; DL3 or Higher Effluent Quality Using Pressure Distribution gal./sq. ft./day</u>
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding those with soil types 5 & 6 as the nongravel portion, all soil types with greater than or equal to 90% rock fragments.	1.0	<u>1.2</u>
2	Coarse sands.	1.0	<u>1.2</u>
3	Medium sands, loamy coarse sands, loamy medium sands.	0.8	<u>1.0</u>
4	Fine sands, loamy fine sands, sandy loams, loams.	0.6	<u>0.8</u>
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams and silty clay loams with a moderate structure or strong structure (excluding a platy structure).	0.4	<u>0.56</u>
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2	<u>0.2</u>
7	Sandy clay, clay, silty clay and strongly cemented firm soils, soil with a moderate or strong platy structure, any soil with a massive structure, any soil with appreciable amounts of expanding clays.	((Not suitable)) <u>Unsuitable</u>	<u>Unsuitable</u>

(b) Calculation of the absorption area is based on:

(i) The design flow in WAC 246-272A-0230(2); and

(ii) Loading rates equal to or less than those in Table VIII of this section as applied to the infiltrative surface of the soil dispersal component or the finest textured soil within the vertical separation selected by the designer, whichever has the finest texture.

(c) Requirements for the method of distribution ((shall)) must correspond to those in WAC 246-272A-0230, Table VI.

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

(i) Only be located in soil types 1-5;

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

(iii) Have pressure distribution including time dosing.

(2) The local health officer may allow the maximum hydraulic loading rates in Table VIII of this section. Loading rates identified in Column B must not be combined with any dispersal component size reductions.

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

(a) ~~((Calculation of))~~ The absorption area calculation is based on:

(i) The design flow in WAC 246-272A-0230(2); and  
(ii) Loading rates ~~((that are))~~ dependent on the soil type, other soil and site characteristics, and the spacing of dripline and emitters as directed in Table VIII of this section;

(b) ~~((The dripline must be installed))~~ A minimum installation of six inches into original, undisturbed soil;

(c) Timed dosing; and

(d) ~~((Soil dispersal components having))~~ Daily design flows greater than ~~((one thousand))~~ 1,000 gallons of sewage per day ~~((may))~~:

(i) ~~((Only be))~~ Located only in soil types 1-5;

(ii) ~~((Only be))~~ Located only on slopes of less than ~~((thirty))~~ 30 percent, or ~~((seventeen))~~ 17 degrees.

~~((3))~~ (4) All SSAS ~~((shall))~~ must meet the following requirements:

(a) The infiltrative surface may not be deeper than three feet below the finished grade, except under special conditions approved by the local health officer. The depth of such system ~~((shall))~~ must not exceed ~~((ten))~~ 10 feet from the finished grade;

(b) A minimum of six inches of sidewall must be located in ~~((original undisturbed))~~ suitable soil;

(c) Beds are only designed in soil types 1, 2, 3 or in fine sands with a width not exceeding ~~((ten))~~ 10 feet. Gravity beds must have a minimum of one lateral for every three feet in width;

(d) Individual laterals greater than ~~((one hundred))~~ 100 feet in length must use pressure distribution;

(e) A layer of between six and ~~((twenty-four))~~ 24 inches of cover material; and

(f) Other features ~~((shall))~~ must conform with the "On-site Wastewater Treatment Systems Manual," United States Environmental Protection Agency EPA-625/R-00/008 February 2002 ~~((available upon request to the department))~~ except where modified by, or in conflict with this section or local ~~((regulations))~~ rules.

~~((4 For))~~ (5) SSAS with drainrock and distribution pipe must meet the following requirements:

(a) A minimum of two inches of drainrock ~~((is required))~~ above the distribution pipe;

(b) A minimum of six inches of drainrock below the distribution pipe; and

(c) Location of the sidewall below the invert of the distribution pipe ~~((is located))~~ in original undisturbed soil.

~~((5))~~ (6) The local health officer may allow the infiltrative surface area in a SSAS to include six inches of the SSAS sidewall height when meeting the required absorption area where total recharge by annual precipitation and irrigation is less than ~~((twelve))~~ 12 inches per year.

~~((6))~~ (7) The local health officer may permit ~~((systems))~~ OSS consisting ~~((solely))~~ of ~~((a))~~ septic tanks and a gravity SSAS in soil type 1 if all the following criteria are met:

(a) The ~~((system))~~ OSS serves a single-family residence;

(b) The lot size is ~~((greater than))~~ two and one-half acres or larger;

(c) Annual precipitation in the region is less than ~~((twenty-five))~~ 25 inches per year ~~((as described by "Washington Climate" published jointly by the Cooperative Extension Service, College of Agriculture, and Washington State University (available for inspection at~~

Washington state libraries)) from a reputable source approved by the local health officer;

(d) The ((system)) OSS is located outside the ((twelve)) 12 counties bordering Puget Sound; and

(e) The geologic conditions beneath the dispersal component must satisfy the minimum unsaturated depth requirements to groundwater as determined by the local health officer. The method for determination is described by "*Design Guideline for Gravity Systems in Soil Type 1,*" ((available upon request to the department)) 2017.

~~((7) The local health officer may increase the loading rate in Table VIII up to a factor of two for soil types 1-4 and up to a factor of 1.5 for soil types 5 and 6 if a product tested to meet treatment level D is used. This reduction may not be combined with any other SSAS size reductions.~~

~~((8)(a))~~ (8) Both the primary and reserve areas must be sized ((to)) at least ((one hundred)) 100 percent of the approved loading rates ((listed in Table VIII).

~~(b) However, the local health officer may allow a legal lot of record created prior to the effective date of this chapter that cannot meet this primary and reserve area requirement to be developed if all the following conditions are met:~~

~~(i) The lot cannot meet the minimum primary and reserve area requirements due to the loading rates for medium sand, fine sand and very fine sand listed in Table VIII of this chapter;~~

~~(ii) The primary and reserve areas are sufficient to allow installation of a SSAS using maximum loading rates of 1.0 gallons/square foot per day for medium sand, 0.8 gallons/square foot/day for fine sand, and 0.6 gallons/square foot/day for very fine sand; and~~

~~(iii) A treatment product meeting at least Treatment Level D and pressure distribution with timed dosing is used)).~~ The local health officer may require the sizing of the reserve area using the loading rate in Table VIII of this section. Column A must be used when sizing the primary area using Column B.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0238 Design requirements—Facilitate operation, monitoring and maintenance.** (1) The OSS must be designed to facilitate routine operation, monitoring and maintenance according to the following criteria:

(a) For gravity ((systems, septic)) OSS:

(i) Sewage tank access for maintenance and inspection at finished grade is required. ((If effluent filters are used, access to the filter at finished grade is required.)) The local health officer may allow access for maintenance and inspection of a ((system consisting of a septic)) sewage tank ((and gravity flow SSAS)) to be a maximum of six inches below finished grade provided a marker showing the location of the tank access is installed at finished grade.

(ii) Each SSAS lateral must include at least one observation port installed in a representative location in order to facilitate SSAS monitoring.

(b) For all other ((systems)) OSS, service access and monitoring ports at finished grade are required for all system components. Specific component requirements include:

(i) Septic tanks must have service access maintenance holes (formerly manholes) and monitoring ports for the inlet and outlet (~~If effluent filters are used, access to the filter at finished grade is required~~);

(ii) Surge, flow equalization or other sewage tanks must have service access ((manholes)) maintenance holes;

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

(iv) Pump chambers, tanks and vaults must have service access ((manholes)) maintenance holes;

(v) Disinfection units must have service access and be installed to facilitate complete maintenance and cleaning, including an easy-access, freefall sampling port; and

(vi) Soil dispersal components ((shall)), excluding subsurface drip, must have monitoring ports for both distribution devices and the infiltrative surface.

(c) For systems using pumps, clearly accessible controls and warning devices are required including:

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

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

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

(2) All accesses must be designed to allow for monitoring and maintenance and shall be secured to minimize injury or unauthorized access in a manner approved by the local health officer.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0240 Holding tank sewage systems.** (1) A person may not install or use holding tank sewage systems for residential development or expansion of residences, whether seasonal or year-round, except as set forth under subsection (2) of this section.

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

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

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

(c) For repairs as permitted under WAC 246-272A-0280 (1)((+))  
(d)(i).

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

(a) Follow design criteria established by the department;

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

(c) Use a holding tank reviewed and approved by the department.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0250 Installation.** (1) Only installers may construct OSS, except as noted under subsection (2) of this section.

(2) The local health officer may allow the resident owner of a single-family residence (~~((not adjacent to a marine shoreline))~~) to install the OSS for that single-family residence except when:

(a) The primary and reserve areas are within 200 feet of marine water;

(b) The primary and reserve areas are within 100 feet of surface water; or

(c) The installation permit meets Table IX standards in WAC 246-272A-0270.

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

(a) Follow the approved design;

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

(c) Make no changes to the approved design without the prior authorization of the designer and the local health officer;

(d) Only install (~~septic tanks, pump chambers, and holding~~) sewage tanks approved by the department consistent with chapter 246-272C WAC;

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

(f) Install the OSS to be watertight, except for the soil dispersal component;

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

(h) Back fill with six to (~~twenty-four~~) 24 inches of cover material and grade the site to prevent surface water from accumulating over any component of the OSS.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0260 Inspection.** (1) For all activities requiring a permit, the local health officer shall inspect the OSS. The local health officer shall:

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

(b) Either inspect the OSS before cover or allow the designer of the OSS to perform the inspection before cover if the designer is not also named as installer of the system(~~(-)~~); and

(c) Keep the record drawings on file, with the approved design documents.

(2) Prior to any inspection, the local health officer or inspector authorized by the local health officer shall coordinate with the OSS owner to obtain access. When the owner does not authorize access, the local health officer may follow the administrative search warrant procedures in RCW 70A.105.030 to gain access.

(3) For any OSS located on a single property serving one dwelling unit on the same property, the local health officer shall not require a property owner to grant inspection and maintenance easements as a condition of receiving a permit.

(4) During the final construction inspection, the local health officer or the designer of the OSS must confirm the OSS meets the approved design.

(5) To comply with the requirements of WAC 246-272A-0270 (1)(e) or (k), an inspection must include, at a minimum:

(a) Inspection and evaluation of:

(i) The status of all sewage tanks including baffles, effluent filters, tank contents such as water level, scum, sludge, solids, water tightness, and general structural conditions;

(ii) The status of all lids, accesses, and risers;

(iii) The OSS and reserve area for any indicators of OSS failure or conditions that may impact system function, operation or repair; and

(iv) Any other components such as distribution boxes;

(b) A review of the record drawing and related documents, if they exist, including previous reports to confirm the system is operating as designed; and

(c) Any proprietary products following the procedures of the accepted operations and maintenance manual associated with those products.

(6) Evidence of an OSS property transfer inspection as required in WAC 246-272A-0270 (1)(k) must be provided to the local health jurisdiction on a form approved by the local health officer, including at a minimum:

(a) All applicable information from subsection (5) of this section;

(b) The address of the property served by the OSS;

(c) The date of the inspection;

(d) The permitted type and design flow for known OSS; and

(e) Verification that the record drawing is accurate, if it exists, or an OSS site plan showing the location of all system components relative to structures and prominent site features.

(7) A local health jurisdiction may require an additional inspection report, or additional information, for an inspection required under WAC 246-272A-0270(1). The person responsible for the final construction inspection shall assure the OSS meets the approved design.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0265 Record drawings.** Upon completion of ((the)) new construction, alteration or repair of the OSS, the OSS owner shall submit a complete and detailed record drawing ~~((shall be submitted to both))~~ to the local health officer ~~((and the OSS owner))~~ that includes at a minimum ~~((the following))~~:

(1) Measurements and directions accurate to +/- 1/2 foot, unless otherwise determined by the local health officer, ~~((to assure))~~ so that the following parts of the OSS can be easily located:

- (a) All sewage tank openings requiring access;
  - (b) The ends, and all changes in direction, of installed and found buried pipes and electrical cables that are part of the OSS; and
  - (c) Any other OSS component which, in the judgment of the local health officer or the designer, must be accessed for observation, maintenance, or operation;
- (2) Location and dimensions of the reserve area;
- (3) Record that materials and equipment meet the specifications contained in the design;
- (4) Initial settings of electrical or mechanical devices that must be known to operate the system in the manner intended by the designer or installer; and
- (5) For proprietary products, manufacturer's standard product literature, including performance specifications and maintenance recommendations needed for operation, monitoring, maintenance or repair of the OSS.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0270 Operation, monitoring, and maintenance—Owner responsibilities.**

(1) The OSS owner is responsible for operating, monitoring, and maintaining the OSS to minimize the risk of failure, and ~~((to accomplish this purpose,))~~ shall:

(a) Request assistance from the local health officer upon occurrence of a system failure or suspected system failure;

(b) Obtain approval from the local health officer before:

(i) Repairing, altering, or expanding an OSS ~~((as required by WAC 246-272A-0200; or~~

~~((as required by WAC 246-272A-0200; or~~

(ii) Before beginning the use of any newly constructed OSS;

(c) Secure and renew contracts for periodic maintenance ~~((where))~~ if required by the local health jurisdiction;

~~((e))~~ (d) Obtain and renew operation permits if required by the local health jurisdiction;

~~((d) Assure a complete evaluation of the system components and/or))~~ (e) Obtain an inspection, as required in WAC 246-272A-0260(5), by a maintenance service provider authorized by the

local health officer of all OSS and property to determine functionality, maintenance needs and compliance with ~~((regulations))~~ this chapter and local rules, and any permits:

(i) At least once every three years, unless more frequent inspections are specified by the local health officer, for all ~~((systems))~~ OSS consisting solely of a ~~((septic))~~ sewage tank and gravity SSAS;

(ii) Annually for all other ~~((systems))~~ OSS unless more frequent inspections are specified by the local health officer;

~~((e))~~ (iii) Submit the results of the inspection to the local health jurisdiction, using a form approved by the local health officer and in compliance with WAC 246-272A-0260(5);

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

~~((f))~~ (g) Provide ongoing maintenance and complete any needed repairs to promptly return the ~~((system))~~ OSS to a proper operating condition;

~~((g))~~ (h) Protect the OSS area and the reserve area from:

(i) Cover by structures or impervious material;

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

(iii) Soil compaction~~((r))~~. For example by vehicular traffic or livestock; and

(iv) Damage by soil removal and grade alteration~~((+~~

~~(h))~~.

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

~~((i))~~ (j) Operate and maintain ~~((systems))~~ OSS as directed by the local health officer~~((+~~

~~(j) Request assistance from the local health officer upon occurrence of a system failure or suspected system failure)); and~~

(k) At the time of property transfer~~((r))~~:

(i) Provide to the buyer, all available OSS maintenance and repair records~~((, if available,))~~ in addition to the completed seller disclosure statement in accordance with chapter 64.06 RCW for residential real property transfers;

(ii) Beginning February 1, 2027, obtain an inspection, as required in WAC 246-272A-0260(5), by a third-party inspector authorized by the local health officer. The local health officer may:

(A) Remove the requirement for an inspection at the time of property transfer if the local health jurisdiction has evidence that the OSS is in compliance with (e) of this subsection and the OSS was inspected by a third-party inspector authorized by the local health officer;

(B) Verify the results of the property inspection for compliance with WAC 246-272A-0260; and

(C) Require additional inspections and other requirements not listed in WAC 246-272A-0260;

(iii) Beginning February 1, 2027, obtain an inspection of proprietary treatment products per the product manufacturer recommendations, as required in WAC 246-272A-0260, by a third-party inspector authorized by the local health officer. The local health officer may:

(A) Remove the requirement for an inspection at the time of property transfer if the local health jurisdiction has evidence that the OSS is in compliance with (e) of this subsection and the OSS was inspected by a third-party inspector authorized by the local health officer;

(B) Verify the results of the property inspection for compliance with WAC 246-272A-0260; and

(C) Require additional inspections and other requirements not listed in WAC 246-272A-0260;

(iv) Submit the results of the inspection, and any additional information or reports required by the local health officer, to the local health jurisdiction, using an inspection report form approved by the local health officer. The local health officer may require a compliance schedule for repair of a failure discovered during the property transfer inspection.

(2) ~~((Persons shall))~~ A person may not:

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



- (b) Use ~~((a sewage system))~~ an OSS additive unless it is specifically approved by the department; ~~((or))~~
- (c) Use an OSS to dispose of waste components atypical of sewage from a residential source; or
- (d) Use any remediation process or activity unless it is approved by the local health officer and is in compliance with WAC 246-272A-0278.

NEW SECTION

**WAC 246-272A-0278 Remediation.** (1) The local health officer may establish a program and requirements for reviewing and approving remediation activities.

- (2) Remediation must not:
  - (a) Result in damage to the OSS;
  - (b) Result in insufficient soil treatment in the zone between the soil dispersal component and the highest seasonal water table, restrictive layer, or soil type 7; or
  - (c) Disturb the soil in or below the soil dispersal component if the vertical separation requirements of WAC 246-272A-0230 are not met.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0280 Repair of failures.** ~~((1) When an OSS failure occurs, the OSS owner shall:~~

- ~~(a) Repair or replace the OSS with a conforming system or component, or a system meeting the requirements of Table IX either on the:~~
  - ~~(i) Property served; or~~
  - ~~(ii) Nearby or adjacent property if easements are obtained; or~~
- ~~(b) Connect the residence or facility to a:~~
  - ~~(i) Publicly owned LOSS;~~
  - ~~(ii) Privately owned LOSS where it is deemed economically feasible; or~~
  - ~~(iii) Public sewer; or~~
- ~~(c) Perform one of the following when requirements in (a) and (b) of this subsection are not feasible:~~
  - ~~(i) Use a holding tank; or~~
  - ~~(ii) Obtain a National Pollution Discharge Elimination System or state discharge permit from the Washington state department of ecology issued to a public entity or jointly to a public entity and the system owner only when the local health officer determines:~~
    - ~~(A) An OSS is not feasible; and~~
    - ~~(B) The only realistic method of final dispersal of treated effluent is discharge to the surface of the land or into surface water; or~~
  - ~~(iii) Abandon the property.~~

~~(2) Prior to repairing the soil dispersal component, the OSS owner shall develop and submit information required under WAC 246-272A-0200(1).~~

~~(3) The local health officer shall permit a system that meets the requirements of Table IX only if the following are not feasible:~~

- ~~(a) Installation of a conforming system or component; and~~
- ~~(b) Connection to either an approved LOSS or a public sewer.~~

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

~~(a) Meet the requirements of Table IX if the effluent treatment and soil dispersal component to be repaired or replaced is closer to any surface water, well, or spring than prescribed by the minimum separation required in Table IV of WAC 246-272A-0210(1). Pressure distribution with timed dosing in the soil dispersal component is required in all cases where a conforming system is not feasible.~~

**TABLE IX  
Treatment Component Performance Levels for Repair of OSS Not Meeting  
Vertical and Horizontal Separations<sup>1</sup>**

Vertical Separation (in inches)	Horizontal Separation <sup>2</sup>											
	<25 feet			25 < 50 feet			50 < 100 feet <sup>3</sup>			≥100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type		
	1	2	3-6	1	2	3-6	1	2	3-6	1	2	3-6
<12	A	A	A	A	A	A	A	A	B	B	B	B
≥12 < 18	A	A	A	A	B	B	A	B	B	Conforming Systems		
≥18 < 24	A	A	A	A	B	B	A	B	C			
≥24 < 36	A	B	B	B	C	C	B	C	C			
≥36	A	B	B	B	C	C	B	C	E			

<sup>1</sup>The treatment component performance levels correspond with those established for treatment components under the product performance testing requirements in Table III of WAC 246-272A-0110.

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

<sup>3</sup>On a site where there is a horizontal setback of 75-100 feet between an OSS dispersal component and an individual water well, individual spring, nonmarine surface water or surface water that is not a public water source and a vertical separation of greater than twelve inches, a conforming system that complies with WAC 246-272A-0210(4) shall be installed if feasible.

~~(b) Protect drinking water sources and shellfish harvesting areas;~~

~~(c) Minimize nitrogen discharge in areas where nitrogen has been identified as a contaminant of concern in the local plan under WAC 246-272A-0015;~~

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

~~(e) Meet the horizontal separations under WAC 246-272A-0210(1) to public drinking water sources;~~

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

~~(g) Maximize the:~~

~~(i) Vertical separation;~~

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

~~(iii) Distance to surface water.~~

~~(5) Prior to designing the repair system, the designer shall consider the contributing factors of the failure to enable the repair to address identified causes.~~

~~(6) If the vertical separation is less than twelve inches, the local health officer may permit ASTM C-33 sand or coarser to be used as fill to prevent direct discharge of treated effluent to groundwater, surface water, or upon the surface of the ground.~~

~~(7) For a repair using the requirements of Table IX, disinfection may not be used to achieve the fecal coliform requirements to meet:~~

~~(a) Treatment levels A or B where there is less than eighteen inches of vertical separation;~~

~~(b) Treatment levels A or B in type 1 soils; or~~

~~(c) Treatment level C.~~

~~(8) The local health officer shall identify repair permits meeting the requirements of Table IX for the purpose of tracking future performance.~~

~~(9) An OSS owner receiving a repair permit for a system meeting the requirements of Table IX from the local health officer shall:~~

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

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

(1) When an OSS failure occurs the local health officer shall:

(a) Allow an OSS to be repaired using the least costly alternative that meets standards and is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes;

(b) Permit an OSS meeting the requirements in Table X of this section only if the OSS has failed and the following are not feasible:

(i) Installation of a conforming OSS or component; or

(ii) Connection to either an approved LOSS or a public sewer.

(c) Identify repair permits meeting the requirements in Table X of this section for the purpose of tracking future performance;

(d) Give first priority to allowing repair and second priority to allowing replacement of an existing conventional OSS, consisting of a septic tank and drainfield, with a similar conventional OSS;

(e) Evaluate all unpermitted sewage discharges to determine if they pose a public health threat. If determined by the local health officer to be a public health threat, the local health officer shall require a compliance schedule;

(f) Report failures within 200 feet of shellfish growing areas to the department; and

(g) Not impose or allow the imposition of more stringent performance requirements of equivalent OSS on private entities than public entities.

(2) The local health officer may:

(a) Require a compliance schedule for failures discovered during property transfer inspections;

(b) Allow a repair of a failure using ASTM C-33 sand or coarser as fill to prevent direct discharge of treated effluent to groundwater, surface water, or upon the surface of the ground if the vertical separation is less than 12 inches.

(3) The OSS owner shall notify the local health officer when there is a failure and indicate which methods will be used to address the failure in accordance with Table IX of this section:

(a) The owner may use option D only if the local health officer determines options A through C are not feasible and may use option E or F only if options A through D are not feasible.

(b) For options A through F, the owner shall develop and submit information and obtain a permit as required under WAC 246-272A-0200 prior to any repair or replacement of an OSS on the property served or a nearby property if the owner obtains an appropriate documentation including, but not limited to, an easement, covenant, contract, or other legal document authorizing access for construction, operation, maintenance, and repair.

(c) If options A through F are not feasible, the owner shall discontinue use of the OSS, abandon the OSS according to the requirements in WAC 246-272A-0300, and cease all sewage generating activities on the property.

**Table IX  
Options and Methods to Address an OSS Failure**

<b>Options</b>	<b>Method</b>
<u>A</u>	<p>Repair or replace the OSS, with a similar OSS, if the OSS provides comparable or better long-term sewage treatment and effluent dispersal outcomes where:</p> <ol style="list-style-type: none"> <li><u>1. The effluent treatment and soil dispersal component to be repaired or replaced is not closer to any surface water, well, or spring than the minimum separation distance required in Table IV of WAC 246-272A-0210(1);</u></li> <li><u>2. The soil dispersal component to be repaired or replaced complies with the treatment level and dispersal method requirements in Table VI of WAC 246-272A-0230;</u></li> <li><u>3. The local health officer has a permit or record of the OSS on file; and</u></li> <li><u>4. The repair or replacement will not result in an OSS that meets the definition of failure.</u></li> </ol>
<u>B</u>	<u>Repair or replace the OSS with an OSS in compliance with new construction requirements under this chapter.</u>
<u>C</u>	<p><u>Connect the residence or facility to a:</u></p> <ol style="list-style-type: none"> <li><u>1. Publicly owned LOSS;</u></li> <li><u>2. Privately owned LOSS where it is deemed economically feasible; or</u></li> <li><u>3. Public sewer.</u></li> </ol>
<u>D</u>	<u>Repair or replace the OSS in conformance with Table X of this section.</u>
<u>E</u>	<u>Use a holding tank.</u>
<u>F</u>	<p><u>Obtain a National Pollution Discharge Elimination System or state discharge permit from the Washington state department of ecology issued to a public entity or jointly to a public entity and the OSS owner only when the local health officer determines:</u></p> <ol style="list-style-type: none"> <li><u>1. An OSS is not feasible; and</u></li> <li><u>2. The only realistic method of final dispersal of treated effluent is discharge to the surface of the land or into surface water.</u></li> </ol>

(4) When there is an OSS failure, the OSS designer shall:

(a) Evaluate the causes of failure prior to designing the repair or replacement of the OSS;

(b) Prevent the direct discharge of sewage or treated effluent to groundwater, surface water, or upon the surface of the ground;

(c) Meet the horizontal separations under WAC 246-272A-0210(1) to public drinking water sources;

(d) Protect all drinking water sources, shellfish harvesting areas, and water recreation facilities designated for swimming in natural waters;

(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;

(f) Not use disinfection to achieve fecal coliform or *E. Coli* requirements in Table X of this section to meet:

(i) Treatment levels DL1 or DL2 with less than 18 inches of vertical separation; or

(ii) Treatment levels DL1 or DL2 in type 1 soils; or

(iii) Treatment level DL3.

(g) Minimize impact of phosphorus discharge in areas where the local health officer has identified phosphorus as a contaminant of concern in the local management plan under WAC 246-272A-0015;

(h) Locate and design repairs meeting the requirements in Table X of this section if the effluent treatment and soil dispersal component

to be repaired or replaced is closer to any surface water, well, or spring than prescribed by the minimum separation required in Table IV of WAC 246-272A-0210(1);

(i) Design any nonconforming OSS using pressure distribution with timed dosing in the soil dispersal component; and

(j) Meet all other design requirements of this chapter to the maximum extent permitted by the site, to maximize the:

(i) Vertical separation;

(ii) Distance from a well or spring; and

(iii) Distance to surface water.

**Table X  
Treatment Component Performance Levels for Repair of OSS Not Meeting  
Vertical and Horizontal Separations<sup>1</sup>**

Vertical Separation (in inches)	Horizontal Separation <sup>2</sup>											
	< 30 feet			≥ 30 < 50 feet			≥ 50 < 100 feet <sup>3</sup>			≥ 100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type		
	1	2	3-6	1	2	3-6	1	2	3-6	1	2	3-6
< 12	A & DL1	A & DL1	A & DL1	A & DL1	A & DL1	A & DL1	A & DL1	A & DL1	A & DL1	B & DL2	B & DL2	B & DL2
≥ 12 < 18	A & DL1	A & DL1	A & DL1	A & DL1	B & DL2	B & DL2	A & DL1	B & DL2	B & DL2	Conforming  OSS		
≥ 18 < 24	A & DL1	A & DL1	A & DL1	A & DL1	B & DL2	B & DL2	A & DL1	B & DL2	B & DL2			
≥ 24 < 36	A & DL1	B & DL2	B & DL2	B & DL2	B & DL2	B & DL2	B & DL2	B & DL2	C & DL3			
≥ 36	A & DL1	B & DL2	B & DL2	B & DL2	C & DL3	C & DL3	B & DL2	C & DL3	C & DL3			

<sup>1</sup>The treatment component performance levels correspond with those established for treatment components under the product performance testing requirements in Table III in WAC 246-272A-0110.

<sup>2</sup>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 is already required.

<sup>3</sup>On a site where there is a horizontal setback of 75-100 feet between an OSS dispersal component and an individual water well, individual spring, nonmarine surface water or surface water that is not a public water source and a vertical separation of greater than 12 inches, a conforming OSS that complies with WAC 246-272A-0210(4) shall be installed if feasible.

NEW SECTION

**WAC 246-272A-0282 Minor repair of malfunctions.** The local health officer:

(1) Shall require the minor repair of a malfunction to a functioning state;

(2) May require a permit for a minor repair of a malfunction; and

(3) May require the OSS owner to submit information regarding minor repairs of a malfunction.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0290 Expansions.** (1) The local health officer shall require an OSS and a reserve area in full compliance with the new ~~((system))~~ construction standards specified in this chapter for an OSS expansion ~~((of a residence or other facility))~~.

(2) A local health officer may allow expansion of an existing ~~((on-site sewage system adjacent to))~~ OSS within 200 feet of a marine shoreline that does not meet the minimum horizontal separation between the soil dispersal component and the ordinary high-water mark required by WAC 246-272A-0210, Table IV, provided that:

(a) The ~~((system))~~ OSS meets all requirements of WAC 246-272A-0230, 246-272A-0232, 246-272A-0234, and 246-272A-0238;

(b) The ~~((system))~~ OSS complies with all other requirements of WAC 246-272A-0210 and this section;

(c) Horizontal separation between the soil dispersal component and the ordinary high-water mark is ~~((fifty))~~ 50 feet or greater; and

(d) Vertical separation is two feet or greater.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0300 Abandonment.** Persons permanently abandoning a ~~((septic))~~ sewage tank, seepage pit, cesspool, or other sewage container shall:

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

(2) Perform one of the following:

(a) Remove and dispose of sewage tanks and other components in a manner approved by the local health officer; or

(b) Leave the sewage tanks and components in place. Remove or destroy the lid~~((+))~~ if possible and ~~((+))~~ fill the void with soil or gravel; and

(3) Grade the site to the surroundings.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0310 Septage management.** ~~((1) The local health officer shall approve an individual before they may remove septage from an OSS.~~

~~((2) Persons))~~ A person removing septage from an OSS shall obtain approval from the local health officer before removal and:

~~((a))~~ (1) Transport septage or sewage only in vehicles clearly identified with the name of the business and approved by the local health officer;

~~((b))~~ (2) Record and report septage removal as required by the local health officer; and

~~((c))~~ (3) Dispose of septage, or apply septage biosolids to land only in a manner consistent with applicable laws.

**WAC 246-272A-0320 Developments, subdivisions, and minimum land area requirements.** (~~((1) A person proposing a subdivision where the use of OSS is planned shall obtain a recommendation for approval from the local health officer as required by RCW 58.17.150.~~

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

~~(a) Site evaluations as required under WAC 246-272A-0220, excluding subsections (3)(a)(i) and (4)(d);~~

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

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

~~(ii) Establishment of a one hundred foot protection zone around each existing and proposed well site;~~

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

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

~~**METHOD I.** Table X, Single-Family Residence Minimum Lot Size or Minimum Land Area Required Per Unit Volume of Sewage, shows the minimum lot size required per single-family residence. For developments other than single-family residences, the minimum land areas shown are required for each unit volume of sewage. However, the local health officer may require larger lot sizes where the local health officer has identified nitrogen as a concern either through planning activities described in WAC 246-272A-0015 or another process.~~

**TABLE X  
Minimum Land Area Requirement  
Single-Family Residence or Unit Volume of Sewage**

Type of Water Supply	Soil Type (defined by WAC 246-272A-0220)					
	1	2	3	4	5	6
Public	0.5 acre	12,500 sq. ft.	15,000 sq. ft.	18,000 sq. ft.	20,000 sq. ft.	22,000 sq. ft.
	2.5 acre <sup>1</sup>					
Individual, on each lot	1.0 acre	1-acre	1-acre	1-acre	2-acres	2-acres
	2.5 acres <sup>1</sup>					

<sup>1</sup>See WAC 246-272A-0234(6).

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

~~(i) Justifies the proposal through a written analysis of the:~~

~~(A) Soil type and depth;~~

~~(B) Area drainage, and/or lot drainage;~~

~~(C) Public health impact on ground and surface water quality;~~

~~(D) Setbacks from property lines, water supplies, etc.;~~

~~(E) Source of domestic water;~~

~~(F) Topography, geology, and ground cover;~~

~~(G) Climatic conditions;~~

~~(H) Availability of public sewers;~~

~~(I) Activity or land use, present, and anticipated;~~

~~(J) Growth patterns;~~

~~(K) Reserve areas for additional subsurface treatment and dispersal;~~

~~(L) Anticipated sewage volume;~~

~~(M) Compliance with current planning and zoning requirements;~~

~~(N) Types of proposed systems or designs, including the use of systems designed for removal of nitrogen;~~

~~(O) Existing encumbrances, such as those listed in WAC 246-272A-0200 (1) (c) (v) and 246-272A-0220 (2) (a) (vii); and~~

~~(P) Estimated nitrogen loading from OSS effluent to existing ground and surface water;~~

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

~~(ii) Shows development with public water supplies having:~~

~~(A) At least twelve thousand five hundred square feet lot sizes per single-family residence;~~

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

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

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

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

~~(i) Install conforming OSS;~~

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

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

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

~~(3) The department shall develop guidelines for the application of Method II by (insert date one year from the effective date).~~

~~(4) The local health officer shall require lot areas of twelve thousand five hundred square feet or larger except when a person proposes:~~

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

~~(b) A planned unit development with:~~

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

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

~~(iii) Management requirements under chapter 246-272B WAC when installing a LOSS; and~~

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

~~(5) The local health officer may:~~

~~(a) Allow inclusion of the area to the centerline of a road or street right of way in a Method II determination under subsection (2) (d) of this section to be included in the minimum land area calculation if:~~

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

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



~~(iii) Lots are at least twelve thousand five hundred square feet in size.~~

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

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

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

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

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

~~(ii) The lot is outside an area identified by the local plan developed under WAC 246-272A-0015 where minimum land area has been listed as a design parameter necessary for public health protection; and~~

~~(iii) The proposed system meets all requirements of these regulations other than minimum land area.~~

~~(6) The use of a reduced-sized SSAS does not provide for a reduction in the minimum land area requirements established in this section. Site development incorporating reduced-sized SSAS must meet the minimum land area requirements established in state and local codes.)~~

(1) Prior to approving any development, the local health officer shall:

(a) Require site evaluations under WAC 246-272A-0220;

(b) Require information consisting of field data, plans, and reports supporting a conclusion that the proposed land area is sufficient to:

(i) Install conforming OSS;

(ii) Preserve reserve areas for proposed and existing OSS; and

(iii) Properly treat and dispose of the sewage;

(c) Require information demonstrating that the proposed development will minimize adverse public health effects from the accumulation of contaminants in groundwater and surface water;

(d) Determine the minimum land area required for the development using Table XI of this section, or the alternative methodology in Table XII of this section. The local health officer may require larger lot sizes than the minimum standards established in Table XI or Table XII of this section;

**Table XI**

**Minimum Land Area Requirement For Each Single-Family Residence or Unit  
Volume of Sewage and Minimum Usable Land Area**

		Soil Type (defined by WAC 246-272A-0220)					
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<b>Minimum Land Area</b>	<b>Public Water Supply</b>	<u>21,780 sq. ft. (.5 acre)</u>	<u>13,000 sq. ft.</u>	<u>16,000 sq. ft.</u>	<u>19,000 sq. ft.</u>	<u>21,000 sq. ft.</u>	<u>23,000 sq. ft.</u>
		<u>2.5 acres<sup>1</sup></u>					
	<b>Nonpublic Water Supply</b>	<u>1.0 acre</u>	<u>1.0 acre</u>	<u>1.0 acre</u>	<u>1.0 acre</u>	<u>2.0 acres</u>	<u>2.0 acres</u>
		<u>2.5 acres<sup>1</sup></u>					
<b>Minimum Usable Land Area</b>		<u>2,000 sq. ft.</u>	<u>2,000 sq. ft.</u>	<u>2,500 sq. ft.</u>	<u>3,333 sq. ft.</u>	<u>5,000 sq. ft.</u>	<u>10,000 sq. ft.</u>

<sup>1</sup>OSS consisting of only sewage tanks and gravity SSAS must have a minimum land area of 2.5 acres per WAC 246-272A-0234(6).

**Table XII**

**Maximum Allowable Total Nitrogen (TN) Load Per Day by Type of Water Supply, Soil Type, and Land Area<sup>1</sup>**

<b><u>Water Supply Type</u></b>	<b><u>Maximum Daily TN Load</u></b>	<b><u>Soil Type<sup>2</sup></u></b>					
		<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>	<b><u>5</u></b>	<b><u>6</u></b>
<b><u>Public</u></b>	<b><u>mg per sq. ft.</u></b>	<u>3.8</u>	<u>6.3</u>	<u>5.1</u>	<u>4.3</u>	<u>3.9</u>	<u>3.6</u>
	<b><u>lb per acre</u></b>	<u>0.36</u>	<u>0.60</u>	<u>0.49</u>	<u>0.41</u>	<u>0.37</u>	<u>0.34</u>
<b><u>Nonpublic</u></b>	<b><u>mg per sq. ft.</u></b>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>0.9</u>	<u>0.9</u>
	<b><u>lb per acre</u></b>	<u>0.18</u>	<u>0.18</u>	<u>0.18</u>	<u>0.18</u>	<u>0.09</u>	<u>0.09</u>

<sup>1</sup>Based on 60 mg/L TN and 360 gal/day OSS effluent.

<sup>2</sup>As defined in Table V in WAC 246-272A-0220.

(e) Require all proposals not meeting the minimum land area requirements in Table XI of this section to demonstrate the proposed development:

(i) Minimizes adverse impacts to public health, surface water, or groundwater quality;

(ii) Considers:

(A) Topography, geology, and ground cover;

(B) Climactic conditions;

(C) Availability of public sewers; and

(D) Present and anticipated land use and growth patterns;

(iii) Complies with current planning and zoning requirements;

(iv) Does not exceed the nitrogen limit per land area as identified in Table XII of this section; and

(v) Does not allow new lots smaller than 13,000 square feet if served by nonpublic water supplies;

(f) Require minimum land area of 13,000 square feet or larger, except when a proposal includes:

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

(ii) A planned unit development with a signed, notarized, and recorded deed covenant restricting any development of lots or parcels above the approved density with the overall density meeting the minimum land area requirements of (d) or (e) of this subsection in perpetuity or until the OSS is no longer needed as identified in WAC 246-272A-0200(6);

(g) Require that developments other than single-family residences:

(i) Meet the minimum land areas required for each unit's volume of sewage;

(ii) Do not exceed 3.35 unit volumes of sewage per day per acre if served by public water supplies; and

(iii) Do not exceed 1.0 unit volume of sewage per day per acre for nonpublic water supplies; and

(h) Require that the use of a reduced-sized dispersal component does not result in a reduction of the minimum land area requirements established in this section.

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

(a) A recommendation for approval as required by RCW 58.17.150;

(b) Where a subdivision with nonpublic wells are proposed:

(i) Configuration of each lot line to allow a supply protection zone to fit within the lot lines; or

(ii) Water supply protection zones on more than one lot when the person proposing the subdivision or development provides a copy of a

recorded restrictive covenant to each property that is sited partially or completely within the water supply protection zone;

(iii) Water supply protection zone of at least 100 foot radius for each existing or proposed well site.

(3) The local health officer may:

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

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

(c) Prohibit development on individual lots within the boundaries of an approved subdivision if the proposed OSS design does not meet the requirements of this chapter; and

(d) Permit the installation of an OSS, where the minimum land area requirements or lot sizes in Table XI of this section or maximum total nitrogen in Table XII of this section cannot be met, only when the following criteria are met:

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

(ii) The lot is not within an area identified in the local management plan developed under WAC 246-272A-0015 where minimum land area is listed as a design parameter necessary for public health protection; and

(iii) The proposed OSS meets all requirements of this chapter without the use of a waiver under WAC 246-272A-0420.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 7/1/07)

**WAC 246-272A-0340 ((Certification)) Approval of installers, pumpers, and maintenance service providers.** (1) OSS installers ((and)), pumpers ((must)), and maintenance service providers shall obtain approval from the local health officer prior to providing services including, but not limited to, conducting inspections in accordance with WAC 246-272A-0260 and 246-272A-0270, within a local health jurisdiction.

(2) The local health officer ((may)) shall establish ((programs and requirements)) procedures for approving OSS installers, pumpers, and maintenance service providers no later than February 1, 2025. These procedures must include, but are not limited to, conducting inspections in accordance with WAC 246-272A-0260 and 246-272A-0270. The local health officer may approve OSS installers, pumpers, and maintenance service providers through reciprocity by other Washington local health jurisdictions.

(3) The local health officer may establish a homeowner OSS inspection certification process.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0400 Technical advisory ((committee)) group (TAG).** ((1)) The department shall:

~~((a)) (1) Maintain a (technical advisory committee) TAG to advise the department regarding:~~

~~((i)) (a) OSS design and siting;~~

~~((ii)) (b) Public domain technologies ((and recommended standards and guidance)), DS&G for ((their)) product use; and~~

~~((iii)) (c) Testing and design standards used for proprietary product registration and ((recommended standards and guidance)) DS&G for use of proprietary products.~~

~~((b)) (2) Select members for the (technical advisory committee with) TAG for three-year terms that have technical or scientific knowledge applicable to OSS from agencies, professions, and organizations including:~~

~~((i)) (a) Local health ((departments)) jurisdictions;~~

~~((ii)) (b) Engineering firms;~~

~~((iii)) (c) The Washington department of ecology;~~

~~((iv)) (d) Land sales, development and building industries;~~

~~((v)) (e) Public sewer utilities;~~

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

~~((vii)) (f) OSS:~~

~~(i) Designers;~~

~~(ii) Installers;~~

~~(iii) Maintenance service providers;~~

~~(iv) Product manufacturers;~~

~~(g) Environmental organizations;~~

~~((viii)) (h) University(+) and college academic communities;~~

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

~~(i) Certified professional soil scientists; and~~

~~((x)) (j) Other interested organizations or groups.~~

~~((c) Convene meetings as needed.~~

~~(2) The department may have a representative on the technical advisory committee.))~~

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0410 Policy advisory ((committee)) group. ((+))**

The department shall:

~~((a)) (1) Maintain a policy advisory ((committee)) group to:~~

~~((i)) (a) Make recommendations concerning OSS departmental policy and ((regulations)) rules;~~

~~((ii)) (b) Review OSS program services; and~~

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

~~((b)) (2) Select members for three-year terms from agencies, professions, organizations having knowledge and interest in OSS, and ((groups)) communities which are affected by ((the regulations; and~~

~~(c) Convene meetings as needed.~~

~~(2) The department may have a representative on the policy advisory committee)) this chapter.~~

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0420 Waivers ~~((of state regulations))~~.** (1) The local health officer may grant a waiver from specific requirements of this chapter ~~((if))~~. A request for waiver must be:

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

(b) ~~((The local health officer determines that the waiver is))~~ Consistent with the ~~((standards in, and the intent of, these rules;~~ ~~(e-))~~ purposes of this chapter.

~~(2)~~ (a) The local health officer must submit ~~((s))~~ quarterly reports to the department ~~((regarding any))~~ showing waivers approved or denied ~~((; and~~

~~(d) Based on review of the quarterly reports))~~.

(b) Upon review, if the department finds that the waivers previously granted ~~((have not been))~~ are inconsistent, consistent with the ~~((standards in, and the intent of these rules))~~ purposes of this chapter, and DS&G for granting waivers, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.

(c) If upon further review ~~((of the quarterly reports)),~~ the department finds ~~((that the inconsistency between the waivers granted and the state board of health standards has not been corrected))~~ waivers previously granted continue to be inconsistent with the purposes of this chapter and DS&G, the department may suspend the authority of the local health officer to grant waivers under this section until such inconsistencies have been corrected.

~~((2))~~ (3) The department shall ~~((develop))~~ maintain and update guidance to assist local health officers in the application of waivers.

(4) The department shall publish an annual report summarizing the waivers issued over the previous year.

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0425 Required ~~((rule))~~ review of rules.** The department shall review this chapter to evaluate the effectiveness of the rules ~~((and determine areas where revisions may be necessary. The department will provide the results of their review along with their)),~~ determine where revisions may be necessary, and make recommendations to the state board of health and all local health officers by September ~~((2009))~~ 2026 and every four years thereafter.

**WAC 246-272A-0430 Enforcement.** (1) When an OSS is out of compliance with any law or rule regulating OSS and administered by the department or the local health officer, the department or the local health officer(~~:~~

~~(a) Shall enforce the rules of chapter 246-272A WAC; or  
(b) May refer cases within their jurisdiction to the local prosecutor's office or office of the attorney general, as appropriate.~~

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

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

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

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

~~(d) The penalties under chapter 70.05 RCW and RCW 43.70.190; and~~

~~(e) Civil or criminal action.~~

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

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

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

~~(4) Enforcement orders)) may initiate enforcement action. Enforcement action may include, but is not necessarily limited to:~~

~~(a) A notice of correction describing the condition that is not in compliance and the text of the specific section or subsection of the applicable state or federal law or rule, a statement of what is required to achieve compliance, and the date by which compliance is to be achieved;~~

~~(b) A notice of violation with or without a civil penalty;~~

~~(c) An order requiring specific actions or ceasing unacceptable activities within a designated time period;~~

~~(d) Suspension, revocation, or modification or denial of permits and licenses as authorized by RCW 43.70.115;~~

~~(e) Civil or criminal penalties authorized under chapter 70.05 RCW and RCW 43.70.190;~~

~~(f) An informal conference may be held at the request of any party to resolve disputes arising from enforcement of this chapter.~~

~~(2) Notices and orders issued under this section ((shall)) must:~~

~~(a) Be in writing;~~

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

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

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

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

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

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

~~(ii) Referral to the office of the county prosecutor or attorney general; and/or~~

~~(iii) Other appropriate remedies.~~

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

~~((5)) (3) Enforcement orders shall be personally served in the manner of service of a summons in a civil action or in ((a)) another manner showing proof of receipt.~~

~~((6)) (4) The department shall have cause to deny the application or reapplication for ((an operational)) a permit or to revoke, suspend, or modify a required ((operational)) permit of any person who has:~~

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

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

~~((7) For the purposes of subsection (6) of this section and WAC 246-272A-0440, a person is defined to include:~~

~~(a) Applicant;~~

~~(b) Reapplicant;~~

~~(c) Permit holder; or~~

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

~~(i) Board members;~~

~~(ii) Officers;~~

~~(iii) Managers;~~

~~(iv) Partners;~~

~~(v) Association members;~~

~~(vi) Agents; and~~

~~(vii) Third persons acting with the knowledge of such persons.)~~

AMENDATORY SECTION (Amending WSR 05-15-119, filed 7/18/05, effective 9/15/05)

**WAC 246-272A-0440 Notice of decision—Adjudicative proceeding.**

(1) All local boards of health shall:

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

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

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

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

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

#### REPEALER

The following sections of the Washington Administrative Code are repealed:

- WAC 246-272A-0020     Applicability.
- WAC 246-272A-0125     Transition from the list of approved systems and products to the registered list—Treatment products.
- WAC 246-272A-0135     Transition from the list of approved systems and products to the registered list—Bacteriological reduction.
- WAC 246-272A-0150     Transition from the list of approved systems and products to the registered list—Distribution products.
- WAC 246-272A-0175     Transition from the experimental system program to application for product registration.



November 21, 2023

SENT VIA EMAIL

Peter Beaton  
Washington State Department of Health  
PO Box 47824  
Olympia WA 98504

**RE: KITSAP PUBLIC HEALTH COMMENTS ON PROPOSED LANGUAGE FOR CHAPTER 246-272A WAC**

Dear Mr. Beaton,

Thank you for the opportunity to provide comments on the proposed rule language for Chapter 246-272A WAC. The Kitsap Public Health District (Health District) appreciates the Department of Health's (Department) efforts to ensure onsite sewage systems (OSS) in Washington State are being properly designed, installed, inspected, and maintained. The Health District wishes to provide the following comments and questions for consideration by the Department:

SECTION	COMMENT
0015	<p>(1) How will DOH review existing LMP plans? What standards or guidance will be used to review a plan?</p> <p>(2)(b)(x) If a local management plan identifies an area where phosphorous is a contaminant of concern, what activities can an LHJ do to address this issue? There is no standard for phosphorous discharge in septic effluent and there are no DOH approved devices for phosphorous reduction.</p> <p>(3) How will DOH review existing LMP plans? What standards or guidance will be used to review a plan?</p>
0120	<p>For all installed proprietary products, what happens when that product then fails the field performance testing requirements? Requiring a compliance plan will not address installed systems that are not meeting the requirements of approved design.</p> <p>How does the state plan to administer the field sampling for devices that treat the sewage as part of their dispersal component? For example, OSCAR or</p>

	Glendon systems, would require some sort of containment under the dispersal component to effectively catch the sewage for sampling.
0234	(4)(c) bed width should be expanded to 12 feet due to the common usage of gravelless chambers and their typical widths
0280	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.

Please feel free to contact me at (360) 728-2290 or [john.kiess@kitsappublichealth.org](mailto:john.kiess@kitsappublichealth.org) if you have additional questions.

Sincerely,



John Kiess, RS  
Environmental Health Director  
Kitsap Public Health District

Dear Mr. Beaton,

As one who spent much time and effort on the ORRC I wish to comment in favor of the new proposed rule language. I encourage the SBOH to adopt the rule as written.

Respectfully,

Sent from my iPhone

Dave Lowe

<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.oscaronsite.com%2F&data=05%7C01%7Cpeter.beaton%40doh.wa.gov%7Cf6beabb0bb7b4027789808dbdcb334cf%7C11d0e217264e400a8ba057dcc127d72d%7C0%7C0%7C638346434472784726%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikk1haWwiLCJXVCI6Mn0%3D%7C1000%7C%7C%7C&sdata=jVbiMEdIH6849HH9DJxQHgr%2FSbPZ%2FQzDaXbwvMi7MIQ%3D&reserved=0>

425-750-4922

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Chapter WAC 246-272A Revisions = more government overreach making life less tolerable for the people and businesses. Do not implement any of the proposed changes.

Paul S Nowak, PhD, PE

16818 fN Madison Rd.

Mead, WA

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Mark Soltman

I was not able to discern from the proposed revised rule why the bacteriological (FC) parameter was removed from Performance Levels A, B, and C, and established as a separate performance level DL1, DL2, DL3. Without a clear understanding of the reason for this change, the impact of this change throughout the rule is confusing to me.

I found this to be an interesting policy shift regarding departmental Recommended Standards and Guidance documents. It seems to move closer to regulating the application of on-site wastewater treatment and disposal technologies, not in rule, but through "Department Standards". It may be the shift to make at this time, but it was always a slippery slope for some citizens and the private sector that had concerns about the application of standards that were not specified in the rule. DOH Recommended Standards and Guidance documents developed by

staff and the TAC were presented as best applicable standards, and highly recommended to LHJs for inclusion in their local rule making processes, thus giving local health flexibility. Any chance that the new designation of "Department Standards" think that a "s" is needed at the end of "meet" to make it read correctly: the land "meets minimum..." As "septage" is a defined term, perhaps "septage" is a better term here rather than "septic"? Reading this as written my mind wants an answer to the question "septic 'what' backing up". Clearly septic contents, which is already defined in the rule: septage.

It occurs to 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.

that fill material is often intended to be consolidated. Why is it specified "unconsolidated"

Insert "soil" so that the term is complete "soil dispersal component"

Does this open the door to install a SSAS in fill material? I always thought that an SSAS needed to be installed in undisturbed soil of a suitable soil type. Other than using ASTM-33 sand as suitable fill material for pressure distribution systems, how is this provision to be used? While this definition is added with this rule revision, the term is not used in the document, at least as the definition is developed here. Other than use of ASTM C-33 sand in the Repair of Failures section, and backfilling with cover material in the Installation section, and void filling with soil or gravel in the Abandonment section, the term "fill", as it relates to this definition, is not used. Just curious.

And, for consistency, insert "soil" before "dispersal component"?

This seems to suggest that fill meeting the textural criteria may be used for a soil dispersal component. This seems to violate the broader provisions of the definition of "suitable" soil, which includes "original, undisturbed, unsaturated". Is the intended? Or an unintended consequence?

Just curious what this is intended to address. I'm wondering if it could easily include: garbage, junk, boulders, oyster shells, tree trunks, etc.? If so, was this intended?

think that a "s" is needed at the end of "meet" to make it read correctly: the land "meets minimum..."

Insert "soil" so that the term is complete "soil dispersal component"

Insert "soil" so that the term is complete "soil dispersal component"

I think this is referring items (a) through (i) in the definition of "minor repair". I suggest referring to the definition lest readers wonder where the "list for a minor repair" is located. Swap "definition" for "list" in this line of text.

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.

As I consider the new Treatment System Performance Levels DL1, DL2, DL3 it occurs to me that rather than "Disinfection Levels" these are bacterial levels *to be achieved by disinfection*. (which is what exists in the current rule). An awkward element that arrives later in the draft rule when achieving the new Disinfection Levels can not be achieved by disinfection. This conflict of terminology is jarring. Calling these "Bacterial Levels" would eliminate the conflict of terminology.

note that while this provision is removed from the definition it is 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.

Another instance of the matter of departmental standards vs. departmental "recommended" standards. Are As written these two items, a & b, are an awkward read following the lead-in provided by item 1 in the section. I suggest using the phrase "when striving to meet" instead of "for".

Manufacturers shall, for the purpose of product registration as described in WAC 246-272A-0110 and 246-272A-0120,

(a) when striving to meet treatment level DL<sup>1</sup>, verify bacteriological reduction performance by sampling for fecal coliform or *E. coli*.

(b) when striving to meet treatment level DL2 or DL3, verify bacteriological reduction performance by sampling for fecal coliform.

standards for "field compliance" appears to only address Fecal Coliform. Is that intended?

What does the superscript "1" mean here? What, if anything, does it refer the reader to? Also, the phrase "supplemental bacteriological reduction technology" occurs only twice in this draft, here in this part of Table II. Why introduce a new term or phrase for disinfection processes/products, which is defined in this draft rule. Wouldn't "supplemental disinfection" suffice?

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..."

For consistency it may be better to leave "proprietary" and insert "registered on-site" in front of the word "proprietary". The current "List of Registered On-site Treatment and Distribution Products" titles Section 2 as "List of Manufacturers of Registered Proprietary On-site Products".

Or strike "proprietary" as proposed and make changes for consistency of language in other documents.

Another instance of placing requirements, in this case on manufacturers, that are to be established outside of the rule development process. Does simply stating that the requirement to be met is identified in departmental standards sufficient to pass the public rule development process for establishing lawful requirements. ALSO, what does the phrase "dated the effective date of the rule" mean here? What is to be dated with the effective date of the rule (I assume it means this proposed rule): the field performance report or the DS&G. Perhaps some clarifying editing is needed here?

ALSO, perhaps the word "treatment" needs to be inserted between "proprietary" and "products" in the statement relating to the standards and guidance document, to clarify the distinction between treatment products and distribution products?

As written these two items, a & b, are an awkward read following the lead-in provided by item 1 in the section. I suggest using the phrase "when striving to meet" instead of "for".

Manufacturers shall, for the purpose of product registration as described in WAC 246-272A-0110 and 246-272A-0120,

(a) when striving to meet treatment level DL<sub>1</sub> verify bacteriological reduction performance by sampling for fecal coliform or *E. coli*.

(b) when striving to meet treatment level DL<sub>2</sub> or DL<sub>3</sub>, verify bacteriological reduction performance by sampling for fecal coliform.

This statement is also a bit awkward. Perhaps a suggestion:

(b) When testing treatment product or treatment component sequence according to the NSF/ANSI Standard 40 testing protocol.

This seems smoother to read. (channeling my "plain talk" training from the last decade of my time with DOH, exchanging a 1 syllable word for a 3 syllable one. Ha!)

This is where referring to bacteriological standard levels as "disinfection levels" is most awkward. It strikes me that stating that manufacturers may not register products for Disinfection Level 3 (DL#) 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 would not present the awkward terminology that exists when the "Disinfection Level" terminology is used.

For consistency it may be better to leave "proprietary" and insert "registered" in front of the word "proprietary". The current "List of Registered On-site Treatment and Distribution Products" titles Section 2 as "List of Manufacturers of Registered Proprietary On-site Products".

Or strike "proprietary" as proposed and make changes for consistency of language in other documents.

Insert "soil" so that the term is complete "soil dispersal component"

This text is addressing gravity flow OSS. The rule maintains definitions for "sewage tanks" and "septic tanks". It seems to me that virtually all gravity flow OSS would use a septic tank. Not sure what is being clarified here by converting "septic" to "sewage" in this subsection. Unless this change is done to capture OSS with a lift station and pump to a gravity flow SSAS in the "gravity OSS" category.

This is another place where gravity flow OSS is being addressed. As nearly all such systems will be using a septic tank, I question the benefit of changing the term from "septic" to "sewage".

I note that the Summary of Key Draft Rule Changes (October 2023) states for this subsection that a requirement for DOH to maintain a guidance document on remediation. I don't see this requirement in this draft of the rule. Was the requirement for a guidance document removed from the draft rule by intent or simply an oversight? If by intent, then the Summary may need to be corrected.

My comment here comes before I have had the opportunity to explore the backstory for this new section. Supporting this new section is a defined term "remediation" that defines what a remediation is not. Without knowing the backstory, all of this seems like a potential "back door" to sewage system technology experimentation. Over the past 30 years progress has been made to assure that systems and processes used are well established, tested, reviewed and approved. How will this new provision interact with the RS&G for Remediation Technologies and Processes? Hopefully if I can get the backstory on this item my concerns will go away.

Table VI uses the term "distribution", as in "method of distribution". Shouldn't "distribution" be used here instead of "dispersal"?

Under the new scheme where bacteriological reduction is addressed as a Disinfection Level, 1 through 3, Treatment Level A no longer shows up alone, it is joined with DL1. Should that change be reflected here, too?

Insert "soil" so that the term is complete "soil dispersal component"

Eliminating the Method 1 and Method 2 distinction doesn't add any clarity to how this reads. There remains two methods: That presented in Table XI, and that which begins with subsection (1) (e) *Require all proposals not meeting the minimum land area requirements in Table XI of this section to demonstrate the proposed development:*

Table XII more accurately presents a condition (maximum daily TN load) of this alternative methodology rather than presenting minimum lot sizes. This TN condition is joined by others listed in 1e, which constitutes the alternative method to determine minimum lot size.

I think this topic could benefit from additional editing for clarity.

One fix for this would be to end statement (d) at the first comma, striking the phrase "or the alternative methodology in Table XII of this section" and move the sentence about the local health officer to a separate letter designation (that would become "e", causing all other lettered items in the line to shift down one). This change allows the provision established in the sentence *Require all proposals not meeting the minimum land area requirements in Table XI of this section to demonstrate the Table XII of this section*" and move the sentence about the local health officer to a separate letter designation (that would become "e", causing all other lettered items in the line to shift down one). This change allows the provision established in the sentence *Require all proposals not meeting the minimum land area requirements in Table XI of this section to demonstrate the proposed development:* to direct persons to the various conditions that apply, including the TN max loading presented in Table XII.

Any reference to Table XII as an alternative methodology would be dropped. Table XII would be presented as a condition that applies to "proposals not meeting the minimum land area requirement in Table XI".

YPO: This table title is missing the table number, TableXII slipped below the table.

Insert "soil" so that the term is complete "soil dispersal component"

The words "may be" is redundant in this sentence as the lead in "(1) ...may initiate enforcement action. Enforcement action *may* include, but is not necessarily limited to:"

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1. WAC 246-272A-0001(1) does not prioritize the interests of WA property owners as the Purpose of the OSS Regulations. The Code should emphasize that the role of Administration is to assist and cooperate with the property owners, by assisting and training them in managing household waste in the most efficient and environmentally friendly manner.

To correct this issue the following wording is suggested:

WAC 246-272A-0001 Purpose, objectives, and authority.



(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 and solid organic waste, conserving and recycling waste waters and protecting the public health. by minimizing:  
~~(a) The potential for public exposure to sewage from on-site sewage systems (OSS); and~~  
~~(b) Adverse effects to public health that discharges from OSS may have on ground and surface waters.~~

It would be even better, if the Department would prioritize this purpose in WAC 246-272A. Regrettably, paragraphs 0230 (1) and 0430, which place absolute power in the hands of one person (LHO) in each County without any definite provisions on how to contest their arbitrary decisions, tell the opposite.

2. WAC 246-272A-0100 "Sewage technologies" does not list or describe or clearly reference such listings and descriptions of public domain technologies commonly used for wastewater treatment in the world. The reference to the Department's Standards and Guidelines (DS&G) is unclear and the reader of the Code is left wondering where to find these DS&G.

**Vague references are not appropriate for a legislative document.** ([The Freedom of Information Act](#))

The lack of a comprehensive list and description of modern wastewater treatment technologies in the Code means that local health officials (LHO) may not be aware of the full range of existing technologies and may, from time to time or deliberately, abuse their authority by omitting the most cost-effective ones for specific conditions and properties of the construction site. To correct this issue, the following sample content draft is suggested: [WAC 246-272A-0100 Sewage technologies](#).

a) WAC 246-272A-0100 does not describe or implement a very important part of household organic waste treatment described in Paragraphs 3.5.2 and 3.5.3 of [USEPA "Onsite Wastewater Treatment Systems Manual"](#): separate treatment of blackwater, graywater and solid organic waste.

b) WAC 246-272A-0100 does not describe Public domain ATU systems. ATU systems were first used a century ago, have come a long way and are widely used throughout the world, with the exception of Washington State. They greatly exceed the efficiency of septic tanks, as shown in [Table 3-19 of USEPA "Onsite Wastewater Treatment Systems Manual"](#), in many cases with effluent quality much better than A and DL1 levels, depending on design and use.

It should be noted that such effluent quality and operational reliability can be reliably achieved if incoming blackwater does not contain solid organic waste and detergents from laundry, which can significantly deteriorate the operation of the ATU.

In addition, unlike septic tanks, ATUs do not emit methane into the atmosphere, a very powerful greenhouse gas ([twenty eight times stronger than CO2](#)).

3. WAC 246-272A-0200 of the Revised Code is good for the last century. Advances in technology over the past decades have ushered in a new approach to permitting and design of CSOs that can and should be done online.

Each county has GIS maps and descriptions of soil composition and hazards for each site. This information, combined with the precise description of OSS technologies and components in this Code or in DS&G, can be used to develop AI trained in OSS technologies.

The property owner or her/his authorized representative can contact the AI online to fill out an application form and receive tips on the placement, type and design of a suitable OSS. In the event that the AI offers multiple possible design and placement approaches, it is the responsibility and privilege of the property owner (not the LHO) to select the option that best suits her/his needs.

4. WAC 246-272A-0210 (Location) is filled with arbitrary requirements. Any OSS constructed in accordance with the design requirements set forth in this Code or in DS&G shall treat black and gray waters to Level A and above DL1 and may be discharged to surface waters. This is especially true if wastewater from the home is treated in an ATU and a subsurface dispersion system. Contamination of wells with OSS outflows can occur if there is no a restrictive layer below the topsoil (which is a very rare case in WA, where topsoils are formed by volcanic lahars) and the requirement to maintain a distance of 100 feet from the OSS is not justified. The same can be said for many of the other horizontal separation distances listed in Table IV.

5. WAC 246-272A-0220 (Soil and site evaluation) has a vague description of the process. The statement in paragraph (1) that: "Only professional engineers, designers, or local health officers may perform soil and site evaluations" results in the site's winter groundwater level being incorrectly determined. Current practices are such that LHOs request the owner to dig three 6-foot-deep test pits and, when they arrive, measure the length of grass roots in the pit. They call it the "Percolation Test" stating that the length of the grassroots determines the winter watertable and therefore the "vertical separation".

This is very far from the true situation in Western Washington. In fact, if the surface is relatively flat, the water table will be near the surface for most of the winter. And this situation has very little to do with the type of soil and slightly depends on the depth of the restrictive layer, which determines how long it will take for the groundwater level to approach the surface. Usually this happens in the early or mid December or so.

Undoubtedly, all farmers know soils content and the winter watertable on their properties much better than any soil specialist or LHO, because the soil is the major source of their income. WAC 246-272A-0220 prevents them from managing their properties in the way they think is best.

6. WAC 246-272A-0230(1) The fact that the Department does not maintain good DS&G with precise description of OSS components and does not reveal it to the public brings to archaic approach to the procedures of OSS design and installation. In fact it causes that,

firstly: department-licensed contractors are shielded from market competition;

secondly: puts unlimited and incontestable power in the hands of one person in each County called LHO.

Giving unjustified preferences to certified designers and unlimited power to LHOs are evident deviation from the major ideas of a democratic society and UDHR.

Besides, all OSS technologies have been around for many years and all certified designers have just a few ready-made files that they use in their daily “design” process. AI trained in OSS design can do the same.

7. WAC 246-272A-0230 (2)(a) contradicts to recommendations of paragraphs 3.5.2 and 3.5.3 of [USEPA “Onsite Wastewater Treatment Systems Manual”](#), which recommend separate treatment of blackwater, graywater, and organic solid waste. Laundry water completely disrupts the wastewater treatment process in the septic tank and ATU. Organic solid waste clogs tanks because the solids require more bacterial work, which significantly increases the temperature, which is not possible in a water-filled tank. For this reason, solids take considerable time to turn into sludge and are the main source of dissolved solids in the effluent, which ultimately leads to the formation of biomats in dispersion systems and deterioration of OSS performance.

This is the matter of importance to accomplish paragraph (2)(a) with [plumbing requirements](#) for newly constructed houses:

8. WAC 246-272A-0230 (2)(d) and its subparagraphs shall take into account separation of blackwater and graywater.

9. WAC 246-272A-0230 (2)(e) and subparagraphs are worded oddly, to say the least. In DS&G the Department shall 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.

The responsibility of the OSS builder is to correctly install the described components in accordance with the recommendations given in this Code. OSS builders shall not be required to measure the quality of the resulting water.

This is the essence of the Public domain OSSs, which is not observed in these paragraphs.

10. WAC 246-272A-0230 (2)(f) repeats the same mistake as (2)(e), Table VI fails to describe what treatment and effluent dispersal units are advised to use depending on the construction site properties. Rationally, Table VI shall look like Table 2-1 “Selection of disposal methods under various site constraints” in US EPA 625/1-80-012 DESIGN MANUAL.

An example might look like follows:

Table VI. Selection of dispersion method for Septic Tank with effluent quality of E

Method	Site properties											
	Soil			Bedrock			Watertable			Slope		Small size
	1	2,3	4-6	Shall	mid	dip	Flood <1'	6''<3'	>3'	<5%	5%<15%	
Subsurf Gravity			x			x			X	x	x	
Gravity&drainage								x		x	x	X
Mound	x	x	x	x	x	x		x		x	x	X
Chamber		x	x		x	x			X	x	x	
Drip		x	x		x	x			X	x	x	
Pressure		x	x		x	x			X	x	x	
Sand filter		x	x		x	x			X	x	x	

Table VI cnt. Selection of dispersion method for ATU with effluent quality of A&DL1

	Site properties				
	Soil type	Bedrock	Watertable	Slope	Small size

Method	1	2,3	4-6	Shall	mid	dip	Flood <1'	6''<3'	>3'	<5%	5%<15%	
Subsurface Grvt		x	x			x			X	x		X
Grvt&drain		x	x			x		x		x		X
Mound&gravity	x	x	x	x	x	x	x			x		X
Chamber												
Drip												
Pressure												
Sand filter												

WAC 246-272A-0232 fails to describe blackwater separation requirements and ATU requirements.

[Suggested corrections of WAC 246-272A-0232 can be found here.](#)

WAC 246-272A-0234 (Design requirements—Soil dispersal components.) does not list all technologies used for dispersal of effluent from treatment tanks, and does not provide for a link where such requirements to all types of dispersal components can be found. Separation of blackwater, graywater and solid organic waste is not taken into account.

Along with general requirements to dispersal components specific requirements to every type of dispersal components shall be listed or a reliable link to such requirements shall be given like this [exemplary description of major subsurface and mound components.](#)

WAC 246-272A-0250 Installation. (1) unreasonably limits the rights of the owner to manage his-her property in the most appropriate way.

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.

“WAC 246-272A-0430 (1) When an OSS is out of compliance with any law or rule regulating OSS and administered by the department or the local health officer, the department or the local health officer may initiate enforcement action. Enforcement action may include, but is not necessarily limited to:

(e) Civil or criminal penalties authorized under chapter 70.05 RCW and RCW 43.70.190;”

This wording means that the Purpose of the Code to prevent environmental pollution is forgotten and any deviation from the Code is punishable up to “Civil or criminal penalties”. If a property owner builds an OSS of a good quality but not listed in the Code or in some other way treated organic household waste without polluting the environment, he may be punished by personal decision of LHO without any way to contest this decision.

It’s not only WAC 246-272A fails to list the full spectrum of technologies and hides them from the public, it also punishes anyone for disobedience and initiative. To an LHO, all people are criminals except those who obey and pay all required fees and charges.

The real situation is that a deputy sheriff supervises the environmental section in the County, and very frequently the property owners deal with people, who simply do not know (or neglect) the full spectrum of household waste treatment technologies, and there is no provision to contest these impromptu decisions since there is no a competent board of appeal.

Further, the current practice is for the local environmental department law enforcement officer (deputy sheriff) to issue violation tickets to property owners without bothering to provide evidence of environmental pollution. If the owner decides to contest this ticket because he did not pollute the environment, magistrates in local courts are biased in favor of the administration because they simply don’t understand the essence of the dispute. Such hearings are turned into a farce with 100 percent predictable outcome when no arguments are considered impartially and competently, and the property owners are deprived of an ability to find justice.

This is a clear example of how noble intentions have turned into police violence without achieving their stated goals.

#### Conclusions.

The proposed draft maintains all flaws of the original WAC 246-272A and:

1. does not list and clearly describe the variety of efficient organic household waste treatment technologies known to mankind and prevents usage of the most efficient ones in practice;
2. unreasonably limits the rights of the owners to manage their properties in the way which they consider appropriate, giving unlimited power of decision into the hands of LHOs;
3. contains many arbitrary requirements;
4. is not acceptable for approval and needs a thorough scientific and legal examination by independent specialists and lawyers.

Peter, if you publish my comments on the DOH website, please, give me a link.

Thank you.

Have a good time.

George Danilov

Physicist

Tel: 360-515-7719

e-mail: [permaculturefarm19@gmail.com](mailto:permaculturefarm19@gmail.com)

mail: PO Box 125, Curtis, WA, 98538

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## Proposed Design Improvements to Pressurized Drainfields for On-site Sewage Disposal Systems

by Douglas Catey, P.E.

### Introduction:

In the process of consulting on the failure of pressurized drainfields, one mode of failure has recurred quite often. At the interface between the discharge holes in the pressurized laterals and the adjacent drainrock, clogging often occurs. Several reasons for clogging at these points are:

1. A piece of drainrock happens to end up right against the lateral at the hole location. The percentage of holes thus blocked is not insignificant, and depends on drainrock size.
2. Fines migrate into the drainrock and fill the interstices between rocks. This is unavoidable to some degree, but is exasperated by poorly washed drainrock, or poor filter fabric placement or quality. I witnessed one failure due to filter fabric disintegration, and resultant fines contamination, in a drainfield that was otherwise in pristine condition.
3. Discharge of solids from the septic tank pump chamber.
4. Build up of a biologic "slime layer".

### Suggested prevention or delay of this failure mechanism:

I suggest some simple, low-cost modifications to the installation of drainfield laterals that should help prevent or, at a minimum, delay failure due to clogging at the lateral discharge hole / drainrock interface.

The principle is to create an air gap between the lateral and the drainrock. One possible method would be to cut longitudinally a length of 4-inch diameter, corrugated, incised ADS (or equal) drainage pipe. This creates a pair of "U" shaped pieces in cross-section.

After placing the laterals on a bed of drainrock, the inverted "U" drainage pipe halves would be centered over the laterals. They can be held in place with shovelful of rock, before covering the entire system with a layer of drainrock, followed by high quality filter fabric, and then native

soil up to grade.

This creates the desired separation between the lateral discharge holes and the drainrock.

Corrugated, incised drainage pipe is preferable to smooth pipe with holes, for the same reason of preventing clogging between the pipe and drainrock.

Cross-connecting the laterals at intervals (say 10 feet) would not only anchor the laterals in the center of the drainage pipe sleeves, but would also tend to equalize the flow distribution throughout the laterals.

Finally, adding long-sweep ells with risers to grade at the end of each lateral would aid any future flushing or jetting of the laterals. The risers could be encased in 4-inch diameter PVC pipe with unglued slip fitting caps. This would alert the owner to the location of the drainfield, protect the lateral risers, and enable simple inspection of the drainrock for standing effluent.

Considerations:

1. In this system, discharge holes in the laterals would best be placed horizontally in the laterals and alternate left and right sides.
2. Some care would be required to assure the sleeves are placed correctly.
3. The longevity of drainage pipe in an effluent environment needs to be ascertained. ADS polypropylene pipe is also manufactured for drainfields, so testing has probably already been performed on the suitability of the material. Long-sweep ells are most readily available as electrical conduit, but electrical conduit is not pressure tested, so may not be suitable for use at the end of laterals, even though laterals are generally low pressure.
4. Should these proposed design modifications be optional?

Conclusion:

These proposed modifications should increase the ease of maintenance, effectiveness, and longevity of septic system drainfields, at a minor cost increase in materials and labor.

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Nov 14 2023 3:13PM

There is no direction in the rules anywhere about old systems that must be inspected, that have not failed, but are older than the local health district has records for. Section 246-272A-0025 (Connection to public sewer system) is the closest, but it is only for systems that have failed. I suggest adding specific evaluation steps for addressing pre-historic OSS.

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Nov 26 2023 11:41PM



Page 13 - WAC 246-272A-0001 (6) Consider adding "Based on an established SOP approved by the state board of health instead of subjective decision by Health Department staff who might be biased and inconsistent ruling on each situation.

Page 44 - WAC 246-272A-0200 Permit Requirement. Consider adding "See attached example of permit application with gravity O.S.S. design layout)

Page 46 - IAW the established SOP Page 46 - IAW the established SOP

Page 51 - Consider removing to match section 13.20.040.

Page 51 - Consider providing justification or technical support

Page 51 - Based on technical support and justifications.

Page 59 - Consider changing to "may personally design, construct, install, or repair a gravity system for the resident owner's own single family dwelling under IAW Section 13.20.040.

Page 59 IAW Section 13.20.040

Page 62 Consider changing to "a partical"

page 65 Consider changing to a practical

If you have any question on my comment, please contact me at dragonerik@yahoo.com. Thank you, Eric Long

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November 28, 2023

Peter Beaton

Washington Department of Health

PO Box 47824

Olympia WA 98504-7824

Re: Comments on CR-102 for On-Site Sewage Systems, Chapter 246-272A WAC Revisions

Dear Mr. Beaton,

I am submitting these comments on the CR-102 for the On-Site Sewage Systems, Chapter 246-272A WAC Revisions on behalf of Taylor Shellfish Farms.

Taylor Shellfish Farms is a 5th generation family-owned shellfish farming business based in Shelton, Washington. We are the largest producer of farmed shellfish (oysters, clams and mussels) in the United States. We do this with help of 600+ employees on 14,000 acres of tide and bed lands that we own or lease in six counties in Washington state.

The National Shellfish Sanitation Program (NSSP) has strict water quality standards for shellfish growing waters to ensure the shellfish we produce are safe to consume. For the past thirty plus years as Director of Public Affairs for Taylor Shellfish Farms, much of my work has been dedicated to ensuring our growing waters continue to meet those strict NSSP standards. Much of that work has been focused specifically on the threat posed by failing on-site sewage systems. This included serving on the Shellfish Advisory Committee in the early 2000s to determine if revisions were needed to WAC 246-272A, then subsequently on the Rule Advisory Committee that worked on those rule revisions that were ultimately adopted in 2005. I also served on an advisory committee for updating the Large On-Site Septic regulations and was involved in lobbying to get HB1458 passed in 2006 to require counties to form Marine Recovery Areas with enhanced on-site sewage oversight adjacent to shellfish growing areas. I have also actively worked with counties regarding their on-site sewage regulations and programs. Most recently I have had the pleasure of serving on the Department's On-site Rule Revision Committee (ORRC) that developed the rule update included in CR-102 WSR 23-22-062. As with prior Department of Health rule advisory committees I have served on, the process followed was exemplary. In my opinion the department went above and beyond to ensure that a broad representation of stakeholders and experts were included, and a process and ground rules were followed to ensure all opinions were heard, respected, and responded to.

While the pandemic created an unfortunate delay in bringing these rule revisions before the Board of Health, it gave me an opportunity to revisit them with fresh eyes as well as take a stroll down memory lane reviewing 25 years of my on-site sewage policy involvement.

Reviewing my DOH on-site sewage folder I am reminded of all the great work done over the years by the Department and Board of Health to improve on-site sewage management and oversight in Washington. The proposed updates to WAC 246-272A before you in the CR-102 continue to build on these efforts with some important improvements to the rule which we urge you to adopt.

We support all the proposed revisions but in particular we want to call out our support for the changes to WAC 246-272A-0015 regarding Local Management Plans (LMPs). With shellfish farms in six counties in Washington we observe a wide range of commitment to implement LMPs and consequently, their effectiveness. The changes which include a review by DOH 2 years after adoption of the rule to determine adequacy, updating to address inadequacies, periodic review by the LHO and DOH and annual reporting by the Puget Sound Counties will be instrumental in improving consistency of implementation of the WAC and its effectiveness throughout Puget Sound Counties. A key requirement that has been added to the LMP is a description of the capacity to implement the management plan, which includes a summary of program expenditures by activity, source of funds, a strategy to fill any funding gaps, and the ability to find failing and unknown systems. We also are pleased to see that areas where sea level rise may impact adequate horizontal separations to surface waters is proposed to be added to the list of areas where OSS could pose an increased public health risk.

Thank you for the opportunity to comment in support of adopting the revisions to WAC 246-272A. I look forward to working with the Department and LHJ's on implementing them in the years ahead.

Sincerely,

Bill Dewey  
Director of Public Affairs  
Mobile: 360-790-2330  
Email: [billd@taylorshellfish.com](mailto:billd@taylorshellfish.com)

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Hi Peter,

Thank you for taking our comments late. Here are comments for consideration.

#### Entire Document

- Ensure consistent use of mL (little m, big L) for milliliter abbreviation.
- Ensure the use of oxford commas.
- 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.
- Ensure initial table references are consistent. Some are simply Table X of this subsection while others are Table X, Title.
- Ensure the abbreviation for Escherichia coli is *E. coli*. Big E, dot, space, little c, all italics.
- 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.

#### Section 246-272A-0110

- Footnotes for Table II are missing.
- Table III uses two units for fecal coliforms and *E. coli*. 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 as the two values are not directly comparable.

#### -0120

- Confirm with DOH Style guide that dates do or do not the "st" or "nd" after the number. Ex. December 31st vs December 31.
- (7) "...a list of [proprietary treatment products]..." change to "registered on-site treatment and distribution products" to make consistent with other subsections.

-0145

- Subsection (6)(a) has a date of November 1 while -0120(6)(a) has a date of October 31. Are these supposed to be the same dates?

-0170

- Subsection (2)(a). Consider adding clarification that the OSS must be for the parcel that is intended to be used for testing new product. Without clarification, an applicant could supply proof from any existing conforming OSS within a county. Ideally this would be caught in the application review process but clarifying in the WAC would help eliminate the loophole.

-0200

- Subsection (4)(d) references subsection (1) however, it should reference subsection (2).

-0210

- 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.
- Table IV is missing footnotes for 3-8. Please provide.
- Table IV outlines nonpublic, in-ground, drinking water containment vessel but excludes the public equivalent. Consider adding.

-0230

- Subsection (1). Add back the “s” after designer or remove the “s” after engineer to make consistent singular or plural.
- If no bedrooms in additional dwelling, then what? (2)(d)(ii)(B) & (2)(d)(iii)(C)

-0232

- Table VII. The number of values in each column do not appear to match; three values on the left and two on the right. Please provide a cleared tracked changes table.

-0233

- Recommend putting “pump basin” in the definitions rather than in WAC subsections.

-0234

- Ensure that each (letter) sections following “meet the following requirements” are in complete sentences. Most of the items listed are missing a verb leaving no ‘action’ for the designer to take.

-0250

- Recommend adding “licensed” between only and installers in Subsection (1)
- 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.

-0260

- Under subsection (5)(c), recommend adding “an evaluation” or move under section (a). As written, it’s missing a verb – what is the inspector supposed to do?

-0265

- Subsection (2) seems as though it could be consolidated in subsection (1).

-0270

- 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.”

-0280

- 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.
- Subsection (4)(e) references 246-272A-0014 & -0016. These WACs DNE. Update the WAC reference to the correct section.

-0320

- Table XI. Ensure leading zeros are used (0.5 acres) and footnotes reference the correct subsection [-0234(7) now].
- 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.

-0420

- Clarify subsection (2)(b). Highlight is the area of confusion along with strikeout recommended edits.  
(b) Upon review, if the department finds that the waivers previously granted are inconsistent, ~~consistent~~ **consistent with the purposes of this chapter**, and DS&G for granting waivers, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.
- In subsection (4), recommend adding what timeframe the annual report will cover. Will it be of the calendar year or biennium?

-0430

- Subsection 2. Consider adding that each notice and order must “include the date in which the required repair must be completed (due date)”.

Please let us know if you have any questions or concerns.

Sincerely,

**Charese Gainor** (she/her)

Drinking Water & On-Site Septic Lead

Skagit County Public Health – Environmental Health

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[CGainor@co.skagit.wa.us](mailto:CGainor@co.skagit.wa.us)

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**246-272A-0340 Approval of installers, pumpers, and maintenance service providers (2)**

This would require non-Puget Sound counties that would not be mandated to do property transfer inspections until 2 years after implementation, to put an approval process for maintenance service providers in place 2 years in advance. Consider changing the requirement date for these counties to have an approval process for maintenance service providers in place closer to the implementation date, e.g., Jan 1, 2027.

# Summary of Comments

## Chapter 246-272A WAC, On-site Sewage Systems

**Table 1: General support**

Comment Received	Department of Health Recommendation
Member of the On-Site Rule Revision Committee supports the changes. Encourages the SBOH to adopt the rules as written.	<b>No change to proposed rule.</b> The Department appreciates the feedback and support for the proposed rules.
Supports the changes, especially the changes to WAC 246-272A-0015 regarding Local Management Plans (LMPs).	<b>No change to proposed rule.</b> The Department appreciates the feedback and support for the proposed 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.	<b>No change to proposed rule.</b> The Department appreciates the feedback and support for the proposed rules.

**Table 2: General opposition**

Comment Received	Department of Health Recommendation
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.	<b>No change to proposed rule.</b> The Department appreciates the feedback. The rule revision committee made of experts and interested parties came to consensus on the proposed 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.	<b>No change to proposed rule</b> The Department 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.	<b>No change to proposed rule.</b> A committee of experts and interested parties determined that the rule is out of date and needs updating. The Department believes the benefits to public health protections from requiring property transfer inspections will outweigh the financial cost and burden on the owner.

Opposes the proposed changes. Does not support mandatory inspections other than as required under RCW 70A.105.030.	<b>No change to proposed rule.</b> The Department appreciates the feedback. The rule revision committee made of experts and interested parties came to consensus on the proposed changes.
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**Table 3: Technical, spelling, stylistic edits**

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
Ensure consistent use of mL (little m, big L) for milliliter abbreviation.	<b>Adopt rule with amendment.</b> Editorial changes to the rule without changing the effect.
Ensure the use of oxford commas.	<b>Adopt rule with amendment.</b> Editorial changes 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.	<b>Adopt rule with amendment.</b> Editorial changes 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.	<b>Adopt rule with amendment.</b> 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.	<b>Adopt rule with amendment.</b> Editorial changes 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.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> 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.	<b>Adopt rule with amendment.</b> Editorial changes 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.	<b>Adopt rule with amendment.</b> The Department will ensure the format for the dates conform to the Code Reviser’s Bill Drafting Guide. Editorial changes to the rule without changing the effect.



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

Comment Received	Department of Health Recommendation
To ensure consistent and unbiased execution, recommend adding the following to WAC 246-272A-0001(6) " <u>Based on an established standard operating procedure approved by the state board of health,</u> "	<b>No change to proposed rule.</b> The Department has determined the authority granted in this section to be substantively similar to other duties of the local health officer and within their authority.
Recommend adding the interests of WA property owners as a priority to subsection 1. Consider the following edit: (1) The purpose of this chapter is to <u>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 and solid organic waste, conserving and recycling waste waters and protecting the public health.</u> <del>by minimizing:</del> <del>(a) The potential for public exposure to sewage from on-site sewage systems (OSS); and</del> <del>(b) Adverse effects to public health that discharges from OSS may have on ground and surface waters.</del>	<b>No change to proposed rule.</b> The Department believes 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	Department of Health Recommendation
NSF officially changed its name to NSF International. Recommend modifying WAC 246-272A-0010(56) "NSF" means <u>NSF International</u> <del>National Sanitation Foundation.</del>	<b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends changing the definition of "NSF" to: "NSF" means (( <u>NSF International</u> )) <del>((National Sanitation Foundation.))</del>
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.	<b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends adding the following definitions: "Infiltration pond" means an earthen impoundment used for the collection, temporary storage, and infiltration of incoming stormwater runoff. "Detention pond" means an earthen impoundment used for the collection and temporary storage of incoming stormwater runoff.

Consider including the term “geothermal well“ to the definition of well.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> 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".	<b>Adopt rule with amendment.</b> The Department recommends changing "septic“ to “sewage“ in part (b) of definition of Failure: (30) "Failure" means a condition of an ( <del>on-site sewage system</del> ) OSS or component that threatens the public health by inadequately treating sewage or by creating a potential for direct or indirect contact between sewage and the public. Examples of failure include: (b) ( <del>Septic</del> ) ( <del>Sewage</del> ) 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.	<b>No change to proposed rule.</b> The proposed rule has 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.	<b>No change to proposed rule.</b> 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".	<b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends changing the definition of “Fill“ to: "Fill" means unconsolidated material that: (a) Meets soil types 1-6 textural criteria and is used as part of a ( <del>soil</del> ) dispersal component; (b) Is used to change grade or to enhance surface water diversion; or (c) Is any other human-transported material.
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".	<b>No change to proposed rule.</b> 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”?	<b>No change to proposed rule.</b> This refers to shredded rubber, glass, or other materials that may be used in a drainfield.

<p>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.</p>	<p><b>No change to proposed rule.</b> 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. The Department has developed this definition 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.</p>
<p>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.</p>	<p><b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department agrees and recommends changing Disinfection Level (DL) to Bacterial Level (BL) throughout the proposed rule.</p>
<p>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 retained in the rule in Section 246-272A-0110(5) where Field Performance Verification is introduced and linked to the DS&amp;G for Proprietary Treatment Products.</p>	<p><b>No change to proposed rule.</b> No specific recommendation.</p>

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

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
<p>Questions about how the Department of Health will review existing LMP plans, what standards or guidance will be used to review a plan, and what activities can 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.</p>	<p><b>No change to proposed rule.</b> The questions will be addressed in guidance documents.</p>

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

Comment Received	Department of Health Recommendation
<p>There is no direction in the rules anywhere about old systems that must be inspected, that have not failed, but are older than the local health district has records for. Section 246-272A-0025 (Connection to public sewer system) is the closest, but it is only for systems that have failed. Suggestion to add specific evaluation steps for addressing pre-historic OSS.</p>	<p><b>No change to proposed rule.</b> The proposed rule allows these pre-permit OSS to continue to operate until they fail or there is evidence they are threatening public health or water quality. The rule doesn't require specific documentation of most OSS. Documentation of OSS is a programmatic function rather than a regulatory one.</p>

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

Comment Received	Department of Health Recommendation
<p>Recommend modifying subsection 3 to expand the scope to cover situations when information submitted by the proprietary product manufacturer is false, erroneous, or unrepresentative.</p> <p>(3) The department may remove, restrict, or suspend a proprietary product's approval for use based on failure to meet required standards or conditions of approval <u>or if the information provided by the manufacturer is false, erroneous, or unrepresentative of the approved product.</u></p>	<p><b>Adopt rule with amendment.</b> The Department agrees with this suggestion. Technical change to the rule without changing the effect.</p>
<p>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&amp;G).</p>	<p><b>No change to proposed rule.</b> Department approved public domain technologies are listed in DS&amp;Gs. The Department reviews and approves public domain technologies based on available literature and use cases.</p>
<p>Recommend incorporating separate treatment of blackwater, graywater and solid organic waste as described in the USEPA "Onsite Wastewater Treatment Systems Manual" (revised 2002).</p>	<p><b>No change to proposed rule.</b> The proposed rule provides a method and requirements for treating blackwater and greywater separately from residential sewage. This is described in WAC 246-272A-0110.</p>
<p>Recommend adding public domain advanced treatment units (ATU) systems.</p>	<p><b>No change to proposed rule.</b> The Department and local health jurisdictions do not have the resources to review and approve public domain ATUs.</p>
<p>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</p>	<p><b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends changing Disinfection Levels (DL) to Bacterial Levels (BL) throughout the</p>

<p>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 would not present the awkward terminology that exists when the "Disinfection Level" terminology is used.</p>	<p>proposed rule.</p>
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**Table 9: WAC 246-272A-0110, Proprietary treatment products – Eligibility for registration**

Comment Received	Department of Health Recommendation
<p>Footnotes for Table II are missing.</p>	<p><b>Adopt rule with amendment.</b> Editorial changes to the rule without changing the effect. The Department recommends changing the footnotes to:</p> <p><sup>1</sup> Test results for BOD<sub>5</sub> may be submitted in lieu of test results for CBOD<sub>5</sub>. In these cases numerical values for CBOD<sub>5</sub> will be determined using the following formula: (BOD<sub>5</sub> x 0.83 = CBOD<sub>5</sub>).</p> <p><sup>2</sup> 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.</p>
<p>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.</p>	<p><b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends changing how the units for FC and EC on Table III are displayed so that both clearly have the units "cfu/100 mL.</p>
<p>EPA Method 1664 is inappropriate to register Category 2 products. Recommend using NSF/ANSI Standard 40 instead.</p>	<p><b>No change to proposed rule.</b> The Department recommends no change to the proposed rule at this time. This suggestion is considered a substantive change and requires additional engagement with the industry. The Department plans to address this in a separate rule</p>

	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.	<b>No change to proposed rule.</b> 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?	<b>No change to proposed rule.</b> The proposed rule language 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..."	<b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. Treatment level D was removed in the proposed rule. The Department recommends the following change to Table III: "Values for Levels A - <del>C</del> 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.	<b>No change to proposed rule.</b> The referenced standards in the proposed rule are the most current. The Department appreciates the suggestion and will add this to the list for potential future changes to the rule.

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

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
Recommend modifying subsection 7 for consistency with other subsections. (7) The department shall maintain a list of <del>proprietary treatment</del> <u>registered on-site treatment and distribution</u> products meeting the registration requirements established in this chapter.	<b>Adopt rule with amendment.</b> Editorial change to the rule without changing the effect. The Department recommend changing WAC 246-272A-0120(7): The department shall maintain a list of (( <del>proprietary treatment</del> )) (( <u>registered on-site treatment and distribution</u> )) products meeting the registration requirements established in this chapter.
For all installed proprietary products, what happens when that product then fails the field performance testing requirements? Requiring a compliance plan will not address installed systems that are not meeting the requirements of approved design.	<b>No change to proposed rule.</b> This depends on the results of the department review of the product. If the department removed the product from the registered list for failure to meet the requirements of section WAC 246-272A-0120 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 the sewage as part of their dispersal component? For example, OSCAR or Glendon systems, would require some sort of containment under the dispersal component to effectively catch the sewage for sampling.	<b>No change to proposed rule.</b> The draft Proprietary On-site Wastewater Treatment Products Department Standards and Guidance document requires the manufacturer to propose a sampling method for department review and approval.
For WAC 246-272A-0120(3)(b), suggest leaving “proprietary” and inserting “registered on-site” in front of the word “proprietary”. The current “List of Registered On-site Treatment and Distribution Products” titles Section 2 as “List of Manufacturers of Registered Proprietary On-site Products”.	<b>No change to proposed rule.</b> The Department will consider renaming the List of Registered On-site Treatment and Distribution Products to match the rule language.
Questions about WAC 246-272A-0120(5)(b)(ii). If it is legal to put requirements for manufacturers to register their products in departmental standards documents and what does “dated the effective date of the rule” mean.	<b>No change to proposed rule.</b> The requirement to complete field verification is included in the rule. The details of the process are included in the standards document. A draft of this document has been available for review and public comment on the department’s rulemaking webpage.
For WAC 246-272A-0120(5)(b)(ii), suggest inserting “treatment” between “proprietary” and “products” in the statement relating to the standards and guidance document, to clarify the distinction between treatment products and distribution products.	<b>Adopt rule with amendment.</b> The Department recommends changing WAC 246-272A-0120(5)(b)(ii) to: A field verification performance report as identified in the <del>((proprietary products))</del> <u>((Proprietary On-site Wastewater Treatment Products))</u> DS&G, dated February 1, 2025.
Proprietary treatment products that would fall under Category 2 are. designed using influent BOD5. Please change “CBOD5” to “BOD5”.	<b>No change to proposed rule.</b> Category 2 products must demonstrate their capacity to treat CBOD <sub>5</sub> as describe in WAC 246-272A-0110, Table II. This is not a proposed change.

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

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
Suggest adding "when striving to meet" instead of "for meeting" in subsection 1. (1) Manufacturers shall, for the purpose of product registration as described in WAC 246-272A-0110 and 246-272A-0120: (a) <del>when striving to meet for meeting</del> treatment level DL1, verify bacteriological reduction performance by sampling for fecal coliform or <i>E. coli</i> . (b) <del>when striving to meet for meeting</del> treatment level DL2 or DL3, verify bacteriological reduction performance by sampling for fecal coliform.	<b>No change to proposed rule.</b> The Department appreciates the suggestion and will add this to the list for potential future changes to the rule.

Suggest rephrasing subsection (2)(b). (2)(b) <u>When testing treatment product or treatment component sequence according to the NSF/ANSI Standard 40 testing protocol.</u>	<b>No change to proposed rule.</b> The Department appreciates the suggestion and will add this to the list for potential future changes to the rule.
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.	<b>Adopt rule with amendment.</b> Technical change to the rule without changing the effect. The Department recommends changing Disinfection Level (DL) to Bacterial Level (BL) throughout the proposed rule.

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

Comment Received	Department of Health Recommendation
Subsection (6)(a) has a date of November 1 while WAC 246-272A-0120(6)(a) has a date of October 31. Are these supposed to be the same dates?	<b>No change to proposed rule.</b> The two sentences use slightly different 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 front of the word "proprietary". The current "List of Registered On-site Treatment and Distribution Products" titles Section 2 as "List of Manufacturers of Registered Proprietary On-site Products". Or strike "proprietary" as proposed and make changes for consistency of language in other documents.	<b>No change to proposed rule.</b> The Department will consider renaming the List of Registered On-site Treatment and Distribution Products to match the rule language.

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

Comment Received	Department of Health Recommendation
Consider adding a sample permit application with gravity O.S.S. design layout.	<b>No change to proposed rule.</b> Permit applications are the responsibility of the local health jurisdictions, not the Department of Health.
Subsection (4)(d) references subsection (1) however, it should reference subsection (2).	<b>Adopt rule with amendment.</b> Editorial changes to the rule without changing the effect. The Department recommends changing WAC 246-272A-0200(4)(d) to: d) Issue a permit when the information submitted under subsection ( <del>(1)</del> )(2) of this section meets the requirements contained in this chapter and in local rules;



Use artificial intelligence (AI) to site and design OSS.	<b>No change to proposed rule.</b> The proposed 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.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> (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**

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
“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).	<b>No change to proposed rule</b> 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.	<b>No change to proposed rule.</b> The Department appreciates 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?	<b>No change to proposed rule</b> The setback is to the easement, or to the waterline whichever is closer.

<p>Upgradient 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.</p>	<p><b>No change to proposed rule.</b> The Department 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.</p>
<p>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.</p>	<p><b>No change to proposed rule.</b> This was added to provide clarity between public drinking water wells and nonpublic drinking water wells. The Department routinely receives questions about this.</p>
<p>Table IV is missing footnotes for 3-8.</p>	<p><b>Adopt rule with amendment.</b> The Department recommends adding the following footnotes to Table IV:</p> <p><sup>3</sup> Any in-ground containment vessel used to store drinking water.</p> <p><sup>4</sup> A network of underground piping carrying fluid under pressure used to heat and cool a structure.</p> <p><sup>5</sup> Lined means any component that has the intended function of detaining the storm water with no intention of dispersal into surrounding soil.</p> <p><sup>6</sup> OSS components take precedence in cases of horizontal setback conflicts between OSS and stormwater components.</p> <p><sup>7</sup> Down-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.</p> <p><sup>8</sup> Unlined means any component that has the ability to or intended function of infiltrating the storm water.</p>
<p>Table IV outlines nonpublic, in-ground, drinking water containment vessel but excludes the public equivalent. Consider adding this to the proposed rule.</p>	<p><b>No change to proposed rule.</b> The Department 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.</p>
<p>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.</p>	<p><b>No change to proposed rule.</b> 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 the Department 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</p>

permit through the Department of Ecology.

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

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

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

Comment Received	Department of Health Recommendation
Subsection (1). Add back the “s” after designer or remove the “s” after engineer to make consistent singular or plural.	<b>Adopt rule with amendment.</b> Editorial changes to the rule without changing the effect. The Department recommends changing WAC 246-272A-0230(1) to: (1) OSS must only be designed by ((a)) professional engineer((s)), licensed under chapter 18.43 RCW, or ((an)) OSS designer, licensed under chapter 18.210 RCW, except: (a) If at the discretion of the local health officer, a resident owner of a single-family residence not within 200 feet of a marine shoreline is allowed to design an OSS for that residence; or (b) If the local health officer performs the soil and site evaluation, the health officer may design the OSS.
If no bedrooms in additional dwelling, then what? (2)(d)(ii)(B) & (2)(d)(iii)(C).	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> The Department appreciates 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.	<b>No change to proposed rule.</b> No specific recommendation. 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.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> 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 proposed 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.	<b>No change to proposed rule.</b> 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**

Comment Received	Department of Health Recommendation
Table VII is no longer needed. Change the section to: (a) for a single family residence, or an OSS treating sewage from a residential source other than a single-family residence, 250 gallons per bedroom with a minimum of 1,000 gallons. Item (c) becomes item (b).	<b>No change to proposed rule.</b> The Department has determined that Table VII is useful in providing the information in a clear, easy-to-understand format.

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

Comment Received	Department of Health Recommendation
Ensure that each (letter) sections following “meet the following requirements” are in complete sentences. Most of the items listed are missing a verb leaving no ‘action’ for the designer to take.	<b>No change to proposed rule.</b> The Department has reviewed this section and has determined that no editorial changes need to be made at this time. The section describes the requirements that the Subsurface Soil Absorption System (SSAS) must meet, not actions for the designer to take.
Install inverted u-shaped pipes over drainfield piping to prevent blockage of drainfield pipes	<b>No change to proposed rule.</b> The Department 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.

Connect drainfield lateral pipes every 10 feet to equalize flow.	<b>No change to proposed rule.</b> The rule allows the recommended technique but does not require it. The Department 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 requirement on proprietary dispersal products without clarifying the proposed rule language. Consider adding the following: (4)(c) Beds are only designed in soil types 1, 2, 3 or in fine sands with a width not exceeding 10 feet. Gravity beds must have a minimum of one lateral for every three feet in width. <u>For proprietary distribution products, extension of the lateral beyond the connection to the product is required only if specified in the product registration;</u>	<b>No change to proposed rule.</b> The full impact of the recommended change is not well understood. All currently registered proprietary dispersal products are designed with a 3-foot wide footprint and are expected to easily comply with the proposed rule language without the recommended change.
Consider adding a list of all technologies used for dispersal of effluent from treatment tanks and a link where requirements to all types of dispersal components can be found. Separation of blackwater, graywater and solid organic waste is not considered.	<b>No change to proposed rule.</b> Approved proprietary products are found in the List of Registered On-site Treatment and Distribution Products. Other guidance is found in related standards documents on the department’s webpage.
(4)(c) bed width should be expanded to 12 feet due to the common usage of gravelless chambers and their typical widths.	<b>No change to proposed rule.</b> This is a technical change with potential impacts to treatment. This change merits literature review and collaboration with technical experts and impacted parties. The Department recommends saving this recommendation for consideration in future rule reviews and revisions.

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

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
Install long-sweep ells to grade at the end of each drainfield lateral to aid in flushing and jetting of laterals.	<b>No change to proposed rule.</b> This is a technical change with potential impacts to operations and maintenance. This change merits collaboration with technical experts and impacted parties. The department recommends saving this recommendation for consideration in future rule reviews and revisions.
Correct misspelling of “maintainence” to “maintenance” in WAC 246-272A-0238(1)(b)(i)	<b>Adopt rule with amendment.</b> Editorial change to the rule without changing the effect. The Department recommends changing WAC 246-272A-0238(1)(b)(i) to:

	(i) Septic tanks must have service access (( <del>maintainance</del> )) (( <del>maintenace</del> )) holes (formerly manholes) and monitoring ports for the inlet and outlet;
Consider revising WAC 246-272A-0238(1)(b)(iii) to read: (iii) Other pretreatment units such as aerobic treatment units and packed-bed filters must have service access maintenance holes <u>and/or monitoring ports, as necessary to access components of the OSS;</u>	<b>No change to proposed rule.</b> Proprietary products are required to be installed according to manufacturer’s instructions. If the manufacturer’s installation instructions include installation of 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 referencing septic tanks to referencing septic tanks. This section refers to gravity OSS, which all use septic tanks.	<b>No change to proposed rule.</b> The comment provided no recommended change. The change in question is proposed include 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**

<b>Comment Received</b>	<b>Department of Health Recommendation</b>
Consider removing the exclusion and allowing homeowners to continue to install replacement systems under Table IX.	<b>No change to proposed rule.</b> Repairs under Table IX pose an increased risk to public health and the environment. The Department does not believe homeowners should be allowed to conduct these repairs at this time.
Recommend adding “licensed” between “only” and “installers” in Subsection (1).	<b>No change to proposed rule.</b> “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.	<b>Adopt rule with amendment.</b> Technical change without change to impact. The Department recommends changing WAC 246-272A-0250(2)(c) to: (c) The installation permit meets Table (( <del>IX</del> )) (( <u>X</u> )) standards in WAC (( <del>246-272A-0270</del> )) (( <u>246-272A-0280</u> )).
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.	<b>No change to proposed rule.</b> The comment does not provide a recommendation. WAC 246-272A-0250(1) requires that only approved installers construct OSS. LHOs approve installers. This duty and authority are granted to LHOs by RCW 70.05.070.

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

Comment Received	Department of Health Recommendation
Subsection (2) seems as though it could be consolidated in subsection (1).	<b>No change to proposed rule.</b> 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	Department of Health Recommendation
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.”	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> The Department respectfully disagrees with the assertions being made. The proposed 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 proposed 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.	<b>No change to proposed rule.</b> 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.	<b>No change to proposed rule.</b> 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 246-272A-0270(1)(e)(i).	<b>No change to proposed rule.</b> The comment does not provide a recommendation. The proposed 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 include other types of sewage tanks.

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

Comment Received	Department of Health Recommendation
<p>The Summary of Key Draft Rule Changes document (October 2023) states for this subsection that there is a requirement for DOH to maintain a guidance document on remediation. I don't see this requirement in this draft of the rule. Was the requirement for a guidance document removed from the draft rule by intent or simply an oversight?</p>	<p><b>No change to proposed rule.</b> This is an error on the Summary of Changes document. The rule language is intended to not include a requirement for DOH to maintain a guidance document on remediation.</p>
<p>How will the new Remediation section (WAC 246-272A-0278) interact with the RS&amp;G for Remediation Technologies and Processes?</p>	<p><b>No change to proposed rule.</b> The comment does not provide a recommendation. The Department will update and republish the Interim Remediation Technologies and Processes RS&amp;G as a DS&amp;G.</p>

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

Comment Received	Department of Health Recommendation
<p>We would highly support DOH and Ecology to work together to make this option more realistic and feasible for homeowners, especially with advanced OSS treatment designs. Table IX, Option F</p>	<p><b>No change to proposed rule.</b> The rule revision committee included representation 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 Department recommends this proposal is tabled and considered in upcoming rule reviews and revisions.</p>
<p>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 &amp; Horizontal Separation" as Table IX.</p>	<p><b>No change to proposed rule.</b> The suggestion will be added to the list for potential future changes to the rule.</p>



<p>Subsection (4)(e) references 246-272A-0014 &amp; -0016. These WACs do not exist; recommend updating the WAC reference to the correct section.</p>	<p><b>Adopt rule with amendment</b> The Department recommends the following correction be made in WAC 246-272A-0280(4)(e): (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-0015<del>4</del> or <del>246-272A-0016</del>;</p>
<p>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"?</p>	<p><b>Adopt rule with amendment.</b> The Department recommends the following correction be made to Table IX, Option A, 2: The soil dispersal component to be repaired or replaced complies with the treatment level and ((distribution))((dispersal)) method requirements in Table VI of WAC 246-272A-0230;</p>
<p>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?</p>	<p><b>Adopt rule with amendment.</b> The Department recommends the following change be made to Table X’s footnote 2: <sup>2</sup>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.</p>

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

Comment Received	Department of Health Recommendation
<p>(3) Consider removing this requirement since this may not always be possible and is mostly addressed in (2)(b).</p>	<p><b>No change to proposed rule.</b> The Department respectfully disagrees; it 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.</p>

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

Comment Received	Department of Health Recommendation			
<p>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.</p>	<p><b>No change to proposed rule.</b> 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. The department will provide training and guidance on the use of Table XII.</p>			
<p>Table XI. Ensure leading zeros are used (<u>0</u>.5 acres) and footnotes reference the correct subsection [0234(<del>6</del>7) now].</p>	<p><b>Adopt rule with amendment.</b> Editorial change to the rule without changing the effect. The Department recommends changing the cell in <i>Soil Type 1</i> column and <i>Public Water Supply</i> row of Table XI to:</p> <table border="1"> <tr> <td>21,780 sq. ft.</td> </tr> <tr> <td>(((0)),5 acre)</td> </tr> <tr> <td>2.5 acres<sup>1</sup></td> </tr> </table>	21,780 sq. ft.	(((0)),5 acre)	2.5 acres <sup>1</sup>
21,780 sq. ft.				
(((0)),5 acre)				
2.5 acres <sup>1</sup>				
<p>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.</p>	<p><b>No change to proposed rule.</b> Office of Drinking Water has been consulted on the relevant definitions.</p>			
<p>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.</p>	<p><b>No change to proposed rule.</b> The comment does not provide a recommendation. The proposed rule language 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 proposed rule.</p>			
<p>Table XII title is missing the table number.</p>	<p><b>No change to proposed rule.</b> The table title is in the proposed rule, just separated by a page break in the document.</p>			
<p>The section describing the method of determining lot sizes that do not meet the requirements in Table XI could benefit from additional editing for clarity.</p>	<p><b>No change to proposed rule.</b> The Department appreciates the feedback. The comment does not provide a recommendation.</p>			

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

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

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

Comment Received	Department of Health Recommendation
<p>Revise subsection (2)(b).  (b) Upon review, if the department finds that the waivers previously granted are inconsistent, <del>consistent</del> with the purposes of this chapter, and DS&amp;G for granting waivers, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.</p>	<p><b>Adopt rule with amendment.</b> Editorial change without changing effect. The Department recommends WAC 246-272A-0420(2)(b) is changed to:  (b) Upon review, if the department finds that the waivers previously granted <u>are inconsistent, ((consistent))</u> with the purposes of this chapter, and DS&amp;G for granting waivers, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.</p>
<p>In subsection (4), recommend adding what timeframe the annual report will cover. Will it be of the calendar year or biennium?</p>	<p><b>No change to proposed rule.</b> The suggestion will be added to the list for potential future changes to the rule.</p>

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

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

<p>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.</p>	<p><b>No change to proposed rule.</b> The Department appreciates the feedback. The proposed rule cannot change the local health officer’s enforcement authority set by statute.</p>
<p>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:"</p>	<p><b>No change to proposed rule.</b> The proposed rule language is intended to describe that the Department or the Local Health Officer may initiate enforcement actions that may include, but are not limited to, the items listed in WAC 246-272A-0430(1)(a) – (1)(e) and that an informal conference may be held at the request of any party. The Department believes the intent is clear and that understandability would not be enhanced by removing the words “may be”.</p>
<p>Believes the changes give too much authority to the Local Health Officer in the local health jurisdiction without any process to appeal their decisions.</p>	<p><b>No change to proposed rule.</b> Decisions made by the local health officer are appealable to the local board of health.</p>

Notes: The Department did not receive written 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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WASHINGTON STATE DEPARTMENT OF HEALTH

# Significant Legislative Rule Analysis

WAC 246-272A  
a Rule Concerning  
On-Site Sewage  
Systems



September 2023

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).

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## Acronym List

CBOD5	carbonaceous biochemical oxygen demand (5 day)
DNR	Department of Natural Resources
EHD	Environmental Health Directors
EPA	Environmental Protection Agency
LHJ	Local Health Jurisdiction
LHO	Local Health Officer
LMP	Local Management Plan
NSF	NSF International
ORRC	Onsite Rule Review Committee
OSS	Onsite Sewage System
PTI	Property Transfer Inspection
TSS	Total Suspended Solids

## SECTION 1

**A brief description of the proposed rule including the current situation/rule, followed by the history of the issue and why the proposed rule is needed.**

Chapter 246-272A WAC, On-Site Sewage Systems, regulates the location, design, installation, operation, maintenance, and monitoring of on-site sewage systems (OSS). There are approximately 950,000 OSS in Washington that produce around 340,000,000 gallons of wastewater per day. This rule protects public health by minimizing both the potential for exposure to sewage from on-site sewage systems, and the adverse effects of discharges from on-site sewage systems on ground and surface waters.<sup>1</sup>

Local health officers (LHOs) have three options to enforce chapter 246-272A WAC. They can: adopt their own local code; adopted this rule by reference; or defer to chapter 246-272A WAC.

The State Board of Health (board) is authorized under RCW 43.20.050 to adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage systems with design flows of less than three thousand five hundred gallons per day. The Washington State Department of Health (department) implements these rules. The department is required to review chapter 246-272A WAC every four years to evaluate the effectiveness of the rules and determine areas where revisions may be necessary. The department is also required to provide results of the review along with recommendations to the board and local health officers. This requirement was adopted in 2005 and the department completed its first evaluation in 2009 and a subsequent evaluation in 2013. Both evaluations concluded with the finding that no revisions were necessary.<sup>2</sup>

In 2017, the department conducted an evaluation of the existing OSS rule, including gathering feedback on the rules from local health partners and interested parties. In December 2017, the department published the following report on the findings: 2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-Site Sewage Systems.<sup>3</sup> The report identified seven key issues and several minor issues that should be considered for possible revision in rulemaking. The seven key issues were: Definitions, Local management plans, Property transfer inspections, Application of treatment levels, Ultraviolet light disinfection effectiveness and approval, Horizontal setbacks (system location) and Statewide service provider licensing. The department briefed the board in January 2018 and the Board directed staff to file a CR-101, Preproposal Statement of Inquiry. Staff filed the CR-101 as WSR 18-06-082 on March 6, 2018.<sup>4</sup>

The Washington state legislature passed Senate Bill 5503 in the 2019 legislative session, and it was codified as RCW 43.20.065.<sup>5</sup> The bill addressed repair and replacement of failed systems and system inspections. The law has been addressed in the rulemaking.

To assist and inform the rule revision process, and to ensure that chapter 246-272A WAC consistently promotes safe and effective operation of OSS, the board requested input and

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<sup>1</sup> Internal Document "2018 Socioeconomic Impact Survey of Hammersley Inlet Shellfish Growers." Available Upon Request.

<sup>2</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>3</sup> [2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-site Sewage Systems](#)

<sup>4</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>5</sup> [RCW 43.20.065: On-site sewage system failures and inspections—Rule making.](#)



review from a statewide representation of diverse interested parties. The department formed the On-Site Rule Revision Committee (ORRC) in June 2018 to serve as this group and foster communication and cooperation between interested parties. The ORRCs role was informal and advisory to the department in this rulemaking. The ORRC proposed, made recommendations, and gave input to the rule. ORRC members include representatives from industry, regulators, consumers, and academia. Two subcommittees were formed to advise on policy and technical issues. The department drafted issue papers on several key topics for both subcommittees. These subcommittees worked on topics, held votes on topics, and ultimately made recommendations to the entire ORRC. The ORRC used majority voting when considering amendments that were forwarded to the department. There were proposals with unanimous support and others with simple majority.

The ORRC met nine times between June 2018 and February 2020 as a full committee and the department convened many associated subcommittee meetings that reported out to the full ORRC. The department shared a draft with interested parties for informal review and comment. In addition, the department conducted three in-person and one web-based public workshop concluding in October 2019. Based on comments received, the department made several changes to the draft rules. The department worked with environmental health directors from different areas of the state on the ORRC and separately to help fine tune the draft rules. See Section 6 for a discussion of changes made to the proposed rule language throughout the process.

## SECTION 2

### Significant Analysis Requirement

As defined in RCW 34.05.328, portions of the proposed rule make changes to chapter 246-272A WAC and requires a significant analysis. The department evaluated the proposed rules to determine rule sections that are considered “significant” or exempt under RCW 34.05.328(5) (b) and (c). Based on the evaluation, sections of the proposed OSS rules are significant legislative rules, subject to the requirements of RCW 34.05.328(5) and analyzed in the Section-by-Section Cost/Benefit Analysis in Section 5. Some sections of the proposed rule are considered exempt because they do not meet the definition of a significant rule, or they meet one of the exemption criteria in RCW 34.05.328(5) (b) and (c).

SA Table 1 identifies rule sections that have been determined exempt from significant analysis based on the exemptions provided in RCW 34.05.328(5) (b) and (c).

**SA Table 1. Summary of Sections not requiring Significant Analysis**

WAC Section and Title	Description of Proposed Changes	Rationale for Exemption Determination
WAC 246-272A-0001 Purpose, objectives, and authority	Changed onsite sewage system to OSS acronym.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0005 Administration	Corrected list of applicable statutes.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0007 Applicability  (Previously WAC 246-272A-0020)	Created new section to move Applicability section nearer the beginning of the chapter for ease of use. Clarified language describing that chapter applies to treatment, siting, design, installation, and operation and maintenance of OSS. Updated language for clarity.	Moved this section from WAC 246-272A-0020 to WAC 246-272A-0007. Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv). Removed redundant language.
WAC 246-272A-0010 Definitions	Changed several definitions for clarity and consistency throughout rule. Changes to definitions include adding new definitions where necessary, deleting definitions that are not used anymore, and modifying definitions.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv). Changes to definitions are identified and analyzed in context as part of the section –by-section analysis.

<b>WAC Section and Title</b>	<b>Description of Proposed Changes</b>	<b>Rationale for Exemption Determination</b>
WAC 246-272A-0013 Local Rules	Created a new section by taking a portion of WAC 246-272A-0015 and moving it to WAC 246-272A-0013. Moved Local Regulation to its own section, separate from local management plans (LMPs). Renamed to Local Rules. Updated language for clarity.	Restructured the section to improve comprehension, corrected typographical errors and clarified language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0170 Product development permits	Updated language for clarity.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0240 Holding tank sewage systems	Updated language for clarity. Makes correct cross references to other rule requirements.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0265 Record drawings	Made grammatical and format changes. Updated language for clarity.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0310 Septage management.	Reformatted section for clarity and consistency.	Clarifies language of the rule without changing its effect RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0420 Waivers	Added requirement that department publish an annual report summarizing waivers issued over the previous year. Updated language for clarity and consistency with remainder of rule.	The proposed rule regarding the department's publication of an annual report is exempt under RCW 34.05.328(5)(b)(ii), relates only to internal governmental operations that are not subject to violation by a nongovernment party. The other amendments clarify language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0425 Required review of rules	Made grammatical changes and updated language for clarity.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).

WAC Section and Title	Description of Proposed Changes	Rationale for Exemption Determination
WAC 246-272A-0430 Enforcement	Made grammatical changes and updated language for clarity.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).
WAC 246-272A-0440 Notice of decision—Adjudicative proceeding	Made grammatical changes and updated language for clarity.	Clarifies language of the rule without changing its effect - RCW 34.05.328 (5)(b)(iv).

**Repealed Sections-**

The proposal repeals the following five rule sections: **WAC 246-272A-0020; WAC 246-272A-0125; WAC 246-272A-0135; WAC 246-272A-0150; WAC 246-272A-0175.** With the exception of WAC 246-272A-0020, as the content of this rule was moved to WAC 246-272A-0007, these sections are no longer needed and are repealed. These sections were initially added as a phased approach during the transition period for manufacturers to implement new rules.

## SECTION 3

### Goals and objectives of the statute that the rule implements.

There are three authorizing statutes that relate to these rules: RCW 43.20.050 powers and duties of the state board of health<sup>6</sup>, chapter 70A.110 RCW, on-site sewage disposal systems—marine recovery areas<sup>7</sup>, and chapter 70A.105 RCW, on-site sewage disposal systems. Combined, these statutes establish the policy for regulating OSS in Washington State. Below are limited excerpts from these statutes.

#### **RCW 43.20.050 Powers and duties of state board of health—Rulemaking—Delegation of authority—Enforcement of rules.<sup>8</sup>**

- (1) The state board of health shall provide a forum for the development of public health policy in Washington state. It is authorized to recommend to the secretary means for obtaining appropriate citizen and professional involvement in all public health policy formulation and other matters related to the powers and duties of the department. It is further empowered to hold hearings and explore ways to improve the health status of the citizenry.  
In fulfilling its responsibilities under this subsection, the state board may create ad hoc committees or other such committees of limited duration as necessary.
- (3) The state board shall adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage systems with design flows of less than three thousand five hundred gallons per day.

#### **Chapter 70A.110 RCW**

Requires all Puget Sound LHOs to develop an LMP by 2007. The intent of this statute is to authorize enhanced LHO OSS programs within Marine Recovery Areas (areas designated as needing enhanced protections) around the Puget Sound so that all OSS are identified, included in a sharable electronic data system, monitored for proper functioning, and repaired when there is a failure.

#### **RCW 70A.110.010 Findings—Purpose.<sup>9</sup>**

The legislature finds that:

- (1) Hood Canal and other marine waters in Puget Sound are at risk of severe loss of marine life from low-dissolved oxygen. The increased input of human-influenced nutrients, especially nitrogen, is a factor causing this low-dissolved oxygen condition in some of Puget Sound's waters, in addition to such natural factors as poor overall water circulation and stratification that discourages mixing of surface-to-deeper waters;
- (2) A significant portion of the state's residents live in homes served by on-site sewage disposal systems, and many new residences will be served by these systems;

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<sup>6</sup> [RCW 43.20.050: Powers and duties of state board of health—Rulemaking—Delegation of authority—Enforcement of rules. \(wa.gov\)](#)

<sup>7</sup> [Chapter 70.118A RCW Dispositions: ON-SITE SEWAGE DISPOSAL SYSTEMS—MARINE RECOVERY AREAS](#)

<sup>8</sup> [RCW 43.20.050: Powers and duties of state board of health—Rulemaking—Delegation of authority—Enforcement of rules. \(wa.gov\)](#)

<sup>9</sup> [RCW 70A.110.010: Findings—Purpose. \(wa.gov\)](#)

- (3) Properly functioning on-site sewage disposal systems largely protect water quality. However, improperly functioning on-site sewage disposal systems in marine recovery areas may contaminate surface water, causing public health problems;
- (4) Local programs designed to identify, and correct failing on-site sewage disposal systems have proven effective in reducing and eliminating public health hazards, improving water quality, and reopening previously closed shellfish areas; and
- (5) State water quality monitoring data and analysis can help to focus these enhanced local programs on specific geographic areas that are sources of pollutants degrading Puget Sound waters.

Therefore, it is the purpose of this chapter to authorize enhanced local programs in marine recovery areas to inventory existing on-site sewage disposal systems, to identify the location of all on-site sewage disposal systems in marine recovery areas, to require inspection of on-site sewage disposal systems and repairs to failing systems, to develop electronic data systems capable of sharing information regarding on-site sewage disposal systems, and to monitor these programs to ensure that they are working to protect public health and Puget Sound water quality.

**RCW 70A.105.100 Alternative systems—State guidelines and standards.<sup>10</sup>**

In order to assure that technical guidelines and standards keep pace with advancing technologies, the department of health in collaboration with local health departments and other interested parties, must review and update as appropriate, the state guidelines and standards for alternative on-site sewage disposal every three years. The first review and update must be completed by January 1, 1999.

The objectives of the proposed OSS rules are to protect public health by minimizing both the potential for exposure to sewage from on-site sewage systems, and the adverse effects of discharges from on-site sewage systems on ground and surface waters.

The proposed rules meet these general goals and specific objectives by revising the current OSS rules to update the standards for the design, construction, installation, operation, maintenance, and monitoring of OSS to ensure properly functioning OSS in Washington state.

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<sup>10</sup> [RCW 70A.105.100z: Alternative systems—State guidelines and standards. \(wa.gov\)](#)

## SECTION 4

**Explanation of why the rule is needed to achieve the goals and objectives of the statute, including alternatives to rulemaking and consequences of not adopting the proposed rule.**

The proposed rules will achieve the authorizing statute's goals and objectives because the rules provide a science-based set of standards that included consultation with a diverse set of interested parties. When adopted into the rule these standards will assist LHOs when establishing their own local OSS programs for the design, construction, installation, operation, and maintenance of on-site sewage systems with design flows of less than three thousand five hundred gallons per day.

There are no feasible alternatives to rulemaking because RCW 43.20.050(3) requires the board to adopt rules that protect public health related to OSS. The board last updated chapter 246-272A WAC in 2005. The proposed OSS rules include many clarifications and updates that will improve understanding by LHO's and citizens across the state and safe, consistent, implementation of the rules.

## SECTION 5

**Analysis of the probable costs and benefits (both qualitative and quantitative) of the proposed rule being implemented, including the determination that the probable benefits are greater than the probable costs.**

### Cost Survey

To help better understand the costs of each section of the rule, the department developed a cost survey and reached out to interested parties for usability testing to ensure the cost survey’s effectiveness (e.g., question format and wording, content, etc.). The department then sent the cost survey to interested parties based on the anticipated cost impact from the draft rule. As part of that process the department completed a comprehensive effort to reach the local government environmental health directors and wastewater program staff. The department also contacted industry member associations that represent them. The department made an exhaustive effort, described in more detail below, to reach those involved with the rule. SA Table 2 shows the numbers of professionals the department attempted to reach and the number that responded to the survey.

**SA Table 2. Target audience, number sent survey, and number of respondents.**

Interested Parties	# Sent survey	# Sent reminder	# Of respondents	% Of respondents*
Local Health Jurisdictions	34	34	20	59%
Manufacturers**	86	86	11	13%
Professional Engineers***	22,294 (ALL)	22,260	136	NA****
Designers	381	433	47	11%
Installers	1,278	1,299	60	6%
Maintenance Service Providers			19	

\* % of respondents is calculated using # of respondents divided by # sent reminder.

\*\* The National Onsite Wastewater Recycling Association (NOWRA) also circulated the survey to 24 corporate members. The department assumes that this list overlapped with the 86 manufacturers that the survey was circulated to via GovDelivery, therefore the 24 were not added into the table.

\*\*\* GovDelivery’s existing list for Professional Engineers includes all Licensed Professional Engineers. Therefore, the department utilized the list but added screening questions to the beginning of the survey to ask if they worked on OSS. Of the 22,294 who were sent the survey, which had 912 Professional Engineers who answered that they complete designs for new and repaired OSS in Washington State. Of the 912 respondents 777 (85%) responded no and were thanked for their time and the survey was ended, 135 (15%) responded yes and continued onto consent and to the survey. One additional Professional Engineer entered the survey through the industry survey and



therefore brought the number of respondents to 136. Of the 135 respondents in the Professional Engineer survey, 106 consented to the voluntary survey, 54 proceeded to contact information, and 45 proceeded to answer the first cost question.

\*\*\*\* For Professional Engineers NA was listed instead of a calculation because the department not targeting the full number of Professional Engineers on the GovDelivery list, only those that work on OSS in Washington State.

It is of note that not all respondents provided answers to all the survey questions, the detailed analysis in the section below provides the number of respondents for each question by listing the “N” number of observations.

Each target audience listed above in SA Table 2 had a unique set of questions. The following details the timeline and process followed for reaching each target audience:

- **Local Health Jurisdictions (LHJs)**
  - The department held a survey kickoff meeting on September 1, 2022, to walk the LHJ’s Environmental Health Directors (EHDs) and/or their designee through the survey instructions, methodology, and specific questions. Following the meeting, LHJs were sent the survey via e-mail. Reminders to fill out the survey were sent on September 13 & 23, 2022. While the survey was open the department held another meeting to answer questions on September 12, 2022. The survey was closed on September 23, 2022.
- **Manufacturers, Professional Engineers, Designers, Installers, and Maintenance Service Providers**
  - GovDelivery was utilized to send out the survey. To supplement the GovDelivery lists, the department asked LHJ EHDs to provide contacts for Maintenance Service Providers in their jurisdictions. The surveys matched to each respective profession were circulated via GovDelivery on November 4, 2022. The GovDelivery notice also included a PDF of survey instructions and instructional video about how to complete the survey. Reminders to fill out the survey were sent to each GovDelivery list on November 10 & 17, 2022. The survey was closed on Friday November 18, 2022.

## Survey Methodology

The cost survey separated costs by frequency type; once/one-time cost, annual costs or repeats on a specified number of years (e.g., 2 or 3 years) and unit costs. Once/One-time costs are costs that only occur once. Annual recurrent costs are costs that occur one time per year or repeats every 2, 3, 5, or 10 years. Unit costs are costs that occur multiple times and are associated with a multiplier (e.g., number of reports written, number of samples tested).

Respondents were asked to respond to time and cost questions by providing an exact answer or a best estimate. In the case that respondents were not able to provide an educated response, they were advised to leave the question blank. In the case that respondents knew that the question would not have a cost impact, they were advised to respond with a 0, rather than leaving the question blank.

To determine the cost of compliance, the department defined no cost, new cost, and additional cost. These costs were defined using the illustrative examples below.

- **No cost (\$0):** The draft rule requires you to fill out a report. You currently complete this report, and it meets the draft rule requirements. You would respond that your cost to comply with the draft rule is \$0.
- **New cost:** The proposed rule requires you to fill out a report. You do not currently complete any reports that meet the draft rule requirements. You would respond by providing cost estimates for the time and labor cost it would take to complete the report.
- **Additional cost to an existing requirement:** Additional costs refer to the new costs that would be incurred by changes to the rule. Do not include costs that you already incur. The draft rule requires you fill out a report. You currently complete this report, but the draft rule requirements add a new component to the report that you do not currently complete. You would respond by only providing the cost estimate for the time and labor cost it would take to add the new component to your existing report, not the cost of completing the entire report.

Survey respondents were advised to use weighted labor cost per hour when including labor by more than one staff member. The following example was provided to survey respondents to understand how to input the response:

**Example:**

- Staff A, 4 hours @ \$25 per hour (Total labor cost = 4 hours \* \$25 = \$100)
- Staff B, 2 hours @ \$40 per hour (Total labor cost = 2 hours \* \$40 = \$80)
- Weighted average calculation:

$$\frac{\$100 + \$80}{4 \text{ hours} + 2 \text{ hours}} = \frac{\$180}{6 \text{ hours}} = \$30 \text{ weighted cost per hour}$$

The survey defines labor as the amount of effort needed to complete the task to comply with the rule. If you were, for example, estimating the time to set up a policy and procedure, think about all the things you would need to accomplish that task from start to finish to comply with the proposed rule language (e.g., write, edit, review, meet, train, etc.). The labor needed to comply with the rule will differ depending on the rule language and what the question is. The department added example prompts for suggestions about what those might be in some places in the survey. The department depended on respondent expertise to best judge what should be included.

Costs were cleaned and analyzed using Microsoft Excel. In some cases, the department removed responses it deemed as an outlier using 2.4 standard deviations above the mean as the trigger.<sup>11</sup>

Note the department asked engineers and designers to identify the cost of the same activity or task. They both are authorized to design OSS so in these cases the owner would only be hiring one or the other not both.

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<sup>11</sup> Selected outlier responses more than 2.4 standard deviations from the mean were removed (Reference: Aquinis et.al, Best-Practice Recommendations for Defining, Identifying and Handling Outliers; Organizational Research Methods, pg. 270-301, 2013).

## Sectional analysis

### **WAC 246-272A-0015 Local management plans**

**Description:** This section identifies the local management plan (LMP) requirements for the Puget Sound LHOs and non-Puget Sound LHOs.

The proposed amendments add new requirements for LMPs and require the department and the LHO to routinely review and revise the LMP.

Specifically, the proposed amendments add five new requirements for LMPs:

1. LMP to assess phosphorus in areas where phosphorous has been identified as a contaminant of concern. Mitigating phosphorous can be a challenge but there are some options an LHO can use to mitigate its impact in the environment, including but not limited to, increasing minimum lot size to decrease density of OSS, increasing setbacks to surface water, and educating OSS owners to reduce the use of products that contain phosphorous.
2. Assess areas where sea level rise may impact adequate horizontal separations to surface water. Sea level rise could lead to pathogens and nutrients entering marine waters if septic tanks or OSS drainfields are inundated by marine water. There are multiple ways to address sea level rise, including but not limited to increasing the horizontal setbacks from the edge of system components to marine water to avoid marine flooding of OSS drainfields or requiring a higher level of treatment.
3. LHOs to provide a summary of program expenditures by activity, source of funds, and a strategy to fill any funding gaps to the department. This builds upon the current requirement for the LMP to describe the capacity of the LHO to adequately fund the plan, including the ability to find failing and unknown systems.
4. LHO to review and update, if necessary, the LMP every five years. If the LMP is updated, LHO must provide an opportunity for public input on the LMP.
5. LHO to report the following information annually to the department:
  1. Number of OSS;
  2. Number of unknown OSS identified;
  3. Number of failures found;
  4. Number of failures repaired; and
  5. Status of compliance with inspections required by WAC 246-272A-0270.

The proposed amendments also require:

- The department to review the LMP and determine if it needs revision within 2 years of the effective date of the rule.
- The department to review the LMP every five years following the initial review.
- The LHO to revise their existing LMP if the department determines it necessary.
- The department to update guidance and provide technical assistance for assisting LHOs with completing their LMP.

The proposed amendments on the topics above were based on the recommendations by the ORRC.

**Cost:** The department surveyed the twelve (12) LHOs that border Puget Sound to determine the estimated cost of implementing this section of the rule. SA Table 3 shows the results of the survey from 10 respondents that provided estimated costs.

**SA Table 3. Estimated cost to implement LMPs for LHOs Puget Sound counties**

Description	Cost Frequency	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Cost of labor to update the existing and add new elements* to the LMP	One-time cost	8	2,400 – 96,000	20,835	37,228	36,739
Cost to revise the 10 existing LMP elements	One-time cost	9	2,400 – 384,000	8,400	57,114	123,610
Cost to collect and address public input to the LMP	Recurrent- Repeats every 5 years	10	440 – 240,000	6,826	33,179	73,399
Cost to the LHJ to review and update the LMP, if necessary (including cost to collect and address public input)	Recurrent- Repeats every 5 years	10	600 – 240,000	6,826	29,340	74,124
Cost to report all OSS data** to the department, at least annually (9 of 10 respondents reported that they already report all OSS data to the department)	Recurrent- Annual	1	304	N/A	N/A	N/A

\*New elements: an assessment of phosphorus, an assessment of sea level rise, a summary of program expenditures by activity, source of funds, and a strategy to fill any funding gaps to the department.

\*\*OSS data is the 1) number of OSS, 2) number of unknown OSS identified, 3) number of failures found, 4) number of failures repaired, and 5) status of compliance with inspections required by WAC 246-272A-0270.

**Benefit:** The benefit of the proposed amendments in this section is to ensure LMPs remain protective of public health by identifying the specific items that Puget Sound LHOs must address in their LMP and the process for LHOs and the department to follow for review and updates to the LMPs. Chapter 70A.110 RCW required all Puget Sound LHOs to develop an LMP by 2007. The intent of this statute is to authorize enhanced LHO OSS programs within Marine Recovery Areas (areas designated as needing enhanced protections) around the Puget Sound so that all OSS are identified, included in a sharable electronic data system, monitored for proper functioning, and repaired when there is a failure. Chapter 246-272A WAC requires the Puget

Sound counties to develop an LMP that covers their entire jurisdiction, with special emphasis on the marine recovery areas. The department reviews the LMPs to ensure they include and address all critical components.

The implementation of the Puget Sound LMPs has been accomplished through contracts with the LHOs and have proven to be successful at achieving the intent of the original statute. Most counties bordering Puget Sound have developed robust inventories of OSS in their jurisdiction and now accurately track inspection, failure, and repair rates. This has established an important and unprecedented baseline of data, which is now used to inform the public health system and other decision-makers, including partner agencies and tribal partners. The revisions will ensure that the LMPs:

- Consider phosphorus in areas where it has been identified as a contaminant of concern;
- Consider sea level rise;
- Consider the funding needed to implement the LMP, are updated when regularly and, are more transparent. Collectively, these plans will result in implementation of OSS programs which will protect public health and water quality;
- Continue to collect the appropriate data to continue the established metrics.

Together these changes will strengthen the individual LMPs and the protection of public health and the environment.

#### **WAC 246-272A-0025 Connection to public sewer system**

**Description:** This section establishes conditions when OSS must connect to a public sewer. If a local health officer determines an OSS has failed, the local health officer has the option to 1) Require hook-up to a public sewer system if one is within two hundred feet; or 2) Permit the repair or replacement of a conforming OSS only if a conforming OSS can be designed and installed.

This section also requires owners that have completed a Table IX repair in accordance with WAC 246-272A-0280 to abandon their OSS and connect to a public sewer system when 1) Connection is deemed necessary to protect public health by the local health officer; 2) An adequate public sewer system becomes available within two hundred feet of the existing building drain of the structures; and 3) The sewer utility allows the sewer connection. This section also authorizes the local boards of health to require a new development to connect to a public sewer system to protect public health if available.

Lastly, this section authorizes the local boards of health to require new development or a development with a failing system to connect to a public sewer system if it is required by the comprehensive land use plan or development regulations.

The proposed amendments to this section changes how to determine if a failed OSS is within the 200-foot threshold. In some cases, specifying the approach to determine the 200-foot distance may result in a cost savings. Some jurisdictions interpreted the 200 feet as the property line which triggered the possibility to connect to sewer, thereby causing the OSS

owner to pay for connections when the distance is greater than 200 feet (i.e., up to 200 feet plus distance from property line to building drain).

**Cost:** The department does not anticipate any compliance costs associated with this proposed section.

**Benefit:** This section establishes when a homeowner must connect to a public sewer system. The expected outcome is that this section applies to fewer properties than the current rule by clarifying the 200-foot distance from sewer to building drain, as opposed to the property line. This changes the number of cases where a failed OSS will be required to connect to a sewer (fewer OSS are within 200 feet from the building sewer rather than 200 feet from property line to sewer).

The clarified approach to determine the 200-foot distance threshold may result in cost savings if a local health department currently applied 200-foot distance cutoff to the property line, and not the building sewer. The major benefit is that the LHJs will have a consistent framework on how to process properties governed under this section.

#### **WAC 246-272A-0100 Sewage technologies**

**Description:** The current rule section establishes that the department must describe a sewage technology in the rule, be registered for use as described by the rule, or have standards for use as described or referenced in the rule.

The proposed amendment adds a provision that the department may remove, restrict, or suspend a product's approval for failure to meet the requirements of approval.

**Cost:** The department does not anticipate an additional cost for the added provision as it only applies if the manufacturer fails to meet the requirements of the approval. The department does not collect cost estimates for non-compliance events so the frequency of occurrence to date is unavailable.

**Benefit:** The benefit of the department having the clear authority to remove, restrict, or suspend a product's approval provides the department a method to ensure that products that are not protective of public health are removed from the approved list. This protects public health by ensuring that all products that are approved for use in Washington are safe and protective of public health.

#### **WAC 246-272A-0110 Proprietary treatment products— Eligibility for registration**

**Description:** This section establishes the process for manufacturers to have their products tested to the appropriate standard and obtain approval. Registration is required before LHOs can permit product use.

The proposed amendments in this section remove the requirement for disinfection from existing treatment component sequence classifications A, B, and C and:

- Adds new separate disinfection levels (DL) DL1, DL2, and DL3 (which is analyzed in section 246-272A-0130 below).

- Adds two new NSF International (NSF)/ANSI standards tests (NSF 385 and NSF 245) that manufacturers have the option to use to have their products approved for bacteriological or nitrogen reduction.
- Removes outdated EPA testing for Category 2 (commercial / high strength waste) and adds current testing option from EPA.
- Incorporates Proprietary Treatment Products Emergency Rule WAC 246-272A-0110 <sup>12</sup> by allowing manufacturers to submit a written request to substitute components in case of supply chain disruptions.

**Cost:** The department does not anticipate any additional compliance costs associated with the proposed rule section. The rule amendment adds new options for tests that manufacturers can use to have their products registered but does not remove existing requirements.

The NSF Standard 245 test, which is estimated by NSF to be up to \$20,000, reduces the nitrogen testing frequency to 6 months, to match the NSF standard 40 duration. The NSF Standard 385 test, which is estimated to be up to \$41,000 depending on the technology, allows for a separate add-on disinfection unit to have standalone testing. The new testing protocol costs less than the entire sequence train (NSF 40 and NSF 245 or NSF 385) which costs approximately \$137,000 for Standard 40 + NSF Standard 245, OR \$158,000 Standard 40 + Standard 385. <sup>13</sup> SA Table 4 and SA Table 5 walks through the NSF and ANSI existing testing protocols.

**SA Table 4. The National Sanitation Foundation and The American National Standards Institute’s Category 1 Existing testing protocol (per product)**

NSF* & ANSI* Standard	Test frequency	Test parameters	Lowest estimated cost	Estimated cost for compliance (per product)
<b>Category 1 Existing testing protocol (per product)</b>				
Standard 40 for Residential Wastewater Treatment Systems	6 months	<u>Influent Samples:</u> TSS & BOD - 5 x per week, Alkalinity - 1 x per week, AND <u>Effluent Samples:</u> TSS & CBOD - 5 x per week	\$117,000	Option 1. Just NSF 40 to be registered at Treatment Level E, D <b>\$117,000</b>
				Option 2. **Treatment Level A, B, or C with NSF 385 (+\$41,000) <b>\$158,000</b>
				Option 3. ***NSF 245 for Treatment Level N (+\$20,000) <b>\$178,000</b>

<sup>12</sup> [Proprietary Treatment Products Emergency Rule | Washington State Department of Health](#)

<sup>13</sup> Staff discussion with NSF employee. Costs presented are estimates.

Standard 41: Non-Liquid Saturated Treatment Systems	Minimum 6 months	Minimum 6 month- controlled lab test, AND Minimum field testing of at least three in-use systems	\$57,000	\$57,000
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\* NSF = NSF International, ANSI =American National Standards Institute

\*\* For Treatment Level A, B, or C systems, bacteriological testing is required in addition to Standard 40.

\*\*\* Adding Nitrogen treatment to a Treatment Level A, B, or C system also currently requires NSF 245 testing.

**SA Table 5. The National Sanitation Foundation and The American National Standards Institute’s Category 1 - Proposed standalone testing protocols (per product)**

NSF* & ANSI* Standard	Test frequency	Test parameters	Lowest estimated cost	Estimated cost for compliance (per product)
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**Category 1 - Proposed standalone testing protocols (per product)**

Standard 40 for Residential Wastewater Treatment Systems	6 months	<u>Influent Samples:</u> TSS & BOD - 5 x per week, Alkalinity - 1 x per week, AND <u>Effluent Samples:</u> TSS & CBOD - 5 x per week	\$117,000	\$117,000
Standard 41: Non-Liquid Saturated Treatment Systems	Minimum 6 months	Minimum 6 month- controlled lab test, AND Minimum field testing of at least three in-use systems	\$57,000	\$57,000
Standard 245 for Nitrogen Reduction	6 months	<u>Influent Samples:</u> NSF/ANSI 40 testing plus Alkalinity, Ammonia, TKN, & NO2/NO3 - 3 x per week, AND <u>Effluent Samples:</u> NSF/ANSI 40 testing plus Alkalinity, Ammonia, TKN, & NO2/NO3 - 3 x per week	\$20,000	\$20,000



Standard 385 for Disinfection Mechanics	Technology dependent test length, minimum 6 months	<u>Influent and Effluent</u> Fecal Coliform (or E.coli for DL1) 1x day for 6 months	\$41,000	\$41,000
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\* NSF = National Sanitation Foundation, ANSI =American National Standards Institute

**Benefit:** The benefits of the proposed amendments are that manufacturers will have more options when designing, manufacturing, and registering proprietary treatment products while maintaining protections for public health.

Specifically, by creating separate disinfection levels and adding additional testing options for product approval and verification the amendments provide:

- More flexibility for manufacturers to register different products without having to conduct extra, unnecessary testing;
- A framework to use E. Coli testing as an option for Disinfection Level 1 systems (discussed in more detail in the section WAC 246-272A-0130);
- An updated test option for Category 2 treatment systems, which will allow new products to be testing and registered, adding additional options for commercial onsite sewage systems or those with sources of high waste strength (i.e., gas stations, restaurants, grocery stores).

It is the department’s understanding that Washington State is the first in the nation to allow this option of allowing the manufacturers to pick and choose which NSF test is best for their products.

**WAC 246-272A-0120 Proprietary treatment product registration—Process and requirements**

**Description:** This section establishes the required content and submittal process for manufacturers to use to register their products. It is typical for the department to review and approve one or two products annually per manufacturer, but this could change based on technology and innovation. The proposed amendments to this section that have been identified for potential cost impacts include:

- Clarifying the name and other identifying information from applicants;
- Adding a new field verification component to the renewal process. The field verification process consists of completing and submitting a field verification report that demonstrates the product effectiveness for bacteria removal through analysis of field-collected samples for either E. coli or fecal coliform;
- Changing from requiring an affidavit stating what changes have been made to a product at the time of product registration renewal to requiring this statement in the form of an attestation. The department currently requires manufacturers to mail a notarized signed affidavit describing any changes that have been made to the product to the department. This is done to verify if retesting is needed;

- Requiring manufactures to provide a statement that all required dated manuals are current or submit the updated and dated new manuals;
- Requiring the department to provide a compliance plan to manufacturers (to correct deficiencies) within ninety days of product registration application based on departmental concerns of public health risk related to the product;
- Manufacturers must post materials on their website, previously they had to have the materials accessible.

**Cost:** The department received survey responses from nine manufacturers. The department considers the first and third bullets above as minor administrative functions and did not survey on these changes. The department also does not collect cost estimates for non-compliance events so did not complete a survey on the cost of the compliance plan because this only applies if a manufacturer is having problems. SA Table 6 shows the estimated costs for maintenance service providers of taking a pair of samples for E. coli or fecal coliform.

Only one of six manufacturers indicated they would hire a third-party contractor to take the required 25 sample sets during a routine maintenance visit due to logistical restrictions. Additionally, 6 out of 11 manufacturers indicated that they already maintain a company website so the cost to post the materials was included in their costs to maintain an up-to-date website. Six manufacturers provided cost estimates to post the materials. The table does not include the cost of 25 pairs of samples. The department contacted and received cost information for 50 samples. The department was given a cost of \$28 - \$65 per sample<sup>14</sup> depending on the test technique; for a total cost for 50 samples ranging between \$2,000 and 3,250. <sup>15</sup> SA Table 6 presents the costs to manufactures to adhere to propriety treatment product registration, process, and requirements for proposed field verification.

**SA Table 6. Estimated cost to adhere to the Field Verification component of the proprietary treatment product registration, process, and requirements\***

Description	Cost Frequency	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
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**Manufacturers**

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<sup>14</sup> Range: \$28 per sample (Lewis County) to \$65 per sample. [AmTest Laboratories](#) quoted \$40/sample.

<sup>15</sup> \$28 X 50 samples = \$1,400, \$65 X 50 samples= \$3,250.

Cost to collect a pair (one influent AND one effluent) of samples, during a routine maintenance service visit NOT including travel	Unit	5	4.28 - 47.50	24	23.66	16.65
Cost to collect a pair (one influent AND one effluent) of samples, during a non-routine maintenance service visit (including travel)	Unit	5	For one pair 50 – 292  For 25 pairs 1,250 - 7,300	65	147.10	122.81
Cost to take the pair of influent and effluent samples to the lab	Unit	5	68.50 – 190	120	126.90	50.82

Cost to complete a product field verification process report (not including sampling costs)	Unit	6	144 - 48,000	3188	10,353	18,682
Cost to hire a service provider or a third-party sampler to collect 25 pairs of samples	Unit	6	5,225 100,000	20,000	34,038	35,936
Cost to post required materials on website	One-time	6	20 – 450	65	141	170

\*In the past two years the department has received applications for four treatment productions and one distribution product, which helps to estimate the total cost.

**Benefit:** The proposed amendments will protect public health by clarifying and modernizing the requirements for manufacturers to follow for proprietary treatment product registration and adding a field verification requirement. Specifically:

- The requirement to clarify the name and other identifying information from product registration applicants will provide the department important information in case manufacturers need to be contacted or legal action needs to be taken. The department currently requires this information in the application process. This amendment would update the rule language to the current process, creating more transparency and clarity around the registration process.
- The requirement for manufacturers to complete a field verification process for proprietary treatment products will verify that the treatment levels assigned to OSS proprietary treatment products are being met under actual use conditions. These products are currently tested only at testing facilities with no field testing required. This amendment will protect public health and the quality of Washington’s groundwaters and surface waters.
- Changing from requiring an affidavit stating what changes have been made to a product at the time of product registration renewal to requiring this statement in the form of an attestation will allow the department to simplify and digitize the product registration renewal process. The department plans to allow manufacturers to submit their renewals via email or an internet-based interface using an attestation to no longer require notarized signatures stating if the product has been changed.
- The requirement for manufacturers to provide a statement that all their dated manuals are current and provide any updated versions of the manuals to the department allows users of these products, industry professionals, the department, and all other interested parties to have the most current and relevant information on operation and maintenance of their products. This will facilitate the most efficient and safe operation and maintenance of these products possible.
- The requirement for the department to provide the manufacturer a compliance plan (to correct deficiencies) within 90 days of product registration based on departmental concerns of public health risk related to the product provides the department a method to allow manufacturers a method to demonstrate they have addressed any issues that potentially interfere with operation and/or maintenance of their products.
- The requirement for manufacturers to post current materials on their website ensures that proprietary treatment technologies used in OSS provide current information to the citizens of Washington state.

the department anticipates that costs associated with testing, field verification, and registration of these products will be reasonable compared to their overall cost.

#### **WAC 246-272A-0130 Bacteriological reduction**

**Description:** This section establishes the requirements for registering bacteriological reduction processes. The proposed amendments to this section:

- Create three new disinfection levels (Disinfection Level 1 or “DL1”, Disinfection Level 2 or “DL2”, and Disinfection Level 3 or “DL3”) that manufacturers can use to get their products registered as a standalone treatment component and as part of a treatment component sequence registered for the appropriate treatment level. The treatment levels are currently designated A, B, and C, and include disinfection carbonaceous biochemical oxygen demand (CBOD5) and total suspended solids (TSS).
- Add an option to test for E. coli to register treatment devices as meeting DL1. The proposed amendments do not remove or change fecal coliform as an option for registering treatment devices as meeting DL1, DL2, or DL3.

**Cost:** The department does not anticipate any additional costs imposed by the amendments to this section of the rule. For products registered for DL1, the new E. coli test is optional, and the cost is comparable to the fecal coliform option. A manufacturer can still elect to certify their equipment using the fecal coliform option in accordance with WAC 246-272A-0130.

**Benefit:** NSF 385 allows separate testing of add-on disinfection units. Previously the entire treatment component sequence had to be tested. This allows different disinfection units to be attached to any treatment component sequence (i.e., not required to use any particular company’s product). This flexibility helps manufacturers, OSS designers, and OSS owners.

#### **WAC 246-272A-0145 Proprietary distribution product registration -Process and requirements.**

**Description:** This section describes the process and requirements to register proprietary distribution products.

The proposed amendment adds that the department must provide a compliance plan to manufacturers (to correct deficiencies) within ninety days of product registration application based on departmental concerns of public health risk related to the product.

**Cost:** The department does not anticipate an additional cost for the added provision as it only applies if the manufacturer fails to meet the requirements. The department does not collect cost estimates for non-compliance events so the frequency of occurrence to date is unavailable. The department acknowledges that there will be additional costs of staff time should the manufacturer need to provide a compliance plan to manufacturers.

**Benefit:** The proposed requirement for the department to provide the manufacturer a compliance plan (to correct deficiencies) within 90 days of product registration based on departmental concerns of public health risk related to the product provides the department a method to allow manufacturers a method to demonstrate they have addressed any issues that potentially interfere with operation and/or maintenance of their products. This provides the department a method to ensure that products that are not protective of public health are removed from the approved list. This protects public health by ensuring that all products that are approved for use in Washington are safe and protective of public health.

## **WAC 246-272A-0200 Permit requirements**

**Description:** This section specifies the permit application content when a person proposes the installation, repair, modification, connection to, or expansion of an OSS. The proposed amendments clarify that permits are not needed for minor repairs (types of projects are identified in the definition of minor repairs in WAC 246-272-0010). Three additional project types were added to the definition. They include control panels, any portions of tight line in the OSS, and effluent filters. OSS owners can make minor repairs without having to get a permit from the LHO. The amendments also add five items to the OSS site plan requirements that the Washington State Department of Natural Resources (DNR) currently outline within the DNR rule WAC 332-130-145 Topographic elements on maps—Requirements.<sup>16</sup> DNR requested that the department include these items to the required topographical map elements in the rule revision and exempted under RCW 34.05.328(5)(b)(iii).<sup>17</sup>

- (1) The following elements must be included on every map that includes topographic elements:
- (a) Vertical datum used (such as "assumed," "NAVD 88," "NSRS," "unknown");
  - (b) North arrow;
  - (c) Map scale and graphic scale bar;
  - (d) Legend of symbols used;
  - (e) Licensee name and contact information;
  - (f) Seal and signature of licensee.

The proposed change adds a requirement for site maps to include 1) horizontal separations as noted in Table IV, 2) an elevation benchmark, and 3) relative elevations of system components.

The section also identifies the things an applicant must demonstrate to the LHO when the OSS adds restrictive covenant as a method to allow access for construction, operation, monitoring, maintenance, and repair of the OSS. The current rule only allows a recorded easement to allow access. LHs charge the same amount for recording (\$203.50 for first page and \$1 for each additional page). The authority to charge fees is in RCW 36.18.010.

**Cost:** Costs associated with these newly added components are assumed to be included in DNR rules. SA Table 7 shows the anticipated one-time cost for designers and engineers to add the specified items to their designs.

The results of our survey found that 34 of 40 Designer respondents already include these new components in their site plans. Therefore, they would not have additional costs to comply with the rule.

The department received survey responses from 10 designers and 10 engineers about adding new elements to designs. SA Table 7 and SA Table 8 present estimated costs to the proposed changes in rule.

### **SA Table 7. Estimated cost to Designers to adhere to permit requirements**

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<sup>16</sup> [WAC 332-130-145](#):

<sup>17</sup> 34.05.328(5)(b)(iii) Rules adopting or incorporating by reference without material change federal statutes or regulations, Washington state statutes, rules of other Washington state agencies, shoreline master programs other than those programs governing shorelines of statewide significance, or, as referenced by Washington state law, national consensus codes that generally establish industry standards, if the material adopted or incorporated regulates the same subject matter and conduct as the adopting or incorporating rule.

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
One-time cost to add horizontal separations as noted in Table IV into design process	4	6.25-900	250	352	385
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>Low-end range**</b>	4	6.25-500	175	164	122
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>High-end range**</b>	4	12.50-500	225	241	209
One-time cost to add elevation benchmark as noted in Table IV into design process*	10	6.25-1,200	150	306	409
Unit cost to add elevation benchmarks on one site map* <b>Low-end range**</b>	9	6.25-512	31	151	181
Unit cost to add elevation benchmarks on one site map* <b>High-end range**</b>	8	12.50-1,316	50	284	452
One-time cost to add relative elevations of system components as noted in Table IV into design process*	7	6.25-900	81	223	316
Unit cost to add relative elevations of system components on one site map* <b>Low-end range**</b>	7	6.25-512	150	170	188
Unit cost to add relative elevations of system components on one site map* <b>High-end range**</b>	6	12.50 - 368	170	368	503

\*These are items covered under WAC 332-130-145 (1)

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

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**SA Table 8. Estimated cost to Engineers to adhere to permit requirements.**

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Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
One-time cost to add horizontal separations as noted in Table IV into design process	8	180 - 22,500	11,050	10,765	7,531
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>Low-end range**</b>	7	0 – 6000	520	1,207	2,129
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>High-end range**</b>	7	300 - 72,000	900	11,121	26,850
One-time cost to add elevation benchmark as noted in Table IV into design process	10	150 - 8,000	800	1,620	2,348
Unit cost to add elevation benchmarks on one site map <b>Low-end range**</b>	9	37.50 - 3,250	390	731	1,014
Unit cost to add elevation benchmarks on one site map <b>High-end range**</b>	9	300 - 5,200	700	1,351	1,531
One-time cost to add relative elevations of system components as noted in Table IV into design process*	6	200 - 8,000	795	1,932	3,019
Unit cost to add relative elevations of system components on one site map* <b>Low-end range**</b>	6	150 - 8,000	570	1,982	3,065
Unit cost to add relative elevations of system components on one site map* <b>High-end range**</b>	6	300 - 8,000	1,200	2,250	2,937

\*These are items covered under WAC 332-130-145 (1)



\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

**Benefit:** The benefit of the proposed amendments is that it clarifies that a permit is not required for minor repairs and adds three new project types to minor repairs. This will save OSS owners from having to obtain a permit for these projects, saving permit costs and facilitating a quicker repair.

Adding the DNR map items to OSS site plans consistently will help all that use them including OSS owners, staff from both agencies, and LHO staff during the design and review process.

Adding a requirement for site maps to include 1) horizontal separations as noted in Table IV, 2) an elevation benchmark, and 3) relative elevations of system components is that it provides crucial information that designers need when designing OSS, installers need when installing OSS, and LHOs need when reviewing permits.

The benefit of adding an option to record a restrictive covenant that allows owners access for construction, operation, monitoring, maintenance, and repair for OSS or OSS components on neighboring properties is that it gives OSS owners more flexibility than allowing only easements for this purpose (as the current rule does). The owner of land cannot grant an easement to themselves. This prevents or complicates owners from purchasing neighboring properties for their OSS or OSS components. An owner may, however, create a restrictive covenant on a neighboring property that they own for their OSS.

**WAC 246-272A-0210 Location**

**Description:** This section establishes minimum horizontal separations (distance) in Table IV of this section for septic tanks, drainfield and building sewers to various water sources to prevent pollution. The proposed amendments in this section add the following new types of sources to protect:

- 1) non-public in-ground water containment vessels,
- 2) closed geothermal loop or pressurized non-potable water line,
- 3) lined stormwater detention pond;
- 4) unlined stormwater infiltration pond;
- 5) subsurface stormwater infiltration or dispersion component

The amendments also clarify the descriptions of some of the components on the list.

The required setback (distance from OSS components) is based on the level of risk. The greater the risk, the greater the required setbacks (e.g., 100 feet setback from an unlined stormwater infiltration pond as compared to 30 feet setback from a lined stormwater detention pond).

**Cost:** The department received survey responses from 4 designers and 8 engineers on the cost of adding any or all the new source types to site maps. SA Table 9 presents the estimated costs.

**SA Table 9. Estimated cost to include any of all source types to a site map**

Description*	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
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<b>Designer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	4	6.25 - 900	250	352	385
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range**</b>	4	6.25 - 500,241	175	164	122
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range**</b>	4	12.50 - 500	225	241	209

<b>Engineer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	8	180 - 22,500	11,050	10,766	7,531
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range**</b>	7	0 - 6,000	520	1,207	2,129
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range**</b>	7	300 - 72,000	900	11,121	26,850

\*This includes adding any or all of the following components to a site map if they exist on the site: 1) non-public in-ground water containment vessels, 2) closed geothermal loop or pressurized non-potable water line, 3) lined stormwater detention pond; 4) unlined stormwater infiltration pond; or 5) Subsurface stormwater infiltration or dispersion component.

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost to compliance.

The setbacks will impact some developments (individual lots and subdivisions). By requiring additional setbacks, this may restrict how these lots can be laid out (require house placement in different area or potentially the size/footprint of the house). Conceivably, this could prevent the development of a lot if the extent of threats to water sources, with their associated setbacks, resulted in no viable building site unless the applicant requested and received a

waiver. This impact is difficult to predict because it depends on the existence of the newly proposed components on the protected sources list.

**Benefit:** The proposed amendments will protect public health, groundwater, and surface water resources in the state (including drinking water sources). They will also protect OSS owners' and their neighbors' property. Specifically:

- Adding water containment vessels as a new item requiring setback from OSS components will protect private drinking water supplies that depend on water containment vessels for their water supply. There is currently no setback requirement to water containment vessels.
- Adding closed geothermal loop and pressurized non-potable water line as items requiring setback from OSS components will protect these piping systems (and related facilities) and OSS from encroachment between the two. Any of these systems can be damaged when the other is installed or repaired too close to the other. OSS can be damaged by leaks and failures of geothermal loop systems and other non-potable water lines if they are too close. Any damage to any of these systems is likely to be costly to repair. There is currently no setback requirement to closed geothermal loops and pressurized non-potable water lines.
- Adding stormwater facilities as new items requiring setback from OSS components will protect both the OSS and stormwater facilities from being hydrologically overloaded by the other. An OSS that is hydrologically overloaded is not able to appropriately treat sewage and is likely to fail. The current setback to stormwater facilities is too small and allows OSS and stormwater facilities to be installed where they could impact each other.

Each of these proposed new setbacks add protective buffers around OSS facilities. This protects public health, water quality, and the owner's property by ensuring the OSS functions as well as possible with as few potential impacts as possible.

The ORRC supported these changes because there has been an increase in conflicts between these components and OSS components. The department anticipates that the potential for these conflicts will increase in the future as building density increases. The proposed amendments take a precautionary approach to prevent these conflicts before they impact public health.

### **WAC 246-272A-0220 Soil and site evaluation**

**Description:** This section identifies minimum soil and site evaluation criteria for developing a site. Only professional engineers, designers, or LHOs are authorized to perform soil and site evaluations. The proposed amendments add the option for local health officer to require an additional evaluation if the site is altered after its original evaluation.

**Cost:** The owner would have to pay the cost of the additional evaluation only if their site was altered, something the owner is responsible for making sure does not happen (in current rule). Some jurisdictions conduct the evaluations and others use professional engineers or designers.

These are not considered compliance costs with the new rule because they would not be needed unless a site was altered.

**Benefit:** The proposed amendments protect public health, water quality, and the property owner. OSS depend on undisturbed soil structure to treat sewage. OSS drainfields (and other subsurface soil absorption systems) are known to fail prematurely (if not immediately) when installed in disturbed soil. In current rule, if the LHO has been informed or otherwise finds out the site has been altered following the original site evaluation, not allowing it to treat sewage as originally designed, the LHO's responsibility is to require a redesign of the OSS and educate the owner on the requirement to install drainfields (and other subsurface soil absorption systems) in undisturbed soil. The current rule language is not as clear as it should be on the requirement to maintain the site in an undisturbed state. For example, it is common for owners and builders to disturb the site and report that they did not know that they shouldn't have. This amendment clarifies to owners and builders that the rule allows the LHO to require an additional evaluation if the site is altered.

### **WAC 246-272A-0230 Design requirements—General**

**Description:** This section identifies design requirements for OSS. The proposed amendments:

- Clarify an OSS for a single-family residence cannot be designed by a resident owner if the residence is within 200 feet of a marine shoreline.<sup>18</sup> The current language does not allow OSS that are "adjacent" to a marine shoreline to be designed by a resident owner. This change adjusts the requirement to match the definition of "Shorelands" in chapter 90.58 RCW *Shoreline Management Act of 1971*. This definition is well established and is applied in related rules. Provides LHOs more flexibility regarding design standards for single-family residences with additional dwellings served by the same OSS. The current rules require OSS to have a minimum of 240 gallons per day design flow for an OSS for a single-family residence. This is the design flow for a 2-bedroom residence (i.e., 120 gallons per day per bedroom). The rule's intent (behind this currently existing requirement) is to disallow OSS designed for a 1-bedroom home since these OSS are known to have a very high rate of premature failure. Some LHOs allow an OSS to serve an additional 1-bedroom single-family residence dwelling unit if the OSS is designed to treat the sewage as calculated by considering all of the bedrooms as part of the same residence. Other LHOs have required that all residences connected to the OSS are calculated at minimum as 240 gallons per day (2-bedrooms) regardless of if they are actually a 1-bedroom residence. The amendments clarify OSS must have a minimum design flow of 240 gallons per day for one single family residence and that LHJs can allow an OSS to serve additional single-family residences and additional dwelling units with a minimum design capacity of 120 gallons per day for each additional bedroom. LHJs that allow multiple additional dwellings served by a single OSS must require a management arrangement that identifies the OSS owner's responsibilities to operate

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<sup>18</sup> [RCW 90.58.030](#) (2)(d) "Shorelands" or "shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology.

and maintain the OSS. The management arrangement must include legal documentation (e.g., a recorded easement or restrictive covenant) allowing access for construction, operation, monitoring, maintenance, and repair of the OSS.

- Change Table VI Treatment Component Performance Levels and Method of Distribution to specify DL1, DL2 and DL3 depending on soil type and depth. This change is needed because changes in WAC 246-272A-0110 Table III removed the disinfection component of treatment levels, A, B and C.
- Add a requirement for sites with soil types 2-6 with soil depths of 24” to 36” to include timed dosing, which was previously only required for sites with shallower soil depths.
- Reduces required treatment levels and disinfection levels from Treatment Level B & DL2 to treatment Level C & DL3 for soil types 2-6 for sites with soil depths that range from 18” or greater to less than 24.” A literature review revealed that soil should be given more credit for treatment.<sup>19</sup>

**Cost:** The department considers the amendments that clarify OSS must have a minimum design flow of 240 gallons for one single family residences. LHJs can allow an OSS to serve additional single-family residences and additional dwelling units with a minimum design capacity of 120 gallons for each additional bedroom. This as an example of a change that will have a small negligible administrative cost to locals to change forms and documents to reflect the new minimum capacity. Regarding the change to the definition from adjacent to 200 feet, the department interprets this more of a limitation of use rather than a direct cost to the property owner.

The department received responses from 24 professional engineers, 29 designers, and 22 installers on the reduced cost to change Treatment Level B (TLB) and Disinfection Level 2 (DL2) to Treatment Level C (TLC) and Disinfection Level 3 (DL3) as described in WAC 246-272A-0110 Table III, and the additional cost to add timed dosing to an OSS. SA Table 10 and SA Table 11 present the estimated costs. LHJs charge the same amount for recording documents (\$103.50 for first page and \$1 for each additional page). The authority to charge fees is in RCW 36.18.010.<sup>20</sup>

**SA Table 10. Estimated cost to adhere to design requirements, addition of timed dosing**

Description	Type of Professional	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Average assumed unit cost to add timed dosing to	Engineer	24	0 - 3,600	195	657	952
	Designer	29	0 – 960	500	129	239

<sup>19</sup> Studies including Effect of soil depth and texture on fecal bacteria removal from septic effluents, A. D. Karathanasis, T. G. Mueller, B. Boone and Y. L. Thompson J (Water Health, 2006 Sep;4(3):395-404)

<sup>20</sup> [RCW 36.18.010: Auditor's fees. \(wa.gov\)](#)

an OSS design (including time and materials)	Installer	22	175 - 17,600	1,875	3,908	4,452
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**SA Table 11. Estimated cost to require one management arrangement for multiple additional dwellings served by a single OSS**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Cost to require one management arrangement (recorded in contract) for multiple additional dwellings served by a single OSS	16	9 – 2,400	170	516	772

Replacing the phrase “not adjacent to” with “not within 200 feet would apply on a case-by-case basis where some LHOs may have interpreted this to be greater than 200 feet and others less than 200 feet.

**Benefit:** The proposed amendments will protect public health and surface water resources. They will also allow LHOs more flexibility and options when permitting multiple residential dwellings connected to a single OSS and reduce treatment requirements for certain soil types/depths. Specifically:

- Clarifying that the area where a resident owner of a single-family residence can be allowed to design their own OSS by changing the excluded area from “adjacent to” to “within 200 feet” adds needed specificity to the requirement. The proposed amendments benefit owners and LHOs by making the rule specific and easier to follow and enforce. Changing the term “adjacent to” to “within 200 feet” provides less need for interpretation and results in consistent application of standards. By matching the definition to that of “Shorelands” in chapter 90.58 RCW *Shoreline Management Act of 1971*, the requirement is connected to an appropriate conceptual and legal framework of shoreline management.
- Providing the LHO clear options and requirements for permitting multiple residences connected to a single OSS will allow owners to propose connecting accessory dwelling units and other residences to an OSS with the least requirements possible. The proposed amendments clarify that while residential OSS must be sized to treat sewage from no less than two bedrooms, additional residences connected to the OSS can be counted as the number of bedrooms they have (even if that is one). Setting clear requirements for OSS serving three or more dwellings to have a management agreement that identifies the OSS owner’s responsibilities to operate and maintain the OSS protects all users of the OSS, and public health generally, by ensuring that it is always clear whose responsibility it is to operate and maintain the OSS.

Changed Table VI Treatment Component Performance Levels and Method of Distribution to correspond with beneficial changes proposed in WAC 246-272A-0110, Table III.

- Adding a requirement for sites with soil types 2-6 with soil depths of 24” to 36” to include timed dosing (which was previously only required for sites with shallower soil depths) will protect public health and the owner. All OSS can benefit from timed dosing as the naturally occurring microorganisms in the system prefer a more regular delivery of organic material, which they use for food. In addition, time dosing allows the soil treatment system to rest and re-aerate between doses that are uniformly applied.<sup>21</sup> This results in more efficient treatment and may extend the usable life of the OSS.
- Reducing the required treatment levels and disinfection levels from Treatment Level B & DL2 to treatment Level C & DL3 for soil types 2-6 for sites with soil depths that range from 18” or greater to less than 24” is expected to result in a cost savings as described in SA Table 12. The department asked industry professionals to provide costs for both current rules and the proposed rules. Overall, the respondents indicated modest cost savings when changing from current to proposed rules. The department received survey responses from 23 engineers, 22 designers, and 11 installers and the estimated cost savings are in SA Table 12.

**SA Table 12. Cost comparison (potential cost savings) between existing and proposed rules (changing the required treatment level from B&DL2 to C&DL3)**

Description	N	Range of Cost (\$)	Median Cost (\$)	Mean Cost (\$)	Standard Deviation (\$)
<b>Engineer</b>					
Existing rules	23	30 - 16,500	1,200	2,493	3,792
Proposed rules	23	30 - 15,000	1,200	2,413	3,551
<b>Cost difference (potential savings)</b>			<b>0</b>	<b>79</b>	
<b>Designer</b>					
Existing rules	22	0 - 50,000	470	3,478	10,715
Proposed rules	22	0 - 50,000	425	3,406	10,743
<b>Cost difference (potential savings)</b>			<b>45</b>	<b>72</b>	
<b>Installer</b>					
Existing rules	10	1,950 -15,400	13,100	11,240	4,408
Proposed rules	9	575 - 14,000	12,250	8,683	2,076
<b>Cost difference (potential savings)</b>			<b>850</b>	<b>2,557</b>	

\* Average one-time initial cost to design a system with vertical separations 18-24", soil type 2, with Treatment Level C (TL-C) & DL3.

\*\*The reported range of costs (minimum and maximum) were identical for both current and proposed rules.

<sup>21</sup> Benefits of Time Dosing and Flow Equalization, Sara Heger, Ph. D (Onsite Installer Magazine, December 06, 2018).

### **WAC 246-272A-0232 Design Requirements-Septic tank sizing**

**Description:** This section identifies the design requirements for septic tanks, such as compartment configuration and minimum gallonage. The amendments remove an obsolete 900-gallon tank, which was previously allowed for a 3-bedroom design. The new minimum size for a tank for 4 or less bedrooms structures increase to 1,000-gallons.

**Cost:** The department surveyed LHJs and 14 of 19 responded that they already require one-thousand-gallon tanks.

The department surveyed tank manufacturers to determine how removing 900-gallon tanks would impact their business. Four tank manufacturers responded to the department's cost survey. Responses were as followed:

- One manufacturer responded that they currently sell 900-gallon tanks and indicated that they would still be able to sell their tanks for other purposes.
- No (0) tank manufacturers indicated they would incur costs due to the proposed rule.

In the survey no negative input on sizing was received.

**Benefit:** The benefit of the proposed amendments is that the industry will all use a consistent minimum sized tank for all homes with 4 or fewer bedrooms. Standardization and consistency of tank sizes is expected to moderate price increases in septic tanks and OSS design and installation. The septic tank provides the primary treatment for OSS, and in many cases the only treatment other than the soil. The septic tank stores and digests settled and floating organic solids in sludge and scum layers. Up to a 40% reduction of these layers can occur in the septic tank. A larger tank may allow less frequent pumping as result of more storage and therefore more settling and digestion. Therefore, for 2- or 3-bedroom homes, using a larger tank is overall beneficial and is expected to result in long-term cost savings for owners. Additionally, the 900-gallon tank is no longer commonly used in the industry.<sup>22</sup>

The department surveyed selected states in the region for their septic tank size requirements. Alaska, Montana, and Oregon all require 1,000-gallon tanks for up to 4 bedrooms. Idaho allows a 900-gallon tank for 1-2 bedrooms.

### **NEW SECTION**

#### **WAC 246-272A-0233 Design Requirements-Pump chambers**

**Description:** This is a new section that establishes 1,000 gallons as the minimum size of pump chambers. There is no minimum size of pump chambers in current rules. Design requirements proposed in rule are currently included in the Pressure Distribution RS&G that were based on estimated waste generation, full time pump submergence, safety for sludge accumulation below pump inlet, and ensuring emergency storage volume comprises at least 75% of the design flow. When these factors are taken into consideration, it becomes evident that 1,000

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<sup>22</sup> [Septic Tank Size Requirements Septic tank size calculations, size tables & codes \(inspectapedia.com\)](https://inspectapedia.com/septic/septic_tank_size_requirements.php)



gallons is the minimum volume needed for a residential structure<sup>23</sup>. Eight out of 19 (42 %) of LHJs already require 1000 gallons minimum pump chamber size and no negative input on sizing was received.

**Cost:** The department surveyed the two manufacturers that sell tanks smaller than 1,000 gallons. One indicated they would not be able to sell their inventory but did not provide an estimated cost of inventory that they would be unable to sell.

The department assumes that manufacturers will have time to manage their inventory when the new tank sizes take effect.

**Benefit:** The benefit of the proposed amendments is that standardized pump chamber tanks will make manufacturing, designing, installing, and regulating pump chamber tanks for OSS more efficient by reducing variables in the respective processes. A pump tank functions much like a septic tank, adding additional treatment capacity. A larger pump tank may allow less frequent servicing as result of more storage and therefore more settling and digestion.

#### **WAC 246-272A-0234 Design requirements—Soil dispersal components**

**Description:** This section identifies the design requirements for soil dispersal component. This includes factors such as soil type, type of distribution (gravity, pressure, timed dosing), and drainfield siting. The proposed amendments add an option to use the new column B in Table VIII- Maximum Hydraulic Loading Rate. Column B requires a higher treatment level but also increases the gallon/square foot/day hydraulic loading of the soil. This allows the OSS to provide greater treatment and have a smaller drainfield. If this option is used, owners may not use any other reductions such as use of gravel less products. There are no amendments to the existing column A in the table, which is still an option for OSS to build their systems using these standards. The amendments allow LHOs to require reserve areas based on column A, or column B if a column B drainfield was initially approved. If they design using Column B in Table VIII the rule maintains that no further reduction using another dispersal component size reduction is allowed.

**Cost:** This new column B gives septic designers the option to increase the treatment level to increase the loading rate of a drainfield. This increase in treatment level and loading rate allows a smaller drainfield to be used. Greater treatment levels (going from treatment level E to C & DL3) results in reduced strength of the effluent (CBOD5, TSS, and Fecal coliforms) being introduced to the environment. There are different ways to improve treatment, including increasing the amount of sand in the drainfield (increase depth of sand from 1ft to 2ft) or adding an aerobic treatment unit or packed bed filter into the treatment train). These systems must also meet the DL3 treatment standard to qualify for the increase in discharge capacity per square foot. The designer chooses the type of treatment based on several factors which includes poorer soil types or site conditions (e.g., too steep of a drainfield). These potential

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<sup>23</sup> 3-bedroom OSS minimum design = 360 gallons per day. Per the Pressure Distribution RS&G, section 2.4, a pump chamber must have capacity for: daily design flow + 75% of design flow for reserve capacity + 18 inch depth to ensure the pump is submerged. Equals 360 gal/day + 270 gal + (18inches x 20 gal/in) = 990 gallon.

costs for septic designers that choose this option are analyzed in Section 5, WAC 246-272A-0280 Repair of failures, below.

**Benefit:** The proposed amendments add optional treatment options, which if selected, will reduce the strength of effluent. This reduces the potential impact to the soil in the drainfield. This allows owners to have smaller drainfields. This makes smaller size lots more buildable.

**WAC 246-272A-0238 Design requirements—Facilitate operation, monitoring and maintenance**

**Description:** This section includes the design requirement for facility operation, monitoring and maintenance. The proposed amendments to the section include:

- Requiring an observation port in each drainfield lateral. Historically, designers added one or more ports to an entire design, but not necessarily for each drainfield lateral (the number of lateral lines vary greatly, with an assumed average of 3 lines per OSS but could vary between 2 and 12).
- Requiring treatment units to have a freefall sampling port to collect samples. This is already required in the current Proprietary Onsite Wastewater Treatment Products Recommended Standards and Guidance Document<sup>24</sup> and allows sampling the proprietary product to determine its treatment efficiency.

**Cost:** The department received survey responses from 24 professional engineers, 29 designers, and 15 installers of the cost to add one observation port to a lateral line. Although this is a new requirement it was previously included in the department’s RS&Gs. The department received survey responses from 5 professional engineers, 16 designers, and 7 installers of the cost to add a freefall sampling port to a new OSS design/installation. SA Table 13 presents the unit costs of each.

**SA Table 13. Estimated cost to adding observations port and freefall sampling port.**

Description	Type of Professional	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Unit cost to add one observation port for each lateral line	Engineer	24	0 - 3,600	195	657	952
	Designer	29	0 - 960	30	129	239
	Installer	15	22.50 - 250	80	95	63
Unit cost to add a freefall sampling port to a new OSS design/installation*	Engineer	5	37.50 - 200	125	115	66
	Designer	16	1 - 300	25	53	61
	Installer	7	100 - 575	300	326	148

\*Initial yes/no question removed respondents from answering subsequent cost questions which means no cost because they comply with the proposed rule.

<sup>24</sup> [Proprietary On-site Wastewater Treatment Products RS&G](#)

**Benefit:** The proposed amendments will protect public health and the owner’s property. Specifically:

- Requiring an observation port in each drainfield lateral will facilitate operation and maintenance inspections. When a drainfield stops (or slows) accepting effluent, is flooded, or is otherwise suspected of being impacted or damaged, observation ports allow inspection of the infiltrative surface of the drainfield (where the soil begins to treat the effluent). The only other way to inspect the drainfield is to dig beside or into it. This procedure is expensive, risks damaging the drainfield components, and disturbs the soil immediately next to the drainfield, which compromises the treatment capacity of this area of soil. This proposed amendment will allow more affordable, less intrusive, and safer inspection of the drainfield. This will allow more thorough routine inspections as well as speed and lower costs of inspections related to failures.
- Requiring treatment units to have a freefall sampling port to collect samples allows sampling the proprietary disinfection product to determine their treatment efficiency. Otherwise, this testing is usually impossible.

#### **WAC 246-272A-0250 Installation**

**Description:** This section establishes that only OSS installers may install OSS, except when the resident owner is allowed to install their own OSS. The section establishes how, when, and where OSS may be installed by a resident owner. The proposed amendments require that the primary and reserve drainfields must be at least 200 feet from a marine shoreline, at least 100 feet from surface water, and not meet the criteria of a Table IX repair if installed by a resident owner. The current language disallows installations by resident owners that are “adjacent” to a marine shoreline. This amendment parallels the restriction in WAC 246-272A-0230 for owners to design an OSS within 200 feet from a marine shoreline. The LHO may require a setback that exceeds 200 feet.

**Cost:** There are no anticipated compliance costs associated with the amendments but puts restrictions on the location to protect the environment and public health. Replacing the arbitrary language with a discreet distance will likely be a cost savings for designers, and installers.

**Benefit:** The proposed amendments make implementing this section more manageable. Changing the area excluded from owner installation from “adjacent to” to “within 200 feet” of marine water adds needed specificity to the requirement. The proposed amendments benefit owners and LHOs by making the rule specific and easier to follow and enforce. Changing the term “adjacent to” to “within 200 feet” provides less need for interpretation and results in consistent application of standards. A distinct distance will improve the ability of the LHO to implement the program. Replacing “adjacent” with an exact distance will help prospective owners, designers and installers implement the rule to protect marine environments.

#### **WAC 246-272A-0260 Inspection**

**Description:** This section establishes OSS inspection procedures and requirements. The proposed amendments:

- Define minimum comprehensive inspection requirements as including, at a minimum inspection and evaluation of:
  - a) The status of all sewage tanks including baffles, effluent filters, tank contents such as water level, scum, sludge, and solids, and water tightness, and general structural conditions;
    - The status of all lids, accesses, and risers;
    - The OSS and reserve area for any indicators of OSS failure or conditions that may impact system function, operation or repair; and
    - Any other components such as distribution boxes;
  - b) A review of the record drawing and related documents, if they exist, including previous reports to confirm the system is operating as designed; and
  - c) An evaluation of any proprietary products following the procedures of the accepted operations and maintenance manual associated with those products.
- Add a requirement that OSS owners must provide evidence of their OSS property transfer inspection on a form approved by the LHO.
- Grant LHOs the authority to require an additional inspection report, or additional information, for an inspection required under WAC 246-272A-0270(1).

**Cost:** The costs of the proposed amendments are nominal.

A standardized inspection procedure may cost more than an OSS evaluation, as the current rule requires. However, many service professionals currently conduct evaluations that meet the requirements of the proposed amendments and are unlikely to increase their prices for service based on the new requirements. Service professionals that conduct evaluations that do not meet the requirements of the proposed amendments may be more affordable than those that conduct evaluations that do meet those requirements and they may need to increase their prices. This increase is expected to be marginal, since the requirements of the standardized inspection are not overly difficult or costly to learn or implement.

The requirement that OSS owners provide evidence of their property transfer inspection on a form approved by the LHO is expected to be a nominal cost.

Granting LHOs authority to require additional reports or information may cost more but is indeterminate since it is unknown what additional reports or information may be required by the LHO. Ten (10) LHJs noted no additional cost because the practice of performing an evaluation necessitates a thorough inspection and was already implemented by local codes.

**Benefit:** The proposed amendments will protect public health and the owner’s property by ensuring that inspections are conducted according to minimum standards and that LHOs have relevant information on the status of property transfer inspections of OSS. Specifically by:

- Defining minimum comprehensive inspection requirements, the amendments will ensure that owners can have confidence that an inspection of their OSS is conducted to a minimum standard and provides the necessary information in a standardized, easy to understand format. This will improve the quality of inspections in general, which will in

turn help ensure that OSS are operating more safely and efficiently, and that OSS malfunctions and failures are detected earlier, minimizing the threat to public health and the cost to the owner. Often, a minor malfunction will evolve into a major failure if left unaddressed.

- Requiring that OSS owners provide evidence of their property transfer inspection to the LHO the amendments will help LHOs collect and track OSS inspection status, which is critical, requisite, information in modern OSS management. This information can be used to generate statistics and maps that can direct educational, enforcement, and funding campaigns.
- Allowing LHOs to require additional reports and information, the amendments provide LHOs the latitude to implement the program to meet the local needs. There may be related issues or programs that are important locally and need to be tracked along with property transfer inspection reports.

#### **WAC 246-272A-0270 Operation, monitoring, and maintenance—Owner responsibilities**

**Description:** This section describes what owners must do for operating, monitoring, maintaining, and inspecting their OSS to minimize the risk of failure and threat to public health. This section requires owners to notify LHO if their OSS fails, work with local health officers for technical assistance, obtain approval for repairs, secure permits, and establish routine inspection requirements (on one- or three-year intervals depending on type of OSS).

The proposed amendments to this section:

- Require owners to submit the results of inspections using an LHO-approved form to the LHJ.
- Require owners to obtain an inspection by a third-party inspector approved by the LHO at time of property transfer if the OSS is not in compliance with routine inspection requirements and was inspected by a third-party inspector authorized by the LHO.
- Allows the LHO to:
  - Waive the requirement for an inspection at the time of property transfer if the LHJ has evidence that the OSS is in compliance with the routine inspection requirements in WAC 246-272A-0270(1)(e) and was inspected by a third-party inspector authorized by the LHO;
  - Verify the results of the property inspection for compliance with WAC 246-272A-0260;
  - Add additional inspections and other requirements not listed in WAC 246-272A-0260; and
  - Require a compliance schedule for repair of a failure discovered during the property transfer inspection.<sup>25</sup>

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<sup>25</sup> Current rule provides this authority to the LHO through the following rules/RCW: [Current] WAC 246-272A-0015(15) Nothing in this chapter shall prohibit the adoption and enforcement of more stringent regulations by local health departments. [Current] WAC 246-272A-0200(8) The local health officer may stipulate additional requirements for a particular permit if necessary for public health protection. RCW 70.05 grants the LHO the authority to... "Take such action as is necessary to maintain health and sanitation supervision over the territory within his or her jurisdiction."

**Cost:** The proposed amendments could result in potential costs to owners under the following conditions.

- If the LHJ does not have evidence that the OSS is in compliance with the routine inspection requirement, the property owner will need to hire a service provider authorized by the LHO to conduct a property transfer inspection at time of property transfer. The LHO has the option to waive the property transfer inspection if the property is in compliance with routine inspection requirements and was inspected by a third-party inspector.<sup>26</sup>
- Hiring a service provider authorized by the LHO to conduct routine or property transfer inspections. Previously, the rule only required an “evaluation” of OSS. The definition of an evaluation was left up to the owner’s discretion. The amendment would require the owner to follow the inspection criteria for routine or property transfer inspections.<sup>27</sup>

If the property owner is in compliance with routine inspection requirements,<sup>28</sup> and the inspection was completed by a third-party inspector, there will likely be no additional costs. If the property needs an inspection realtors will be impacted by the proposed changes. This will add another facet to the work associated with selling a home. Specifically, they will have to determine if the property has a current inspection and if not, arrange to get one completed. This could add several hours of additional time to a transaction. The department assumes that LHJs will waive the third-party property transfer inspection.

The department received responses from 10 LHJs on the cost of an inspection and submittal of a copy of the report to the department. SA Table 14 shows the actual and estimated costs for LHJ to create a program to implement property transfer inspection (PTI) program.

**SA Table 14. Estimated costs for Property Transfer Inspections (PTIs)**

Description	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
<b>Local Health Jurisdictions</b>					
One-time cost estimate for LHJ to create a program to implement property transfer inspection (PTI) program (with an existing program)	6	300 - 120,000	11,105	30,193	41,161

<sup>26</sup> This requirement is found in WAC 246-272A-0270(1)(e). This has been a requirement since 7/1/2007 when the current version of the rule went into effect. [WAC 246-272A-0270](#):

<sup>27</sup> WAC 246-272A-0260(5)

<sup>28</sup> WAC 246-272A-0270(1)(e)

One-time cost estimate for LHJ to create a program to implement property transfer inspection (PTI) program (without an existing program)	9	700 - 1,786,600	65,605	398,757	665,410
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**Installers**

Unit-cost for installer to conduct PTI requirements and send form to LHJ <b>Low-end range**</b>	10	0-700	235	277	198
Unit-cost for installer to conduct PTI requirements and send form to LHJ <b>High-end range**</b>	10	0-700	350	337	213
Unit-cost for installers, to conduct PTI requirements and send form to LHJ <b>Average</b>	10	0-700	275	288	199

**Maintenance Service Providers**

Unit-cost service maintenance providers to conduct PTI and send form to LHJ <b>Low-end range*</b>	9	100-700	250	308	182
Unit-cost service maintenance providers to conduct PTI and send form to LHJ <b>High-end range*</b>	9	100-700	400	374	187
Unit-cost service maintenance providers to conduct PTI and send form to LHJ <b>Average</b>	9	100-700	300	320	183

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost to compliance.

The multiplier to the unit cost is unknown as the PTI is a new requirement and it is unknown how many PTI's will be conducted, processed, and filed. Therefore, the total cost is unknown. SA Table 15 provides the estimates costs.

**SA Table 15. Estimated costs for Maintenance Service Provider (MSP) inspection and inspection report.**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Unit-cost to for MSP to complete an inspection <b>Low-end range*</b>	9	100 - 700	250	307	183
Unit-cost to for MSP to complete an inspection <b>High-end range*</b>	9	100 - 700	400	374	188
Unit-cost to for MSP to complete an inspection <b>Average</b>	9	100 - 700	300	320	182
Unit-cost for an MSP to submit an inspection report to the LHJ	10	0.50 - 428	41	122	156

\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost to compliance.

**Benefit:** Establishing a property transfer inspection program represents an opportunity to check on the viability and operation of OSS before the transaction is complete. This keeps all parties informed and creates opportunity to address any OSS issues that ultimately protects the environment and people that use these systems. The provision establishing the notification requirement will help OSS owners and service providers understand their role in the inspection process.

The benefit of requiring an inspection of OSS by a third-party inspector at the time of property transfer is that, prior to the property transfer, the property seller, the potential property buyer, and the LHO will know that OSS has recently been inspected and will have access to information on the condition of the system. Because the LHO is expected to waive this requirement for OSS that are in compliance with routine inspections of OSS as required in WAC 246-272A-0270(1)(e), this may also increase compliance rates with this preexisting requirement.<sup>29</sup> This will create an easy process for home sellers to follow in order to establish compliance with local inspection requirements for home sales before they are ready to sell. It may also encourage owners to maintain compliance with routine inspection requirements throughout their ownership, so their home is a more competitive option on the real estate market.

As a result of the inspection, owners will be able to fix an OSS that poses a potential health risk before the sale. Buyers will be less likely to unknowingly purchase a property with a failed, malfunctioning, or unmaintained OSS. LHO's will gain critical information about failing and malfunctioning OSS and will ensure that these issues are corrected, and public health is

<sup>29</sup> This requirement is found in WAC 246-272A-0270(1)(e) This has been a requirement since 7/1/2007 when the current version of the rule went into effect. [WAC 246-272A-0270](#)



protected. The LHO may allow the OSS to be repaired on a compliance schedule, which may allow an owner to knowingly purchase a property with a failing OSS with the understanding they have to repair it by a certain date. This facilitates real estate transfers and protects buyers and public health by making the condition of the OSS known to all parties while negotiations can still occur.

Performing an inspection as described in WAC 246-272A-0260 will lead to more consistent/uniform approach to ensuring OSS performance/maintenance. This will benefit owners and the public because a minimum standard of performance will be expected when the services of a professional septic inspector are contracted. This will benefit local health departments for the same reason. It will also benefit OSS inspectors and the industry more broadly by leveling the playing field to a minimum standard. This prevents the undercutting of competent inspections that meet the industry standard with substandard inspections of questionable value.

### **WAC 246-272A-0278 Remediation**

**Description:** This is a new section that provides LHOs the option to establish a remediation policy, governing how and when remediation projects would be allowed. It also establishes specific exclusions for remediation.

Remediation is an attempt to restore a drainfield that has failed to functional, non-failure, status. There are an assortment of nonproprietary and proprietary biological, physical, and chemical technologies or processes to remediate and restore the flow of effluent into the soil below the infiltrative surface. The term remediation, and the related technologies and processes, are not mentioned in the current version of the rule. The department does not maintain a list of approved remediation products available for use. The department has issued an interim standards document on Remediation, which provides limited specific guidance to LHOs. This has led to vastly disparate approaches between LHOs, with some allowing remediation without a permit, some requiring a permit, and others disallowing it entirely. This has created uncertainty among owners and service providers. Service providers provided comment that many in the industry are frustrated with the regulatory uncertainty around remediation and requested that amendments are added to the rule to add clarity and direction to LHOs, owners, and service providers.

The proposed amendments:

- Allow the LHO to develop a policy reviewing and approving remediation.
- Establish the following exclusions for remediation activities:
  - Damaging the OSS;
  - Resulting in insufficient soil for treatment in the drainfield;
  - Disturbing the soil when there is not enough soil to meet standards in WAC 246-272A-0230.

Remediation is not always successful. When it is successful, the OSS is returned to a functioning state. It is unknown if a remediated OSS can be expected to fail prematurely or continue to function to its original design lifetime. When remediation is not successful, the OSS will still

need to be repaired or replaced. In this case, a repair or replacement of the OSS will be necessary.

**Cost:** Nine LHJs indicated that they allow homeowners to conduct remediation projects on failing or failed OSS. Seven LHJs indicated that they do not allow remediation projects. Two LHJs did not know if they allowed remediation projects. Of the nine LHJs that currently allow remediation projects only three have a policy in place. Of the remaining six, three LHJs that currently allow these projects provided a cost estimate to amend or adopt a new remediation project policy in accordance with the draft rule and are shown in SA Table 16.

**SA Table 16. Estimated cost of Remediation Policy**

Description	N	Range (\$)
Cost of Remediation Policy	3	404 - 1,275 - 8,253

**Benefit:** The benefit of the proposed amendments is that they add a lower cost option to repairs and replacement for owners of a failed OSS. The cost to remediate a drainfield, if successful, is significantly less than the cost to replace or repair the system. The long-term benefits of remediation are unknown because it is unknown if successful remediation is a short-term or long-term solution.

In counties where LHOs choose to establish a policy allowing remediation, OSS owners will have the option to try remediation instead of a repair. Remediation is not always successful. If it is successful, the OSS will not need to be repaired or replaced until it fails again. If it is not successful, the OSS will still need to be repaired or replaced.

### **WAC 246-272A-0280 Repair of failures**

**Description:** This section establishes requirements and options for owners when their OSS fails and procedures that LHOs are required to follow following an OSS failure. The proposed amendments to this section are:

- LHOs required to report OSS failures to the department if they are within 200 feet of a shellfish growing area.
- LHO required to evaluate all unpermitted sewage discharges to determine if they pose a public health threat. If determined to be a public health threat the LHO shall require a compliance schedule. Owners may face costs, penalties, or both, associated with compliance schedule deficiencies.
- Designer must minimize the impact of phosphorus discharge in the OSS design when the LHO has identified it as a contaminant of concern in that area in the Local Management Plan.
- Changes to Table X in the proposed rule Treatment Component Performance Levels for Repair of OSS Not Meeting Vertical and Horizontal Separations
  - Incorporated changes to treatment levels resulting from proposed amendments in WAC 246-272A-0110 (DL1, DL2, DL3).

- Increased the minimum horizontal separation required between the soil dispersal unit (e.g., drainfield) and a well, spring, or surface water by 5 feet from 25 feet to 30 feet for repairs. Increased treatment and disinfection levels for specific soil types and vertical separations – a total of 6 situations (See SA Table 17).
- Allow an OSS repair using the least expensive alternative that meets standards and is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes.<sup>30</sup>
- Allow an OSS repair using Table X in the proposed rule only if installation of a conforming OSS or component/connection to either an approved LOSS or a public sewer is not possible when no reasonable alternatives exist.
- Change in requirement to abandon property if no repair of failed OSS is possible to cease using the OSS and generating sewage. This allows the owner access and use of their property.

**Exempted from the SA:** Requirement for LHO to not impose or allow the imposition of more stringent performance requirements of equivalent OSS on private entities than public entities under 34.05.328(5)(b)(v).<sup>31</sup>

**Cost:** The department conducted a survey and received responses from 11 LHOs, 3 installers, 21 designers, and 19 engineers on the costs imposed by the amendments to this section. SA Table 17 presents the estimated costs.

**SA Table 17. Estimated costs associated with WAC 246-272A-0280 Repair of failures reported in the department cost survey**

Description	Industry	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
<b>Local Health Jurisdiction</b>						
Cost to report a failure to the department for an OSS located within 200 feet of a shellfish growing area by phone or email	LHJ	11	12.50-150	43	53	42
Cost per site to determine if an unpermitted sewage discharge poses a public health threat including travel	LHJ	4	158-216	184	185	25

<sup>30</sup> This provision is taken directly from RCW. In addition, the department reasonably assumes that local health jurisdictions are already following these directives.

<sup>31</sup> [RCW 34.05.328: Significant legislative rules, other selected rules. \(wa.gov\)](#) 34.05.328(5)(b)(v) (v) Rules the content of which is explicitly and specifically dictated by statute, including any rules of the department of revenue adopted under the authority of RCW 82.32.762(3)

Cost for a local health officer to create a compliance schedule.	LHJ	2	175-250	NA	NA	NA
Does your LHJ have certain areas in your jurisdiction where phosphorous is a contaminant of concern (or similar designation)?	Yes (4) No (20)					
Does your LHJ require designers to minimize the impact of phosphorus discharge in the OSS design when the LHO has identified as a contaminant of concern in that area in the Local Management Plan	Yes (2) No (2)					

#### Designer / Engineer / Installer

Unit cost to minimize the impact of phosphorus discharge in the OSS design when the LHO has identified as a contaminant of concern in the area and the LMP	<b>Designer</b>	15	40 – 4,800	100	539	1,204
Cost to change from Treatment Level B to Treatment Level A & DL1 with <12” vertical separation, 50’ to 100’ horizontal separation, and soil types 3-6.	<b>Engineer</b>	18	0 – 2,500	365	652	772
	<b>Designer</b>	21	0 – 4,800	50	619	1,255
	<b>Installer</b>	3		0, 0, 16,000		
Cost to change from Treatment Level C to Treatment Level B & DL2 with 18” to 24” vertical separation, 50’ to 100’ horizontal separation, and soil types 3-6.	<b>Engineer</b>	19	0 – 2,500	300	550	741
	<b>Designer</b>	21	0 – 7,200	32.50	674	1,691
	<b>Installer</b>	3		0, 5,259, 17,000		
Cost to change from Treatment Level C to	<b>Engineer</b>	19	0 – 2,500	300	550	741

Treatment Level B & DL2 with 24" to 36" vertical separation, 30' to 50' horizontal separation, and soil type 2.	<b>Designer</b>	21	0 – 4,800	32.50	562	1,251
	<b>Installer</b>	3		0, 4,209, 14,000		
Cost to change from Treatment Level C to Treatment Level B & DL2 with 24" to 36" vertical separation, 30' to 50' horizontal separation, and soil types 3-6.	<b>Engineer</b>	8	50 – 1,200	210	394	414
	<b>Designer</b>	21	0 – 4,800	32.50	562	1,251
	<b>Installer</b>	2		0, 18,000		
Cost to change from Treatment Level C to Treatment Level B & DL2 with 24" to 36" vertical separation, 50' to 100' horizontal separation, and soil type 2.	<b>Engineer</b>	2		300, 1,200		
	<b>Designer</b>	21	0 – 4,800	32.50	562	1,251
	<b>Installer</b>	2		0, 14,000		
Cost to change from Treatment Level E to Treatment Level C & DL3 with <36" vertical separation, 50' to 100' horizontal separation, and soil types 3-6. *	<b>Engineer</b>	2		0, 1,200		
	<b>Designer</b>	21	0 – 4,320	100	565	1,163
	<b>Installer</b>	1		0		

**Benefit:** The proposed rule provides better protection of public health and the waters of the State of Washington. Specifically:

- The requirement for the LHO to report any OSS failures that are within 200 feet of shellfish growing areas will protect public health by ensuring that shellfish are not harvested from that area until it has been verified to be safe.
- The requirement for the LHO to evaluate unpermitted sewage discharges<sup>32</sup> to determine if they are a public health threat and require a compliance schedule (for correction) if they are determined to be a threat will protect public health by ensuring that unpermitted OSS and other unpermitted discharges of sewage are investigated, evaluated, and corrected if public health is threatened by the discharge.
- The requirement for the designer to minimize the impact of phosphorus when the repair is located in an area where phosphorus has been identified as a contaminant of concern in the LHJ's local management plan will protect public health and Washington's

<sup>32</sup> "Unpermitted sewage discharge" means the discharge of sewage or treated effluent from an unknown OSS.

surface waters. Phosphorus contributes to harmful algal blooms (HABs), eutrophication, and degradation of the environmental quality of surface waters. Areas where phosphorus has been established as a contaminant of concern are susceptible to phosphorous contamination or are already impacted by phosphorous contamination. These areas require protection to ensure they are not significantly impacted by phosphorous contamination. Once an area or surface water body is impacted by phosphorous contamination it is very difficult, costly, and time-intensive to remediate the area or water body to pre-contamination quality. Prevention of phosphorus contamination is much less expensive and facilitates maintenance of environmental quality.

- The proposed changes to Table X in WAC 246-272A-280 are based on a review of the available literature on pathogen deactivation from horizontal migration through the soil. This review revealed no literature or other data sources regarding deactivation of pathogens by horizontal migration through the soil for any distances less than 30 feet. There was, therefore, no known scientific justification for allowing installation of a drainfield less than 30 feet from a well, spring, or surface water. A number of other setback distances were also found to not be supported by current scientific literature<sup>33</sup>. The minimum setback was changed to 30 feet and any other setbacks that were not support by literature were changed to agree with the scientific literature.
- The change to allow an OSS to be repaired using the least expensive alternative that is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes, creates equity between conventional OSS, consisting solely of a septic tank and gravity drainfield, and all other OSS. This allowance is required for conventional OSS by statute. A repair that meets the requirements of the rule and is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes protects public health by ensuring that repaired OSS treats sewage to safe levels.
- The change to clarify that OSS can only be repaired to the standards in the proposed Table X in WAC 246-272A-0280, if installation of a conforming OSS or a connection to an approved LOSS or a public sewer is not possible, protects public health by ensuring that LHOs do not permit new construction or OSS repairs under the proposed Table X standards that could be installed to meet conforming system requirements. Table X standards are not as protective of public health as new construction, or conforming OSS, standards and have been meant to be applied only as an exception when an OSS fails; and only when installation of a conforming OSS is not possible for its repair and no LOSS or public sewer is available to connect to. There is uncertainty among some LHOs that the current rule language is clear on this intent. This change clarifies the ORRC's and the Department's original intent.
- The change in requirement for the owner to abandon their property if no repair of a failed OSS is possible to instead cease using the OSS and generating sewage, which allows the owner access and use of their property.

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<sup>33</sup> [On-Site Rule Revision Issue –Proprietary Product Field Testing Table VI and Table IX \(wa.gov\)](#)

### **WAC 246-272A-0282 Minor repair of malfunctions**

**Description:** The new section establishes a framework for projects defined as minor repairs that bring an OSS back to a functioning state. Clarifies that owners are allowed to make repairs of certain OSS components (identified in the definition) without having to obtain a permit from an LHO, which although many LHOs do not typically issue permits for these types of projects they have the authority to do so in the permitting section of the rule. The new section also adds additional projects/components defined as minor repairs not needing permits.

**Cost:** Ten of 19 LHJs indicated they require owners to submit information about any minor repairs they complete. There are potential compliance costs imposed by the amendments as the department is authorizing LHO's to mandate that the OSS owner submit any information but is only providing it as an option for LHOs. Costs are presented in SA Table 18.

**SA Table 18. Cost to Local Health Jurisdictions for minor repairs**

Description	Yes	No	Don't know
LHJs already require OSS owners to obtain a permit or submit information about any minor repairs they complete.	10	8	0
<i>Of the LHJs that answered <b>no</b>, you DO NOT already require OSS owners to obtain a permit or submit information about any minor repairs they complete...</i>	10	8	0
LHJs who intend to require OSS owners to obtain a permit or submit information about any minor repairs, they complete.	No cost responses		
<i>Of the LHJs that answered <b>yes</b>, they intend to require OSS owners to obtain a permit or submit information about any minor repairs they complete...</i>			
Cost to OSS owners (from LHJs) to obtain a permit or submit information about any minor repairs they complete.			

**Benefit:** Allowing minor repair projects without having to get a permit will likely cause cost savings for OSS owners and make LHJs more efficient in their operations (reducing the number of project reviews would likely reduce review time).

### **WAC 246-272A-0290 Expansions**

**Description:** This section establishes requirements for OSS owners that want to expand their existing OSS. Proposed amendments to this section change when added requirements apply to an expansion of an OSS near marine shorelines. The existing language uses the word "adjacent to" to describe when these requirements apply. The proposed amendment changes "adjacent to" to "within 200 feet" of a marine area."<sup>34</sup>

**Cost:** The department does not anticipate any additional cost of compliance associated with the proposed amendments.

<sup>34</sup> This change matches a change describing when owners can design their own OSS in WAC 246-272A-0230.

**Benefit:** The proposed amendments benefit owners and LHOs by making the rule specific and easier to follow and enforce. Changing the term “adjacent to” to “within 200 feet” provides less need for interpretation and results in consistent application of standards.

### **WAC 246-272A-0300 Abandonment**

**Description:** This section amends requirements governing how OSS owners may abandon a sewage tank, seepage pit, cesspool, or other sewage containers. Owners have the option to remove tank/container or remove lid and fill the tank or container with sand or soil. The amendments add a requirement to grade the site to the surroundings, for both options.

**Cost:** Seven installers responded (7/7) to the department’s cost survey and indicated that that they already grade a site after removing a tank and no cost estimates provided. Therefore, the department does not anticipate any additional cost to comply with the proposed rules.

**Benefit:** An ungraded site creates a safety hazard. The benefit of the proposed amendments is that a properly graded site will protect the health and safety of people residing at or visiting the site by preventing falls and injuries.

### **WAC 246-272A-0320 Developments, subdivisions, and minimum land area requirements**

**Description:** This section establishes minimum land area requirements when proposing land developments or subdivisions. The proposed amendments:

1. Increase minimum lot size.
2. Reduce the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies.
3. Establish minimum useable land area as a new requirement.
4. Update requirements for sub-sized lots.
5. Update miscellaneous provisions.

**The analysis of this section is divided into five parts to match the proposed amendments.**

#### **Part 1. Increasing minimum lot size.**

**Description of Part 1:** The amendments revise Table XI in the proposed rule to increase minimum lot sizes (ranges from 500-1,000 sq ft) based on soil type for each single-family residence or unit volume of sewage.

There is a need to require a minimum land area for OSS to ensure their safe long-term operation and treatment. Minimum lot size requirements have been included in Washington’s OSS rule since the first comprehensive statewide rule took effect in 1974. Originally, the primary purpose of the requirement was to ensure that there was enough land on the approved lot for all components of the OSS, including the reserve drainfield, to be installed without encroaching on horizontal setbacks to the home, property lines, and other site features.

Over time the scientific understanding of OSS wastewater treatment and the fate and transport of OSS contaminants developed, and a scientific and regulatory consensus emerged around two important points directly related to minimum lot sizes:



1. Historically, treatment requirements had been too lenient and treatment components had been too small to treat sewage effectively and reliably, particularly in certain soil types. Several studies and experiments expanded the understanding of how wastewater is treated in the soil, and in particular, how far pathogenic microbes and viruses can travel through soils. Well-draining sandy soils (e.g., Type 1 Soils) were found to allow pathogens to travel long distances while poor-draining clayey soils (e.g., Type 6 Soils) were found to treat pathogens well but require much larger drainfields to sustain long term treatment.
2. Nitrogen and phosphorus (together referred to as “nutrients” due to their role in plant growth) from OSS are dangerous contaminants in well water at higher concentrations and are detrimental to aquatic environments. It had long been understood that nutrients are not completely treated by OSS. However, the amount of nutrients released into the environment had historically been considered inconsequential because the health effects were not well understood and because free nutrients in terrestrial environments were thought to be used quickly by plants with little to no negative impacts.

Numerous recent studies and experiments, along with several well-documented cases of contamination of drinking water wells and surface waters have informed a consensus that inadequately functioning OSS can directly affect both human health and the environment.<sup>35</sup> Many cases of contamination were a result of premature OSS failures, while others were a result of OSS operating at a capacity that was too high for the treatment systems and receiving soils to treat. Others were a result of multiple OSS being installed too densely.<sup>36</sup> These failures and exceeded treatment capacities have been directly responsible for creating human health hazards. One known consequence of OSS failure is methemoglobinemia, commonly referred to as “blue baby syndrome.” This illness, which affects infants fed formula made with nitrogen-contaminated well water, has been linked to contamination from OSS.<sup>37</sup> Another known consequence of higher nutrient levels entering surface waters from various sources including OSS, are harmful algal blooms (HABs).<sup>38</sup>

To address these issues, three changes were made in subsequent rule revisions:

1. Treatment component requirements were increased to better match the scientific consensus. This led to generally larger and more sophisticated treatment components being installed.
2. Minimum lot size requirements were increased to accommodate larger OSS treatment components and to mitigate nutrients from OSS by providing enough soil to assimilate and dilute nutrients to safe levels before they reach groundwater or surface water. Notably, there was not agreement on the minimum land required to ensure that nutrients would always be safely mitigated. This is partially because the fate and

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<sup>35</sup> [Onsite Wastewater Treatment and Disposal Systems | US EPA, A Brief History of on-Site Wastewater Management | NC State Extension \(ncsu.edu\)](#)

<sup>36</sup> [Document Display | NEPIS | US EPA](#) Onsite Wastewater Treatment Systems Manual. Revised 2002.

<sup>37</sup> [PEHSU Nitrates Factsheet- Provider July 2014.doc \(washington.edu\)](#)

<sup>38</sup> [Harmful Algal Blooms | US EPA](#)

transport of nutrients is variable from site to site and is dependent on many specifics of OSS installation and use, land use, and hydrogeologic variables that are not collected as part of a standard OSS design. Hydrogeologists and other experts expressed concern that high-capacity OSS or densely installed OSS may cause significant nutrient contamination of groundwater resources under certain conditions. Environmental advocates expressed concern that HABS were a serious threat to aquatic environments, fisheries, and shellfish resources and that OSS should be installed so that their potential contributions are minimized. Development and property rights advocates expressed concerns over the impact to development costs. Through multiple rule revisions the determination of the appropriate minimum lot size requirements has been a compromise between the right to use land to its fullest development potential and a conservative estimate of the safety factors needed to protect groundwater and surface water resources.

3. A requirement to account for the quantity of sewage per acre (known as unit volume of sewage) in non-residential/commercial applications was added to the rule to ensure that nutrients were appropriately accounted for in non-residential and commercial applications.

The current version of the rule has been in effect since 2007, following the most recent rule revision in 2005. During that revision, the interested parties proposed to increase the minimum lot size to 21,780 sq ft for all soil types to protect water resources from nutrient contamination. This proposal was not approved by the Washington State Board of Health (board) due to concerns that the requirement would add an unneeded expense and could create unbuildable lots.<sup>39</sup> The rule requires a minimum acreage that is based on soil type and varies from 12,500 sq ft to 21,780.

Again, during the review of the rule in 2017, minimum lot size requirements were identified as an issue that needed to be considered for revision due to continued land development in Washington state. Since 2005, many areas in Washington have experienced significant growth of high-density communities served by OSS. Changes to land use on residential lots have also increased pressures on OSS treatment. While suburban lot sizes have gotten smaller,<sup>40</sup> the average size of single-family homes has generally increased.<sup>41,42,43,44,45</sup> Higher density development is required under many zoning and development regulations since it results in lower environmental impacts per person and affords an economy of scale for public services.

While beneficial in many ways, less land area per residential lot and higher rates of impervious surface coverage results in less available soil that can provide treatment of OSS effluent. This

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<sup>39</sup> [On-Site Rule Revision Issue: Minimum Land Area - WAC 246-272A-0320](#)

<sup>40</sup> [Lot Size Index by US States \(angi.com\)](#), [How American Homes Vary By the Year They Were Built \(census.gov\)](#)

<sup>41</sup> [\[STUDY\] Supersized: Americans Are Living in Bigger Houses With Fewer People | The Zebra](#)

<sup>42</sup> [What Is The Average Square Footage Of A House? | Rocket Mortgage](#)

<sup>43</sup> [Size of new single-family homes in the U.S. | Statista](#)

<sup>44</sup> [National housing and impervious surface scenarios for integrated climate impact assessments | NLCD 2016 Percent Developed Imperviousness \(CONUS\) | Multi-Resolution Land Characteristics \(MRL\)](#)

<sup>45</sup> [NLCD 2016 Percent Developed Imperviousness \(CONUS\) | Multi-Resolution Land Characteristics \(MRLC\) Consortium PNAS](#)

increases the potential that nutrients from OSS will not be adequately assimilated and diluted before they are transported into groundwater or surface water.

Climate change is expected to increase these pressures.<sup>46</sup> Summertime temperatures and the frequency of heavy precipitation events in Washington are both predicted to increase in the future. HABs form more readily at higher temperatures. And heavy rain events can rapidly flush nutrients through the soil and into groundwater and surface water.

While the understanding of the impacts of nutrients has developed significantly, there is still significant uncertainty that the rule’s minimum land requirements are protective of groundwater and surface water resources. The members of the ORRC considered several alternatives to address nutrient contamination.

Some members of the committee expressed concern that future development of the smallest lots allowed to be served by OSS is likely to cause nutrient contamination of water resources. Others asserted that no serious issues in Washington have been directly correlated to development that adheres to the standard minimum lot sizing (non-subsidized lots).

**Cost/impact of Part 1:** The ORRC agreed by consensus to recommend a modest increase in the minimum lot sizing of all soil types to add protections to counter growing threats to water resources.

The proposed increase ranges from 500 square feet to 1,000 square feet, depending on soil type.

The following table was developed to help explain the impact of the proposed lot size increases on potential subdivisions. It was developed by calculating the minimum acres needed to create subdivisions of between 1 – 10 lots under both the current and proposed minimum lot sizes by using the formula below. This allows us to show the acres needed for subdivisions under the current rule and compare that to the acres needed for the same subdivision under the proposed minimum lot size requirements.

The formula used to calculate the acres needed is:

$$\frac{(Number\ of\ Lots) \times (Lot\ Size)}{43,560\ ft}$$

While the formula has not changed, the proposed change in lot size leads to a difference in the acres needed for subdivisions.

There are no proposed changes to Soil Type 1.

**SA Table 19. Impact of proposed changes on lot sizes**

<b>Table comparing minimum size of subdividable lot needed by lots in subdivision with public water and soil type 2</b>
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<sup>46</sup> [On-Site Rule Revision Issue: Minimum Land Area - WAC 246-272A-0320](#)

Proposed Acres Required	Lots in subdivision	1	2	3	4	5	6	7	8	9	10	
	Current Acres Required	Minimum size of subdividable lot at current minimum lot size 12,500 sq ft (in acres)	0.29	0.57	0.86	1.15	1.43	1.72	2.01	2.30	2.58	2.87
	Required	Minimum size of subdividable lot at proposed 13,000 sq ft (in acres)	0.30	0.60	0.90	1.19	1.49	1.79	2.09	2.39	2.69	2.98

**Table comparing minimum size of subdividable lot needed by lots in subdivision with public water and soil type 3**

Proposed Acres Required	Lots in subdivision	1	2	3	4	5	6	7	8	9	10	
	Current Acres Required	Minimum size of subdividable lot at proposed 15,000 sq ft (in acres)	0.34	0.69	1.03	1.38	1.72	2.07	2.41	2.75	3.10	3.44
	Required	Minimum size of subdividable lot at proposed 16,000 sq ft (in acres)	0.37	0.73	1.10	1.47	1.84	2.20	2.57	2.94	3.31	3.67

**Table comparing minimum size of subdividable lot needed by lots in subdivision with public water and soil type 4**

Proposed Acres Required	Lots in subdivision	1	2	3	4	5	6	7	8	9	10
	Minimum size of subdividable lot at proposed 18,000 sq ft (in acres)	0.41	0.83	1.24	1.65	2.07	2.48	2.89	3.31	3.72	4.13
	Minimum size of subdividable lot at proposed 19,000 sq ft (in acres)	0.44	0.87	1.31	1.74	2.18	2.62	3.05	3.49	3.93	4.36

**Table comparing minimum size of subdividable lot needed by lots in subdivision with public water and soil type 5**

Proposed Acres Required	Lots in subdivision	1	2	3	4	5	6	7	8	9	10
	Minimum size of subdividable lot at proposed 20,000 sq ft (in acres)	0.46	0.92	1.38	1.84	2.30	2.75	3.21	3.67	4.13	4.59
	Minimum size of subdividable lot at proposed 21,000 sq ft (in acres)	0.48	0.96	1.45	1.93	2.41	2.89	3.37	3.86	4.34	4.82

**Table comparing minimum size of subdividable lot needed by lots in subdivision with public water and soil type 6**

Lots in subdivision	1	2	3	4	5	6	7	8	9	10
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Proposed Acres Required	Current Acres Required	Minimum size of subdividable lot at proposed 22,000 sq ft (in acres)	0.51	1.01	1.52	2.02	2.53	3.03	3.54	4.04	4.55	5.05
	Proposed Acres Required	Minimum size of subdividable lot at proposed 23,000 sq ft (in acres)	0.53	1.06	1.58	2.11	2.64	3.17	3.70	4.22	4.75	5.28

The tables show the modest impact of the proposed increase of minimum lot size to lots that can be subdivided. For example, for soil type 2, the change will require a landowner to have .30 of an acre to create a lot compared to the .29 acre (1/100 of an acre impact) and for a 10-lot subdivision the minimum size of a subdividable lot would be 11/100 of an acre larger.

**Benefit of Part 1:** The benefit of the proposed amendments is that they will protect public health and water resources. Specifically, by requiring larger minimum land areas for OSS, the amendments will ensure that there is more land to treat and dilute nutrients, which will help to prevent groundwater contamination by nutrients. Because these groundwater resources are drinking water sources, this will help prevent potential cases of methemoglobinemia, an acute and sometimes fatal illness affecting infants fed formula made with nitrogen-contaminated well water.<sup>47</sup> Studies have also shown a correlation between long-term ingestion of elevated nitrate and increased incidence of certain cancers, and increased birth defects.<sup>48</sup> Uncertainty exists in nitrate risk assessment, and the connections between the level of nitrate in drinking water, volume ingested, duration of exposure, and possible chronic risks are not fully understood.<sup>49,50</sup> Once groundwater has been contaminated with nutrients it is very difficult and expensive to treat to be safe to drink.<sup>51</sup>

Preventing nutrient contamination of surface waters protects important ecological resources such as aquatic environments, fisheries, shellfish resources, and recreational beaches. Eutrophication of surface waters is directly related to nutrient contamination<sup>52</sup> and Harmful Algal Blooms (HABs), which are dangerous to public health and can be deadly to wildlife and

<sup>47</sup> [Potential Well Water Contaminants and Their Impacts | US EPA](#)

<sup>48</sup>

<sup>49</sup> [Drinking Water Contaminant – Nitrate – Drinking Water and Human Health \(extension.org\)](#)

<sup>50</sup> [Drinking Water: Nitrate-Nitrogen \(unl.edu\)](#)

<sup>51</sup> [Nitrogen contamination and bioremediation in groundwater and the environment: A review - ScienceDirect](#)

<sup>52</sup> [Analysis of eutrophication potential of municipal wastewater - PubMed \(nih.gov\)](#)

pets and devastating to ecosystems, are fed by nutrient contamination, including from OSS.<sup>53</sup> Furthermore, remediation and rehabilitation of nutrient-contaminated surface waters is also very difficult and costly.<sup>54</sup>

Increased land area also improves the options for the owner if the OSS fails and major components need to be replaced. Even small increases in available land area can allow much more affordable repair options.

As the tables above show, the impacts of this change on development potential are minimal and in general do not result in a reduction of the number of possible lots for subdivisions under ten acres. The proposed increases in minimum land area will help protect important water resources from nutrient contamination from OSS.

**Part 2 Reduced the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies.**

**Description of part 2:** The proposed amendment reduces the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies. This results in a reduction of the maximum quantity of sewage that can be generated by non-residential uses on lots served by public water supplies from 1,575 gallons per day per acre to 1,508 gallons per day per acre. This is a reduction of 67 gallons per day per acre (a decrease of about 4%). This is described in detail below.

As defined in the rule, “Unit volume of sewage” means:

- a) Flow from a single-family residence;
- b) Flow from a mobile home site in a mobile home park; or
- c) Four hundred fifty gallons of sewage per day where the proposed development is not single-family residences or a mobile home park.

Under (c) of this definition, a unit volume of sewage is 450 gallons for non-residential uses. In the rule, the maximum unit volume of sewage describes the amount of sewage that can be generated per acre for non-residential uses on lots served by public water supplies and is calculated by dividing an acre by the smallest lot size for lots served by public water supplies. The smallest lot size was increased from 12,500 sq. ft. to 13,000 sq. ft., as described in part 1 of this section. The change of the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies is therefore a consequence of changing the minimum lot size from 12,500 to 13,000.

**Cost/Impact of Part 2:**

To understand the costs, SA Table 20 and SA Table 21 outline the maximum unit volume of sewage per acre under the current and proposed rule.

**SA Table 20. Calculation of maximum unit volume of sewage per acre under current rule**

Current Rule
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<sup>53</sup> <https://www.cdc.gov/habs/index.html> Analysis of eutrophication potential of municipal wastewater - PubMed (nih.gov)

<sup>54</sup> <https://www.epa.gov/nutrient-policy-data/research-and-reports-nutrient-pollution>

Known Variables	Minimum Lot Size = <b>12,500</b> sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage per acre for non-residential uses on lots served by public water supplies	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre  43,560 sq ft / 12,500 sq ft = 3.48 ≈ <b>3.5</b> Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage  3.5 Unit Volumes of Sewage per Acre x 450 gallons per day = <b>1,575</b> Gallons of Sewage per Day per Acre

**SA Table 21. Calculation of maximum unit volume of sewage per acre under proposed rule**

Proposed Rule	
Known Variables	Minimum Lot Size = <b>13,000</b> sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage per acre for non-residential uses on lots served by public water supplies	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre  43,560 sq ft / 13,000 sq ft = 3.35 Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage  3.35 Unit Volumes of Sewage per Acre x 450 gallons per day = <b>1,508</b> Gallons of Sewage per Day per Acre

**Benefit of Part 2:** The benefit of the proposed amendment is the same as Part 1 above.

**Part 3 Establish minimum usable land area as a new requirement.**

**Description of Part 3:** The amendments revise Table XI in the proposed rule to include a requirement for new lots to include a minimum usable land area, which is defined as:

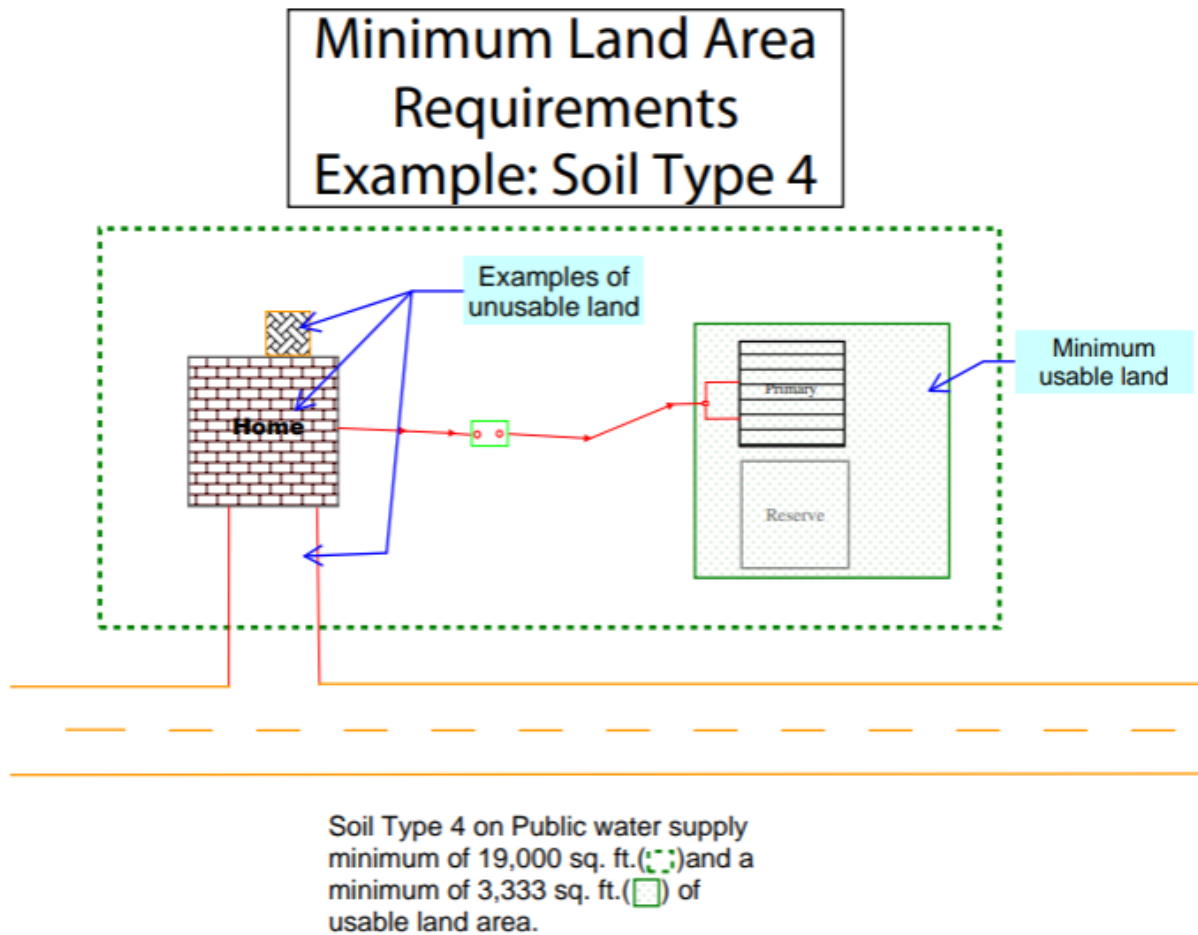
*"Minimum usable land area" means the minimum land area within the minimum lot size required per development using an OSS, which is based on soil type and type of water*



supply. Minimum usable land area is free of all physical restrictions and meet minimum vertical and horizontal separations.

The minimum lot size requirement requires each lot to be at least a certain size but does not require newly created lots to include a specific amount of land that is usable for an OSS. This can lead to new lots that are potentially undevelopable with OSS due to significant portions of the lot being under water, too steep, rocky, paved, impacted by easements, or otherwise unbuildable. SA Figure 1 demonstrates the impact of the minimum usable land area requirement.

**SA Figure 1. Minimum Land Area Requirements Example: Soil Type 4**



**Cost/Impact of Part 3:** The impact of the proposed amendment to the owner is a restriction on subdividing land proposed to be served by OSS into lots that do not have enough usable land to meet the minimum usable land area requirement. SA Table 22 details the impacts of the proposed amendment on Local Health Jurisdictions and designers.

**SA Table 22. Costs to Local Health Jurisdictions and Designers associated with proposed minimum usable land**

<b>Description</b>	The department asked Local Health Jurisdictions... Do you already use the draft definition of minimum usable land* as a requirement? <i>Answers are in the data row below.</i>				
<b>Findings from cost survey</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>		
	13	5	0		
<b>Description</b>	Because you answered no, you DO NOT already use the draft definition of minimum useable land as a requirement...What is the cost of developing a policy/process that ensures that developments meet the minimum useable land areas? The findings are presented in the data row below.				
<b>Findings from cost survey</b>	<b>N</b>	<b>Range (\$)</b>	<b>Median (\$)</b>	<b>Mean (\$)</b>	<b>Standard Deviation (\$)</b>
	5	0 – 66,022	880	14,418	25,848
<b>Description</b>	The department asked Designers, what is the cost to incorporate the proposed minimum usable land requirement for one OSS design? <i>The findings are presented in the data row below.</i>				
<b>Findings from cost survey</b>	<b>N</b>	<b>Range (\$)</b>	<b>Median (\$)</b>	<b>Mean (\$)</b>	<b>Standard Deviation (\$)</b>
	Low end range*	22	0-16,000	88	759
High end range*	22	0-16,000	250	1,700	3,955

\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost of compliance.

The cost to designers to incorporate the proposed minimum useable land requirement into an OSS design will likely be passed onto the consumer and will not be a cost to businesses.

**Benefit of Part 3:** The benefit of the proposed amendment is that it will protect public health, the environment, and the property owner. Specifically, the amendment, by requiring a minimum usable land area, will ensure that newly approved lots have suitable land to accommodate the installation and eventual repair of an OSS.

**Part 4 Updating requirements for sub-sized lots.**

**Description of Part 4:** The proposed amendments update the requirements for sub-sized lots. Specifically, the amendments:

- Remove reference to the rule’s current methodology for permitting OSS on sub-sized lots. This methodology is known as Method II

- Add Table XII to the rule language to determine lot sizes for lots which do not meet Table XI lot size requirements. These are known as sub-sized lots.
- Change the requirements for sub-sized lots of record (existing lots)

**The proposed amendments:**

Remove reference to Method II, the rule’s current methodology for permitting OSS on sub-sized lots. The current rule contains an allowance to use an alternative methodology, known as Method II, to determine minimum lot sizes for lots with OSS that are smaller than the typical minimum lot sizes. The rule requires that the project is justified through a written analysis of:

- (A) Soil type and depth;
- (B) Area drainage, and/or lot drainage;
- (C) Public health impact on ground and surface water quality;
- (D) Setbacks from property lines, water supplies, etc.;
- (E) Source of domestic water;
- (F) Topography, geology, and ground cover;
- (G) Climatic conditions;
- (H) Availability of public sewers;
- (I) Activity or land use, present, and anticipated;
- (J) Growth patterns;
- (K) Reserve areas for additional subsurface treatment and dispersal;
- (L) Anticipated sewage volume;
- (M) Compliance with current planning and zoning requirements;
- (N) Types of proposed systems or designs, including the use of systems designed for removal of nitrogen;
- (Q) Any other information required by the local health officer.
- (O) Existing encumbrances, such as those listed in WAC 246-272A-0200 (1)(c)(v) and 246-272A-0220 (2)(a)(vii); and
- (P) Estimated nitrogen loading from OSS effluent to existing ground and surface water;

This method was intended to serve development needs in planned unit developments, often within the boundaries of an urban growth area<sup>55</sup>.

The current rule also required the department to develop a guidance document to guide local permitting of lots approved under Method II by July 1, 2008. This guidance was meant to direct LHOs on how to account for the items on the list above, which represent the variability and macroscale impacts of OSS installation, land use, and hydrogeology that are not generally considered during routine OSS design.

The department did not develop the Method II guidance by the deadline set in the rule. Nonetheless, several LHJs began permitting subdivisions and OSS as Method II developments. Some LHJs developed local requirements to address nutrients and other concerns associated

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<sup>55</sup> [Chapter 36.70A RCW: GROWTH MANAGEMENT—PLANNING BY SELECTED COUNTIES AND CITIES \(wa.gov\)](#)

with sub-sized lots. Others permit sub-sized lots based solely on the rule's requirement for written justification.

Method II developments generally result in significantly smaller lots than lots determined by Table XI in the proposed rule. Many Method II developments are high-density suburban neighborhoods that have significant potential to impact groundwater and surface water resources, particularly by nutrient contamination. The rule's current requirements, absent the required Method II guidance, are insufficient to protect groundwater and surface water resources from nutrient contamination.

As noted above, the current rule allows use of Method II to determine minimum lot sizes for lots smaller than the requirements in Table XI in the proposed rule. These lots are known as sub-sized lots.

Under the proposed amendments, the owner has the option to use Table XII in the proposed rule to determine minimum lot size for sub-sized lots. Table XII establishes a maximum amount of nitrogen (measured as Total Nitrogen) allowable from OSS per square foot of land, dependent on soil type. A lot must be at least large enough to accept the nitrogen from the OSS that will be installed on it. In other words, Table XII minimum lot sizes are determined based on nitrogen output from the OSS and the corresponding soil type. These sizes are based on the lot sizes in Table XI of the proposed rule, but can be reduced by installing additional treatment, as described below.

OSS are assumed to emit a certain amount of nitrogen, based on scientific literature<sup>56</sup>. This amount of nitrogen is expected for any OSS that does not include nitrogen treatment. However, lot sizes are allowed to be reduced if an approved nitrogen treatment device is added to the OSS. Nitrogen treatment devices are expected to treat 50% of the nitrogen in OSS effluent, so lots sizes are allowed to be reduced by up to 50% of Table XI sizes, if the OSS includes nitrogen treatment.

The amendments are based on the premise that lots sized in compliance with Table XI adequately protect groundwater and surface water resources. This allows OSS to be installed on lots that do not meet Table XI's requirements (sub-sized lots) while ensuring that groundwater and surface water are protected commensurate as it would be if the same OSS were installed on a lot that meets Table XI's requirements. Developers may choose to pay more for OSS which treat nitrogen in exchange for using less land area and get more lots from a subdivision.

A direct comparison between Table XII minimum lot sizes in the proposed rule and Method II minimum lot sizes in the current rule is not possible because Method II does not have an actual minimum lot size. Because Method II is generally used within urban growth areas to meet minimum development density requirements, the department analyzed the maximum densities allowed by Table XII. Notably, the maximum densities allowed via Table XII allows subdivisions and final lot sizes to meet most zoning requirements in urban growth areas. See tables below.

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<sup>56</sup> US EPA, Onsite Wastewater Treatment Systems Manual, Feb 2002

The department analyzed the maximum number of lots that a single acre, by each soil type, can be subdivided into using Table XII of the proposed amendments, assuming 50% denitrification via installation of a nitrogen treatment device and a public water supply (SA Table 23). The goal is a minimum of 5 lots per acre. All soil types can accommodate 5 lots per acre, if some or all lots are limited to 2 bedrooms.

**SA Table 23. Table XII (in the rule) Maximum Subdivision of Lots Per Acre by Soil Type**

Soil Type 1

<b>Soil Type 1</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	2
Denitrification factor	0.5

Or

<b>Soil Type 1</b>	
Acres	1
Maximum number of lots	3
Lot Sizes	14,520 sq ft
Bedrooms per lot	3
Denitrification factor	0.5

Soil Type 2

<b>Soil Type 2</b>	
Acres	1
Maximum number of lots	6
Lot Sizes	7,260 sq ft
Bedrooms per lot	3
Denitrification factor	0.5

Soil Type 3

<b>Soil Type 3</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft

Bedrooms per lot	3
Denitrification factor	0.5

**Soil Type 4**

<b>Soil Type 4</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	2
Denitrification factor	0.5

Or

<b>Soil Type 4</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	Three 3-bedroom lots and Two 2-bedroom lots
Denitrification factor	0.5

Or

<b>Soil Type 4</b>	
Acres	1
Maximum number of lots	4
Lot Sizes	10,890 sq ft
Bedrooms per lot	3
Denitrification factor	0.5

**Soil Type 5**

<b>Soil Type 5</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	2
Denitrification factor	0.5

Or

<b>Soil Type 5</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	Two 3-bedroom lots and Three 2-bedroom lots
Denitrification factor	0.5

<b>Soil Type 5</b>	
Acres	1
Maximum number of lots	4
Lot Sizes	10,890 sq ft
Bedrooms per lot	3
Denitrification factor	0.5

Soil Type 6

<b>Soil Type 6</b>	
Acres	1
Maximum number of lots	5
Lot Sizes	8,712 sq ft
Bedrooms per lot	2
Denitrification factor	0.5

Or

<b>Soil Type 6</b>	
Acres	1
Maximum number of lots	3
Lot Sizes	14,520 sq ft
Bedrooms per lot	Two 3-bedroom lots and Three 2-bedroom lots
Denitrification factor	0.5

Change the requirements for sub-sized lots of record (existing lots)

The current rule allows development on lots of record (lots which predate the rule’s requirements) that do not meet minimum lot size requirements if the proposed OSS will meet all requirements of the current rule other than minimum lot size. LHJs have issued waivers to allow OSS installation on these lots when the rule’s requirements cannot be met. In November 2008, the Supreme Court of Washington ruled in Griffin v Thurston that permit applications to install an OSS on a lot that does not meet the minimum lot size requirements of the rule may not be granted waivers from the rule’s requirements.<sup>57</sup> Specifically, the court ruled that an OSS permit application can meet all requirements under WAC 246-272A-0320(5)(e)(iii) if the application qualifies for alternative methods or standards that are embedded in the applicable rule but, cannot rely on the general waiver provision found in WAC 246-272A-0420. This ruling has prevented installation of OSS on many preexisting sub-sized lots because the OSS would require a waiver from one or more of the rule’s requirements.

Waivers are required to be consistent with the standards and intent of the rule and are expected to be protective of public health. There are no waivers for deviation from minimum lot size because there are no mitigating measures that can be taken. Therefore, sub-sized lots with an OSS permitted using a waiver are a concern due to their potential impact (particularly due to nutrients) to nearby groundwater and surface waters.

During the review of the rule in 2017, interested parties rated updating the lot sizing method for sub-sized lots as a high priority. During rule revision, several interested parties expressed concern that continued development of sub-sized lots served by OSS without adequately considering nutrients is very likely to result in preventable nutrient contamination of groundwater and surface water resources. LHJs expressed that there is often local pressure to allow development at the highest densities permitted by rule. Interested parties agreed the rule should clearly explain the requirements for development of sub-sized lots served by OSS, that the requirements should protect groundwater and surface water resources, while also being as permissive of sub-sized lots as safely possible.

**Cost/Impact of Part 4:** The department asked LHJs in the cost survey if they allow developments (the division of lots) smaller than the minimum land requirements (using the current rule’s Method II) and responses are presented in SA Table 24.

**SA Table 24. Local Health Jurisdictions that currently allow developments on smaller than the minimum land requirements (using the current rule’s Method II)**

Description	Yes	No	Don’t know
LHJ currently allows developments (the division of lots) smaller than the minimum land requirements in Table XI (using current rule Method II) *	8	9	1

\* This does not apply to development of existing legal lots. DRAFT rule Table XI.

<sup>57</sup> [Griffin v. Thurston County :: 2008 :: Washington Supreme Court Decisions :: Washington Case Law :: Washington Law :: US Law :: Justia](#)



In jurisdictions where the LHJ allows the development of lots using Method II, the proposed amendments will prevent future land subdivisions using Method II. Future subdivisions will be required to meet the requirements of either Table XI or Table XII as outlined in the proposed rule.

The department asked OSS designers to estimate the additional cost to add nitrogen treatment to an OSS to allow it to meet the nitrogen treatment requirements in Table XII of the proposed rule. Results are presented in SA Table 25.

**SA Table 25. Designers estimated cost to design and add a device for nitrogen treatment**

Description	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Incremental/additional cost for an OSS for a Design with treatment level N <b>Low-end range*</b>	23	0 – 2,400	150	288	489
Incremental/additional cost for an OSS for a Design with treatment level N <b>High-end range*</b>	23	0 - 4,800	400	614	949
Incremental/additional cost for a device for an OSS with treatment level N <b>Low-end range*</b>	22	0 - 80,000	200	3,029	12,733
Incremental/additional cost for a device for an OSS with treatment level N <b>High-end range*</b>	22	0 - 80,000	550	4,276	16,941
<b>Design + Device Low-end range**</b>		<b>0 - 82,400</b>	<b>350</b>	<b>3,317</b>	
<b>Design + Device High-end range**</b>		<b>0 - 84,800</b>	<b>950</b>	<b>4,890</b>	

\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

\*\*Design + Device Low-end and High-end ranges are the addition of the lowest range and highest range survey responses from the first four data rows (denoted in grey). These were summed because you would need both the design and the device for a total cost to add nitrogen treatment.

In the cost survey the department asked manufacturers if they currently offer a device that is registered to meet treatment level N; 2 manufacturers answered yes, 2 answered no. One manufacturer indicated that they do plan in the future to add treatment level N to their product and estimated the cost of the unit between \$5,000 and \$8,000.

**Benefit of Part 4:** The benefit of the proposed amendments is that they will protect public health, water quality, and the owner's property. They will provide a much safer, more responsible path for developing new sub-sized lots. They will also allow for installing OSS on sub-sized lots of record that require a waiver, which is currently not permitted. Specifically,

- Changing the method of permitting sub-sized lots from relying on a written justification of a list of important variables (Method II) to establishing a maximum amount of nitrogen that can be allowed per land area (Table XII) in the proposed rule, while also considering those important variables, will ensure that water resources are protected from nitrogen contamination. The amendments allow OSS to be installed on lots that do not meet Table XI's requirements (sub-sized lots) while ensuring that groundwater and surface is protected commensurate as it would be if that OSS were installed on a lot that meets Table XI's requirements (was not sub-sized). Using this methodology, new developments can be designed with lots as small as half the size of Table XI's minimum lot sizes by installing nitrogen treatment technology that takes the place of the land area that is otherwise used to treat and dilute nitrogen. Developers may choose to pay more for OSS which treat nitrogen in order to use less land area and get more lots from a subdivision. The rule's current requirements, absent the required guidance on how to implement Method II, result in inconsistent interpretation and implementation of the rule and are insufficient to protect groundwater and surface water resources from nutrient contamination. The proposed amendment allows continued development of new sub-sized lots while requiring the development to protect water resources from nitrogen contamination.
- The addition of Table XII to the proposed rule also allows sub-sized lots of record, which are currently not eligible for an OSS permit due to the Griffin v Thurston Supreme Court decision, to potentially be eligible for an OSS permit. This is because Table XII is an alternative method of determining the minimum lot size which is *embedded in the rule*. In the Griffin v Thurston case, the Washington Supreme Court ruled that waivers cannot be granted for OSS permits where the lot does not meet a minimum lot size determination methodology *embedded in the rule*.

The Table XII lot sizing will not allow every lot of record to be permissible for an OSS (because some are too small or have issues for which there is no suitable waiver) but it will allow many hundreds or thousands to be permissible with an OSS that currently are not.

#### **Part 5 Update miscellaneous provisions**

**Description:** The following proposed amendments update miscellaneous provisions. Specifically, the amendments:

- Remove the allowance to include road areas “up to the centerline of the road” for determining lot size in subdivisions that do not meet the minimum land area requirements in Table X of the proposed rule. Road areas require compacted soil, and are often paved, and do not provide adequate treatment of OSS effluent, including nutrients. Management and treatment of nutrients is critical to determination of lot sizes and treatment requirements for sub-sized lots.
- Allow recording a restrictive covenant to allow water protection zones for individual wells on new subdivisions to cross lot lines.

**Cost/Impact of Part 5:** New sub-sized lots (created through subdivisions) will be required to meet the requirements of Table XI without including areas that are roads or are planned to be roads. The department interprets this more of a limitation of use rather than a direct cost to the property owner. The cost of this revision is indeterminate and will likely be nominal.

The LHJs were asked if they currently include up to the centerline of the road for subdivisions that do not meet the minimum land area requirements in SA Table 26.

**SA Table 26. Local Health Jurisdictions that currently include up to the centerline of the road for subdivisions that do not meet the minimum land requirements in rule**

Description	N	Yes	No	Don't know
LHJ currently includes up to the centerline of the road for subdivisions that do not meet the minimum land area requirements in Table X	18	4	12	2

\* This does not apply to development of existing legal lots. Refer to rule, DRAFT rule Table XI.

**Benefit of Part 5:** The benefit of the proposed amendments is that they will protect public health and water quality and allow owners to record a restrictive covenant to protect water protection zones that cross lot lines. Specifically:

- Precluding road areas from being included in lot size determinations to meet minimum lot size requirements protects public health and the environment because paved and compacted road areas are unsuitable for OSS effluent treatment; and
- Allowing the owner to record a restrictive covenant to allow water protection zones for individual wells on new subdivisions to cross lot lines will allow the owner of multiple lots to ensure that drinking water protection zones that cross lot lines can be protected with a restrictive covenant.

**WAC 246-272A-0340 Approval of installers, pumpers, and maintenance service providers**

**Description:** This section requires installers and pumpers to get approved by the LHO before they could provide services. The existing rule gives LHOs the option to approve maintenance service providers. The proposed amendments change the term “certified” to “approved” in the section title and requires LHOs to approve maintenance service providers before they can offer services. This change is needed to complete property transfer inspections. The amendments

add an option for LHOs to approve OSS installers, pumpers, and maintenance service providers through reciprocity by other LHO approvals. The amendments also allow LHOs to establish an OSS owner inspection certification program where they get trained to be able to inspect their own OSS.

**Cost:** The department received responses from 11 LHJs on the cost to establish a maintenance service and OSS owner inspection program. SA Table 27 shows the estimated costs. The department assumes that over time the LHJs will establish a fee for service that the maintenance service providers will eventually pay.

**SA Table 27. Estimated cost to Local Health Jurisdictions to establish an Owner Inspection Program**

Description	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
<b>Local Health Jurisdiction</b>					
One-time cost to establish an existing maintenance service provider approval program	11	300 - 1,500,000	18,000	182,560	44,126
Annual cost to offer an existing maintenance service provider approval program	11	250 - 207,667	12,000	36,656	61,125
One-time cost to establish an OSS owner inspection program	3	21,460 48,717 53,200	NA	NA	NA
Annual cost to offer an OSS owner inspection program	2	40,050 99,900	NA	NA	NA

**Benefit:** Once approved, the maintenance service providers may, if allowed by LHO, also perform the property transfer inspections providing a broader more competitive base of potential approved inspection providers. The amendments will increase competition, increase public confidence in the program as it is implemented, and improve efficiency and level of standard for professions that work on OSS.

**WAC 246-272A-0400 Technical advisory group (TAG)**

**Description:** This section directs how the department will maintain and use a technical advisory group (TAG). The amendments change the title from “committee” to “group” and add a 3-year term length for serving on the TAG (previously the term length was not identified). The amendments add two new specific member categories to the TAG, (maintenance service providers and certified professional soil scientists) that were already attending and participating in the group and remove an allowance that the department have a representative to the TAG. The amendments also strike language allowing the department to convene the TAG, since this is implied in the section’s language directing the department to maintain the TAG.

**Cost:** The department does not anticipate any additional compliance costs associated with the proposed amendments.

**Benefit:** The proposed amendments formalize participating members of the TAG. The three-year term clarifies the duration of time commitment when joining the TAG.

#### **WAC 246-272A-0410 Policy advisory group**

**Description:** This section directs how the department will maintain and use a policy advisory group (PAG). The amendments change the title from “committee” to “group” and adds a 3-year term length for serving on the PAG (previously the term length was not identified). The amendments strike language allowing the department to convene the PAG, since this is implied in the section’s language directing the department to maintain the PAG. The amendments also remove an allowance that the department have a representative to the PAG.

**Cost:** The department does not anticipate any additional compliance costs associated with the proposed amendments.

**Benefit:** The proposed amendments add a three-year term which clarifies the duration of time commitment when joining the PAG.

### ***Determination***

#### **Probable Benefits greater than Probable Costs**

The rulemaking intends to improve public health protection, streamline regulations, provide clarity, and improve consistency between state and local regulations. As described in this analysis, there are selected sections that could result in increased costs for select OSS owners (e.g., property transfer inspection), LHOs (e.g., establishing local management plan), designers (e.g., add new components to site maps) and installers (e.g., add observation port in each lateral) although the department assumes these costs to designers and installers will ultimately be paid by clients (OSS owners). The proposed rule enhances public health protection by preventing untreated sewage from entering the environment and by enhancing the focus of local OSS programs on proactively preventing issues with OSS rather than responding to issues. Although parties may incur certain costs, the benefit of improving the effectiveness, operation, and performance of OSS, which protect and improve public health, outweigh these costs.

Based on this analysis, the department concludes that the total probable benefits of the proposed rule exceed the total probable costs.

## SECTION 6

**List of alternative versions of the rule that were considered including the reason why the proposed rule is the least burdensome alternative for those that are required to comply and that will achieve the goals and objectives of the proposed rule.**

The list below represents draft revisions the department considered but ultimately elected to propose less burdensome alternative language after determining the change would still achieve the general goals and specific objective of the authorizing statute:

- [WAC 246-272A-0015] The ORRC proposed that non-Puget Sound LHJs develop LMPs with similar requirements to the Puget Sound LHJs. Environmental Health Directors expressed concern that the non-Puget Sound LHJs did not have adequate resources to develop LMPs at that scale. Many non-Puget Sound LHJs have not satisfied existing rule requirements to develop LMPs with a more limited scope. In response, the department revised the proposed rule to leave the LMP requirements for non-Puget Sound LHJs largely unchanged. The department will invest resources in training LHJ staff in LMP development, including help securing funding for this work.
- [WAC 246-272A-0025] The proposed amendments clarify how the distance to sewer is measured in cases where a failed OSS must be connected to sewer, protecting owners from paying high sewer connection costs due to a requirement to connect from long distances.

The current rule language requires that the owner connect their property to sewer in the case of a failed OSS, if a conforming OSS cannot be installed, and the distance “between the residence or other facility and an adequate public sewer is two hundred feet or less as measured along the usual or most feasible route of access”. Several LHJ’s have required sewer connection in cases where the sewer line was within 200 feet of the property line but was much further to the actual point of connection.

This has created a costly and disproportionate effect of this provision of the rule. LHJ’s, in collaboration with other local regulators, determine if owners should be required to connect to sewer based on the distance from the edge of their property to the sewer line. The owners are, however, required to pay the actual per foot connection costs, which are often based on distances much greater than 200 feet. Moreover, many sewer districts require the property owner to pay for the sewer line to be installed across the frontage of their property, to extend the sewer line to the next property. The cost associated with this depends on the distance of frontage.

When the ORRC considered revisions to this section there was extensive discussion among the committee members about the proper balance between equity of application of the rule and the effort to connect permitted OSS, pre-permit OSS (installed prior to 1974), and unpermitted OSS to sewers. Some committee members supported retaining the current wording of the rule so that sewer districts can require sewer connection in more cases. Most committee members opted to propose a less burdensome revision to the rule. The proposed amendments revise the method of

measurement to determine if the property is subject to the sewer connection requirement to begin approximately where the building drain exits the building (where the building drain and the sewer line connect) instead of the edge of the property. This will reduce the disproportionate burden on owners and limit the requirement to properties that are more adjacent to sewer lines.

- [WAC 246-272A-0120] The ORRC proposed that the department develop a requirement that proprietary treatment products are field verified as a part of the product registration process. Currently, proprietary treatment products are tested at testing facilities to determine what level of treatment they provide. Few have undergone field testing to determine their efficacy under actual use conditions. This has been identified as a concern during the last two rule revisions.

The department collaborated with a committee of product manufacturers and LHJ staff to develop this requirement. The department initially proposed to this committee that all newly installed proprietary treatment products would be tested during their first two years of service. This would have entailed collecting effluent samples during the service visits (about 4) that normally happen during the first two years and having those analyzed for a limited number of regulatory analytes.

There was robust debate among the committee members on the benefits versus the costs of the proposal. Several counterproposals were provided. Some manufacturers argued that field verification had limited merit. Others argued that field verification was needed. And others argued that operational analytes should also be collected.

The committee worked to balance cost and burden to manufacturers against the benefit of the potential information gained on the actual operational performance of proprietary treatment products. The final proposed requirement requires all existing and new proprietary treatment products to undergo field verification that includes sampling twenty-five separate installations and having the samples analyzed for E. coli or fecal coliform, to determine the bacterial reduction treatment provided by the proprietary treatment product. This is a much more limited requirement and will be less costly and burdensome to manufacturers.

- [WAC 246-272-0270] The ORRC proposed that all OSS must be inspected at the time of property transfer. LHJ representatives expressed concern to the department that this requirement would be difficult to implement, particularly for smaller LHJs with less resources. They also argued that it would be easier to implement and fairer to owners if this requirement could be waived for OSS that are in compliance with routine inspection requirements found in WAC 246-272A-0270. The department agreed and made two revisions to proposed rule. The first requires property transfer inspections beginning two years after the effective date of the majority of the rule. This will allow the LHJs time to build the systems and policies needed to implement the property transfer inspection requirement locally. The second revision is to allow LHOs to waive the property transfer inspection requirement in cases where the OSS is in compliance with routine inspection requirements found in WAC 246-272A-0270. This will allow owners who have appropriately maintained inspection requirements of their OSS to forego the

property transfer inspection and instead rely on the results of their most recent inspection to demonstrate that the OSS is functioning safely and in compliance with the rule's requirements.

- [WAC 246-272-0278] The ORRC proposed that the LHO be required to develop a Remediation Policy, which would describe which, if any, OSS remediation process would be permitted and what the requirements associated with this process would be. LHJ representatives informed the department that this requirement would create unnecessary costs for LHJs, taking resources away from important activities. They argued that developing a policy is costly and time-intensive and that it is not necessary if remediation processes will not be allowed. The department agreed and revised the proposed language to allow, but not require, the LHO to develop a Remediation Policy. This allows the LHO the latitude to develop a Remediation Policy if they determine it is needed, but not if it is not. This potentially limits the cost of this section of the rule.



## **SECTION 7**

**Determination that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.**

The proposed rule does not require those to whom it applies to take an action that violates requirements of federal or state law.

## **SECTION 8**

**Determination that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.**

The proposed rule does not impose more stringent performance requirements on private entities than on public entities. The proposed changes in this rule apply equally to all OSS, whether they are publicly or privately owned.

## **SECTION 9**

**Determination if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, determine that the difference is justified by an explicit state statute or by substantial evidence that the difference is necessary.**

The proposed rule does not differ from any applicable federal regulation or statute.

## **SECTION 10**

**Demonstration that the rule has been coordinated, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter.**

The department coordinated with the Department of Ecology water quality program regarding hydrogeology. The department has coordinated with U.S Environmental Protection Agency (EPA), the ORRC, and the department's Technical Advisory Group. The proposed rule changes have been coordinated to the maximum extent practical with other federal and state laws applicable to the same subject matter:

WASHINGTON STATE DEPARTMENT OF HEALTH

# Small Business Economic Impact Statement

WAC 246-272A  
a Rule Concerning  
On-Site Sewage  
Systems



September 2023

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## SECTION 1

**A brief description of the proposed rule including the current situation/rule, followed by the history of the issue and why the proposed rule is needed. A description of the probable compliance requirements and the kinds of professional services that a small business is likely to need in order to comply with the proposed rule.**

Chapter 246-272A WAC, On-Site Sewage Systems, regulates the location, design, installation, operation, maintenance, and monitoring of on-site sewage systems (OSS). There are approximately 950,000 OSS in Washington that produce around 340,000,000 gallons of wastewater per day. This rule protects public health by minimizing both the potential for exposure to sewage from on-site sewage systems, and the adverse effects of discharges from on-site sewage systems on ground and surface waters.<sup>1</sup>

Local health officers (LHOs) have three options to enforce chapter 246-272A WAC. They can: adopt their own local code; adopted this rule by reference; or defer to chapter 246-272A WAC. The State Board of Health (board) is authorized under RCW 43.20.050 to adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage systems with design flows of less than three thousand five hundred gallons per day. The Washington State Department of Health (department) implements these rules. The department is required to review chapter 246-272A WAC every four years to evaluate the effectiveness of the rules and determine areas where revisions may be necessary. The department is also required to provide results of the review along with recommendations to the board and local health officers. This requirement was adopted in 2005 and the department completed its first evaluation in 2009 and a subsequent evaluation in 2013. Both evaluations concluded with the finding that no revisions were necessary.<sup>2</sup>

In 2017, the department conducted an evaluation of the existing OSS rule, including gathering feedback on the rules from local health partners and interested parties. In December 2017, the department published the following report on the findings: 2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-Site Sewage Systems.<sup>3</sup> The report identified seven key issues and several minor issues that should be considered for possible revision in rulemaking. The seven key issues were: Definitions, Local management plans, Property transfer inspections, Application of treatment levels, Ultraviolet light disinfection effectiveness and approval, Horizontal setbacks (system location) and Statewide service provider licensing. The department briefed the board in January 2018 and the Board directed staff to file a CR-101, Preproposal Statement of Inquiry. Staff filed the CR-101 as WSR 18-06-082 on March 6, 2018.<sup>4</sup>

The Washington state legislature passed Senate Bill 5503 in the 2019 legislative session and it was codified as RCW 43.20.065.<sup>5</sup> The bill addressed repair and replacement of failed systems and system inspections. The law has been addressed in the rulemaking.

To assist and inform the rule revision process, and to ensure that chapter 246-272A WAC consistently promotes safe and effective operation of OSS, the board requested input and review from a statewide representation of diverse interested parties. The department formed the On-Site Rule Revision Committee (ORRC) in June 2018 to serve as this group and foster communication and cooperation between interested parties. The ORRCs role was informal and advisory to the department in this

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<sup>1</sup> Internal Document "2018 Socioeconomic Impact Survey of Hammersley Inlet Shellfish Growers." Available Upon Request.

<sup>2</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>3</sup> 2017 Evaluation of the Effectiveness of Chapter 246-272A WAC, On-site Sewage Systems

<sup>4</sup> <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/337-152a.pdf?uid=635807f46e5ae>

<sup>5</sup> RCW 43.20.065: On-site sewage system failures and inspections—Rule making

rulemaking. The ORRC proposed, made recommendations, and gave input to the rule. ORRC members include representatives from industry, regulators, consumers, and academia. Two subcommittees were formed to advise on policy and technical issues. The department drafted issue papers on several key topics for both subcommittees. These subcommittees worked on topics, held votes on topics, and ultimately made recommendations to the entire ORRC. The ORRC used a majority rule when considering amendments that were forwarded to the department. There were proposals with unanimous support and others with simple majority.

The ORRC met nine times between June 2018 and February 2020 as a full committee and the department convened many associated subcommittee meetings that reported out to the full ORRC. The department shared a draft with interested parties for informal review and comment. In addition, the department conducted three in-person and one web-based public workshops concluding in October 2019. Based on comments received, the department made several changes to the draft rules. The department worked with environmental health directors from different areas of the state on the ORRC and separately to help fine tune the draft rules.

**The objectives of the proposed OSS rules are to:**

- Incorporate the most recent science and technology standards for OSS;
- Ensure OSS are inspected periodically in all areas of the state to determine whether they are functioning properly to avoid contamination and environmental degradation resulting from a failure; and
- Establish a mechanism for local and state governments to enforce OSS practices that protect the environment and residents of WA state from OSS safety hazards.

The department assumes businesses will have to hire professional engineers, designers, installers, pumpers, and maintenance service providers in various situations to prepare documents and to provide other professional services as described in the significant analysis.

## SECTION 2

### Identification and summary of which businesses are required to comply with the proposed rule using the North American Industry Classification System (NAICS).

**SBEIS Table 1. Summary of Businesses Required to comply to the Proposed Rule**

NAICS Code <sup>6</sup>	NAICS Business Description	Number of businesses in Washington State	Minor Cost Threshold <sup>7</sup>
541330	Engineering Services	1,717	\$7,717
562991	Septic Tank and Related Service	118	\$2,661
327390	Other Concrete Product Manufacturing	49	\$15,846
326199	All Other Plastics Product Manufacturing	98	\$18,869
562998	All Other Miscellaneous Waste Management Services (Maintenance Service Providers)	42	\$14,287
238910	Site Preparation Contractors	2,373	\$4,017
333318	Commercial and Service Industry Machinery Manufacturing (Manufacturers)	109	\$9,003
531210	Offices of Real Estate Agents and Brokers	2,751	\$3,168

<sup>6</sup> U.S. Census Bureau, [North American Industry Classification System \(NAICS\)](#).

<sup>7</sup> Governor’s Office for Regulatory Innovation and Assistance, Regulatory Fairness Act Tools & Guidance, [Minor Cost Threshold Calculator](#).



237210	Land Subdivision	195	\$4,213
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### SECTION 3

**Analysis of probable costs of businesses in the industry to comply to the proposed rule and includes the cost of equipment, supplies, labor, professional services, and administrative costs. The analysis considers if compliance with the proposed rule will cause businesses in the industry to lose sales or revenue.**

**Sectional Analysis:** The sectional analysis includes sections that result in compliance costs to businesses. It does not include sections where businesses provide services to customers for example costs of completing an inspection of an OSS for a client. This is because costs are passed to the clients and clients pay for these additional costs, in this case OSS owners will pay the cost of the services. These costs are not included in this analysis because businesses elect to provide these services and are not obligated to do so. The department anticipates that most new requirements will not cause businesses to lose sales or revenue, with potential exceptions.

**Cost Survey:** To help better understand the costs of each section of the rule, the department developed a cost survey surveying local government environmental health directors, wastewater program staff, and industry members associations that represent them. Cost survey details and methodology is outlined in the Significant Analysis (available upon request).

#### **WAC 246-272A-0120 Proprietary treatment product registration—Process and requirements.**

**Description:** This section establishes the required content and submittal process for manufacturers to use to register their products.

**Cost:** The department received survey responses from nine manufacturers. The department also does not collect cost estimates for non-compliance events so did not complete a survey on the cost of the compliance plan because this only applies if a manufacturer is having problems. SBEIS Table 2 shows the estimated costs for maintenance service providers of taking a pair of samples for E. coli or fecal coliform. Only one of six manufacturers indicated they would hire a third-party contractor to take the required 25 sample sets during a routine maintenance visit due to logistical restrictions. Additionally, 6 out of 11 manufacturers indicated that they already maintain a company website so posting required materials was solely cost to update websites. Six manufacturers provided cost estimates to post the materials. The table does not include the cost of 25 pairs of samples. The department contacted and received cost information for 50 samples. The department was given a cost of \$28 to \$65 per sample<sup>8</sup> depending on the test technique; for a total cost for 50 samples ranging between \$2,000 and 3,250.<sup>9</sup>

**SBEIS Table 2. Estimated cost to adhere to the Field Verification component of the proprietary treatment product registration, process, and requirements\* (from SA Table 6)**

Description	Cost Frequency	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
Cost to collect a pair (one influent AND one effluent) of samples, during	Unit	5	4.28 - 47.50	24	23.66	16.65

<sup>8</sup> Range: \$28 per sample (Lewis County) to \$65 per sample. [AmTest Laboratories](#) quoted \$40/sample.

<sup>9</sup> \$28 X 50 samples = \$1,400, \$65 X 50 samples = \$3,250.

a routine maintenance service visit NOT including travel						
Cost to collect a pair (one influent AND one effluent) of samples, during a non-routine maintenance service visit (including travel)	Unit	5	For one pair 50 – 292 For 25 pairs 1,250 - 7,300	65	147.10	122.81
Cost to take the pair of influent and effluent samples to the lab	Unit	5	68.50 – 190	120	126.90	50.82

Cost to complete a product field verification process report (not including sampling costs)	Unit	6	144 - 48,000	3188	10,353	18,682
Cost to hire a service provider or a third-party sampler to collect 25 pairs of samples	Unit	6	5,225 - 100,000	20,000	34,038	35,936
Cost to post required materials on website	One-time	6	20 – 450	65	141	170

\*In the past two years the department has received applications for four treatment productions and one distribution product, which helps to estimate the total cost.

**Potential impact on Businesses:** Manufacturers of treatment units will need to arrange for sampling of at least 25 installations of each of their products that are registered as providing DL1, DL2, or TLN treatment. Manufacturers may conduct this sampling or hire a third party to conduct it. It will entail developing a sampling plan, contacting owners and arranging for site visits, collecting samples, delivering samples to a laboratory for analysis, and writing a report synthesizing the laboratory results. If the results demonstrate that the product does not meet the registered treatment level, the product will be reassessed and may be reassigned a treatment level or be removed from registration. If it is removed from registration, it can no longer be sold in Washington.

**WAC 246-272A-0200 Permit requirements**

**Description:** This section specifies the permit application content when a person proposes the installation, repair, modification, connection to, or expansion of an OSS. The proposed change adds a requirement for site maps to include 1) horizontal separations as noted in Table IV in the rule, 2) an elevation benchmark, and 3) relative elevations of system components.

**Cost:** SBEIS Table 3 and Table 4 show the anticipated one-time cost for designers and engineers to add the specified items to their designs. The results of our survey found that 34 of 40 Designer respondents already include these new components in their site plans. Therefore, they would not have additional costs to comply with the rule. The department received survey responses from 10 designers and 10 engineers about adding new elements to designs. SBEIS Table 3 & SBEIS Table 4 presents the estimated costs.

**SBEIS Table 3. Estimated cost to Designers to adhere to permit requirements (from SA Table 7)**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
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One-time cost to add horizontal separations as noted in Table IV into design process	4	6.25-900	250	352	385
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>Low-end range**</b>	4	6.25-500	175	164	122
Unit cost to put the horizontal separations as noted in Table IV into one OSS design <b>High-end range**</b>	4	12.50-500	225	241	209
One-time cost to add elevation benchmark as noted in Table IV into design process*	10	6.25-1,200	150	306	409
One-time cost to add relative elevations of system components as noted in Table IV into design process*	7	6.25-900	81	223	316
Unit cost to add relative elevations of system components on one site map* <b>Low-end range**</b>	7	6.25-512	150	170	188
Unit cost to add relative elevations of system components on one site map* <b>High-end range**</b>	6	12.50 - 368	170	368	503

\*These are items covered under WAC 332-130-145 (1).

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

**SBEIS Table 4. Estimated cost to Professional Engineers to adhere to permit requirements (from SA Table 8)**

Description (responses)	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
One-time cost to add horizontal separations as noted in Table IV into design process	8	180 - 22,500	11,050	10,765	7,531
One-time cost to add elevation benchmark as noted in Table IV into design process	10	150 - 8,000	800	1,620	2,348
Unit cost to add elevation benchmarks on one site map <b>Low-end range**</b>	9	37.50 - 3,250	390	731	1,014
Unit cost to add elevation benchmarks on one site map <b>High-end range**</b>	9	300 - 5,200	700	1,351	1,531
One-time cost to add relative elevations of system components as noted in Table IV into design process*	6	200 - 8,000	795	1,932	3,019

\*These are items covered under WAC 332-130-145(1).

\*\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end and high end of the range to better understand the potential minimum cost and maximum cost of compliance.

**Potential impact on Businesses:** Designers and engineers will need to incorporate the new items required as part of a permit application and site plan. The department anticipates that there will be an initial period of added costs, effort, and learning while designers and engineers incorporate the new requirements into their practices and routines. However, over time, these requirements are expected to become part of their routine data collection and reporting with marginal impacts.

WASHINGTON STATE DEPARTMENT OF HEALTH

Small Business Economic Impact Statement

Template Updated August 2023

**WAC 246-272A-0210 Location**

**Description:** This section establishes minimum horizontal separations (distance) in Table IV of this section for septic tanks, drainfield and building sewers to various water sources to prevent pollution. The proposed change includes adding any or all of the following components to a site map if they exist on the site: 1) non-public in-ground water containment vessels, 2) closed geothermal loop or pressurized non-potable water line, 3) lined stormwater detention pond; 4) unlined stormwater infiltration pond; or 5) Subsurface stormwater infiltration or dispersion component.

**Cost:** The department received survey responses from 4 designers and 8 engineers on the cost of adding any or all the new source types to site maps. SBEIS Table 5 presents the estimated costs.

**SBEIS Table 5. Estimated cost to include any of all source types to a site map (from SA Table 9)**

Description	N	Range (\$)	Median (\$)	Mean (\$)	Standard Deviation (\$)
<b>Designer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	4	6.25 - 900	250	352	385
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range*</b>	4	6.25 - 500,241	175	164	122
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range*</b>	4	12.50 - 500	225	241	209
<b>Engineer</b>					
One-time cost to incorporate the items that you currently do not include from current Table IV into the design process	8	180 - 22,500	11,050	10,766	7,531
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>Low-end range*</b>	7	0 - 6,000	520	1,207	2,129
One-time cost to incorporate the items that you currently do not include from current Table IV into one OSS design <b>High-end range*</b>	7	300 - 72,000	900	11,121	26,850

\*Respondents were asked to provide a range of costs (rows are denoted in grey) and the department analyzed the low end of the range and the high end of the range to better understand the potential minimum cost and maximum cost to compliance.

**Potential impact on Businesses:** The proposed setbacks will impact some developments (individual lots and subdivisions). By requiring additional setbacks, this may restrict how these lots can be laid out (require house placement in different area or potentially the size/footprint of the house). Conceivably, this could prevent the development of a lot if the extent of threats to water sources, with their associated setbacks, resulted in no viable building site unless the applicant requested and received a

waiver. This impact is difficult to predict because it depends on the existence of the newly proposed components on the protected sources list.

**WAC 246-272A-0270 Operation, monitoring, and maintenance—Owner responsibilities.**

**Description:** This section describes what owners must do for operating, monitoring, maintaining, and inspection of their OSS to minimize the risk of failure and threat to public health.

**Cost:** If the property owner is in compliance with routine inspection requirements,<sup>10</sup> and the inspection was completed by a third-party inspector, there will likely be no additional costs.

**Potential impact on Businesses:** There is expected to be minimal impact to realtors. Real estate purchases in Washington are contracted through a Purchase and Sale Agreement (PSA) form. This form requires an inspection of the OSS. Buyers are currently allowed to waive this requirement. The realtor is responsible for ensuring that the PSA is completed and recording that either the OSS is inspected, or that the buyer has waived the OSS inspection. Under the proposed revisions, the buyer would no longer be permitted to waive the OSS inspection and the realtor would be responsible for recording that the inspection was complete. To reiterate the above, if the property owner is not in compliance with routine inspection requirements there will likely be no additional costs, if the property owner is not in compliance with routine inspection requirements the additional cost to realtors would be time for the owner to bring the OSS into compliance with routine inspection requirements.

**WAC 246-272A-0320 Developments, subdivisions, and minimum land area requirements.**

**Description:** This section establishes minimum land area requirements when proposing land developments or subdivisions. The proposed amendments have potential costs to businesses by: 1) Increasing minimum lot size, 2) Reducing the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for non-residential uses on lots served by public water supplies, 3) Establishing minimum useable land area as a new requirement, and 4) Updating requirements for sub-sized lots. For a more detailed description of these changes see the Significant Analysis.

**Cost:**

**Part 1 Increase minimum lot size:** The department developed tables that show the modest impact of the proposed increase of minimum lot size to lots that can be subdivided (shown in the Significant Analysis). The proposed increase ranges from 500 square feet to 1,000 square feet, depending on soil type. As an example, for soil type 2, the change will require a landowner to have a minimum of .30 of an acre lot to create a lot compared to the .29 acre (1/100 of an acre impact) and for a 10-lot subdivision the minimum size of subdividable lot would have to be 11/100 of acre larger.

**Potential impact on Businesses:** In general, the department does not anticipate that the proposed rule will impact developers' sales/revenue. The department acknowledges that there could be potential scenarios where developers are affected by the rule but in general most subdivisions will not be affected. The potential impact of the rule could be seen if the development is over 20 acres AND the developer is developing the lots to be as small as possible.

**Part 2 Reduce the maximum unit volume of sewage per day per acre:** SBEIS Table 6 describes the change from 3.5 to 3.35 maximum volumes of sewage per day per acre for non-residential uses on lots served by public water supplies. To understand the costs, SBEIS Table 6 and SBEIS Table 7 outline the maximum unit volume of sewage per acre under the current and proposed rule.

**SBEIS Table 6. Calculation of maximum unit volume of sewage per acre under current rule (from SA Table 20)**

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<sup>10</sup> WAC 246-272A-0270(1)(e)

Current Rule	
Known Variables	Minimum Lot Size = 12,500 sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage per acre for non-residential uses on lots served by public water supplies	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre  43,560 sq ft / 12,500 sq ft = 3.48 ≈ 3.5 Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage  3.5 Unit Volumes of Sewage per Acre x 450 gallons per day = <b>1,575 Gallons of Sewage per Day per Acre</b>

**SBEIS Table 7. Calculation of maximum unit volume of sewage per acre under proposed rule (from SA Table 21)**

Proposed Rule	
Known Variables	Minimum Lot Size = 13,000 sq ft. 1 acre = 43,560 sq ft Unit Volume of Sewage = 450 Gallons of Sewage per Day
Maximum unit volumes of sewage per acre for non-residential uses on lots served by public water supplies	1 acre / Minimum Lot Size = Unit Volumes of Sewage per Acre  43,560 sq ft / 13,000 sq ft = 3.35 Unit Volumes of Sewage per Acre
Unit volumes of sewage converted into gallons per acre	Unit Volumes of Sewage per Acre x Gallons of Sewage per Unit Volume of Sewage  3.35 Unit Volumes of Sewage per Acre x 450 gallons per day = <b>1,508 Gallons of Sewage per Day per Acre</b>

The proposed amendment maximum quantity of sewage that can be generated by non-residential uses on lots served by public water supplies is therefore reduced from 1,575 gallons per day per acre to 1,508 gallons per day per acre. This is a reduction of 67 gallons per day per acre (a decrease of about 4%).

Potential impact on Businesses: The department is unable to estimate how this will affect businesses. The department acknowledges that businesses could be impacted by the rule by the reduction of 67 gallons of sewage per day per acre.

**Part 3 Establish minimum useable land area as a new requirement:** The cost to designers to incorporate the proposed minimum useable land requirement into an OSS design was collected during the cost survey, but as the costs will likely be passed onto the consumer and not be a cost to businesses, the department did not include the cost in this section.

Potential impact on Businesses: Lots created for commercial usage that will be served by an OSS will be required to have a minimum area of land that is usable for an OSS. Land subdivisions that will be served by OSS will need to be planned and configured so that each lot contains the required minimum usable land area.

**Part 4 Update requirements for sub-sized lots:** The amendments are based on the premise that lots sized in compliance with Table XI in the rule adequately protect groundwater and surface water resources from nitrogen impacts. Smaller lot sizes are allowed if nitrogen is treated at the same proportion that the lot is smaller than the Table XI requirement. This allows OSS to be installed on lots

that do not meet Table XI’s requirements (sub-sized lots) while ensuring that groundwater and surface water is protected. Using this methodology, new planned developments can be designed with lots as small as half the size of Table XI’s minimum lot sizes by installing nitrogen treatment technology that takes the place of the land area that is otherwise used to treat and dilute nitrogen. Developers may choose to pay more for OSS which treat nitrogen in exchange for using less land area and get more lots from a subdivision.

Potential impact on Businesses: Developers may choose to pay more for OSS that treat nitrogen in exchange for using less land area. The result is more lots from a subdivision and a higher cost OSS on each lot.

**Summary of all Costs**

Due to the large number of requirements of the proposed rule, coupled with the fact that many of the requirements do not universally apply to businesses, many costs are indeterminate, and it is not possible to compute the total incremental costs of the revised rules. The department anticipates that most new requirements will not cause businesses to lose sales or revenue, with potential exceptions as noted in this document.

**SECTION 4**

**Analysis on if the proposed rule may impose more than minor costs for businesses in the industry. Includes a summary of how the costs were calculated.**

Yes, the costs of the proposed rule are greater than the minor cost threshold (SBEIS Table 8).

**Summary of how this determination was made**

SBEIS Table 8 shows the reported estimated costs of selected sections of the rule (that will affect businesses) and that the proposed rule will likely impose more than minor costs for businesses in the industries.

**SBEIS Table 8. Summary of costs to businesses**

NAICS name/number	Minor Cost Threshold (\$)	Requirement/section	Reported Estimated Cost (\$)*
Engineers / 541330	\$7,117	One-time cost to incorporate the items that you currently do not include from current Table IV into the design process (WAC 246-272A-0210)	\$10,000 \$12,100 \$15,625 \$16,900 \$22,500
Manufacturers / 33318	\$9,003	Cost to hire a service provider or a third-party sampler to collect 25 pairs of samples (WAC 246-272A-0120)	\$20,000 \$20,000 \$50,000 \$100,000

\*Each cost listed represents an individual response from the survey. Results are not intended to be summed but intended to be the cost to each individual business to comply with the individual rule section.

**SECTION 5**

**Determination on if the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule.**

Yes, the department believes the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule.

#### **Explanation of the determination**

The department makes this determination based on examining cost per employee criteria. Many of the cost are comparable for small and large businesses. Therefore, because smaller businesses have fewer employees, their cost per employee will be higher (disproportionate) than the cost per employee of larger businesses.

#### Thoughts on disproportionate impacts to small businesses:

Installers will need to incorporate new requirements into their installation practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. This may cause some uncertainties for installers as contracts are bid and accepted under the rule's new requirements. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed to customers with no long-term negative impacts to installers.

Engineers and Designers will need to incorporate new requirements into their design practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. This may cause some uncertainties for engineers and designers as contracts are bid and accepted under the rule's new requirements. Engineering firms and designers are generally adept at learning new requirements and applying their costing structure to ensure that costs are covered, and profits maintained and appropriate margins. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed to customers with no long-term negative impacts to engineers or designers.

Maintenance Service Providers are often some of the largest companies involved in the onsite sewage industry. Maintenance service providers will need to incorporate new requirements into their installation practices. Initial implementation costs may be elevated as new requirements and practices are learned and refined. In particular, new requirements for inspections may be challenging for maintenance service providers to incorporate into their practices and costing structures. This may cause some uncertainties for maintenance service providers as service is provided under the rule's new requirements. Over time, the new requirements are expected to become common practice with marginal impacts as compared to current practices and costs. The department assumes costs will be passed to customers with no long-term negative impacts to installers.

Manufacturers vary from very small and local to very large and international. Manufacturers of disinfecting proprietary treatment products will be required to conduct field verification of all of their registered products. This is a new requirement and practice and may elevate costs to manufacturers as they undertake field verification of their products. Over time, the new requirements are expected to become common practice with costs minimized and processes streamlined. The department assumes most costs will be passed to customers with no long-term negative impacts to manufacturers. Some manufacturers may elect to adjust their prices to offset the projected impacts while others are expected to wait to review impacts before adjusting prices.

Realtors will need to ensure that OSS property transfer inspections happen for all property sales, unless you already in compliance with routine inspection requirements in the rule. This is already part of their work. The Purchase and Sale Agreement that accompanies all property sales includes an OSS inspection



addendum. The new requirements will preclude buyers from waiving this inspection. There is expected to be little to no long-term negative impact to realtors.

Developers will need to plan subdivisions with slightly larger lot sizes if they are subdividing/building at the minimum lot sizing (i.e., the maximum density) allowed. The number of lots created from a subdivision would be impacted if the lots were the smallest size allowed and the subdivision was over 20 acres. The department does not have information on the frequency of this type of subdivision required to make a determination of the disproportionate impact to small businesses but anticipates that the impacts would be marginal when compared to proceeds from sale of lots.

## **SECTION 6**

**If the proposed rule has a disproportionate impact on small businesses, the following steps have been identified and taken to reduce the costs of the rule on small businesses. If costs cannot be reduced an explanation has been provided below about why the costs cannot be reduced.**

### **1. Reducing, modifying, or eliminating substantive regulatory requirements.**

The department convened the on-site rule revision committee (ORRC). Its members took great interest in minimizing impact of the draft rules by reducing, modifying, and eliminating the requirements when appropriate. The ORRC included eight representatives from industry, including manufacturers, installers, designers, engineers, maintenance service providers and realtors. The department also was aware and considered the impact of every provision when drafting the rules.

### **2. Simplifying, reducing, or eliminating recordkeeping and reporting requirements.**

Similar to above, the ORRC was very aware and attempted to limit the impact to all parties when drafting the rules and attempted to simplify, reduce and eliminate recordkeeping and reporting requirements when possible.

### **3. Reducing the frequency of inspections.**

The rule does not require inspections of any businesses. OSS are required to be inspected to protect public health. Most OSS are owned and operated by private residential owners. Some businesses are served by an OSS. The proposed rule requires all OSS are inspected at the time of property transfer. The proposal allows the local health officer to remove the property transfer inspection for any OSS that is in compliance with routine inspections requirements that are already required for all OSS. This will significantly reduce the frequency of inspections.

### **4. Delaying compliance timetables.**

The department plans to recommend delaying the effective date of most provisions in the rule by one year to enable local health officers, industry practitioners, and interested parties to work on implementation. The department also plans to recommend delaying implementation of the property transfer inspection provision two additional years to allow more time to prepare for implementation. The board will take these recommendations under consideration at the time of the public hearing and rule adoption.

### **5. Reducing or modifying fine schedules for noncompliance; or**

The proposed rules do not add any new fining authority or new fine schedules.

### **6. Any other mitigation techniques including those suggested by small businesses or small business advocates.**

Several changes that will reduce burdens and save costs for small businesses are included in the proposed rule. Some of the proposed improvements include:

- Streamlining and digitizing the proprietary product renewal process;

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Small Business Economic Impact Statement

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- Adding testing and registration options for proprietary products;
- Adding a provision that manufacturers of proprietary products can use replacement components that their products have not been tested with in cases of supply chain or manufacturing disruption; and
- Adding an allowance for local health officers to develop a policy allowing remediation practices.

## **SECTION 7**

### **Description of how small businesses were involved in the development of the proposed rule.**

The ORRC included eight representatives from industry, including manufacturers, installers, designers, engineers, maintenance service providers and realtors. Each of these representatives represented the interests of small businesses. The ORRC gave input on all aspects of the draft rule that was released for informal comment. The department received and reviewed several comments from small businesses and small business advocates. The department made adjustments to the draft rule to reduce burdens and perceived burdens noted by commentors.

The department also developed a proposed revision to include the new proprietary product field verification requirement as proposed by the ORRC to the standards document that details the processes of registering proprietary products. The department invited all manufacturers that currently have registered proprietary treatment products in Washington, as well as representatives of the state and national manufacturers' associations, to participate in a workgroup to draft this document.

## **SECTION 8**

### **The estimated number of jobs that will be created or lost in result of the compliance with the proposed rule.**

The impact of the revised rules on jobs is indeterminate. However, as the rule increases the number of inspections, this could result in increased employment for inspectors, pumpers, and maintenance service providers.

**Summary of Key Draft Rule Changes  
December 2023  
On-site Sewage Systems  
Chapter 246-272A WAC**

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).

**How to Use this Document**

This document lists the key proposed changes to the rule. These changes are based on the recommendations made by the Onsite Rule Revision Committee and changes made by department program and policy staff. If a section is not listed, there are no proposed changes or only minor changes.

**Acronyms**

LHJ	Local Health Jurisdiction
LHO	Local Health Officer
LMP	Local Management Plan
OSS	On-site Sewage System
SFR	Single Family Residence
SSAS	Subsurface Soil Absorption System

**Summary of Draft Changes**

WAC Section Number	Section Title	Draft Changes
-0007	<b>Applicability</b>	<ul style="list-style-type: none"> <li>Created new section to move Applicability section nearer the beginning of the chapter for ease of use.</li> <li>Clarified language describing that chapter applies to treatment, siting, design, installation, and operation and maintenance of OSS.</li> <li>Updated language for clarity.</li> </ul>
-0010	<b>Definitions</b>	<ul style="list-style-type: none"> <li>Changed several definitions for clarity and consistency throughout rule.</li> <li>Added new definitions to address issues with application of current rule language.</li> <li>Added new definitions to address issues with application of draft rule language.</li> </ul>
-0013	<b>Local Rules</b>	<ul style="list-style-type: none"> <li>Created new section number. Moved Local Regulation to its own section, separate from LMPs. Renamed to Local Rules.</li> <li>Updated language for clarity.</li> </ul>
-0015	<b>Local Management Plans</b>	<ul style="list-style-type: none"> <li>Removed Local Regulation from section and moved to section -0013.</li> <li>Added requirements for Puget Sound LHJs to include in their LMPs consideration of:               <ul style="list-style-type: none"> <li>Areas where phosphorus is a contaminant of concern</li> <li>Areas where sea level rise may impact horizontal separation to surface water</li> </ul> </li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>• Added requirement for Puget Sound LHJs to include a summary of program expenditures by activity and fund source and a strategy to fill any funding gaps.</li> <li>• Added requirement that the LHO for each Puget Sound county and the department review and approve their LMP within 2 years of the rule effective date, and every 5 years thereafter, and revise as necessary.</li> <li>• Changed the required process for LHO to allow public input in LMP before submitting to the department for approval:               <ul style="list-style-type: none"> <li>○ <u>From</u> holding a public hearing prior to approval of a new or revised LMP by the local board of health,</li> <li>○ <u>To</u> providing an opportunity for public input following review by the LHO, prior to approval by the local board of health.</li> </ul> </li> <li>• Added requirement that the LHO for each Puget Sound county report annually to the department the following data elements: number of OSS, number of unknown OSS identified, number of failures found, number of failures repaired, number of property transfer inspections completed, and status of compliance with inspections required by WAC 246-272A-0270.</li> <li>• Updated language for clarity.</li> </ul>
-0020	<b>Applicability</b>	<ul style="list-style-type: none"> <li>• Moved to section -0007</li> </ul>
-0025	<b>Connection to public sewer system</b>	<ul style="list-style-type: none"> <li>• Clarified where to measure 200 feet from to determine if connection to sewer is required.</li> <li>• Updated language for clarity.</li> </ul>
-0100	<b>Sewage Technologies</b>	<ul style="list-style-type: none"> <li>• Changed Recommended Standards &amp; Guidance (RS&amp;G) to Departmental Standards and Guidance (DS&amp;G).</li> <li>• Removed reference to sewage technology categories.</li> <li>• Added provision that department may remove, restrict, or suspend a product's approval for failure to meet requirements of approval.</li> <li>• Updated language for clarity.</li> </ul>
-0110	<b>Proprietary treatment products – Certification and registration</b>	<ul style="list-style-type: none"> <li>• Added <i>NSF/ANSI Standard 245: Residential Wastewater Treatment Systems - Nitrogen Reduction</i> as a method to verify nitrogen reduction for proprietary nitrogen reducing products.</li> <li>• Added <i>NSF/ANSI Standard 385 Residential Wastewater Treatment Systems – Disinfection Mechanics</i> as a method to verify bacterial reduction for proprietary supplemental bacterial reduction products.</li> <li>• Added allowance for manufacturers to request to substitute components of a registered proprietary product's construction in cases of supply chain shortage or similar manufacturing disruption.</li> <li>• Updated references to testing protocols, including adding a protocol to use EPA Method 1664, Revision B to verify performance of Category 2 products.</li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>• Added requirement that product manufacturers follow departmental field performance standards.</li> <li>• Updated <i>Table I, Testing Requirements for Proprietary Treatment Products</i>, with updated references to testing protocols, added EPA Method 1664, Revision B as a testing requirement protocol for Category 2 products, and for clarity.</li> <li>• Updated <i>Table II, Test Results Reporting Requirements for Proprietary Treatment Products</i>, to separate disinfection levels from other treatment levels to allow for registration of supplemental (standalone) disinfection products, to allow bacterial reduction verification of Disinfection Level 1 (DL 1) via testing for fecal coliform or E. coli, and for clarity.</li> <li>• Updated <i>Table III, Product Performance Requirements for Proprietary Treatment Products</i>, to separate disinfection levels from other treatment levels to allow for registration of supplemental (standalone) disinfection products, to allow bacterial reduction verification via testing for fecal coliform or E. coli, to update requirements for nitrogen reduction verification, and for clarity.</li> <li>• Updated language for clarity.</li> </ul>
-0120	<b>Proprietary treatment product registration— Process and requirements.</b>	<ul style="list-style-type: none"> <li>• Updated description of product registration process to match the department’s current practices.</li> <li>• Updated references to testing protocols.</li> <li>• Updated reference to fee WAC (<i>WAC 246-272-2000</i>).</li> <li>• Added requirement that product manufacturers verify field performance according to departmental standards and guidance documents. Added requirement that manufacturers report reasons for product failure to meet field performance requirements to the department.</li> <li>• Changed from requiring an affidavit stating if a product has been changed at time of renewal to requiring an attestation.</li> <li>• Added provision for department to require compliance plans for product manufacturers whose products have led to concerns of public health risks.</li> <li>• Added requirement that manufacturers have product information available on their website.</li> <li>• Updated language for clarity.</li> </ul>
-0125	<b>Transition from the list of approved systems and products to the registered list –Treatment products.</b>	<ul style="list-style-type: none"> <li>• Removed section –obsolete</li> </ul>
-0130	<b>Bacterial reduction.</b>	<ul style="list-style-type: none"> <li>• Created disinfection treatment levels (DL1, DL2, and DL3), distinct from other treatment levels (TLA, TLB, and TLC) to allow manufacturers more flexibility in registration treatment products.</li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>○ Allows treatment products to be registered without verification of bacterial disinfection.</li> <li>○ Allows registration of supplemental disinfection products.</li> <li>○ Allows manufacturers and designers to combine components (that weren't originally tested together) in a treatment train to better meet the needs of certain sites and minimize costs.</li> <li>● Created new standard to allow for verification of bacterial reduction for DL1 via testing for E. coli.</li> <li>● Removed obsolete language referring to testing under previous versions of standards/protocols.</li> <li>● Added <i>NSF/ANSI Standard 385 Residential Wastewater Treatment Systems – Disinfection Mechanics</i> as an optional method to verify bacterial reduction for supplemental bacterial reduction products.</li> <li>● Updated language for clarity.</li> </ul>
-0135	Transition from the list of approved systems and products to the registered list –Bacterial reduction.	<ul style="list-style-type: none"> <li>● Removed section –obsolete</li> </ul>
-0140	Proprietary distribution products-Registration	<ul style="list-style-type: none"> <li>● Updated section title (caption).</li> <li>● Update language for clarity.</li> </ul>
-0145	Proprietary distribution product registration— Process and requirements.	<ul style="list-style-type: none"> <li>● Updated language to match the requirements and process in the treatment products section (-0120), and to include the department's current product registration practices.</li> <li>● Updated reference to fee WAC (<i>WAC 246-272-2000</i>).</li> <li>● Added requirement that manufacturers have product information available on their website.</li> <li>● Added provision for compliance plans for product manufacturers whose products have led to concerns of public health risks.</li> <li>● Updated language for clarity.</li> </ul>
-0150	Transition from the list of approved systems and products to the registered list -Distribution products.	<ul style="list-style-type: none"> <li>● Removed section –obsolete</li> </ul>

WAC Section Number	Section Title	Draft Changes
-0170	Product development permits.	<ul style="list-style-type: none"> <li>• Updated language for clarity.</li> </ul>
-0175	Transition from the experimental system program to application for product registration.	<ul style="list-style-type: none"> <li>• Removed section –obsolete</li> </ul>
-0200	Permit requirements.	<ul style="list-style-type: none"> <li>• Clarified when permits are and aren't required through introduction and use of new term, "Minor Repair."</li> <li>• Incorporated provisions from <i>WAC 332-130-145, Topographic elements on maps—Requirements</i> (DNR rule) into site plan requirements. These include:               <ul style="list-style-type: none"> <li>○ A legend of symbols used</li> <li>○ Plan scale and a graphic scale bar</li> <li>○ Vertical datum used such as "assumed", "NAVD 88", "NSRS", or "unknown"</li> <li>○ Name, signature, stamp and contact information of the designer</li> <li>○ A statement on limitation of use indicating the site plan is not a survey</li> </ul> </li> <li>• Added new requirement for site plans to include:               <ul style="list-style-type: none"> <li>○ Horizontal separation to site features listed on Table IV</li> <li>○ An elevation benchmark and relative elevations of system components</li> </ul> </li> <li>• Updated language for clarity.</li> </ul>
-0210	Location.	<ul style="list-style-type: none"> <li>• Updated <i>Table IV, Minimum Horizontal Separations</i>, including the following changes to Items Requiring Setback:               <ul style="list-style-type: none"> <li>○ Removed "Suction line"</li> <li>○ Added "Non-public drinking water well"</li> <li>○ Combined public surface water source with public drinking water spiring</li> <li>○ Added "Non-public drinking water spring or surface water"</li> <li>○ Added "Non-public, in ground, drinking water containment vessel"</li> <li>○ Added "Easement for water supply line"</li> <li>○ Added "Closed geothermal loop or pressurized non-potable water line"</li> <li>○ Added "Lined stormwater detention pond"</li> <li>○ Added "Unlined stormwater infiltration pond"</li> <li>○ Added "Irrigation canal or irrigation pond"</li> </ul> </li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>○ Added “Subsurface stormwater infiltration or dispersion component”</li> <li>○ Made changes for clarity</li> <li>● Added statement that OSS components take precedence in cases of conflicts with stormwater components.</li> <li>● Removed option for LHO to reduce horizontal separation from OSS components to in-ground swimming pools to 2 feet.</li> <li>● Updated language for clarity.</li> </ul>
-0220	<b>Soil and site evaluation.</b>	<ul style="list-style-type: none"> <li>● Removed requirement to report Suction Lines on site and soil evaluation report.</li> <li>● Updated <i>Table V, Soil Type Descriptions</i>, for clarity.</li> <li>● Added option for LHO to require a replacement site and soil evaluation if the site has been altered since the initial site and soil evaluation.</li> <li>● Updated language for clarity.</li> </ul>
-0230	<b>Design requirements—General.</b>	<ul style="list-style-type: none"> <li>● Changed requirement that an OSS for a single-family residence cannot be designed by a resident owner of the residence is “adjacent” to a marine shoreline, to the resident owner cannot design the OSS if the residence is within 200 feet of a marine shoreline.</li> <li>● Updated reference for sewage tank compliance to chapter 246-272C WAC.</li> <li>● Changed the design flow calculation section to distinguish between design flow calculation requirements (and related requirements) for a single-family residence with one additional dwelling served by one OSS, and requirements for multiple dwellings served by one OSS.</li> <li>● Updated <i>Table VI, Treatment Component Performance Levels and Method of Distribution</i>, to: <ul style="list-style-type: none"> <li>○ Reduce required treatment levels and disinfection levels from Treatment Level B &amp; DL2 to treatment Level C &amp; DL3 for soil types 2 – 6 for sites with soil depths that range from 18” or greater to less than 24”. A literature review revealed that soil should be given more credit for treatment.</li> <li>○ Incorporate changes made to treatment standards (separating disinfection levels from other treatment levels).</li> </ul> </li> <li>● Updated language for clarity.</li> </ul>
-0232	<b>Design requirements—Septic tank sizing.</b>	<ul style="list-style-type: none"> <li>● Changed minimum septic tank size from 900 gallons to 1000 gallons.</li> <li>● Added reference to <i>chapter 246-272C WAC On-site Sewage System Tanks</i>.</li> <li>● Updated language for clarity.</li> </ul>
-0233	<b>Design requirements-Pump chamber sizing.</b>	<ul style="list-style-type: none"> <li>● Added new section.</li> <li>● Defined requirements for pump chamber sizing.</li> <li>● Defined “Pump Basin.”</li> </ul>



WAC Section Number	Section Title	Draft Changes
-0234	Design requirements— Soil dispersal components.	<ul style="list-style-type: none"> <li>• Modified <i>Table VIII, Hydraulic Loading Rates</i>, creating a new optional Column B, to allow higher loading rates for effluent treated to a higher treatment level. This allows smaller drainfields if the effluent is treated to a higher treatment level..</li> <li>• Changed requirement that reserve drainfield must always be full sized to allowing reserve drainfield to be reduced sized if primary drainfield is reduced size, at LHO discretion.</li> <li>• Added requirement that gravity beds have a minimum of one lateral for every 3 feet in width.</li> <li>• Removed obsolete references.</li> <li>• Updated language for clarity.</li> </ul>
-0238	Design requirements— Facilitate operation, monitoring and maintenance.	<ul style="list-style-type: none"> <li>• Changed requirement for gravity OSS with effluent filters in the sewage tank to have tank access ports at finished grade to a requirement for all gravity OSS to have tank access ports at finished grade.</li> <li>• Added requirement to install at least one observation port on each SSAS lateral.</li> <li>• Added requirement that disinfection units must include an easy-access, freefall sampling port.</li> <li>• Clarified that subsurface drip systems are excluded from the requirement to have monitoring ports at the distribution device and infiltrative surface.</li> <li>• Updated language for clarity.</li> </ul>
-0250	Installation	<ul style="list-style-type: none"> <li>• Clarified restrictions on when LHO may allow a resident owner of a SFR to install an OSS, changing language from restriction when adjacent to marine shoreline to specific distances from marine water and surface water and precluding repairs meeting Table X.</li> <li>• Added reference to <i>chapter 246-272C WAC On-site Sewage System Tanks</i>.</li> <li>• Updated language for clarity.</li> </ul>
-0260	Inspection	<ul style="list-style-type: none"> <li>• Added provisions from <i>Engrossed Substitute Senate Bill 5503 (2019)</i>, now codified as <i>RCW 43.20.065</i>, that: <ul style="list-style-type: none"> <li>○ Require Local Health Officer (LHO) or a certified professional inspector to coordinate and obtain permission from owner before conducting an inspection; and</li> <li>○ Prohibit LHO’s from requiring easements as a permit condition for inspection or maintenance for OSS that are on the same property that they serve.</li> </ul> </li> <li>• Defined minimum procedures for property transfer inspections and required routine OSS evaluations.</li> <li>• Added requirement that property transfer inspections are reported to LHO on a LHO approved form.</li> <li>• Clarified that LHO may require additional inspection report, or other information, for routine inspections.</li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>Updated language for clarity and consistency.</li> </ul>
-0265	Record drawings	<ul style="list-style-type: none"> <li>Updated language for clarity.</li> </ul>
-0270	Operation, monitoring, and maintenance- Owner Responsibilities	<ul style="list-style-type: none"> <li>Added requirement for owner to request assistance from LHJ if OSS fails.</li> <li>Added requirement for owner to get approval from Local Health Officer to begin use of an OSS.</li> <li>Changed requirement for owner to get routine evaluation of their OSS to a requirement for owner to get a routine inspection, as defined in -0260.</li> <li>Added requirement for owner to obtain a professional, 3<sup>rd</sup> party, inspection of OSS preceding property transfer. This requirement goes into effect 2 years after effective date of rule. Included provisions that LHO <u>may</u>:               <ul style="list-style-type: none"> <li>Remove the requirement for inspection preceding property transfer inspection if LHJ has evidence that the OSS is in compliance with routine inspections (required in -0270(1)(e));</li> <li>Verify the results of the property transfer inspection; and</li> <li>Require additional inspections and requirements.</li> </ul> </li> <li>Added requirement that results of property transfer inspection are provided to LHJ on a form approved by the LHO.</li> <li>Added provision that LHO may require a compliance schedule for repair of failures discovered during property transfer inspections.</li> <li>Added prohibition on owners using any remediation process unless it is approved by the LHO.</li> <li>Updated language for clarity and consistency.</li> </ul>
-0278	Remediation	<ul style="list-style-type: none"> <li>Added new section.</li> <li>Added option that Local Health Officer may develop a remediation policy.</li> <li>Added minimum requirements for remediation.</li> </ul>
-0280	Repair of failures	<ul style="list-style-type: none"> <li>Clarified that the LHO may permit OSS that meet Table X only in cases of repairs.</li> <li>Added provisions from <i>RCW 43.20.065</i> that require:               <ul style="list-style-type: none"> <li>Priority be given to allowing a repair or replacement of a conventional OSS, consisting of a septic tank and drainfield, with a similar conventional OSS that complies with standards and provides comparable long-term treatment;</li> </ul> </li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>○ Allowing repairs using the least expensive alternative that meets standards; and</li> <li>○ That LHO not impose or allow the imposition of more stringent performance requirements of equivalent OSS on private entities than public entities.</li> <li>● Added requirement that LHO evaluate all unpermitted discharges to determine if they pose a public health threat. If determined to be a public health threat the LHO shall require a compliance schedule.</li> <li>● Added requirement that LHO report failures within 200 feet of shellfish growing areas to the department.</li> <li>● Added provision that LHO may require a compliance schedule for failures discovered during property transfer inspections.</li> <li>● Clarified owner’s options in cases of failure.</li> <li>● Added new <i>Table IX Options and Methods to Address an OSS Failure</i> to explain owner’s option in case of OSS failure.</li> <li>● Added requirement that OSS designer evaluate the causes of failure prior to designing the repair or replacement of an OSS.</li> <li>● Added requirement that OSS designer minimize impact of phosphorus discharge in areas where phosphorus has been identified as a contaminant of concern in the LMP.</li> <li>● Updated and renamed <i>Table X, Treatment Component Performance Levels for Repair of OSS Not Meeting Vertical and Horizontal Separations</i>, to incorporate changes made to treatment standards (separating disinfection levels from other treatment levels) and to correct inconsistencies with WAC 246-272A-0230.</li> <li>● Updated language and structure for clarity and consistency.</li> </ul>
-0282	Minor repair of malfunctions	<ul style="list-style-type: none"> <li>● Added new section.</li> <li>● Added requirement that LHOs require the minor repair of a malfunction to a functioning state.</li> <li>● Added provision that LHO may require a permit for a minor repair of a malfunction.</li> <li>● Added option for LHO to require owner to submit information regarding minor repairs.</li> </ul>
-0290	Expansions	<ul style="list-style-type: none"> <li>● Updated language for consistency and clarity.</li> </ul>
-0300	Abandonment	<ul style="list-style-type: none"> <li>● Clarified that tanks and other sewage containers can be removed or abandoned in place.</li> <li>● Added requirement that empty tanks be filled with soil or gravel if abandoned in place.</li> <li>● Added requirement to grade site to surroundings.</li> <li>● Clarified process.</li> </ul>

WAC Section Number	Section Title	Draft Changes
		<ul style="list-style-type: none"> <li>Updated language for clarity.</li> </ul>
-0320	<b>Developments, subdivisions, and minimum land area requirements</b>	<ul style="list-style-type: none"> <li>Changed title of Table XI.</li> <li>Increased minimum land area requirement in <i>Table XI, Minimum Land Area Requirement For Each Single-Family Residence or Unit Volume of Sewage</i>, for lots served by a public water source, by 500 – 1000 square feet, depending on soil type. This changes the minimum lot size on Table XI from 12,500 to 13,000 sq ft for all lots served by public water supplies.</li> <li>Added “Minimum Usable Land Area” requirement to Table XI. This is a new requirement. (See definitions for definition of minimum usable land area.)</li> <li>Removed references to Method I and Method II lot sizing methods.</li> <li>Added new methodology and new <i>Table XII, Maximum Allowable Total Nitrogen (TN) Load Per Day by Type of Water Supply, Soil Type, and Land Area</i> for developments that do not meet Table XI’s requirement.</li> <li>Changed minimum lot size from 12,500 to 13,000 sq ft for nonpublic water supplies for all new lots.</li> <li>Reduced the maximum unit volume of sewage per day per acre from 3.5 to 3.35 for lots served by public water supplies for both Table XI and Table XII due to the change of minimum lot size from 12,500 to 13,000 sq ft for all lots served by public water supplies on Table XI</li> <li>Added option for drinking water well water supply protection zones on new subdivisions to be located on multiple lots (to cross lot lines) if a copy of a recorded restrictive covenant is provided to each affected property owner.</li> <li>Added clarifying language that LHOs may allow permitting of an OSS on a preexisting lot of record that does not meet current minimum land area requirements only if it meets all requirements of chapter 246-272A WAC without the use of a waiver under WAC 246-272A-0420.</li> <li>Updated language and structure for clarity and consistency.</li> </ul>
-0340	<b>Certification of installers, pumpers, and maintenance service providers.</b>	<ul style="list-style-type: none"> <li>Added requirement that Local Health Officer (LHO) establish approval procedures for maintenance service providers. Added allowance that LHO may allow reciprocity from other local health jurisdictions or third-party certification programs.</li> <li>Clarified that LHO has authority to establish certification process for owners to inspect their OSS.</li> <li>Updated language for clarity and consistency.</li> </ul>

<b>WAC Section Number</b>	<b>Section Title</b>	<b>Draft Changes</b>
<b>-0400</b>	<b>Technical advisory group.</b>	<ul style="list-style-type: none"> <li>• Updated section title (caption).</li> <li>• Added requirement that Technical Advisory Group (TAG) members are selected for three-year terms.</li> <li>• Added new professions to the list of potential TAG members.</li> <li>• Updated language for clarity and consistency with remainder of rule.</li> </ul>
<b>-0410</b>	<b>Policy advisory group.</b>	<ul style="list-style-type: none"> <li>• Updated section title (caption).</li> <li>• Added requirement that Policy Advisory Group (PAG) members are selected for three-year terms.</li> <li>• Updated language for clarity and consistency.</li> </ul>
<b>-0420</b>	<b>Waiver of state regulations.</b>	<ul style="list-style-type: none"> <li>• Added requirement that department publish an annual report summarizing waivers issued over the previous year.</li> <li>• Updated language for clarity and consistency with remainder of rule.</li> </ul>

## Key Draft Rule Changes

October 2023

# On-site Sewage Systems (OSS) Chapter 246-272A WAC

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This document lists the key proposed changes to the rule.



### Property Transfer Inspections

Beginning in 2027, all on-site sewage systems (OSS) must be inspected when the property is sold or the deed is transferred. The Local Health Officer (LHO) may remove this requirement if the OSS has had a recent routine inspection. The LHO may verify the results of the inspection, require additional inspections, and require that failed OSS discovered during the property transfer inspection are repaired on a set timeline.



### Minor Repairs

There is a new definition for “Minor Repair” to clarify that permits are not needed for some repairs.



### Repairs

The LHO must:

- Allow the least expensive repair or replacement of an OSS that meets the rule’s requirements.
- Evaluate all unpermitted sewage discharges and require any that pose a public health threat to be brought into compliance with the rule within a set timeframe.
- Report OSS failures to the Washington Department of Health if they are within 200 feet of shellfish growing areas.

LHOs may not impose more stringent repair requirements on private entities than public entities.



### Remediation

LHOs may develop a policy allowing OSS remediation practices to correct certain problems and failures. Remediation practices that damage the OSS or result in insufficient soil treatment are not allowed.



### Minimum Lot Sizes

Minimum lot sizes have been increased by 500 – 1000 sq ft, depending on soil type.



### Minimum Usable Land Area

New lots being served by OSS must have a certain land area that is usable for septic system installation and repairs. This land cannot be under water, paved, impacted by an easement, or otherwise unusable for the OSS.



### Field Verification of Proprietary Treatment Products

Manufacturers of OSS using disinfecting and nitrogen-treating proprietary treatment components must verify the efficacy of their products in the field. This will entail collecting samples from 25 installations in Washington State to evaluate their performance under field conditions.



### Product Supply Chain

Proprietary products may be retrofitted with components they were not tested with if there is a supply chain or other manufacturing disruption. The manufacturer must provide a statement from an engineer that the retrofit will not impact OSS performance or maintenance.



### Resilience

Sea Level Rise – LHOs in Puget Sound counties are required to identify areas where sea level rise may impact horizontal setbacks to OSS resulting in an increased risk to public health.

Phosphorus – LHOs in Puget Sound counties are required to identify areas where phosphorus has been found to be a contaminant of concern. They must identify measures to protect public health and water quality from phosphorus from new and repaired OSS in these areas. This is already an established requirement for areas where nitrogen is a contaminant of concern.

Nitrogen-based minimum lot size for small lots – Lots may be allowed to be made smaller than the minimums if certain safety measures are met and nitrogen treatment is installed on the OSS.

# Revision of Chapter 246-272A WAC, Homeowner Cost Impacts at a Glance



The State Board of Health and Department of Health worked with interested parties and a diverse group of advisors to modernize the septic system rules while minimizing added demands on system owners. The proposed rules aim to increase protection while mitigating costs to owners. The following list highlights several features of the proposed rules that help control costs and ease implementation of the proposed rules.

## **Connecting Failed Septic Systems to Sewer Systems (WAC 246-272A-0025)**

This section sets new ways to deal with failed septic systems near sewers. The new rule bases the 200-foot requirement on distance to the sewage connection point (building drain) instead of the property line. This should mean fewer buildings needing to connect based on distance to sewer service.

## **Expanding the Definition of Minor Repairs (WAC 246-272A-0200 & 0282)**

The proposed rules expand the definition of “minor repairs” to add system fixes considered relatively routine and low risk. This will lower costs for homeowners. It should also help speed up repairs and cut the number of required local permits.

## **Connecting Multiple Dwellings to a Septic System (WAC 246-272A-0230)**

The proposed rule makes it easier to permit and connect multiple residences, such as accessory dwelling units, to a single septic system. The proposal allows owners to add new buildings to septic systems based only on the number of bedrooms.

## **Allowing Smaller Drainfields with Better Treatment (WAC 246-272A-0234)**

The proposal allows an option for owners to build a septic system with higher treatment in exchange for a smaller drainfield. This allows owners to build on a smaller footprint and may make smaller lots more buildable.

## **Adding Design Requirements to Facilitate Inspections and Maintenance (WAC 246-272A-0238)**

The proposed rule changes language to allow more affordable, less intrusive, and safer inspection of drainfields. The design features also facilitate more thorough inspections and can help speed up and lower the cost of inspections.

## **Expanding Property Transfer Inspection of Septic Systems (WAC 246-272A-0270)**

Building on required property transfer inspections (PTI) in many local health jurisdictions, this requirement extends time-of-sale inspection of septic systems statewide. Timely inspection of septic systems can help consumers/buyers avoid purchasing properties with problem or failing septic systems. Local health jurisdictions can waive PTI inspections for properties with up-to-date inspection records.

## **Limiting Changes to Local Management Plans (WAC 246-272A-0015)**

The proposed rule includes modest changes for Puget Sound counties, mostly related to improved data

### **On-Site Sewage System Loan Program**

Since the rules were last revised, the Washington Department of Health collaborated with partner agencies and institutions to scale up and capitalize a statewide low-interest loan program to help homeowners repair and replace failing and malfunctioning septic systems. Craft3 administers this essential homeowner finance program. Visit Craft3's website at:

<https://www.craft3.org/homeowner-loans/clean-water/washington>



reporting and management plan updates. There are no significant local management plan (LMP) changes for local health jurisdictions elsewhere in the state. This helps lower local program costs for managing septic systems but does limit some oversight services. Local health jurisdictions can grow their management programs as needed and as financial resources allow.

#### **Adding Provisions for Remediation (WAC 246-272A-0282)**

The proposed rule lets local health jurisdictions adopt policies to allow practices/technologies to remediate or restore a failed drainfield. In limited circumstances, remediation may be cheaper for drainfield rehabilitation. Approved remediation must not damage the septic system or result in insufficient drainfield soil for treatment.

#### **Updating Minimum Lot Size, Land Area, and Alternate Methods of Treatment in Subdivisions. (WAC 246-272A-0320)**

The proposed rule includes several land-related amendments and related efforts to mitigate cost impacts. Balancing technical recommendations for sufficient treatment and minimum land needs, the proposed amendments include:

- Minimal increases in lot sizes based on soil type.
- The addition of minimum standards for available land area (actual useable/buildable area of a lot) for septic system and reserve area.
- New ways to determine more dense subdivisions when coupled with higher levels of treatment to reduce nitrogen effects on water resources and neighboring properties.

### **Septic system safety and public health**

In communities without sewers, septic systems are crucial for treating domestic sewage. Properly functioning septic systems keep sewage out of sight and out of mind, while keeping it out of playgrounds, water supplies, and food sources. However, when they malfunction or fail, they can contaminate our communities and pose a serious threat to public health.

Septic systems are expensive appliances. While sewer users pay fees to fund the operation of their wastewater treatment plant, septic system owners are responsible for the costs of operating and maintaining their septic system.

#### **Recommending Phased Implementation of the Rules**

The Department of Health is asking the State Board of Health to consider delayed start dates for the proposed rules. This will allow time for training and to develop effective support statewide.

For more information, please visit our website at: <https://doh.wa.gov/community-and-environment/wastewater-management/rules-and-regulations/onsite-rule-revision>



#### **DOH 337-171 November 2023**

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## Board Authority

### RCW [43.20.050](#)

#### **Powers and duties of state board of health—Rule making— Delegation of authority—Enforcement of rules.**

(1) The state board of health shall provide a forum for the development of public health policy in Washington state. It is authorized to recommend to the secretary means for obtaining appropriate citizen and professional involvement in all public health policy formulation and other matters related to the powers and duties of the department. It is further empowered to hold hearings and explore ways to improve the health status of the citizenry.

In fulfilling its responsibilities under this subsection, the state board may create ad hoc committees or other such committees of limited duration as necessary.

(2) In order to protect public health, the state board of health shall:

(a) Adopt rules for group A public water systems, as defined in RCW [70A.125.010](#), necessary to assure safe and reliable public drinking water and to protect the public health. Such rules shall establish requirements regarding:

(i) The design and construction of public water system facilities, including proper sizing of pipes and storage for the number and type of customers;

(ii) Drinking water quality standards, monitoring requirements, and laboratory certification requirements;

(iii) Public water system management and reporting requirements;

(iv) Public water system planning and emergency response requirements;

(v) Public water system operation and maintenance requirements;

(vi) Water quality, reliability, and management of existing but inadequate public water systems; and

(vii) Quality standards for the source or supply, or both source and supply, of water for bottled water plants;

(b) Adopt rules as necessary for group B public water systems, as defined in RCW [70A.125.010](#). The rules shall, at a minimum, establish requirements regarding the initial design and construction of a public water system. The state board of health rules may waive some or all requirements for group B public water systems with fewer than five connections;

(c) Adopt rules and standards for prevention, control, and abatement of health hazards and nuisances related to the disposal of human and animal excreta and animal remains;

(d) Adopt rules controlling public health related to environmental conditions including but not limited to heating, lighting, ventilation, sanitary facilities, and cleanliness in public facilities including but not limited to food service establishments, schools, recreational facilities, and transient accommodations;

(e) Adopt rules for the imposition and use of isolation and quarantine;

(f) Adopt rules for the prevention and control of infectious and noninfectious diseases, including food and vector borne illness, and rules governing the receipt and conveyance of remains of deceased persons, and such other sanitary matters as may best be controlled by universal rule; and

(g) Adopt rules for accessing existing databases for the purposes of performing health related research.

(3) The state board shall adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage systems with design flows of less than three thousand five hundred gallons per day.

(4) The state board may delegate any of its rule-adopting authority to the secretary and rescind such delegated authority.

(5) All local boards of health, health authorities and officials, officers of state institutions, police officers, sheriffs, constables, and all other officers and employees of the state, or any county, city, or township thereof, shall enforce all rules adopted by the state board of health. In the event of failure or refusal on the part of any member of such boards or any other official or person mentioned in this section to so act, he or she shall be subject to a fine of not less than fifty dollars, upon first conviction, and not less than one hundred dollars upon second conviction.

(6) The state board may advise the secretary on health policy issues pertaining to the department of health and the state.

[ [2021 c 65 § 37](#); [2011 c 27 § 1](#); [2009 c 495 § 1](#); [2007 c 343 § 11](#); [1993 c 492 § 489](#); [1992 c 34 § 4](#). Prior: [1989 1st ex.s. c 9 § 210](#); [1989 c 207 § 1](#); [1985 c 213 § 1](#); [1979 c 141 § 49](#); [1967 ex.s. c 102 § 9](#); [1965 c 8 § 43.20.050](#); prior: (i) [1901 c 116 § 1](#); [1891 c 98 § 2](#); RRS § 6001. (ii) [1921 c 7 § 58](#); RRS § 10816.]

## **RCW 70A.110.070**

### **Department review of on-site program management plans— Assistance to local health jurisdictions.**

(1) The on-site program management plans of local health jurisdictions required under RCW [70A.110.030](#) must be submitted to the department by July 1, 2007, and be reviewed to determine if they contain all necessary elements. The

department shall provide in writing to the local board of health its review of the completeness of the plan. The board may adopt additional criteria by rule for approving plans.

(2) In reviewing the on-site strategy component of the plan, the department shall ensure that all required elements, including designation of any marine recovery area, have been addressed.

(3) Within thirty days of receiving an on-site strategy, the department shall either approve the on-site strategy or provide in writing the reasons for not approving the strategy and recommend changes. If the department does not approve the on-site strategy, the local health officer must amend and resubmit the plan to the department for approval.

(4) Upon receipt of department approval or after thirty days without notification, whichever comes first, the local health officer shall implement the on-site strategy.

(5) If the department denies approval of an on-site strategy, the local health officer may appeal the denial to the board. The board must make a final determination concerning the denial.

(6) The department shall assist local health jurisdictions in:

(a) Developing written on-site program management plans required by RCW [70A.110.030](#);

(b) Identifying reasonable methods for finding unknown systems; and

(c) Developing or enhancing electronic data systems that will enable each local health jurisdiction to actively manage all on-site sewage disposal systems within their jurisdictions, with priority given to those on-site sewage disposal systems that are located in or which could affect designated marine recovery areas. [ [2020 c 20 § 1337](#); [2006 c 18 § 7](#). Formerly RCW [70.118A.070](#).]

## **RCW [43.20.065](#)**

### **On-site sewage system failures and inspections—Rule making.**

(1) Rules adopted by the state board under RCW [43.20.050](#)(3) regarding failures of on-site sewage systems must:

(a) Give first priority to allowing repair and second priority to allowing replacement of an existing conventional on-site sewage system, consisting of a septic tank and drainfield, with a similar conventional system;

(b) Not impose or allow the imposition of more stringent performance requirements of equivalent on-site sewage systems on private entities than public entities; and

(c) Allow a system to be repaired using the least expensive alternative that meets standards and is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes.

(2) Rules adopted by the state board under RCW [43.20.050](#)(3) regarding inspections must:

(a) Require any inspection of an on-site sewage system carried out by a certified professional inspector or public agency to be coordinated with the owner of the on-site sewage system prior to accessing the on-site sewage system;

(b) Require any inspection of an on-site sewage system carried out by a certified professional inspector or responsible public agency to be authorized by the owner of the on-site sewage system prior to accessing the on-site sewage system;

(c) Allow, in cases where an inspection has not been authorized by a property owner, the local health jurisdiction to follow the procedures established for an administrative search warrant in RCW [70A.105.030](#); and

(d) Forbid local health jurisdictions from requiring private property owners to grant inspection or maintenance easements for on-site sewage systems as a condition of permit issuance for on-site sewage systems that are located on a single property and service a single dwelling unit.

[ [2021 c 65 § 38](#); [2019 c 21 § 2](#).]

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Umair A. Shah, MD, MPH, Secretary of Health

**Subject:** Emergency Rulemaking for On-Site Sewage Systems, WAC 246-272A-0110—Proprietary Treatment Products and Supply Chain Shortages

## Background and Summary:

Under RCW 43.20.050, the State Board of Health (Board) has rulemaking authority for on-site sewage systems with design flows less than three thousand five hundred gallons per day. The Board's rules for On-Site Sewage Systems, chapter 246-272A WAC, set comprehensive standards for these small on-site sewage systems.

The on-site sewage system rules are currently under revision and are under consideration for adoption at today's Board meeting. Once a permanent rule is adopted, it generally takes 31 days after it is filed with the code reviser for the rule to take effect. While the permanent rulemaking will encompass the emergency rule, the following matter requires separate action to maintain continuity of the emergency rule regardless of the outcome of today's public hearing on proposed amendments to chapter 246-272A WAC.

By memo dated June 1, 2022, the Washington Department of Health (Department) requested an emergency rule to address supply chain shortages associated with on-site sewage system proprietary treatment products regulated under WAC 246-272A-0110. At its meeting on June 8, 2022, the Board adopted an emergency rule to address the issue and staff filed the rule on June 15, 2022, as WSR 22-13-101.

Under RCW 34.05.350, the Board may adopt emergency rules when action is needed to protect public health and safety and observing the time requirements of permanent rulemaking would be contrary to the public interest. Identical or substantially similar emergency rules may be adopted in sequence if the agency is actively working to adopt the rule as a permanent rule.

Consistent with these requirements and subsequent to initial action in June 2022, the Department has continued to update the Board and request this emergency rule in series. The Board has acted on each request and adopted each rule.

- Second emergency rule requested October 12, 2022, filed October 13, 2022, as WSR 22-21-070;
- Third emergency rule requested January 9, 2023, filed February 10, 2023, as WSR 23-05-055;

(continued on the next page)

- Fourth emergency rule requested April 12, 2023, filed June 9, 2023, as WSR 23-13-018; and
- Fifth emergency rule requested August 9, 2023, filed October 6, 2023, as WSR 23-21-016.

The fifth emergency rule expires February 3, 2024. Today, the Department is returning to request a sixth rule in this series to prevent a break in this emergency rule prior to completion of the permanent rulemaking on chapter 246-272A WAC and revisions to WAC 246-272A-0110 taking effect.

As brief background and as explained in prior requests, this emergency started with the manufacturing disruption and shortage of a specific product used in many proprietary systems—a disinfecting ultraviolet (UV) light manufactured by Salcor Inc. At the time other parts and components integral to the maintenance and performance of proprietary treatment products were also in short supply.

The shortage of replacement parts and components threatens system maintenance and public health and safety due to poor system performance. Failure to maintain on-site sewage systems easily and properly can also impede system inspections associated with property transactions.

In short, this emergency rule—and identical language in the proposed permanent rule—allows manufacturers of registered proprietary treatment products to get written approval from the Department to replace system components that are unavailable due to manufacturing disruptions with comparable components that will not negatively impact performance, treatment, operation, or maintenance of the original registered product.

Jeremy Simmons, Manager of the Department's On-Site Wastewater Management Program, will explain the Department's request for this sixth emergency rule and will again update the Board on the status of these component-replacement requests from manufacturers of proprietary treatment products.

#### Recommended Board Actions:

The Board may wish to consider and amend, if necessary, one of the following motions. The recommended motions are provided for the Board's ease of reference. The Board may develop a different motion as necessary.

*If the Board adopts the proposed amendments to chapter 246-272A WAC prior to this agenda item:*

The Board directs staff to file a sixth CR-103E, Emergency Rulemaking Order, upon expiration of the fifth emergency rule, filed as WSR 23-21-016, to amend WAC 246-272A-0110 to help ensure on-site sewage system proprietary treatment products continue to function properly without negatively impacting treatment, operation, or maintenance during supply chain shortages or other manufacturing disruptions. The

Board directs staff to withdraw the emergency rule when the revised permanent rules take effect.

OR

*If the Board does NOT adopt the proposed amendments to chapter 246-272A WAC prior to this agenda item:*

The Board directs staff to file a sixth CR-103E, Emergency Rulemaking Order, upon expiration of the fifth emergency rule, filed as WSR 23-21-016, to amend WAC 246-272A-0110 to help ensure on-site sewage system proprietary treatment products continue to function properly without negatively impacting treatment, operation, or maintenance during supply chain shortages or other manufacturing disruptions.

#### Staff

Andrew Kamali

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). TTY users can dial 711.

PO Box 47990 • Olympia, WA 98504-7990  
360-236-4110 • [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov) • [sboh.wa.gov](http://sboh.wa.gov)





STATE OF WASHINGTON  
DEPARTMENT OF HEALTH  
OFFICE of ENVIRONMENTAL HEALTH and SAFETY  
*PO Box 47824, Olympia, WA 98504*  
*(360) 236-3330 • 711 Washington Relay Service*

June 1, 2022

TO: Michelle Davis, Executive Director  
State Board of Health

FROM: Todd Phillips, Director  
Office of Environmental Health and Safety

SUBJECT: Emergency rule request, WAC 246-272A-0110, Proprietary treatment products -  
Certification and registration.

The Department of Health (department) requests the State Board of Health adopt an emergency rule to allow on-site sewage systems proprietary treatment products to be operated and maintained with the best components available during an ongoing supply chain shortage.

WAC 246-272A-0110, requires manufacturers of proprietary treatment products used in on-site sewage systems to test their products with the National Science Foundation (NSF) and register their products with the department based on the NSF test results before the product is allowed to be permitted or installed in Washington. This allows the department to ensure that products used in on-site sewage systems can provide the appropriate level of treatment needed to protect public health and the environment such as such as drinking water sources and shellfish sites. Proprietary treatment products are required to be installed and operated as they were tested and registered to ensure they continue to perform as needed. Supply chain disruptions have occasionally made this requirement difficult for manufacturers and owners to comply with, particularly in recent years.

Some manufacturers have incorporated disinfecting ultraviolet (UV) light systems into their products to achieve higher treatment performance required for sensitive sites. These disinfecting UV light systems require routine maintenance that requires replacement supplies. Salcor Inc., the manufacturer of a disinfecting UV light system incorporated into several proprietary treatment products sold and currently in use in Washington, has recently ceased operation. This has created a sudden shortage of Salcor supplies that are needed for operation and maintenance for on-site sewage systems currently in operation. Exact numbers are unavailable, but we know there are several thousand on-site sewage systems using Salcor products in Washington.

Without these supplies, the on-site sewage systems that use Salcor products do not operate as registered and may not completely treat sewage. This may impact sensitive sites near to these on-site sewage systems. It is also currently preventing home sales when maintenance of these devices is noted on home inspections for property transfers because replacement parts are unavailable. New construction is likewise impacted as many active or pending permits include on-site sewage systems using Salcor products. There are other manufacturers of disinfecting UV light systems that can be substituted into the proprietary treatment products that use Salcor products.

The request for an emergency rule is intended to allow manufacturers to make a written request to substitute components of a registered product's construction in cases of a demonstrated supply chain shortage or similar manufacturing disruptions that may impact installations, operation, or maintenance. The request must include information that demonstrates the substituted component will not negatively impact performance or diminish the effect of the treatment, operation, and maintenance of the original registered product. This is a short-term solution that will provide appropriate public health and environmental protections while limiting negative impacts to home sales and construction. A long-term solution will be investigated and developed for incorporation into the permanent rulemaking while this emergency rule is in effect.

Respectfully,

A handwritten signature in black ink, appearing to read "Todd Phillips, R.S.", written in a cursive style.

Todd Phillips, R.S.  
Director, Office of Environmental Health & Safety

**WAC 246-272A-0110 Proprietary treatment products—Certification and registration.** (1) Manufacturers shall register their proprietary treatment products with the department before the local health officer may permit their use.

(2) To qualify for product registration, manufacturers desiring to sell or distribute proprietary treatment products in Washington state shall:

(a) Verify product performance through testing using the testing protocol established in Table I and register their product with the department using the process described in WAC 246-272-0120;

(b) Report test results of influent and effluent sampling obtained throughout the testing period (including normal and stress loading phases) for evaluation of constituent reduction according to Table II;

(c) Demonstrate product performance according to Table III. All (~~thirty-day~~) 30-day averages and geometric means obtained throughout the test period must meet the identified threshold values to qualify for registration at that threshold level; and

(d) For registration at levels A, B, and C verify bacteriological reduction according to WAC 246-272A-0130.

(3) Manufacturers verifying product performance through testing according to the following standards or protocols shall have product testing conducted by a testing facility accredited by ANSI:

(a) ANSI/NSF Standard 40—Residential Wastewater Treatment Systems;

(b) NSF Standard 41: Non-Liquid Saturated Treatment Systems;

(c) NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation; or

(d) Protocol for bacteriological reduction described in WAC 246-272A-0130.

(4) Manufacturers verifying product performance through testing according to the following standards or protocols shall have product testing conducted by a testing facility meeting the requirements established by the Testing Organization and Verification Organization, consistent with the test protocol and plan:

(a) EPA/NSF—Protocol for the Verification of Wastewater Treatment Technologies; or

(b) EPA Environmental Technology Verification Program protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction.

(5) Treatment levels used in these rules are not intended to be applied as field compliance standards. Their intended use is for establishing treatment product performance in a product testing setting under established protocols by qualified testing entities.

(6) Manufacturers may submit a written request to substitute components of a registered product's construction in cases of supply chain shortage or similar manufacturing disruptions impacting installations, operation, or maintenance. The substitution request must include a report stamped, signed, and dated by a professional engineer demonstrating the substituted component will not negatively impact performance or diminish the effect of the treatment, operation, and

maintenance of the original registered product. If approved, substitution is authorized until rescinded by the department.

**TABLE I**

<b>Testing Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Required Testing Protocol</b>
<b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than treatment level E.	ANSI/NSF 40— Residential Wastewater Treatment Systems (protocols dated between July 1996 and the effective date of these rules)
<b>Category 2</b> Designed to treat high-strength sewage when septic tank effluent is anticipated to be greater than treatment level E.  (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	EPA/NSF Protocol for the Verification of Wastewater Treatment Technologies/ EPA Environmental Technology Verification (April 2001)
<b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).	NSF/ANSI Standard 41: Non-Liquid Saturated Treatment Systems (September 1999)  NSF Protocol P157 Electrical Incinerating Toilets - Health and Sanitation (April 2000)
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Protocol for the Verification of Residential Wastewater Treatment Technologies for Nutrient Reduction/EPA Environmental Technology Verification Program (November, 2000)

**TABLE II**

<b>Test Results Reporting Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Testing Results Reported</b>
<b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than treatment level E.	Report test results of influent and effluent sampling obtained throughout the testing period for evaluation of constituent reduction for the parameters: CBOD <sub>5</sub> , and TSS:

Test Results Reporting Requirements for Proprietary Treatment Products	
	<input type="checkbox"/> Average <span style="float: right;"><input type="checkbox"/> Standard Deviation</span> <input type="checkbox"/> Minimum <span style="float: right;"><input type="checkbox"/> Maximum</span> <input type="checkbox"/> Median <span style="float: right;"><input type="checkbox"/> Interquartile Range</span> <input type="checkbox"/> 30-day Average (for each month) For bacteriological reduction performance, report fecal coliform test results of influent and effluent sampling by geometric mean from samples drawn within <del>((thirty day))</del> 30-day or monthly calendar periods, obtained from a minimum of three samples per week throughout the testing period. See WAC 246-272A-0130. Test report must also include the individual results of all samples drawn throughout the test period.
<b>Category 2</b> Designed to treat high-strength sewage when septic tank effluent is anticipated to be greater than treatment level E.  (Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	Report all individual test results and full test average values of influent and effluent sampling obtained throughout the testing period for: CBOD <sub>5</sub> , TSS and O&G. Establish the treatment capacity of the product tested in pounds per day for CBOD <sub>5</sub> .
<b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).	Report test results on all required performance criteria according to the format prescribed in the NSF test protocol described in Table I.
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Report test results on all required performance criteria according to the format prescribed in the test protocol described in Table I.

**TABLE III**

Product Performance Requirements for Proprietary Treatment Products						
Treatment Component/Sequence Category	Product Performance Requirements					
<b>Category 1</b> Designed to treat sewage with strength typical of a residential source when septic tank effluent is anticipated to be equal to or less than treatment level E.	<b>Treatment System Performance Testing Levels</b>					
	<b>Level</b>	<b>Parameters</b>				
		<b>CBOD<sub>5</sub></b>	<b>TSS</b>	<b>O&amp;G</b>	<b>FC</b>	<b>TN</b>
	<b>A</b>	10 mg/L	10 mg/L	—	200/100 ml	—
	<b>B</b>	15 mg/L	15 mg/L	—	1,000/100 ml	—
	<b>C</b>	25 mg/L	30 mg/L	—	50,000/100 ml	—
	<b>D</b>	25 mg/L	30 mg/L	—	—	—
	<b>E</b>	125 mg/L	80 mg/L	20 mg/L	—	—
	<b>N</b>	—	—	—	—	20 mg/L
	Values for Levels A - D are 30-day values (averages for CBOD <sub>5</sub> , TSS, and geometric mean for FC.) All 30-day averages throughout the test period must meet these values in order to be registered at these levels. Values for Levels E and N are derived from full test averages.					
<b>Category 2</b> Designed to treat high-strength sewage when septic tank effluent is anticipated to be greater than treatment level E.	All of the following requirements must be met:					

<b>Product Performance Requirements for Proprietary Treatment Products</b>	
<b>Treatment Component/Sequence Category</b>	<b>Product Performance Requirements</b>
(Such as at restaurants, grocery stores, mini-marts, group homes, medical clinics, residences, etc.)	(1) All full test averages must meet Level E; and (2) Establish the treatment capacity of the product tested in pounds per day for CBOD <sub>5</sub> .
<b>Category 3</b> Black water component of residential sewage (such as composting and incinerating toilets).	Test results must meet the performance requirements established in the NSF test protocol.
<b>Total Nitrogen Reduction in Categories 1 &amp; 2 (Above)</b>	Test results must establish product performance effluent quality meeting Level N, when presented as the full test average.



**RULE-MAKING  
ORDER  
EMERGENCY RULE ONLY**

**CR-103E (December  
2017)  
(Implements RCW  
34.05.350  
and 34.05.360)**

CODE REVISER USE ONLY

**Agency:** State Board of Health

**Effective date of rule:  
Emergency Rules**

- Immediately upon filing.
- Later (specify) \_\_

**Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?**

- Yes
- No
- If Yes, explain:

**Purpose:** The State Board of Health (board) adopted an emergency rule regarding substitute components of registered products as part of the certification and registration of proprietary treatment products used in on-site sewage systems. The original emergency rule was filed on June 15, 2022 (WSR 22-13-101). Emergency rules have been filed continuously thereafter with the most recent filing on October 6, 2023 WSR 23-21-061). Only one change has been made to the amendments since the filing of the original emergency rule. This emergency rule is being adopted with a slight change to the previous emergency rule language.

This sixth emergency rules amends WAC 246-272A-0110 to allow manufacturers to make a written request to the Department of Health (department) to substitute components of a registered product’s construction in cases of a demonstrated supply chain shortage or similar manufacturing disruptions that may impact installations, operation, or maintenance. The request must include information that demonstrates the substituted component will not negatively impact performance or diminish the effect of the treatment, operation, and maintenance of the original registered product. The emergency rule will also allow manufacturers of registered proprietary treatment products to replace components of their products that are not available due to supply chain shortages or similar manufacturing disruptions with like components, as long as the components will not negatively impact performance, treatment, operation, or maintenance of the original registered product.

The current rule requires manufacturers of proprietary treatment products used in on-site sewage systems to test their products with the NSF and register their products with the department based on NSF test results before the product is allowed to be permitted or installed in Washington. Without the emergency rule, the current rule would impede home sales when maintenance of proprietary products has not been completed as noted on home inspections for property transfers because replacement parts with NSF registration are unavailable. New construction is likewise impacted as many active or pending permits include on-site sewage systems using Salcor products. Salcor manufactures a disinfecting ultraviolet (UV) light system incorporated into several proprietary treatment products used in Washington State.

There are other manufacturers of disinfecting UV light systems that can be substituted into proprietary treatment products in place of Salcor products. Salcor was sold and the new owner is working with NSF to get their products approved but this process will take several months. In order to continue to protect the public's health, safety, and welfare, it is necessary to adopt a sixth emergency rule to allow the department to consider written requests from manufacturers of proprietary treatment products for substitutes to proprietary treatment product components so their systems will be able to function properly without negatively impacting treatment, operation or maintenance during supply chain shortages. To date, four manufacturers have received department approval to substitute the Salcor 3G UV lamp with an alternate UV lamp.

In 2018, the board filed a CR-101, Preproposal Statement of Inquiry (WSR 18-06-082), to initiate permanent rulemaking and update the on-site sewage system rules. That rulemaking is still underway and is expected to conclude in 2024. As directed by the board at the June 8, 2022 meeting, the emergency rule amendment will be considered for incorporation into the permanent rulemaking that is currently underway.

**Citation of rules affected by this order:**

New: None  
 Repealed: None  
 Amended: WAC 246-272A-0110  
 Suspended: None

**Statutory authority for adoption:** RCW 43.20.050 (3)

**Other authority:**

**EMERGENCY RULE**

Under RCW 34.05.350 the agency for good cause finds:

- That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
- That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

**Reasons for this finding:** : The board finds that in order to protect the public's health, safety, and welfare it is necessary to adopt the emergency rule to amend WAC 246-272A-0110 to allow the department to consider written request from manufacturers of proprietary treatment products to substitute a proprietary treatment product component so their systems may continue to function properly without negatively impacting performance or diminish the effect of the treatment, operation, or maintenance during supply chain shortages.

**Note: If any category is left blank, it will be calculated as zero.  
 No descriptive text.**

**Count by whole WAC sections only, from the WAC number through the history note.  
 A section may be counted in more than one category.**

**The number of sections adopted in order to comply with:**

Federal statute:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Federal rules or standards:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Recently enacted state statutes:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>

**The number of sections adopted at the request of a nongovernmental entity:**

New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
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**The number of sections adopted on the agency's own initiative:**

New 0 Amended 1 Repealed 0

**The number of sections adopted in order to clarify, streamline, or reform agency procedures:**

New 0 Amended 0 Repealed 0

**The number of sections adopted using:**

Negotiated rule making: New 0 Amended 0 Repealed 0

Pilot rule making: New 0 Amended 0 Repealed 0

Other alternative rule making: New 0 Amended 1 Repealed 0

**Date Adopted:**

**Name:** Michelle Davis, MPA

**Title:** Executive Director Washington State  
Board of Health

**Signature:**

January 2024

# On-site Sewage Systems – Emergency Rule

WAC 246-272A-0110

## Emergency Rule Summary and Product-Component Approvals

The State Board of Health (Board) adopted an emergency rule on June 8, 2022 to allow manufacturers of registered proprietary treatment products to replace components of their products that are not available due to supply chain shortages or similar manufacturing disruptions with like components that will not negatively impact performance, treatment, operation, or maintenance of the original registered product. As directed by the Board, the emergency rule amendment will be considered for incorporation into the permanent rulemaking that is currently underway.

To-date, four companies have received department approval to substitute the Salcor 3G UV lamp, a disinfecting ultraviolet lamp, as summarized in the table below.

Company	Registered Product	Component to be Substituted	Substitution Component(s)	Approved Treatment Levels
Bio-Microbics	MicroFAST series with Salcor 3G	Salcor 3G UV Unit	Norweco AT 1500 UV & Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level A Treatment Level B
Delta	Whitewater DF with Salcor 3G	Salcor 3G UV Unit	Norweco AT 1500 UV & Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level A Treatment Level B
Delta	ECOPOD - N with Salcor 3G	Salcor 3G UV Unit	Norweco AT 1500 UV & Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level A Treatment Level B
Enviro-Flo	NuWater B 500 with Salcor 3G	Salcor 3G UV Unit	Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level B
Enviro-Flo	NuWater BNR 500 / BNR 600 with Salcor 3G	Salcor 3G UV Unit	Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level A Treatment Level B
Jet	Model J-500 with Salcor 3G	Salcor 3G UV Unit	Jet Illumi-jet 952 & 952 Retrofit Kit	Treatment Level A Treatment Level B

These approvals allow replacement of the Salcor 3G UV lamp on several individual product lines as listed on the [List of Registered On-site Treatment and Distribution Products for Washington State](#).

Link to emergency rule:

[Proprietary Treatment Products Emergency Rule | Washington State Department of Health](#)  
[Emergency Rule OSS Proprietary Treatment Products - CR103 \(wa.gov\)](#)

Link to permanent rule making:

[On-site Sewage System Rule Revision | Washington State Department of Health](#)

For more information, contact Jeremy Simmons, Program Manager at (360) 236-3346.

## Board Authority

### RCW [43.20.050](#)

#### **Powers and duties of state board of health—Rule making— Delegation of authority—Enforcement of rules.**

(1) The state board of health shall provide a forum for the development of public health policy in Washington state. It is authorized to recommend to the secretary means for obtaining appropriate citizen and professional involvement in all public health policy formulation and other matters related to the powers and duties of the department. It is further empowered to hold hearings and explore ways to improve the health status of the citizenry.

In fulfilling its responsibilities under this subsection, the state board may create ad hoc committees or other such committees of limited duration as necessary.

(2) In order to protect public health, the state board of health shall:

(a) Adopt rules for group A public water systems, as defined in RCW [70A.125.010](#), necessary to assure safe and reliable public drinking water and to protect the public health. Such rules shall establish requirements regarding:

(i) The design and construction of public water system facilities, including proper sizing of pipes and storage for the number and type of customers;

(ii) Drinking water quality standards, monitoring requirements, and laboratory certification requirements;

(iii) Public water system management and reporting requirements;

(iv) Public water system planning and emergency response requirements;

(v) Public water system operation and maintenance requirements;

(vi) Water quality, reliability, and management of existing but inadequate public water systems; and

(vii) Quality standards for the source or supply, or both source and supply, of water for bottled water plants;

(b) Adopt rules as necessary for group B public water systems, as defined in RCW [70A.125.010](#). The rules shall, at a minimum, establish requirements regarding the initial design and construction of a public water system. The state board of health rules may waive some or all requirements for group B public water systems with fewer than five connections;

(c) Adopt rules and standards for prevention, control, and abatement of health hazards and nuisances related to the disposal of human and animal excreta and animal remains;

(d) Adopt rules controlling public health related to environmental conditions including but not limited to heating, lighting, ventilation, sanitary facilities, and cleanliness in public facilities including but not limited to food service establishments, schools, recreational facilities, and transient accommodations;

(e) Adopt rules for the imposition and use of isolation and quarantine;

(f) Adopt rules for the prevention and control of infectious and noninfectious diseases, including food and vector borne illness, and rules governing the receipt and conveyance of remains of deceased persons, and such other sanitary matters as may best be controlled by universal rule; and

(g) Adopt rules for accessing existing databases for the purposes of performing health related research.

(3) The state board shall adopt rules for the design, construction, installation, operation, and maintenance of those on-site sewage systems with design flows of less than three thousand five hundred gallons per day.

(4) The state board may delegate any of its rule-adopting authority to the secretary and rescind such delegated authority.

(5) All local boards of health, health authorities and officials, officers of state institutions, police officers, sheriffs, constables, and all other officers and employees of the state, or any county, city, or township thereof, shall enforce all rules adopted by the state board of health. In the event of failure or refusal on the part of any member of such boards or any other official or person mentioned in this section to so act, he or she shall be subject to a fine of not less than fifty dollars, upon first conviction, and not less than one hundred dollars upon second conviction.

(6) The state board may advise the secretary on health policy issues pertaining to the department of health and the state.

[ [2021 c 65 § 37](#); [2011 c 27 § 1](#); [2009 c 495 § 1](#); [2007 c 343 § 11](#); [1993 c 492 § 489](#); [1992 c 34 § 4](#). Prior: [1989 1st ex.s. c 9 § 210](#); [1989 c 207 § 1](#); [1985 c 213 § 1](#); [1979 c 141 § 49](#); [1967 ex.s. c 102 § 9](#); [1965 c 8 § 43.20.050](#); prior: (i) [1901 c 116 § 1](#); [1891 c 98 § 2](#); RRS § 6001. (ii) [1921 c 7 § 58](#); RRS § 10816.]

## **RCW 70A.110.070**

### **Department review of on-site program management plans— Assistance to local health jurisdictions.**

(1) The on-site program management plans of local health jurisdictions required under RCW [70A.110.030](#) must be submitted to the department by July 1, 2007, and be reviewed to determine if they contain all necessary elements. The

department shall provide in writing to the local board of health its review of the completeness of the plan. The board may adopt additional criteria by rule for approving plans.

(2) In reviewing the on-site strategy component of the plan, the department shall ensure that all required elements, including designation of any marine recovery area, have been addressed.

(3) Within thirty days of receiving an on-site strategy, the department shall either approve the on-site strategy or provide in writing the reasons for not approving the strategy and recommend changes. If the department does not approve the on-site strategy, the local health officer must amend and resubmit the plan to the department for approval.

(4) Upon receipt of department approval or after thirty days without notification, whichever comes first, the local health officer shall implement the on-site strategy.

(5) If the department denies approval of an on-site strategy, the local health officer may appeal the denial to the board. The board must make a final determination concerning the denial.

(6) The department shall assist local health jurisdictions in:

(a) Developing written on-site program management plans required by RCW [70A.110.030](#);

(b) Identifying reasonable methods for finding unknown systems; and

(c) Developing or enhancing electronic data systems that will enable each local health jurisdiction to actively manage all on-site sewage disposal systems within their jurisdictions, with priority given to those on-site sewage disposal systems that are located in or which could affect designated marine recovery areas. [ [2020 c 20 § 1337](#); [2006 c 18 § 7](#). Formerly RCW [70.118A.070](#).]

## **RCW [43.20.065](#)**

### **On-site sewage system failures and inspections—Rule making.**

(1) Rules adopted by the state board under RCW [43.20.050](#)(3) regarding failures of on-site sewage systems must:

(a) Give first priority to allowing repair and second priority to allowing replacement of an existing conventional on-site sewage system, consisting of a septic tank and drainfield, with a similar conventional system;

(b) Not impose or allow the imposition of more stringent performance requirements of equivalent on-site sewage systems on private entities than public entities; and

(c) Allow a system to be repaired using the least expensive alternative that meets standards and is likely to provide comparable or better long-term sewage treatment and effluent dispersal outcomes.

(2) Rules adopted by the state board under RCW [43.20.050](#)(3) regarding inspections must:

(a) Require any inspection of an on-site sewage system carried out by a certified professional inspector or public agency to be coordinated with the owner of the on-site sewage system prior to accessing the on-site sewage system;

(b) Require any inspection of an on-site sewage system carried out by a certified professional inspector or responsible public agency to be authorized by the owner of the on-site sewage system prior to accessing the on-site sewage system;

(c) Allow, in cases where an inspection has not been authorized by a property owner, the local health jurisdiction to follow the procedures established for an administrative search warrant in RCW [70A.105.030](#); and

(d) Forbid local health jurisdictions from requiring private property owners to grant inspection or maintenance easements for on-site sewage systems as a condition of permit issuance for on-site sewage systems that are located on a single property and service a single dwelling unit.

[ [2021 c 65 § 38](#); [2019 c 21 § 2](#).]

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Socia Love-Thurman, Board Member

**Subject:** Petition for Rulemaking – Chapter 246-760 WAC, Auditory and Visual Screening Standards in Schools

## Background and Summary:

The Administrative Procedures Act (RCW 34.05.330) allows any person to petition a state agency for the adoption, amendment, or repeal of any rule. Upon receipt of a petition, the agency has sixty days to either (1) deny the petition in writing, stating the reasons and, as appropriate, offer other means for addressing the concerns raised by the petitioner, or (2) accept the petition and initiate rulemaking.

On November 8, 2024, the Washington State Board of Health (Board) received a rulemaking petition to amend its school vision screening standards ([chapter 246-760 WAC](#)). The petitioner requests that the Board amend [WAC 246-760-070 \(2\)](#) to include screening for color vision deficiency, also known as colorblindness, as part of the vision screening required for all students enrolled in Washington schools. The petitioner includes an attachment to their petition that provides information about the prevalence of color vision deficiency and the impacts the condition may have on a student's ability to learn. The attachment also states that adding a test for color vision deficiency is inexpensive and can be done quickly, and 11 other states currently require this testing in their screening programs.

Color vision deficiency is a condition that affects a person's perception of color.<sup>1,2</sup> People with color vision deficiency see colors differently or have difficulty identifying the difference between certain colors.<sup>2</sup> There are several types of color vision deficiency. The most common type is red-green color vision deficiency, and it affects men more than women. People are also more likely to have color vision deficiency if they have a family history of the condition, have certain eye diseases or health conditions, or if they take certain medications.<sup>1,2</sup>

The Board has the duty under [RCW 28A.210.020](#) to define and adopt rules for vision and hearing screenings of children attending schools in Washington. Chapter 246-760 WAC lists the standards for school districts to use to conduct these screenings. The purpose of this requirement is to screen and identify students in Washington who may be experiencing vision or hearing impairments and refer them for diagnostic evaluation and care by an appropriate healthcare provider.

(continued on the next page)

Washington State Board of Health  
January 10, 2024, Meeting Memo

School vision screenings are conducted once per academic year for children in kindergarten and grades one, two, three, five, and seven. If resources permit, schools may expand screenings to other grade levels and conduct optional vision screenings using evidence-based screening tools and techniques. The vision screening sections of chapter 246-760 WAC were last updated in 2017 to add near vision acuity screenings as required by the passage of Senate Bill 6245 ([Chapter 219, Laws of 2016](#)).

[WAC 246-760-070](#) requires that schools conduct distance and near vision acuity screenings using tools and procedures that are linguistically, developmentally and age appropriate. Schools are required to conduct vision screening according to the tool's instructions and screening protocol consistent with the American Association for Pediatric Ophthalmology and Strabismus (AAPOS) and the National Association of School Nurses (NASN) guidance. The screening tools, including rescreening and referral criteria, are outlined by grade level in Table 1 of [WAC 246-760-071](#).

I have invited Molly Dinardo, Board Staff, to provide more information about the petition and color vision deficiency, a brief overview of national childhood vision screening guidelines, and the Board's options for responding to the petition.

**Recommended Board Actions:**

The Board may wish to consider one of the following motions:

The Board declines the petition for rulemaking to revise applicable sections of chapter 246-760 WAC to include screening for color vision deficiency in the Washington State school vision screening standards and procedures under RCW 28A.210.020 for the reasons articulated by Board Members. The Board directs staff to notify the petitioner of the Board's decision.

OR

The Board accepts the petition for rulemaking to explore options to revise relevant sections of chapter 246-760 to possibly include screening for color vision deficiency in the Washington State school vision screening standards and procedures under RCW 28A.210.020. The Board directs staff to notify the requestor of its decision and to file a CR-101, Preproposal of Inquiry, to further evaluate the request and possible rule change.

**Staff**

Molly Dinardo

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). TTY users can dial 711.

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Washington State Board of Health  
January 10, 2024, Meeting Memo

- 
1. MedlinePlus Genetics. Color vision deficiency. Last Updated January 1, 2015. Accessed December 15, 2023. <https://medlineplus.gov/genetics/condition/color-vision-deficiency/>
  2. National Eye Institute. Color Blindness. Last Updated November 15, 2023. Accessed December 15, 2023. <https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/color-blindness>



## PETITION FOR ADOPTION, AMENDMENT, OR REPEAL OF A STATE ADMINISTRATIVE RULE

In accordance with [RCW 34.05.330](#), the Office of Financial Management (OFM) created this form for individuals or groups who wish to petition a state agency or institution of higher education to adopt, amend, or repeal an administrative rule. You may use this form to submit your request. You also may contact agencies using other formats, such as a letter or email.

The agency or institution will give full consideration to your petition and will respond to you within 60 days of receiving your petition. For more information on the rule petition process, see Chapter 82-05 of the Washington Administrative Code (WAC) at <http://apps.leg.wa.gov/wac/default.aspx?cite=82-05>.

### CONTACT INFORMATION *(please type or print)*

Petitioner's Name \_\_\_\_\_

Name of Organization \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ Email \_\_\_\_\_

### COMPLETING AND SENDING PETITION FORM

- Check all of the boxes that apply.
- Provide relevant examples.
- Include suggested language for a rule, if possible.
- Attach additional pages, if needed.
- Send your petition to the agency with authority to adopt or administer the rule. Here is a list of agencies and their rules coordinators: <http://www.leg.wa.gov/CodeReviser/Documents/RClist.htm>.

### INFORMATION ON RULE PETITION

Agency responsible for adopting or administering the rule: \_\_\_\_\_

**1. NEW RULE - I am requesting the agency to adopt a new rule.**

The subject (or purpose) of this rule is: \_\_\_\_\_

The rule is needed because: \_\_\_\_\_

The new rule would affect the following people or groups: \_\_\_\_\_

**2. AMEND RULE - I am requesting the agency to change an existing rule.**

List rule number (WAC), if known: \_\_\_\_\_

I am requesting the following change: \_\_\_\_\_

This change is needed because: \_\_\_\_\_

The effect of this rule change will be: \_\_\_\_\_

The rule is not clearly or simply stated: \_\_\_\_\_

**3. REPEAL RULE - I am requesting the agency to eliminate an existing rule.**

List rule number (WAC), if known: \_\_\_\_\_

*(Check one or more boxes)*

It does not do what it was intended to do.

It is no longer needed because: \_\_\_\_\_

It imposes unreasonable costs: \_\_\_\_\_

The agency has no authority to make this rule: \_\_\_\_\_

It is applied differently to public and private parties: \_\_\_\_\_

It conflicts with another federal, state, or local law or rule. List conflicting law or rule, if known: \_\_\_\_\_

It duplicates another federal, state or local law or rule. List duplicate law or rule, if known: \_\_\_\_\_

Other (please explain): \_\_\_\_\_

## Add Color Blindness to Student Visual Testing

John Strick  
7331 17th Ave NE  
Seattle, WA 98115

I am requesting that WAC 246-760-070 (2) be amended to include testing of all students enrolled in Washington schools for color blindness.

Color blindness is more common than most people realize. One out every 12 boys is colorblind. One out of every 200 girls is colorblind. In a classroom of 24 students, on average one student will be colorblind. This means that most classrooms in our state have a colorblind student.

From pie charts that have different colors to red ink that indicates a wrong answer, visual cues are critical in learning. Too many students don't learn that they are colorblind until later in life. And too few teachers realize that students in their classroom may not be able to distinguish what they are trying to teach.

All schools are required to test the vision of their students in Washington State. Adding a test for color blindness is cheap and can be done quickly. It takes relatively little time to ask a student to find the number or shape in a picture of colored dots. The impact on students who don't know they are colorblind could be quite large. It will aid in their ability to learn in the classroom and to understand why kids might make fun of them for not coloring something correctly.

I respectfully submit the request to have the State of Washington join the 11 other states that mandate the testing of color blindness in school children.

Sincerely,

A handwritten signature in black ink that reads "John Strick". The signature is written in a cursive style with a large initial "J".



# Washington State Board of Health

Rulemaking Petition, Visual Screening Standards in Schools,  
Chapter 246-760 WAC

January 10, 2024

**Molly Dinardo, MPH (she/her)**

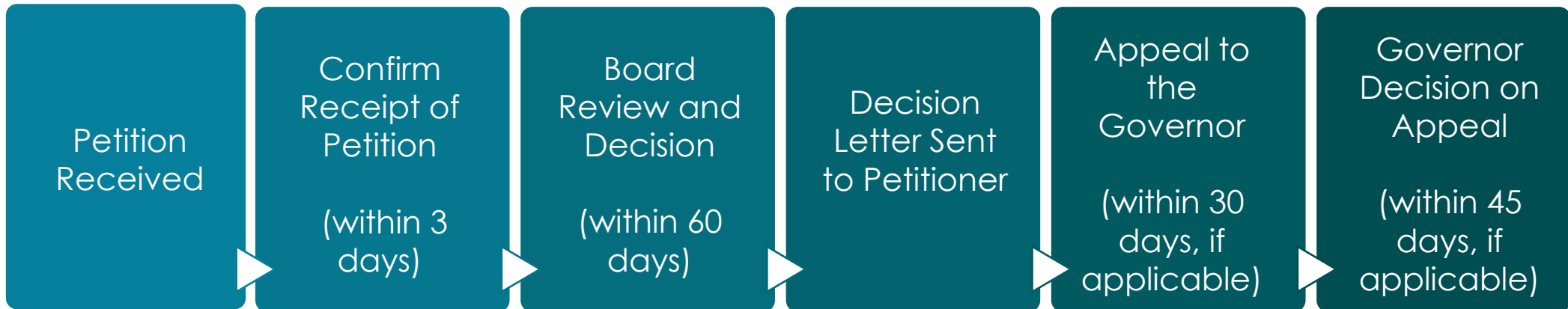
Health Policy Advisor



# Background

Under the Administrative Procedures Act (RCW 34.05.330), any person may petition a state agency to adopt, repeal, or amend any rule within its authority.

## Overview of the Board's Petition Process:



# Petition Request

- On November 8, 2024, the Board received a petition for rulemaking to amend its school vision screening standards (chapter 246-760 WAC).
- The request:
  - Amend WAC 246-760-070 (2) to include screening for color vision deficiency (CVD).
- Petitioner rationale:
  - About 1 in 12 boys and 1 in 200 girls have CVD.
  - Often, children do not learn they have the condition until later in life.
  - The screening test is inexpensive and can be done quickly.
  - 11 other states currently test for CVD.





# Board Authority

- RCW 28A.210.020 requires the Board to define and adopt rules for vision and hearing screenings of children attending schools in Washington.
- Chapter 246-760 WAC outlines the standards for these screenings.
- In 2016, Senate Bill 6245 (Chapter 219, Laws of 2016) amended RCW 28A.210 to require near vision screenings in addition to distance screenings.
- The Board updated the vision screening sections of chapter 246-760 WAC in 2017 to include this new requirement.



# Board Vision Screening Standards

- Screenings occur once per academic year for students in kindergarten through 3 grade and grades 5 and 7.
- Schools are required to use screening tools and procedures that are linguistically, developmentally, and age-appropriate.
- If resources permit, schools may screen students in other grade levels and conduct optional vision screenings using evidence-based tools and techniques.



# Color Vision Deficiency (CVD)

- There are several types of CVD. The most common type is red-green CVD.<sup>1,2</sup>
- CVD typically affects men more than women. People are also more likely to have CVD if they:
  - Have a family history of CVD
  - Have certain eye diseases
  - Have certain health conditions (diabetes, Alzheimer's, multiple sclerosis, leukemia)
  - Take certain medications
- There is no treatment for CVD. Special glasses and contact lenses are available that may help people with certain CVDs.



Full Color Vision



Red-Green CVD (mild)



Red-Green CVD

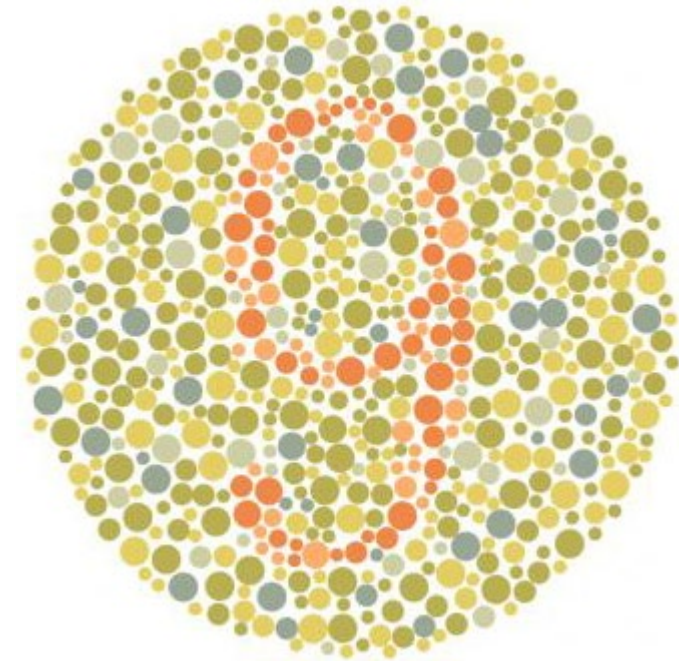


Blue-Yellow CVD

Sources: Image adapted from [ColorPsychology.org](http://ColorPsychology.org) and [Midtown Optometry](http://MidtownOptometry)

# CVD Testing

- Color vision deficiency is usually tested and diagnosed through a comprehensive eye exam.<sup>3,4</sup>
- Color plate testing is the most common type of CVD screening. Different color plates can check for certain types of CVD.
- The most used color plate test is the Ishihara test, but similar tests are available.
- Testing involves showing a person a set of 8 to 38 plates, each with a different number or symbol.<sup>4</sup>



Source: [National Institute of Health](#), [National Eye Institute](#).

# Screening for CVD in School-Aged Children

- Several national organizations have developed policies and guidelines for childhood vision screenings, including: <sup>5,6</sup>
  - American Academy of Ophthalmology (AAO)
  - American Association for Pediatric Ophthalmology and Strabismus (AAPOS)
  - American Academy of Pediatrics (AAP)
  - Prevent Blindness and the National Center for Children's Vision and Eye Health (NCCVEH)
  - United States Preventive Services Task Force (USPSTF)
- Currently, none of these organizations recommend mass screening for CVD in the community or school setting.

“Despite the limited evidence regarding the negative impact of [CVD]...lack of evidence of impact is not evidence of lack of impact. At this time, the gravity of the overall negative impact is unclear and difficult to translate into an effective argument supporting mass population screening of [CVD].”

- Prevent Blindness Position Statement, School-Aged Vision Screening & Eye Health Programs (2015)

# Board Member Discussion

Would the Board consider accepting or denying the petition? Why or why not?

Note: Discussion and justification for the Board's decision will be included in the Board's determination letter to the petitioner.



# Citations

1. National Eye Institute. Color Blindness. Accessed December 22, 2023. Last Updated November 15, 2023. <https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/color-blindness>
2. MedlinePlus Genetics. Color vision deficiency. Accessed December 22, 2023. Last Updated January 1, 2015. <https://medlineplus.gov/genetics/condition/color-vision-deficiency/#inheritance>
3. National Eye Institute. Testing for Color Vision Deficiency. Accessed December 22, 2023. Last Updated August 7, 2023. <https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/color-blindness/testing-color-vision-deficiency>
4. Cleveland Clinic. What To Know About Color Blindness Tests. Accessed December 22, 2023. Last Updated March 17, 2023. <https://my.clevelandclinic.org/health/diagnostics/24845-color-blindness-test>
5. Ambrosino C, Dai X, Antonio Aguirre B, Collins ME. Pediatric and School-Age Vision Screening in the United States: Rationale, Components, and Future Directions. *Children*. 2023;10(3):490. [doi:10.3390/children10030490](https://doi.org/10.3390/children10030490)
6. Wahl MD, Fishman D, Block SS, et al. A Comprehensive Review of State Vision Screening Mandates for Schoolchildren in the United States. *Optom Vis Sci Off Publ Am Acad Optom*. 2021;98(5):490-499. [doi:10.1097/OPX.0000000000001686](https://doi.org/10.1097/OPX.0000000000001686)

# | THANK YOU





## National Guidelines and Policies on Childhood Vision Screenings<sup>i</sup>

1. American Academy of Ophthalmology (AAO). Vision Screening for Infants and Children, Joint Policy Statement with American Association for Pediatric Ophthalmology and Strabismus (AAPOS). Published October 6, 2022. Accessed December 22, 2023. <https://www.aao.org/education/clinical-statement/vision-screening-infants-children-2022>
2. American Academy of Ophthalmology (AAO). Pediatric Eye Evaluations Preferred Practice Pattern, Vision Screening in the Primary Care and Community Setting. Published December 19, 2022. Accessed December 22, 2023. [https://www.aaojournal.org/article/S0161-6420\(22\)00866-1/fulltext](https://www.aaojournal.org/article/S0161-6420(22)00866-1/fulltext)
3. American Academy of Pediatrics (AAP). Recommendations for Preventive Pediatric Health Care. Published April 2023. Accessed December 22, 2023. [https://downloads.aap.org/AAP/PDF/periodicity\\_schedule.pdf](https://downloads.aap.org/AAP/PDF/periodicity_schedule.pdf)
4. American Association for Pediatric Ophthalmology and Strabismus (AAPOS). Vision Screening Recommendations. No Publication Date Available. Accessed December 22, 2023. <https://aapos.org/members/vision-screening-guidelines>
5. National Association of School Nurses. Health and Practice Topics | Vision and Eye Health. Page Last Updated February 2022. Accessed December 22, 2023. <https://www.nasn.org/nasn-resources/resources-by-topic/vision-health>
6. National Center for Children's Vision and Eye Health. Vision Screening Guidelines by Age. Published November 30, 2023. Accessed December 20, 2023. <https://nationalcenter.preventblindness.org/vision-screening-guidelines-by-age/>
7. Prevent Blindness. Position Statement on School-Aged Vision Screening and Eye Health Programs. Published August 5, 2015. Accessed December 20, 2023. <https://preventblindness.org/wp-content/uploads/2011/06/Prevent-Blindness-Statements-on-School-aged-Vision-Screening-Approved-8-2015.pdf>
8. United States Preventive Services Task Force (USPSTF). Final Recommendation Statement Vision in Children Ages 6 Months to 6 Years: Screening. Published September 5, 2017. Accessed December 20, 2023. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/vision-in-children-ages-6-months-to-5-years-screening#fullrecommendationstart>

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<sup>i</sup> Please note this is not meant to be an exhaustive list of all available national childhood vision screening guidelines and policy statements.

## **RCW 28A.210.020**

### **Visual and auditory screening of pupils—Rules.**

Every board of school directors shall have the power, and it shall be its duty to provide for and require screening for the visual and auditory acuity of all children attending schools in their districts to ascertain which if any of such children have defects sufficient to retard them in their studies. Visual screening shall include both distance and near vision screening. Auditory and visual screening shall be made in accordance with procedures and standards adopted by rule of the state board of health. Prior to the adoption or revision of such rules the state board of health shall seek the recommendations of the superintendent of public instruction regarding the administration of visual and auditory screening and the qualifications of persons competent to administer such screening. Persons performing visual screening may include, but are not limited to, ophthalmologists, optometrists, or opticians who donate their professional services to schools or school districts. If a vision professional who donates his or her services identifies a vision defect sufficient to affect a student's learning, the vision professional must notify the school nurse and/or the school principal in writing and may not contact the student's parents or guardians directly. A school official shall inform parents or guardians of students in writing that a visual examination was recommended, but may not communicate the name or contact information of the vision professional conducting the screening.

[ **2016 c 219 § 1; 2009 c 556 § 18; 1971 c 32 § 2; 1969 ex.s. c 223 § 28A.31.030.**

Prior: **1941 c 202 § 1**; Rem. Supp. 1941 § 4689-1. Formerly

RCW **28A.31.030, 28.31.030.**]

## Washington State Board of Health Policy & Procedure

<b>Policy Number:</b>	<b>2005-001</b>
<b>Subject:</b>	<b>Responding to Petitions for Rule-Making</b>
<b>Approved Date:</b>	<b>November 9, 2005 (revised August 13, 2014)</b>

### Policy Statement

RCW 34.05.330 allows any person to petition a state agency to adopt, repeal, or amend any rule within its authority. Agencies have 60 days to respond. The agency can deny the request—explaining its reasons and, if appropriate, describing alternative steps it is prepared to take—or it must initiate rule-making. If a petition to repeal or amend a rule is denied, a petitioner can appeal the agency’s decision to the Governor.

This policy defines who must be notified and consulted when the Board is petitioned, who may respond on behalf of the Board, and whether Board action is required.

- **Board Response:** When the Board receives a written petition for rule-making within its authority that clearly expresses the change or changes requested, the Board will respond within 60 days of receipt of the petition. The response will be made at the direction of the Board. The response will be in the form of a letter from the Chair denying the petition or informing the petitioner the Executive Director has been directed to initiate rule-making.
- **Consideration of the Petition:** The Chair may place a petition for rule-making on the agenda for a Board meeting scheduled to be held within 60 days of receipt of the petition. Alternatively, if the Board does not have a regular meeting scheduled within 60 days of receipt of the petition, or if hearing the petition at the next regular meeting would defer more pressing matters, the Chair shall call a special meeting of the Board to consider the petition for rulemaking.

### Procedure

- **Notifications:** Board staff, in consultation with the Executive Director, will respond to the petitioner within three business days acknowledging receipt of the petition and informing the petitioner whether the request is clear. The Executive Director or staff will notify Board members that a petition for rule-making has been received and will be brought to the Board for consideration at the next regularly scheduled board meeting or will be considered at a special meeting. If

no regular meeting is scheduled before the 60-day response deadline, or if the agenda for the regular meeting cannot accommodate the petition, the Executive Director will notify the Chair of the need to schedule a special board meeting for the purposes of considering the petition. Upon Board action on the petition, the Executive Director shall assure Board members receive electronic copies of the final petition response.

- **Appeals:** If a petitioner appeals the Board's decision to deny a petition to the Governor, the Executive Director will inform the Board of the Governor's action on the appeal at the next scheduled Board meeting.
- **Consultation:** The Executive Director and Board staff will gather background information for the Board's use when it considers the petition. In this regard, the Executive Director will consult with the Board member who sponsored the most recent revisions to the rule being challenged or the appropriate policy committee. The Executive Director may also consult with appropriate representatives of the implementing agency or agencies, and may consult with stakeholders as appropriate.

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Michelle Davis, Executive Director

**Subject:** Draft Statement of the Board on Possible 2024 Legislative Issues

## Background and Summary:

Washington State Board of Health (Board) Policy 2001-001 creates a procedure for monitoring proposed policy and budget issues during legislative session. It also establishes processes for communication between Board Members and the Legislature. The policy calls for the creation of a Board policy statement that guides staff activities and individual Board Members as issues arise during the legislative session.

At our November meeting, I provided Members with a copy of the “Statement of the Board on Possible Legislative Issues 2021-2023 Biennium” and requested suggestions for this year’s statement. Since then, I consulted with staff and drafted the attached statement, based on information that we have regarding public health system priorities and Board Member feedback.

I am asking for your consideration and adoption of the 2024 Statement of Policy on Possible Legislative issues. If adopted by the Board, this document will guide staff during the 2024 legislative session, which convened on January 8, 2024.

## Recommended Board Actions:

The Board may wish to consider, or amend as needed, the following motion:  
The Board adopts the Statement of Policy on Possible 2024 Legislative Issues as discussed on January 10, 2024.

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). TTY users can dial 711.

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## Statement of the Board on Possible Legislative Issues 2023-2025 Biennium

It is the policy (Policy 01-001) of the Washington State Board of Health (Board) to comment on legislative proposals that affect the Board's:

- [Statutory authority](#) and rules,
- [2022 State Health Report Recommendations](#), and
- [2017-2022 strategic plan](#) activities

This statement represents the Sense of the Board and is used to guide staff and Board members in their communications on legislative and budget proposals. The statement is not intended to be an exhaustive list of anticipated legislative topics but is focused on priority issues.

### Foundational Public Health Services

The Board believes that [Public Health is Essential](#) and supports the [recommendations](#) developed by the Foundational Public Health Services (FPHS) Policy Workgroup to modernize the public health system and provide state funding to the governmental public health system for the delivery of FPHS, so services are available in every community. The governmental public health system must be able to monitor health, focus on prevention, assure health for all, and be capable of an all-hazards response. Providing ongoing sustained resources to the governmental health system is critical in order to address inequities, innovate, and modernize. This includes increasing the Board's capacity to meet its statutory obligations under chapter 43.20 RCW and other state laws.

The Board believes it is critical for the state to provide adequate, dedicated, stable funding for full implementation of FPHS statewide that keeps pace with inflation and demand for services. The Board ~~supports the Governor's proposed 2023-25 budget, which builds upon the current investment in FPHS by \$100 million~~[supports continuation of FPHS funding to the governmental public health system](#). The Board **opposes** reductions to funding for the governmental public health system, including changes in fee authority or reductions to funding sources such as the [Model Toxics Control Act](#).

### Local Health Officer Authority

Washington's COVID-19 pandemic response has shown the critical importance of assuring our public health partners have evidence-based knowledge and resources to quickly identify and respond to disease outbreaks and other health threats. Much of the ability to respond to outbreaks and other public health threats in communities falls under the local health officer's authority. The local health officer is appointed by a county's local board of health. Local boards of health, local health administrators, and officers have a statutory duty to carry out the state's public health laws and rules. Public health

response should not be partisan or politicized. The Board **opposes** legislation that diminishes local health officer duties or authorities.

#### Advancing Health Justice and Equity in State Government

The Board recognizes that racism ~~is a public health crisis~~ is embedded within the health care delivery and public health system. Racism and other forms of discrimination have been and continue to be institutionalized and perpetuated through policies and practices that prevent meaningful community engagement and limit opportunity and access to important public services. Health inequities cannot be eliminated without addressing structural and institutional racism in these systems. The Board supports legislation that is anti-racist and prioritizes and operationalizes health justice and equity across state government.

The Board supports the Governor's Interagency Council on Health Disparities' (Council's) efforts to use a health justice framework to advance enduring health equity and social justice. Health justice centers the following principles: racial equity; collaboration across areas of study and work; upstream interventions that address root causes of inequities and injustice; adaptability; advocacy for systems change; and community-based strategies that uphold community power. Since 2006, the Council has heard from its advisory committees and members of the public, particularly communities most impacted by inequities, that the state needs to address structural and institutional inequities in our state system as a key strategy for eliminating health inequities. Therefore, the Board supports the Council's legislative proposal to update the Council's name, membership, duties, and authority in RCW 43.20 and related laws. The Board also supports the Council's decision package for increased, ongoing funding (General Funds-State) in the state's operating budget. These funds would support the Council's operations; enable enhancement of community/partner engagement, communications, and collaboration; and provide language assistance services and community compensation.

~~Furthermore, as part of its five year strategic plan, the Board commits to supporting the Governor's Interagency Council on Health Disparities (Council) and incorporating the Council's recommendations in the Board's State Health Report.~~

The Board supports systemic efforts to remove barriers to participation and promote inclusion and civic participation for historically marginalized communities and communities most impacted by policy decisions. One recent example includes legislation (2SSB 5793 – Chapter 245, Laws of 2022) allowing state agencies to compensate community members with lived experience or low income for participating in certain workgroups or Technical Advisory Committees. The Board supports proposals that improve mechanisms and resources for ~~include community members directly impacted by policies in relevant policy discussions, compensating them~~ community members and organizations for their time, effort, and expertise ~~and remove financial barriers so they can participate~~. The Board also supports proposals that improve coordination and resources for language assistance services, so community members

**Commented [MD1]:** Updated this section to reflect Council health justice framework, and their legislative proposal. Included support for community compensation, language access, honoraria for Tribal participation in policy development. Removed reference to Strategic plan.

**Commented [MD2]:** Member Hayes recommends substituting "racism as a public health crisis" with an recognition that it is embedded within the health care delivery and public health system.

**Commented [MD3]:** Deleting this text as it is not relevant to legislative activities.



[can better access resources, including public health services, and participate in policy development.](#)

[-The Board recognizes that interaction with Tribes, as sovereign nations, and Tribal members requires processes and resources that are unique and distinct from community engagement. The Board supports proposals that would remove barriers and enhance resources/mechanisms for compensation of Tribal participation in Washington state government policy development and other efforts \(e.g., honoraria\).](#)

Through a proviso in the 2019-2021 operating budget, the Legislature directed the Council to convene an Office of Equity Task Force to develop an operations plan for a future Washington State Office of Equity. In 2020, the Board endorsed the Task Force's recommendations as well as legislation that created the Washington State Office of Equity. The Board supports legislative proposals that align with the Task Force's recommendations, including proposals that assure ongoing and adequate funding for the Office of Equity.

#### [Data Disaggregation](#)

Disaggregated data can reveal inequities across and within groups and are instrumental for public health efforts to prevent and control diseases and conditions. However, demographic data collection in Washington is currently decentralized and inconsistent, as agencies often must work within the parameters of outdated federal data standards. Collecting data in greater detail is essential to identifying and eliminating health inequities, undoing institutional racism, and advancing equity within public health and the broader governmental system.

Collecting and analyzing disaggregated data helps the governmental public health system identify and address health inequities and [can help policy makers prioritize resources for communities.](#) The COVID-19 pandemic shed light on the systemic and structural inequities in the healthcare and public health systems. Collection and use of disaggregated data was, and continues to be, vital to identifying impacted populations. Together, disaggregated data and qualitative data—stories from disproportionately impacted communities—support effective public health responses, including partnering with communities on outreach, prevention, and access to care. Without these data, the public health system cannot effectively and equitably respond to a public health crisis.

[The National Academies released recommendations to improve health equity in federal policy-making, including recommendations related to advancing data sovereignty and disaggregating race/ethnicity data.](#) The Board supports legislation that aligns with these federal recommendations and legislative action to ensure the collection of disaggregated race/ethnicity and language data, beyond Census-level categories. The Board also supports the collection of data variables that help in identifying and eliminating health inequities. Examples of these types of variables include but are not limited to housing status, Veteran status, sexual orientation, gender, gender identity, occupation, income, and disability status. [If collected transparently, consistently, and](#)

**Commented [MD4]:** Added National Academies recommendations, and clarifying edits regarding data collection.

**Commented [MD5]:** Member Oshiro recommended emphasizing data disaggregation for policy makers to make better informed decisions regarding disparities within communities. Governmental public health system includes SBOH, DOH, Local health jurisdictions (including local boards of health), as well as Washington's federally recognized tribes and tribal health centers.

through individual self-report, ~~Variables these variables such as these~~ can provide insight into the social ~~and political~~ determinants of health and equity while respecting an individual's autonomy. The Board also supports legislation that improves how data link up and work together across public health and health care systems, to enable more meaningful collection, analysis, and use of these data ~~to improve the interoperability of public health and health care data systems to ensure functionality to facilitate the collection and meaningful use of these data.~~

**Commented [MD6]:** Member Hayes recommends striking political, until this term becomes more mainstream.

Health and wellness of people who are pregnant or postpartum and their children  
The Board supports enhancing systems and support for people who are pregnant or postpartum, infants, and children, and the monitoring of mortality due to pregnancy-related conditions. The Board recognizes that institutional racism contributes to high rates of mortality ~~preventable pregnancy-related deaths, and barriers to accessing reproductive and perinatal health care in Washington due to pregnancy related conditions.~~

**Commented [MD7]:** Added additional detail re: DOH MMRP, and AIHC addendum.

In alignment with this recognition, The Board supports the recommendations in the Council's Literature Review on Inequities in Reproductive Health Access, as required by SSB 6219 (2018) ~~the Board supports recommendations in the Department of Health's 2023 Maternal Mortality Review Panel Report (MMRP), and Healthy Pregnancy Advisory Committee Report on Strategies for Improving Maternal and Infant Health Outcomes. The Board also supports the Tribal and Urban Indian Leadership recommendations from the American Indian Health Commission (AIHC) addendum in the MMRP report, which underscore the importance of Tribally led and informed solutions to maternal and pregnant person health.~~

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Additionally, the Board supports recommendations in the Council's Literature Review on Inequities in Reproductive Health Access, as required by SSB 6219 (2018). The Board also supports the Council's position (adopted September 2022) to use a Reproductive Justice framework when considering and addressing inequities in health and access ~~and recognizes that a legal right to abortion and other~~ reproductive health care services ~~is critical~~. A Reproductive Justice framework expands beyond personal choice, focusing on access to services and emphasizing the human right to maintain personal bodily autonomy, the autonomous right to have children, not have children, and raise the children we have in safe and sustainable communities. The Board shares the Council's commitment to understanding how racialized power systems limit access to health and opportunity and commits to centering racial justice in our work and consideration of proposed legislation-

The Board also supports the recommendations in the Department of Health's Healthy Pregnancy Advisory Committee Report on Strategies for Improving Maternal and Infant Health Outcomes.

**Commented [MD8]:** These recommendations are replaced with the more recent Maternal Mortality Review Panel Report.

### Newborn Screening

The Board has the authority to define and adopt rules for newborn screening in Washington. The rules ~~is~~ includes the list of conditions the Department of Health's Newborn Screening program must screen all newborns for. ~~If the Board adds a new condition, the~~ ~~Once the~~ Department must assess the programmatic and fiscal impacts to the current program. The Washington Health Care Authority's Medicaid Program covers about forty percent of births in Washington. The addition of new conditions may require the Department and Health Care Authority to request an increase in the newborn screening fee to cover the costs of new screening tests, staff time and follow-up services for babies with positive screens, and other programmatic and administrative costs. The Board supports funding requests to increase the newborn screening fee to cover the costs associated with new conditions.

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Commented [MD9]: Staff recommend having this language in event funding needs are identified during legislative session.

Commented [MD10]: Recommend support of EJ Council's funding request.

### Healthy Environment for All (HEAL) Act

The Board agrees with the Environmental Justice (EJ) Task Force's statement that "Washington cannot achieve equity without [environmental justice]" and that "[t]he pathway to reaching an equitable Washington is only possible through ongoing anti-racism, environmental conservation, public health, and community engagement work." In 2021, the Legislature passed the Healthy Environment for All (HEAL) Act. The HEAL Act created the Environmental Justice Council and created obligations for seven state agencies to integrate environmental justice into agency decision-making, policy, and practice, as well as specific provisions to update and maintain the Washington Tracking Network's Environmental Health Disparities Map. Other agencies may opt-in to the obligations. Three agencies, including the Board, have opted to join in a "Listen and Learn" capacity and are participating in meetings of the Environmental Justice Council and implementing HEAL Act requirements as resources allow. The Board supports ongoing and increased funding to support implementation of the HEAL Act and additional environmental justice efforts across state agencies, including the [Environmental Justice Council's decision package for increased funding to support the EJ Council's operations](#).

Commented [MD11]: This section updated to reflect current staffing.

### Health Impact Reviews

Under RCW 43.20.285 the Board conducts [Health Impact Reviews](#) (HIRs) at the request of the Governor or a legislator. HIRs are objective, non-partisan, evidence-based analyses of proposed legislative or budgetary changes to determine the potential impacts on health and equity. The Board receives funding for 1.6 FTE through the Foundational Public Health Services budget, which contributes 2.6 FTE total to conduct HIRs. HIRs improve the state's ability to use evidence to inform policy and to promote health and equity. While the Board supports additional state and legislative efforts to assess equity impacts of legislative proposals, the Board recognizes the unique value that HIRs add to legislative decision-making. The rigorous HIR research approach, which uses both quantitative and qualitative research, as well as lived experience, provides legislators with a nuanced understanding of how proposed policy may impact the status quo and health and equity in the state. The Board supports the retention of

HIRs and will continue to offer assistance and support to ensure any new proposed tools align with and do not duplicate the work of HIRs.

The Board supports legislative action to ensure long-term, sustainable solutions to obtain peer-reviewed literature access for HIR work. The Board believes that there is also a need for all state entities (agencies, boards, commissions, councils, etc.) to have access to research and published literature to inform evidence-based policy and program development.

### School Environmental Health and Safety

The Board believes that all children should be able to attend schools that are built, maintained, and operated to ensure a safe and healthy environment. The Board supports removal or amendment of the budget proviso that suspends the Board's rules related to environmental health and safety standards for primary and secondary schools (Chapter 246-366A WAC). Until the Board's suspended school rules can be implemented, the Board supports the Department of Health's [November 2016](#) recommendations in response to the Governor's directive on lead as they relate to school environmental health and safety.

**Commented [MD12]:** Amended this section to reflect EJ Council recommendations. Board members perhaps the first paragraph should focus on a path forward to have modern basic health and safety standards.

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The Board has long recognized that ongoing, regular inspections and technical assistance provided by local health jurisdictions are critical to ensuring schools are designed, built, and maintained to protect students' health. Only eighteen of Washington's thirty-five local health jurisdictions have school environmental health and safety programs. In order to provide basic health and safety protections for all school children across the state, local health jurisdictions must have sufficient resources and capacity to conduct school environmental health and safety inspections.

Indoor air quality is a key component of a healthy school environment. Higher ventilation rates can improve absenteeism and student performance, as well as reduce transmission and spread of respiratory illness, including SARS-CoV-2 (the virus that causes COVID-19). Indoor air quality can also be adversely impact by increased wildfire and extreme weather events. Regular inspection, maintenance, and repairs of heating, ventilation, and air conditioning (HVAC) systems, as well as adequate ventilation to dilute contaminants, can improve indoor air quality and school safety.

The Board supports the Environment Justice Council's 2024 Climate Commitment Act funding recommendations that relate to school environmental justice, as well as proposals legislation to adequately fund school repair and remediation strategies to improve school environmental health and safety programs, and -as well as- legislation to assess, improve, and update ventilation systems and other infrastructure strategies to improve health, safety, and indoor air quality in school facilities.

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### On-Site Sewage Systems

The Board recognizes that on-site sewage systems are an important and effective means of treating and dispersing effluent if the systems are properly permitted, sited, operated, and maintained. The Board supports legislation that preserves the authority of local health officers and boards of health to develop and implement on-site sewage system regulations and plans which protect public health and meet community needs. The Board supports efforts to assure local on-site site sewage management programs have adequate capacity and funding, including assessment of local septage handling and capacity.

**Commented [MD13]:** Updated to include septage capacity assessment (WSAC).

### Food Safety

The Board recognizes that food service is evolving. The COVID-19 pandemic has, and continues to have, major impacts on food service and has prompted creative ideas to improve food access and equitable entry into the restaurant industry. This session, the Board anticipates legislation on topics including microenterprise or commercial kitchens, community pantries and/or refrigerators, foods offered in bed and breakfast settings, and regulations of non-permanent structures. The Board's support of food service-related legislation depends on whether the proposal includes critical public health safeguards that uphold essential food safety standards (including but not limited to permitting, inspections, plan review, time to temperature controls, and other public health measures).

### Food Safety

The Board would oppose legislation that would exempt currently unregulated practices such as microenterprise home kitchens from fundamental environmental health and safety requirements for food service facilities.

### Aquatic and Water Recreation Facilities

The Board recognizes that drowning is the leading cause of death for children ages 1-4 years and a significant source of morbidity in children under 19 years. State and local regulations on aquatic facilities, water recreation facilities, and designated swim areas are necessary and important to protect the health, safety, and welfare of those who use them. The Board supports legislation that aims to prevent injury, illness, and death at facilities such as swimming pools, hot tubs, splash pads, water parks, natural designated swim areas, and more.

### Shellfish Sanitation

The Board recognizes that sanitary controls are essential for the safe production, harvest, processing, and marketing of shellfish. Historically, the Board's rulemaking authority and the Department of Health's regulatory authority have focused on the commercial and recreational harvest of bivalve molluscan shellfish such as clams, oysters, mussels, and geoduck. The Board supports legislation that preserves and strengthens sanitary controls for molluscan shellfish. The Board and its partners have observed shifting needs related to climate change, marine biotoxins, and other shellfish,

**Commented [MD14]:** Adds clarification regarding wSHB 1010, and refers to HIR.

such as crab. In 2021, 2022, and 2023, bills were proposed, but did not pass, that would amend chapter 69.30 RCW, Sanitary Control of Shellfish. The proposed bills would allow the Board to conduct rulemaking to establish sanitary controls for commercial crab harvesting and processing and grant the Department of Health authority to regulate commercial crab as it pertains to marine biotoxins such as domoic acid and paralytic shellfish poisoning. The 2023 bill will again be considered in the 2024 Legislative Session and the Board supports its passage. The Board has completed an HIR on SHB 1010.

### Drinking Water

The Board recognizes that safe, reliable drinking water systems and drinking water supplies are essential for public health protection and community well-being. The Board's Group A rules cover the state's largest public water systems, and its Group B rules apply to public systems that generally serve fewer than fifteen connections. The Board supports budget and policy proposals that strengthen implementation of these rules, drinking water infrastructure, and source water protection. ~~In the 2023 Legislative Session, the Board anticipates and supports policy and funding proposals to:~~

- ~~• Develop programs to support public water system compliance and assist counties and others with failing water systems that fall into receivership and threaten community access to safe drinking water;~~
- ~~• Find alternate drinking water sources and solutions for communities on wells and small water systems with contaminated drinking water sources; and~~
- ~~• Secure adequate state funding to match federal funding in the Bipartisan Infrastructure Law to support implementation of Board rules and Safe Drinking Water Act compliance.~~

### Governor's Directive on Lead and Childhood Lead Poisoning Prevention

Governor Inslee issued Directive 16-06 on May 2, 2016, to address lead remediation in the built environment. Environmental pathways for lead exposure include drinking water at homes, schools, and outdoor areas.

The Board continues to support the Department of Health's November 2016 report recommendations to the Governor, including continuing the initial investment made to test drinking water at schools, provide remediation funds to replace fixtures, improve remediation assistance for low-income and rental properties, and provide focused blood testing for children at greatest risk of exposure to lead and subsequent case management. The Board was pleased with the passage of E2SHB 1139 during the 2021 legislative session, which requires lead testing and remediation in school drinking water. The Board also supports:

- Updating the *Health and Safety Guide for K–12 Schools in Washington State*.
- Gathering data to evaluate and update chapter 246-366A WAC, Environmental Health and Safety Standards for Primary and Secondary Schools, including

**Commented [MD15]:** Staff recommend simplifying this section.

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**Commented [MD16]:** Added Childhood lead poisoning, and information related to the Department's recent presentation on lead.

updates to align with E2SHB 1139 and recent revisions made to the federal lead and copper rules.

- Including environmental health and safety in decisions using the funding formula for school construction and modernization.
- Encouraging healthcare providers to follow DOH blood lead screening recommendations.
- Ongoing efforts to establish or improve existing data sharing agreements between the Department, Health Care Authority, and other public health agencies to access lead testing rates and related information for children enrolled in Medicaid.
- Updating the Washington State Plan Amendment (SPA) to add two new billable service areas (for home lead exposure assessments and targeted case management) and the upcoming implementation of the Interagency Agreement (IAA) to allow the Department to receive Medicaid Administrative Match.

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### Preventing Smoking and Vaping

Commented [MD17]: Updated to reflect 2023 legislation.

In August 2016, the Board adopted [Resolution 2016-01](#) to increase the age of purchase for tobacco and vapor products from age 18 to 21 years. During the 2019 legislative session, EHB 1074 passed, raising the legal age for purchasing tobacco and vapor products from age 18 to 21 years. While EHB 1074 was an essential important public health intervention step to prevent youth access, Washington's Purchase Use and Possession (PUP) law needed further reform to prevent -still needs to reform its commercial tobacco laws, policies inequitable, and enforcement practices that negatively affect individuals, namely youth, specifically youth of color, and instead, shift the responsibility to commercial tobacco businesses or industry actors.

During the 2023 Legislative Session, ESSB 5365 passed, which increased monetary penalties for retailers that sell to underage youth, limited the circumstances in which youth could be detained, and modified sanctions and fines for underage youth purchase, use, or possession of commercial tobacco products. -which- The Board supports legislation that continues to improve PUP laws in Washington and reduces inequitable enforcement.

In addition, the Board supports enhancing current strategies to prevent the marketing, sales, and use of commercial tobacco products (cigarettes, e-cigarettes, cigars, hookah, heated tobacco, smokeless tobacco, etc.) and cannabis to youth, which may include including a ban on all restricting the sale of -flavored vapor and tobacco products and adding additional authority for the Secretary of Health to issue product bans and recalls of smoking and vapor products. The Board supports legislation that would improve regulation of Washington's vapor product industry, including requiring vapor ingredient disclosure and routine lab testing for vapor products, requiring signage regarding health risks of these products, removing the preemption of vapor product retail licensing, allowing for product bans and recalls, and instituting nicotine limits in products sold in Washington.

In response to an outbreak of e-cigarette and vapor product-associated lung injury, the Board adopted rules to ban the use of vitamin E acetate in vapor products. Compounds, such as Delta-8 THC, and other additives, continue to emerge on the market with little known about their impacts on health. The Board supports efforts to understand and address emerging compounds that result in negative health effects.

### Oral Health

The Board acknowledges that expanded access to oral health care improves health outcomes because dental care is inextricably linked to whole-body health. In 2015, the Board adopted 7 recommended oral strategies after a collaborative multi-year project to assess the oral health needs of Washingtonians. The Board supports legislation that will advance its -Recommended Strategies to Improve the Oral Health of Washington Residents. In 2022, the Legislature tasked the Department with assessing oral health equity in the state (ESSB 5693), focusing on community water fluoridation. The Board supports recommendations in the Oral Health Equity Assessment report to reduce oral health inequities in Washington. In addition, the Board would also support the development of a state oral health officer at the Department of Health.

**Commented [MD18]:** Updated to reflect recent Department of Health work related to oral health in Washington.

### Immunizations

The Board recognizes the research and data that demonstrate that immunizations reduce the incidence of vaccine-preventable disease in our community and protect those who are immunocompromised and those unable to be vaccinated. The Board supports legislation that helps reduce the number of children who are out of compliance with state immunization documentation requirements, assists schools and childcares in monitoring the immunization status of children, and increases immunization rates across all age groups. The Board supports additional funding to increase school nurse capacity and improve access to and use of the Washington State Immunization Information System.

The Board also supports the Department of Health's efforts to promote vaccination against ~~COVID-19~~ respiratory viruses such as COVID-19 and RSV by making these vaccines accessible through the Washington Vaccine Association (WVA).

### Obesity Prevention and Access to Healthy Food

The rate of increase in obesity among Washington residents has slowed compared to other states. The Board supports efforts to create equitable access to safe, well-lit public spaces that promote movement, including parks and playgrounds. The Board supports efforts to increase access to healthy foods including fresh fruits and vegetables, maintaining and expanding access to programs such as WIC, WIC/SNAP at farmers markets, USDA's school lunch program, and efforts to increase access to culturally relevant foods, reduce food insecurity, and increase opportunities for physical activity.



The Board also supports maintaining funding for the Fruit and Vegetable Incentive Program, which provides incentives to people with low incomes experiencing food insecurity to support healthy food options.

### Opioids

The Board supports the goals, strategies, and actions outlined in the updated [2021-2022 Opioid and Overdose Response Plan](#) and the forthcoming updated plan, to effectively combat the opioid epidemic. Its goals are to:

- Prevent opioid and other drug misuse.
- Identify and treat opioid misuse and stimulant use disorder.
- Ensure and improve the health and wellness of people who use opioids and other drugs
- Use data and information to detect opioid misuse, monitor health effects for persons who use drugs, analyze population health, and evaluate interventions.
- Support people in recovery.

◆ [The Board also supports recommendations from the Washington State Tribal Opioid and Fentanyl Summit. In addition, the Board supports Governor Inslee's updated budget strategy, as outlined in the 24-25 proposed supplemental budget, to expand funding for opioid and fentanyl education and awareness, health engagement hubs, low-barrier opioid treatment programs, overdose prevention efforts, and for Tribal governments to support response efforts to the opioid and fentanyl crisis in their communities.](#)

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Commented [MD19]: Recommended by Member Hayes

Commented [MD20]: Member Oshiro recommendation to call out alignment with Governor's proposed strategy.

### Increase Access to Health Insurance Coverage

A number of efforts have increased access to affordable health insurance for people in Washington, including federal initiatives like the Affordable Care Act, Medicaid expansion, and American Rescue Plan Act, and state initiatives like Cascade Care. Access to health insurance increases access to and use of healthcare services and improves health outcomes. In 2021, the legislature passed supplemental legislation to further increase the affordability and availability of Cascade Care. This included a new premium and cost-sharing subsidy program administered by the state. ~~Coupled with expanded federal subsidies, some people will be able to enroll in a plan with premiums under \$10/month for the 2023 plan year. Starting in 2023, people will be able to sign up for health and dental plans on Washington Healthplanfinder. The legislature also took action to explore options for extending health insurance access regardless of immigration status. With the end of the federal COVID-19 Public Health Emergency, approximately 13% of Medicaid enrollees (300,000 people) in Washington may lose healthcare coverage, making access to affordable health insurance critical. Despite these efforts, the average health insurance premium doubled from 2014 to 2024. State agencies and partners continue to consider policies to make healthcare more affordable in Washington State.~~ The Board supports legislation that continues to build and sustain

Commented [MD21]: Updated to reflect recent changes to Healthplanfinder.

access to affordable health coverage across the state for all Washingtonians and legislation that alleviates cost concerns ~~of those who are underinsured.~~

### Mental Health Services

The Board recognizes the disparate access to consistent and culturally appropriate mental health services in the state, particularly for historically marginalized communities and communities that have been disproportionately impacted by the COVID-19 pandemic. In recent years, there have been efforts to increase access to video and audio platforms that provide mental health services. The Board supports continued efforts to increase access to these and other mental health services across our communities.

The Board also recognizes the workforce challenges that plague the mental healthcare system. New provider types such as certified peer counselors have expanded capacity for support services, but gaps still exist. Additionally, studies continually show that there are public health benefits to providers reflecting the racial/ethnic diversity of their patients, by increasing trust, participation in care, and an increase in patient comfort. The Board supports efforts to increase and diversify the mental health workforce in Washington. The COVID-19 pandemic has had a profound impact on youth and families and exacerbated the need for access to age-appropriate services, especially in schools. During the 2023 session, the legislature revised certain education, training, experience, and exam requirements for behavioral health profession licensure (2SHB 1724) to address workforce barriers and support more behavioral health professionals practicing in Washington State. The Board supports efforts to make mental health services readily available to youth in Washington and increase social and emotional supports in schools.

Additionally, the Board recognizes the impacts of historical and intergenerational trauma and the disproportionate effects it has on the mental health of Native communities. As such, the Board supports legislation related to supporting Tribal-led and informed mental health and behavioral health services in Washington. Further, in the current Washington state mental and behavioral health systems, the role of Tribal sovereignty and recognition of the Indian health system are often overlooked. The Board supports legislation to clarify the role and authority of Tribal governments to improve the Washington state behavioral health system for better coordination and recognition with the Indian behavioral health system.

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**Commented [MD22]:** This section (second paragraph) updated to reflect 2023 legislative action.

**Commented [MD23]:** Added in response to Member Hayes request and staff conversation with AIHC

**Washington State Board of Health  
Policy & Procedure**

<b>Policy Number:</b>	<b>2001-001</b>
<b>Subject:</b>	<b>Monitoring and Communicating With the Legislature About Legislation Relevant to the State Board of Health</b>
<b>Approved Date:</b>	<b>January 10, 2001 (Revised June 13, 2012)</b>

**Policy Statement**

The Washington State Board of Health monitors and communicates with the Legislature on proposed legislation that:

- Has a direct impact on the Board’s statutory powers and duties;
- Runs counter to the Board’s intent or direction as stated in existing rule;
- Is directly related to priorities established by the Board each biennium, supported by a Board-approved strategic plan, work plan, interim document, or final report;
- Is directly related to a policy issue addressed in the Board’s “Statement on Likely Legislative Issues.”
- May adversely impact the public health system.

**Procedure**

Prior to each legislative session, Board staff, under the direction of the Executive Director, will identify policy issues that are likely to come before the Legislature that have any bearing on the Board’s broad statutory authority, its rule making activities, or its priorities. The Executive Director will present a list of these issues to the Board for discussion at a meeting prior to legislative session. The Board may choose to adopt a “Statement on Likely Legislative Issues” that reflects the Board’s position on those issues.

During legislative session, Board staff will routinely review legislative bill introductions, committee agendas, and monitor legislative meetings. The Executive Director will provide regular legislative updates to Board members, which may include: upcoming hearings or work sessions, staff activities, bill summaries and recommendations, and budget information.

**Action on Bills of Interest**

Board staff, in consultation with the Executive Director, shall prepare a summary of concerns, draft messages, and suggested technical solutions for the Chair’s approval that Board members or staff may use to communicate the Board’s position to a bill’s sponsor, appropriate committee chairs, other legislators, and legislative staff.

The Executive Director and the Board Chair or his or her designee must review and approve all correspondence to legislators and legislative staff that conveys the Board's position on legislation or other issues before the Legislature. The correspondence should routinely be copied and sent to the Office of the Secretary – Policy, Legislative, and Constituent Relations.

### **Responsibility for Communicating with the Legislature**

The Board Chair may recommend a specific amendment or other action on proposed legislation to legislators or legislative staff on behalf of the Board, if the Chair believes the position is generally consistent with the wishes of the majority of the Board. The Executive Director or Board staff may transmit or deliver these communications for the Chair.

A Board member may communicate his or her views on Board letterhead and may ask Board staff to help communicate his or her views only if the communication is consistent with Board position and this policy.

This policy is not intended to prevent a Board member from communicating with the Legislature on proposed legislation or other matters of personal interest to the member. However, in these cases, the Board member must clarify that his or her communications do not necessarily reflect the views of the Board and that he or she is acting on his or her own personal behalf.

### **Agency Request Legislation**

Board staff must prepare agency request legislation according to Office of Financial Management (OFM) guidelines and schedules. The Executive Director shall work closely with other state agencies to assure the bill does not conflict with other agency authorities. Consistent with OFM guidelines, all agency request legislation must receive Governor's approval before the Executive Director may seek sponsors or promote the bill to legislators.

### **Recommendations to the Governor**

If the Legislature passes a bill that the Board has testified on or sought amendments to, Board staff, in consultation with the Executive Director and Board Chair, may develop a recommendation to the Governor to sign, partially veto, or veto the legislation. The memo must briefly describe the bill, the Board's position, and recommend Governor's action (sign, partial veto, or veto). Prior to submitting a memo to the Governor's office, staff must complete an enrolled bill analysis for the Governor's executive policy analyst assigned to the legislation.

### **PDC Reporting**

Any Board or staff member who has in-person contact with legislators or legislative staff, including in meetings and at hearings, regarding legislation on behalf of the Board must report the activity to the Executive Director. This report must include the date of the communication, length of time spent with the individual(s), and the topic of discussion, including bill numbers. The Executive Director may need to include these reports in the Board's consolidated quarterly lobbying report as required by the Public Disclosure Commission under RCW 42.17A.635.

# WASHINGTON STATE BOARD OF HEALTH

**Date:** January 10, 2024

**To:** Washington State Board of Health Members

**From:** Kelly Oshiro, Board Vice Chair

**Subject:** Complaint Against Snohomish County Health Department Officials

## Background and Summary:

Under RCW 70.05.120, any person may file a complaint with the State Board of Health (Board) concerning the failure of the local health officer or administrative officer to carry out the laws or the rules and regulations concerning public health. The Board's authority extends to state statutes in chapters 70.05, 70.24, and 70.46 RCW, or Board rules, regulations, and orders. When a complaint is received, the Board may request a preliminary investigation, in accordance with Board Policy 2015-001, if the complaint merits further action.

On November 28, 2023, the Board received a complaint against the Snohomish County Health Department Director and Local Health Officer. The complaint alleges that these health officials have violated RCW 70.05.070(3) and refused or neglected to obey and enforce the Board's rules related to communicable disease control under WAC 246-100-036 and 040. The allegation states that the Snohomish County Health Department has failed to use any of the available tools to control and prevent the spread of dangerous and highly infectious pathogens circulating within the county.

The complainant is requesting that the Board conduct a preliminary investigation under RCW 70.05.120(1) and is also seeking immediate implementation and enforcement of the State of Washington's current COVID-19 masking guidance throughout all of Snohomish County, immediate implementation and enforcement of procedures for isolation and quarantine under WAC 246-100-040, and "any other action necessary to control and prevent the spread of dangerous, contagious or infectious diseases" within the county.

[RCW 70.05.070\(3\)](#) states, "[t]he local health officer, acting under the direction of the local board of health or under direction of the administrative officer appointed under RCW 70.05.040 or 70.05.035, if any, shall "[c]ontrol and prevent the spread of any dangerous, contagious, or infectious diseases that may occur within [their] jurisdiction." Under Board rule, local health officers, "...shall, when necessary, conduct investigations and institute disease control and contamination control measures, including medical examination, testing, counseling, treatment, vaccination, decontamination of persons or animals, isolation, quarantine, etc....or other measures [they] deem necessary based on [their] professional judgment, current standards of practice and the best available

(Continued on the next page)

Washington State Board of Health

January 10, 2024, Meeting Memo

medical and scientific information” (WAC 246-100-036(3)). The local health officer or the superior court may issue an emergency detention order for the purpose of isolation or quarantine when certain requirements are met to ensure that due process is satisfied (WAC 246-100-040).

According to [the Snohomish County Health Department’s website](#), masking is currently optional in most public settings.<sup>1</sup> Masking is recommended in certain situations, especially when [community transmission levels](#) are medium or high. Masks are still required in patient care areas of health care facilities when certain thresholds for COVID-19, flu, or respiratory syncytial virus (RSV) are exceeded.<sup>1,2</sup> The Snohomish County Health Department’s website also notes that although local health jurisdictions have the authority to put in place masking requirements at the county level, the county is aligning with statewide guidance, and not currently putting more strict masking requirements in place for the county.<sup>1</sup> As stated in the June 2023 Snohomish County Health Department Health Officer’s [Order No. 23-033](#), “the Snohomish County Public Health Department and the Washington State Department of Health will continue to monitor COVID-19 disease activity in the county and state and carry out public health activities that help prevent severe disease and death from COVID-19.”<sup>3</sup>

On October 31, 2022, Governor Jay Inslee ended all COVID emergency orders, including Washington’s state of emergency declaration.<sup>4</sup> Snohomish County Executive Somers simultaneously rescinded the state of emergency within Snohomish County.<sup>3</sup> The rescinding of these emergency orders marked the transition from Washington’s emergency pandemic response to ongoing monitoring and prevention activities, such as promoting voluntary health behaviors like masking and vaccinations. On April 3, 2023, the Washington State Department of Health ended the Secretary of Health’s final masking order, which required universal masking in health care, long-term care, and adult correctional facilities for people aged 5 and older.<sup>5</sup>

The Snohomish County Health Department has stated its support of data-informed decisions by health care organizations to require masking in their facilities if certain thresholds are exceeded.<sup>2</sup> Additionally, they “encourage people to remain vigilant and flexible for future times when it may become advisable for everyone to mask up to protect [themselves], others, the health care system and other essential societal functions.”<sup>1</sup>

Board Policy 2015-001 allows the subject local health officer or administrator to respond to a complaint against them. A notice was sent out to the Snohomish County Health Department Director and Local Health Officer to notify them of this complaint. The subject health officials were informed that the Board will review the complaint during its January 10, 2024, meeting, and that they may respond in writing to the complaint if they choose. The complainant was also informed that the complaint would be heard at the January 10 meeting and that they could submit supporting documentation before the meeting if they wished to. The complainant submitted an additional document titled “Supplemental Statement of Authorities” on December 22, 2023. This document was forwarded to Board Members and the health officials and is also included in the January meeting materials.

Washington State Board of Health  
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**Recommended Board Actions:**

The Board may wish to consider, amend if necessary, and adopt one of the following motions:

The Board determines that an investigation is warranted and directs staff to conduct a preliminary investigation under RCW 70.05.120 and report their findings to the Board.

OR

The Board determines that the complaint does not merit an investigation because, for the reasons articulated by the Board, it does not indicate a possible violation of public health law and that the Board directs staff to notify the complainant of the Board's decision.

**Staff**

Molly Dinardo, Policy Advisor

To request this document in an alternate format or a different language, please contact the Washington State Board of Health at 360-236-4110 or by email at [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov). TTY users can dial 711.

PO Box 47990 • Olympia, WA 98504-7990  
360-236-4110 • [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov) • [sboh.wa.gov](http://sboh.wa.gov)

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1. Snohomish County Health Department. Preventing COVID-19 | Masks. No Publication Date. Accessed December 18, 2023. <https://www.snohd.org/616/Masks>
  2. Snohomish County Health Department. Public Health Essentials Blog, Regional Healthcare Organizations Adopt Masking Guidelines. Published September 26, 2023. Accessed December 18, 2023. <https://www.snohd.org/Blog.aspx?IID=88#item>
  3. Snohomish County Health Department. Health Officer's Order No. 23-033. Published June 30, 2023. Accessed December 18, 2023. <https://www.snohd.org/DocumentCenter/View/12420/HO-Order-ending-COVID-public-health-emergency?bidId=>
  4. Governor Jay Inslee. State's COVID Emergency Order Ends Next Week. Published October 28, 2023. Accessed December 29, 2022. <https://www.governor.wa.gov/news-media/state%E2%80%99s-covid-emergency-order-ends-next-week>
  5. Washington State Department of Health. Masking Requirements in Healthcare, Long-term Care, and Correctional Facilities to End April 3. Published March 3, 2023. Accessed December 18, 2023. <https://doh.wa.gov/newsroom/masking-requirements-healthcare-long-term-care-and-correctional-facilities-end-april-3>

Washington State Board of Health  
PO Box 47990  
Olympia, WA 98504-7990  
360 236 4110  
wsboh@sboh.wa.gov

## COMPLAINT

This Complaint is hereby filed with the Washington State Board of Health ( “WSBH” ) via e-mail to “wsboh@sboh.wa.gov.”

This Complaint is filed in accordance with RCW 70.05.120(1) which provides that “Any person may complain to the state board of health concerning the failure of the local health officer or administrative officer to carry out the laws or the rules and regulations concerning public health.”

This Complaint alleges that the following Snohomish County Health Department ( “SCHD” ) officials have violated provisions of Chapter 70.05 RCW and refused and/or neglected to obey and/or enforce the rules and regulations of the State Board of Health for the prevention, suppression or control of dangerous contagious or infectious disease or for the protection of the health of the People of the State of Washington ( WAC 246-100-036 and -040 ):

**Dennis Worsham** – Director;

**James Lewis, MD, MPH** – Health Officer.

“We now know that COVID-19 is here for the foreseeable future. It's important to understand how to live our lives while keeping ourselves, loved ones and community as safe as possible. How can we do that? By using all the tools we've learned so far: staying up to date with COVID-19 vaccines, getting tested and staying home if sick or exposed, wearing a mask in crowds, and keeping distance.”<sup>1</sup>

SCHD has failed to use any of the available tools to control and prevent the spread of dangerous, contagious and/or highly infectious pathogens circulating within Snohomish County. ( RCW 70.05.070(3) )

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<sup>1</sup> <https://doh.wa.gov/emergencies/covid-19>



The Director and the Health Officer are ultimately responsible for ensuring that the public health laws, rules, and regulations of the State of Washington are strictly enforced within all of Snohomish County. ( RCW 70.05.070(1) and (2) )

It is a gross dereliction of duty to allow such individuals to continue jeopardizing the health and safety of the Citizens of Snohomish County. ( RCW 70.05.120(1) )

I, John G Gehman, hereby respectfully request that WSBH conduct a preliminary investigation as mandated under RCW 70.05.120(1), and if so warranted, call a hearing to determine whether the aforementioned individuals are guilty of refusing and/or neglecting to control and prevent the spread of dangerous, contagious or infectious diseases occurring within Snohomish County.

**Remedies Sought:**

1. Immediate implementation and enforcement of the State of Washington's current COVID-19 masking guidance throughout all of Snohomish County
2. Immediate implementation and enforcement of the State's "Procedures for isolation or quarantine" under WAC 246-100-040.
3. Any other action necessary to control and prevent the spread of dangerous, contagious, or infectious diseases within Snohomish County.

Respectfully signed, electronically, and submitted this 28<sup>th</sup> Day of November 2023, by:

*/s/ John G Gehman*

John G Gehman  
328 S Davies Rd, Unit B  
Lake Stevens, WA 98258  
253 592 4573  
jhnghmn@gmail.com

Washington State Board of Health  
PO Box 47990  
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360 236 4110  
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Please admit the following 'Supplemental Statement of Authorities' into the official record of proceedings relating to the Complaint filed by John G Gehman on November 28, 2023.

## **SUPPLEMENTAL STATEMENT OF AUTHORITIES**

### **1. COVID-19 IS A DANGEROUS, CONTAGIOUS OR INFECTIOUS DISEASE**

The incontrovertible fact that COVID-19 is a dangerous, contagious or infectious disease is thoroughly documented.

CDC:

Some people, especially those who had severe COVID-19, experience multiorgan effects or autoimmune conditions with symptoms lasting weeks, months, or even years after COVID-19 illness. Multi-organ effects can involve many body systems, including the heart, lung, kidney, skin, and brain. As a result of these effects, people who have had COVID-19 may be more likely to develop new health conditions such as diabetes, heart conditions, blood clots, or neurological conditions compared with people who have not had COVID-19.<sup>1</sup>

Washington State Department of Health:

Most people will recover on their own, but some people can develop more serious complications, such as pneumonia, and require medical care or hospitalization. Older people and people with chronic diseases are more likely to get very sick from COVID-19.<sup>2</sup>

Snohomish County Health Department:

The coronavirus disease (COVID-19) is a respiratory illness. While most people who become ill with COVID-19 can recover on their own with rest and supportive care, the disease can cause severe complications and can be fatal.<sup>3</sup>

A study published in the Washington State Department of Health's May 18, 2020 '2019-nCoV

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1 <https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html#:~:text=Some%20people%2C%20especially%20those%20who,kidney%2C%20skin%2C%20and%20brain>.

2 <https://doh.wa.gov/emergencies/covid-19/frequently-asked-questions>

3 <https://www.snohd.org/537/COVID-19-Health-Information>

Literature Situation Report (Lit Rep)<sup>4</sup> says that:

Among a cohort of 2,597 pediatric patients with COVID-19, a low proportion exhibited lymphopenia (9.8%) compared to adults. Elevated creatine kinase MB isoenzyme was much more commonly observed in children (27%) than that in adults, raising some concerns about heart injury in pediatric patients.<sup>5</sup>

And there are several studies conducted in 2020 proving that COVID-19 is in fact a dangerous, contagious or infectious disease:

“The neurological manifestations of COVID-19: a review article”<sup>6</sup>

Various neurological manifestations have been reported on the literature associated with COVID-19, which in the current study are classified into Central Nervous System (CNS) related manifestations including headache, dizziness, impaired consciousness, acute cerebrovascular disease, epilepsy, and Peripheral Nervous System (PNS) related manifestations such as hyposmia/anosmia, hypogeusia/ageusia, muscle pain, and Guillain-Barre syndrome.

“Extrapulmonary manifestations of COVID-19”<sup>7</sup>

Although COVID-19 is most well known for causing substantial respiratory pathology, it can also result in several extrapulmonary manifestations. These conditions include thrombotic complications, myocardial dysfunction and arrhythmia, acute coronary syndromes, acute kidney injury, gastrointestinal symptoms, hepatocellular injury, hyperglycemia and ketosis, neurologic illnesses, ocular symptoms, and dermatologic complications.

“SARS-CoV-2 dissemination through peripheral nerves explains multiple organ injury”<sup>8</sup>

SARS-CoV-2 is reported to be able to infect the lungs, the intestines, blood vessels, the bile ducts, the conjunctiva, macrophages, T lymphocytes, the heart, liver, kidneys, and brain. More than a third of cases displayed neurologic involvement, and many severely ill patients developed multiple organ infection and injury.

“Pathogenesis, clinical manifestations and complications of coronavirus disease 2019

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4 <https://doh.wa.gov/sites/default/files/legacy/Documents/1600/LitRep-20200518.pdf>

5 <https://onlinelibrary.wiley.com/doi/10.1002/jmv.26023>

6 Niazkar, H. R., B., Nasimi, A., & Bahri, N. (2020). The neurological manifestations of COVID-19: a review article. *Neurological Sciences, 41*, 1667-1671.

7 Gupta, A., Madhavan, M. V., Sehgal, K., Nair, N., Mahajan, S., Sehrawat, T.S., ... & Landry, D. W. (2020). Extrapulmonary manifestations of COVID-19. *Nature Medicine, 26*(7), 1017-1032.

8 Fenrich, M., Mrdenovic, S., Balog, M., Tomic, S., Zjalic, M., Roncevic, A., ... & Heffer, M. (2020). SARS-CoV-2 dissemination through peripheral nerves explains multiple organ injury. *Frontiers in cellular neuroscience, 14*, 229.

(COVID-19)<sup>9</sup>

Respiratory system and the lungs are the most commonly involved sites of COVID-19 infection. Cardiovascular, liver, kidneys, gastrointestinal and central nervous systems are involved with different frequencies and degrees of severity.

## **2. STATE AND LOCAL PUBLIC HEALTH OFFICIALS HAVE A DUTY TO CONTROL AND PREVENT THE SPREAD OF DANGEROUS, CONTAGIOUS OR INFECTIOUS DISEASE**

The laws and rules of the State of Washington mandate that local health officials shall, whenever dangerous contagious or infectious diseases occur within their jurisdictions, institute disease control and prevention measures, including medical examination, testing, counseling, treatment, vaccination, isolation, quarantine, and vector control. RCW 70.05.070(3) and WAC 246-100-036(3)

And under RCW 70.05.120(2) it is a misdemeanor for local health officials to refuse or neglect to obey the statutory mandate to control and prevent the spread of dangerous contagious or infectious diseases:

Any member of a local board of health who shall violate any of the provisions of chapters 70.05, 70.24, and 70.46 RCW or refuse or neglect to obey or enforce any of the rules, regulations or orders of the state board of health made for the prevention, suppression or control of any dangerous contagious or infectious disease or for the protection of the health of the people of this state, is guilty of a misdemeanor, and upon conviction shall be fined not less than ten dollars nor more than two hundred dollars.

## **3. LOCAL HEALTH OFFICIALS HAVE NO AUTHORITY TO IMPLEMENT THE STATE'S 5-DAY ISOLATION POLICY**

The State of Washington defines 'isolation' as “the separation of persons or animals with an infectious agent or contaminant in order to prevent or limit the transmission of the infectious agent or contaminant to those who are susceptible to disease or who may spread the agent or contamination to others.” WAC 246-100-011(17)

And 'quarantine' is defined as “the limitation of freedom of movement of persons or domestic animals that have been exposed to, or are suspected to have been exposed to, an infectious agent: (a) for a period of time not longer than the longest usual incubation period of the infectious agent; and (b) in a way to prevent effective contact with those not so exposed.” WAC 246-100-011(24)

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9 Kordzadeh-Kermani, E., Khalili, H., & Karimzadeh, I. (2020). Pathogenesis, clinical manifestations and complications of coronavirus disease 2019 (COVID-19). *Future Microbiology* 15(13), 1287-1305.

The Snohomish County Health Department has improperly and unlawfully replaced, rather than supplemented, the State's isolation and quarantine policy as set forth under WAC 246-100-040 through -065 with a 5-day isolation policy for people who have COVID-19<sup>1011</sup> which appears to be loosely based on CDC's pseudo-scientific guidance which clearly state's that it "is meant to supplement – not replace – any federal, state, local, territorial, or tribal health and safety laws, rules, and regulations."<sup>12</sup>

#### **4. THE BOARD OF HEALTH HAS A DUTY TO CONDUCT APRELIMINARY INVESTIGATION**

RCW 70.05.120(1) states that: "Any person may complain to the state board of health concerning the failure of the local health officer or administrative officer to carry out the laws or the rules and regulations concerning public health, and the state board of health shall, if a preliminary investigation warrants, call a hearing to determine whether the local health officer or administrative officer is guilty of the alleged acts."

The Board of Health has no authority, under any provision of any law, to refuse to conduct a preliminary investigation.

Here, the evidence clearly indicates that the officials at the Snohomish County Health Department have failed and refused to "carry out the laws or the rules and regulations of concerning public health" - so there should be no reason to refuse to "call a hearing to determine whether the local health officer or administrative officer is guilty of the alleged acts."

Respectfully signed, electronically, and submitted this 22<sup>nd</sup> Day of December 2023, by:

*/s/ John G Gehman*

John G Gehman  
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Lake Stevens, WA 98258  
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10 <https://www.snohd.org/545/If-you-get-COVID-19>

11 <https://doh.wa.gov/emergencies/covid-19/isolation-and-quarantine-covid-19/isolation-and-quarantine-calculator>

12 <https://www.cdc.gov/coronavirus/2019-ncov/your-health/isolation.html>

December 20, 2023

Michelle Davis  
Executive Director  
Washington State Board of Health  
PO Box 47990  
Olympia, WA 98504-7990

**RE: Complaint response (WSBOH complaint 002)**

To Executive Director Davis and the Washington State Board of Health:

Thank you for the opportunity to respond to the concerns shared in the November 28 complaint by John Gehman. Our priority is, and will remain, the health and safety of all Snohomish County residents. The actions we are taking to address COVID-19 are carefully considered and in alignment with state guidance.

The complainant has previously submitted concerns to the State Board of Health regarding local health officials, alleging that they failed to take steps to control COVID-19 and did not comply with public health regulations. The State Board of Health [in January 2023](#) voted unanimously that the complaint did not merit investigation. In their deliberation on the matter, Board members noted that the complainant was not specific about what they believed should be done, and one Board member expressed that she was perplexed by the complaint after seeing the hard work and proactive efforts of Snohomish County's health officers throughout the course of the pandemic. Others acknowledged the many challenges of the pandemic, and that public health officials navigated the crisis admirably given the push and pull from many directions when it came to prevention and intervention measures.

In the November 28 complaint, there appears to be more specificity. The complainant outlines three remedies sought. We would like to address those three items.

- 1) Complainant seeks, "Immediate implementation and enforcement of the State of Washington's current COVID-19 masking guidance throughout all of Snohomish County."

Snohomish County has consistently been in alignment with statewide masking requirements and guidance. The Secretary of Health's previous mask order has been rescinded for quite some time. Washington State Department of Health (DOH) guidance does still recommend masking in certain settings or circumstances, and the Snohomish County Health Department has repeatedly supported and aligned with those recommendations in public messaging, conversations, media interviews, and within our own programs and building.



A key setting where masking has been recommended is in healthcare environments, and the Snohomish County Health Department (Dr. Lewis in particular) was directly involved in efforts by regional healthcare organizations and public health leaders to identify thresholds for disease activity for COVID-19, influenza, and respiratory syncytial virus (RSV) for which masking should be required by healthcare organizations in patient care areas. We [issued a statement](#) in support of those thresholds and maintain [a public facing data dashboard](#) accompanied by regular messaging to update people on disease activity and when they should be prepared to mask up. The work of local health officials, including Dr. Lewis, on updating approaches to masking and protecting those at risk of severe illness [has been published in the Annals of Internal Medicine](#). In short, Snohomish County's public health leaders have diligently worked to align with state guidance while being at the forefront of data-informed, carefully considered regional masking recommendations to reduce the spread of illness.

- 2) Complainant seeks: "Immediate implementation and enforcement of the State's 'Procedures for isolation or quarantine' under WAC 246-100-040."

As with masking guidance, the Snohomish County Health Department has consistently aligned our local guidance with statewide guidance for isolation and quarantine. [DOH guidance](#) as of the writing of this response states that, "People who test positive for COVID-19 or those who have symptoms of COVID-19 and are awaiting test results should isolate at home away from others except to get medical care." We have and will continue to share that information and remind people to stay home and away from others if they have tested positive and/or have symptoms. The current DOH guidance document states "should" rather than "must" isolate.

The WAC cited by the complainant focuses on the health officer's authority to order emergency detention of a person or group of persons for the purposes of isolation and quarantine. This WAC is not utilized often, and when it is, it is done in collaboration with CDC and DOH isolation and quarantine requirements for whatever infection is in question. An illness such as tuberculosis (TB) would be the most likely example. This authority is only used after other measures have been exhausted in terms of working with the individual or group to voluntarily quarantine or isolate.

- 3) Complainant seeks: "Any other action necessary to control and prevent the spread of dangerous, contagious, or infectious diseases within Snohomish County."

This is a broad category and encompasses the day-to-day work of local public health. The Snohomish County Health Department has many programs focused on reducing disease in our community, from foodborne illnesses to sexually transmitted infections to respiratory viruses. Our health officer, director, and other staff working in their areas of expertise within the Health Department will continue to evaluate illness activity in Snohomish County and take action to prevent the spread of infectious diseases.



COVID-19 is one of many notifiable conditions the Health Department monitors and is prepared to respond to. As of the writing of this response, COVID-19 activity based on data from hospitals in Snohomish County is low – it is below the threshold set for masking in healthcare, and notably lower than the levels reported at the same time last season or the season before. We will continue to monitor disease activity and will focus on additional guidance and preventive measures in the event of a surge in transmission or severity of the disease.

Thank you for your time and consideration of this response.

Sincerely,



James Lewis, MD MPH  
Health Officer  
Snohomish County Health Department



Dennis Worsham  
Health Director  
Snohomish County Health Department



## **RCW 70.05.120**

### **Violations—Remedies—Penalties.**

(1) Any local health officer or administrative officer appointed under RCW 70.05.040, if any, who shall refuse or neglect to obey or enforce the provisions of chapters 70.05, 70.24, and 70.46 RCW or the rules, regulations or orders of the state board of health or who shall refuse or neglect to make prompt and accurate reports to the state board of health, may be removed as local health officer or administrative officer by the state board of health and shall not again be reappointed except with the consent of the state board of health. Any person may complain to the state board of health concerning the failure of the local health officer or administrative officer to carry out the laws or the rules and regulations concerning public health, and the state board of health shall, if a preliminary investigation so warrants, call a hearing to determine whether the local health officer or administrative officer is guilty of the alleged acts. Such hearings shall be held pursuant to the provisions of chapter 34.05 RCW, and the rules and regulations of the state board of health adopted thereunder.

(2) Any member of a local board of health who shall violate any of the provisions of chapters 70.05, 70.24, and 70.46 RCW or refuse or neglect to obey or enforce any of the rules, regulations or orders of the state board of health made for the prevention, suppression or control of any dangerous contagious or infectious disease or for the protection of the health of the people of this state, is guilty of a misdemeanor, and upon conviction shall be fined not less than ten dollars nor more than two hundred dollars.

(3) Any physician who shall refuse or neglect to report to the proper health officer or administrative officer within twelve hours after first attending any case of contagious or infectious disease or any diseases required by the state board of health to be reported or any case suspicious of being one of such diseases, is guilty of a misdemeanor, and upon conviction shall be fined not less than ten dollars nor more than two hundred dollars for each case that is not reported.

(4) Any person violating any of the provisions of chapters 70.05, 70.24, and 70.46 RCW or violating or refusing or neglecting to obey any of the rules, regulations or orders made for the prevention, suppression and control of dangerous contagious and infectious diseases by the local board of health or local health officer or administrative officer or state board of health, or who shall leave any isolation hospital or quarantined house or place without the consent of the proper health officer or who evades or breaks quarantine or conceals a case of contagious or infectious disease or assists in evading or breaking any quarantine or concealing any case of contagious or infectious disease, is guilty of a misdemeanor, and upon conviction thereof shall be subject to a fine of not less than twenty-five dollars nor more than one hundred dollars or to imprisonment in the county jail not to exceed ninety days or to both fine and imprisonment.

[ 2003 c 53 § 350; 1999 c 391 § 6; 1993 c 492 § 241; 1984 c 25 § 8; 1967 ex.s. c 51 § 17. ]

## Rules cited in complaint against local health officials

### WAC 246-100-036

#### Responsibilities and duties—Local health officers.

(1) The local health officer shall establish, in consultation with local health care providers, health facilities, emergency management personnel, law enforcement agencies, and any other entity they deem necessary, plans, policies, and procedures for instituting emergency measures necessary to prevent the spread of communicable disease or contamination.

(2) Local health officers shall:

(a) Notify health care providers within the local health jurisdiction regarding requirements in this chapter;

(b) Ensure anonymous HIV testing is reasonably available;

(c) Make HIV testing, as defined in this chapter, available for voluntary, mandatory, and anonymous testing;

(d) Make information on anonymous HIV testing available;

(e) Use identifying information on persons diagnosed with HIV provided according to chapter [246-101](#) WAC only:

(i) For purposes of contacting the person diagnosed with HIV to provide test results; or

(ii) To contact persons who may have experienced exposure, including persons identified as sex or injection equipment-sharing partners and spouses; or

(iii) To link with other name-based public health disease registries when doing so will improve ability to provide needed social and health care services and disease prevention, if the identity or identifying information of the persons living with HIV is not disclosed outside of the local health jurisdiction.

(3) Local health officers shall, when necessary, conduct investigations and institute disease control and contamination control measures, including medical examination, testing, counseling, treatment, vaccination, decontamination of persons or animals, isolation, quarantine, vector control, condemnation of food supplies, and inspection and closure of facilities, consistent with those indicated in the *Control of Communicable Diseases Manual*, 20th edition, published by the American Public Health Association, or other measures they deem necessary based on their professional judgment, current standards of practice, and the best available medical and scientific information.

(4) A local health jurisdiction should seek agreements as necessary with tribal governments and with federal authorities, with state agencies, and institutions of higher education that empower the local health officer to conduct investigations

and institute control measures in accordance with WAC [246-100-040](#) on tribal lands, federal enclaves and military bases, and the campuses of state institutions. State institutions include, but are not limited to, state-operated: Colleges and universities, schools, hospitals, prisons, group homes, juvenile rehabilitation facilities, and residential habilitation centers.

[Statutory Authority: RCW [43.20.050](#) and [70.24.130](#). WSR 22-06-061, § 246-100-036, filed 2/25/22, effective 3/28/22. Statutory Authority: RCW [43.20.050](#). WSR 15-05-014, § 246-100-036, filed 2/6/15, effective 3/9/15; WSR 03-17-022, § 246-100-036, filed 8/13/03, effective 9/13/03. Statutory Authority: RCW [43.20.050](#) (2)(d), [70.05.050](#), and [70.05.060](#). WSR 03-05-048, § 246-100-036, filed 2/13/03, effective 2/13/03. Statutory Authority: RCW [43.20.050](#). WSR 00-23-120, § 246-100-036, filed 11/22/00, effective 12/23/00. Statutory Authority: RCW [70.24.125](#) and [70.24.130](#). WSR 99-17-077, § 246-100-036, filed 8/13/99, effective 9/1/99. Statutory Authority: RCW [70.24.022](#), [70.24].340 and Public Law 104-146. WSR 97-15-099, § 246-100-036, filed 7/21/97, effective 7/21/97. Statutory Authority: RCW [43.20.050](#) and [70.24.130](#). WSR 92-02-019 (Order 225B), § 246-100-036, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW [43.20.050](#). WSR 91-02-051 (Order 124B), recodified as § 246-100-036, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter [70.24](#) RCW. WSR 89-02-008 (Order 324), § 248-100-036, filed 12/27/88. Statutory Authority: RCW [43.20.050](#). WSR 88-07-063 (Order 308), § 248-100-036, filed 3/16/88.]

## **WAC 246-100-040**

### **Procedures for isolation or quarantine.**

(1) At his or her sole discretion, a local health officer may issue an emergency detention order causing a person or group of persons to be immediately detained for purposes of isolation or quarantine in accordance with subsection (3) of this section, or may petition the superior court *ex parte* for an order to take the person or group of persons into involuntary detention for purposes of isolation or quarantine in accordance with subsection (4) of this section, provided that he or she:

(a) Has first made reasonable efforts, which shall be documented, to obtain voluntary compliance with requests for medical examination, testing, treatment, counseling, vaccination, decontamination of persons or animals, isolation, quarantine, and inspection and closure of facilities, or has determined in his or her professional judgment that seeking voluntary compliance would create a risk of serious harm; and

(b) Has reason to believe that the person or group of persons is, or is suspected to be, infected with, exposed to, or contaminated with a communicable disease or chemical, biological, or radiological agent that could spread to or contaminate others if remedial action is not taken; and

(c) Has reason to believe that the person or group of persons would pose a serious and imminent risk to the health and safety of others if not detained for purposes of isolation or quarantine.

(2) A local health officer may invoke the powers of police officers, sheriffs, constables, and all other officers and employees of any political subdivisions within the jurisdiction of the health department to enforce immediately orders given to effectuate the purposes of this section in accordance with the provisions of RCW [43.20.050\(4\)](#) and [70.05.120](#).

(3) If a local health officer orders the immediate involuntary detention of a person or group of persons for purposes of isolation or quarantine:

(a) The emergency detention order shall be for a period not to exceed ten days.

(b) The local health officer shall issue a written emergency detention order as soon as reasonably possible and in all cases within twelve hours of detention that shall specify the following:

(i) The identity of all persons or groups subject to isolation or quarantine;

(ii) The premises subject to isolation or quarantine;

(iii) The date and time at which isolation or quarantine commences;

(iv) The suspected communicable disease or infectious agent if known;

(v) The measures taken by the local health officer to seek voluntary compliance or the basis on which the local health officer determined that seeking voluntary compliance would create a risk of serious harm; and

(vi) The medical basis on which isolation or quarantine is justified.

(c) The local health officer shall provide copies of the written emergency detention order to the person or group of persons detained or, if the order applies to a group and it is impractical to provide individual copies, post copies in a conspicuous place in the premises where isolation or quarantine has been imposed.

(d) Along with the written order, and by the same means of distribution, the local health officer shall provide the person or group of persons detained with the following written notice:

NOTICE: You have the right to petition the superior court for release from isolation or quarantine in accordance with WAC [246-100-055](#). You have a right to legal counsel. If you are unable to afford legal counsel, then counsel will be appointed for you at government expense and you should request the

appointment of counsel at this time. If you currently have legal counsel, then you have an opportunity to contact that counsel for assistance.

(4) If a local health officer petitions the superior court *ex parte* for an order authorizing involuntary detention of a person or group of persons for purposes of isolation or quarantine pursuant to this section:

(a) The petition shall specify:

(i) The identity of all persons or groups to be subject to isolation or quarantine;

(ii) The premises where isolation or quarantine will take place;

(iii) The date and time at which isolation or quarantine will commence;

(iv) The suspected communicable disease or infectious agent if known;

(v) The anticipated duration of isolation or quarantine based on the suspected communicable disease or infectious agent if known;

(vi) The measures taken by the local health officer to seek voluntary compliance or the basis on which the local health officer determined that seeking voluntary compliance would create a risk of serious harm;

(vii) The medical basis on which isolation or quarantine is justified.

(b) The petition shall be accompanied by the declaration of the local health officer attesting to the facts asserted in the petition, together with any further information that may be relevant and material to the court's consideration.

(c) Notice to the persons or groups identified in the petition shall be accomplished in accordance with the rules of civil procedure.

(d) The court shall hold a hearing on a petition filed pursuant to this section within seventy-two hours of filing, exclusive of Saturdays, Sundays, and holidays.

(e) The court shall issue the order if there is a reasonable basis to find that isolation or quarantine is necessary to prevent a serious and imminent risk to the health and safety of others.

(f) A court order authorizing isolation or quarantine as a result of an *ex parte* hearing shall:

(i) Specify a maximum duration for isolation or quarantine not to exceed ten days;

(ii) Identify the isolated or quarantined persons or groups by name or shared or similar characteristics or circumstances;

(iii) Specify factual findings warranting isolation or quarantine pursuant to this section;

(iv) Include any conditions necessary to ensure that isolation or quarantine is carried out within the stated purposes and restrictions of this section;

(v) Specify the premises where isolation or quarantine will take place; and

(vi) Be served on all affected persons or groups in accordance with the rules of civil procedure.

(5) A local health officer may petition the superior court for an order authorizing the continued isolation or quarantine of a person or group detained under subsections (3) or (4) of this section for a period up to thirty days.

(a) The petition shall specify:

(i) The identity of all persons or groups subject to isolation or quarantine;

(ii) The premises where isolation or quarantine is taking place;

(iii) The communicable disease or infectious agent if known;

(iv) The anticipated duration of isolation or quarantine based on the suspected communicable disease or infectious agent if known;

(v) The medical basis on which continued isolation or quarantine is justified.

(b) The petition shall be accompanied by the declaration of the local health officer attesting to the facts asserted in the petition, together with any further information that may be relevant and material to the court's consideration.

(c) The petition shall be accompanied by a statement of compliance with the conditions and principles for isolation and quarantine contained in WAC [246-100-045](#).

(d) Notice to the persons or groups identified in the petition shall be accomplished in accordance with the rules of civil procedure.

(e) The court shall hold a hearing on a petition filed pursuant to this subsection within seventy-two hours of filing, exclusive of Saturdays, Sundays, and holidays. In extraordinary circumstances and for good cause shown, the local health officer may apply to continue the hearing date for up to ten days, which continuance the court may grant at its discretion giving due regard to the rights of the affected individuals, the protection of the public's health, the severity of the public health threat, and the availability of necessary witnesses and evidence.

(f) The court shall grant the petition if it finds that there is clear, cogent, and convincing evidence that isolation or quarantine is necessary to prevent a serious and imminent risk to the health and safety of others.

(g) A court order authorizing continued isolation or quarantine as a result of a hearing shall:

(i) Specify a maximum duration for isolation or quarantine not to exceed thirty days;

(ii) Identify the isolated or quarantined persons or groups by name or shared or similar characteristics or circumstances;

(iii) Specify factual findings warranting isolation or quarantine pursuant to this section;

(iv) Include any conditions necessary to ensure that isolation or quarantine is carried out within the stated purposes and restrictions of this section;

(v) Specify the premises where isolation or quarantine will take place; and

(vi) Be served on all affected persons or groups in accordance with the rules of civil procedure.

(6) Prior to the expiration of a court order for continued detention issued pursuant to subsection (5) of this section, the local health officer may petition the superior court to continue isolation or quarantine provided:

(a) The court finds there is a reasonable basis to require continued isolation or quarantine to prevent a serious and imminent threat to the health and safety of others.

(b) The order shall be for a period not to exceed thirty days.

(7) State statutes, rules, and state and federal emergency declarations governing procedures for detention, examination, counseling, testing, treatment, vaccination, isolation, or quarantine for specified health emergencies or specified communicable diseases, including, but not limited to, tuberculosis and HIV, shall supersede this section.

[Statutory Authority: RCW [43.20.050](#) (2)(d), [70.05.050](#), and [70.05.060](#). WSR 03-05-048, § 246-100-040, filed 2/13/03, effective 2/13/03.]

**Washington State Board of Health  
Policy & Procedure**

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<b>Draft Policy Number:</b>	<b>2015-001</b>
<b>Subject:</b>	<b>Responding to Complaints Against a Local Health Officer or Administrative Officer Under RCW 70.05.120</b>
<b>Approved Date:</b>	<b>January 14, 2015 (Revised November 9, 2022)</b>

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**Policy Statement**

RCW 70.05.120 allows any person to file a complaint with the Washington State Board of Health (Board) alleging the failure of the local health officer or administrative officer to carry out the laws or the rules and regulations concerning public health. The Board will review complaints that allege a local health officer or administrative officer has refused or neglected to obey or enforce the provisions of chapters 70.05, 70.24 and 70.46 RCW, or Board rules, regulations, or orders. The Board will review a complaint to determine whether it merits a preliminary investigation. The Board may dismiss a complaint that is beyond the scope of RCW 70.05.120, lacks sufficient information to support a preliminary investigation, or is frivolous in nature. If the Board determines a preliminary investigation is warranted, the Board will assign staff or a third-party investigator, as appropriate, to conduct a preliminary investigation and to report their findings to the Board. The Board will then review the findings of the investigation and determine how to proceed. The Board may determine that further information is necessary, close the complaint, or hold a hearing based on the findings of the preliminary investigation.

**Procedure**

- 1) **Complaint Review and Notifications:** Board staff, in consultation with the Executive Director, will respond to the complainant within five business days acknowledging receipt of the complaint. The Executive Director or staff will notify Board members that a complaint has been received and will be brought to the Board for review at the next regularly scheduled Board meeting. If no regular meeting is scheduled within 60 days of receipt of the complaint, or if the agenda for the regular meeting cannot accommodate review of the complaint, the Executive Director will notify the Chair of the need to schedule a special Board meeting for the purpose of reviewing the complaint. The Executive Director will also notify the subject local health official and will provide a copy of the complaint for their information and review and inform the official that they may provide a written response to the complaint if they so choose. The Executive Director will notify the complainant and the subject local health official of dates and times that the Board is scheduled to review or discuss the complaint. As part of the initial review, the Board will determine whether a complaint falls within its authority to review, and whether the complaint merits further action. Board staff may consolidate multiple complaints against



the same official(s) about the same subject matter for review. The Board may dismiss a complaint that is beyond the scope of RCW 70.05.120, lacks sufficient information to support a preliminary investigation, or is frivolous in nature. The Board will notify the complainant(s) and the local health official named in the complaint(s) of complaint dismissal.

- 2) **Preliminary Investigation:** If the Board determines that a complaint is within the scope of RCW 70.05.120, and merits further review, the Board may direct staff to conduct a preliminary investigation. The Board may identify a Board member to be available for consultation with staff during the preliminary investigation. If a Board member is consulted, they will recuse themselves from further participation in resolution of the complaint. The Board may direct staff to hire a third-party investigator to conduct the preliminary investigation when necessary to avoid a potential conflict of interest with the Board. The preliminary investigation may include but may not be limited to: a review of relevant statutory and rule authorities; gathering other background information and evidence; and interviewing the complainant, the local health official named in the complaint, and others regarding the complainant's allegations. Background information includes, but is not limited to, laws, rules, court decisions, and documents submitted by the complainant and local health official named in the complaint, and other state or local entities involved or implicated in the complaint. In addition to conducting interviews, the individual(s) designated to conduct the investigation may consult with content or industry experts, appropriate representatives of named or implicated agencies, and others as appropriate. The Board may request the Department of Health to provide assistance in conducting the preliminary investigation.
- 3) **Findings:** Board staff or a third-party investigator assigned to conduct the investigation will present the findings of the preliminary investigation and a recommendation for Board consideration at a Board meeting. As described above, Board staff will notify the complainant and subject local health official of the date and time of the Board meeting at which the Board will review findings. The complainant and local health official named in the complaint will be given the opportunity to provide comment at the meeting.
- 4) **Review of Findings** Based on the findings of the preliminary investigation, the Board will determine how to proceed. For example, it may request further information if it cannot reach a conclusion based on the results of the preliminary investigation; close the complaint if it concludes that the local health officer or administrative officer did not refuse or fail to obey or enforce the provisions of chapter 70.05, 70.24 or 70.46 RCW, or Board rules, regulations, or orders; or, hold a hearing under the Administrative Procedure Act (APA), chapter 34.05 RCW to determine if the local officer is guilty of the alleged acts.
- 5) **Hearing:** If a hearing is called, the Board will designate a presiding officer for the proceedings in accordance with RCW 34.05.425. The Board, members of the Board, or an Administrative Law Judge (ALJ) with the Office of Administrative Hearings (OAH) may serve as the presiding officer. If an ALJ is designated, the Board will determine the scope

of the ALJ's duties at that time. The ALJ's scope of duties may include presiding over the hearing and/or serving as decision maker. If an ALJ is involved, OAH will schedule the proceedings. The proceedings will be conducted in accordance with the APA and applicable procedural rules.

- 6) **Notice of Final Disposition:** Unless the Board has called a hearing and OAH has notified the local health official named in the complaint(s) of the final disposition, the Board will notify the complainant(s) and the local health official of the final disposition of the complaint.