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# Summary and Review of On-Site Sewage System Regulations For Local Health Jurisdictions of the Hood Canal Watershed

#### Introduction

This report has been prepared to satisfy Task 3 of the Hood Canal Regional Pollution Identification and Correction Project – Summary and Review of On-Site Sewage System Regulations for Local Health Jurisdictions of the Hood Canal Watershed. The objective of the report is to summarize and compare how local health jurisdictions regulate the location, design, installation, operation, maintenance, and monitoring of onsite sewage systems in accordance with Chapter 246-272A WAC, On-site Sewage Systems.

There are three local health jurisdictions in the Hood Canal Watershed that WAC 246-272A applies to and that this report will cover:

- Jefferson County Public Health
- Mason County Public Health
- Kitsap Public Health District

There are also two tribes in the Hood Canal Watershed: the Skokomish Tribe and the Port Gamble S'Klallam Tribe. However, WAC 246-272A does not apply to tribes, so this report will not address on-site sewage system regulation and management within these two tribal jurisdictions.

#### Regulatory Background for On-Site Sewage Systems

WAC 246-272A is the administrative code, and a State Board of Health rule, to implement the requirements of the following state laws:

- RCW 70.05 Local Health Departments, Boards, Officers Regulations
- RCW 70.46 Health Districts
- RCW 70.118 On-Site Sewage Disposal Systems
- RCW 70.118A On-Site Sewage Disposal Systems Marine Recovery Areas

These rules and regulations direct the local board of health and local health officer to regulate on-site sewage systems that are sized to handle under 3,500 gallons of sewage per day. Local health jurisdiction staff are authorized by the local health officer to implement these state and local rules.

At minimum, local boards of health are required enforce rules of WAC 246-272A. Local boards of health are given the option to either enforce the state rules or adopt their own local rules. If a local board of health opts to adopt their own local rules, the local regulations must be (see WAC 246-272A-0015(9)):

- 1. Consistent with, and at least as stringent as, WAC 246-272A; and
- 2. Approved by the state Department of Health prior to the effective date of the local regulations.

In addition to implementing the minimum state requirements, local health officers are required to develop and implement a local management plan for on-site sewage systems that has also been approved by the state Department of Health.

These rules also provide authority to local health officers to obtain administrative search warrants when needed to identify and correct on-site sewage system failures (RCW 70.118.030), adopt more restrictive standards than the state rules (RCW 70.118.050) and to issue waivers to state and local rules (RCW 70.05.072).

## Summary and Status of Implementation of State On-Site Sewage System Rules for Each Local Health Jurisdiction

The local health jurisdictions of Jefferson, Mason, and Kitsap have each adopted their own Department of Health-approved on-site sewage system regulations and local management plans. All three local health jurisdictions have their regulations posted on their respective websites:

- Jefferson Public Health: http://www.jeffersoncountypublichealth.org/index.php?septic-systems
- Mason Public Health: http://www.co.mason.wa.us/health/environmental/onsite/codes\_regulations.php
- Kitsap Public Health District: http://kitsappublichealth.org/environment/regulations\_policies.php

A tabular summary of how each local health jurisdiction's regulations compare with WAC 246-272A is contained in Appendix 1.

A Puget Sound Local Management Plan summary report written by the state Department of Health and submitted to the state legislature is available on the Department's website at <a href="http://www.doh.wa.gov/Portals/1/Documents/Pubs/337-035.pdf">http://www.doh.wa.gov/Portals/1/Documents/Pubs/337-035.pdf</a>. This report contains links to the local management plans for the three local health jurisdictions of Hood Canal.

All three local health jurisdictions have adopted policies to clarify or address specific issues of importance to each of their jurisdictions; these policies are posted on each agency's respective on-site sewage web page (as listed above).

Finally, pursuant with RCW 70.118A, all three local health jurisdictions have also declared marine recovery areas within their respective county; these marine recovery areas are:

- <u>Jefferson County:</u> Northwest Hood Canal
- Mason County: Southern Hood Canal and Oakland Bay
- Kitsap County: Burley Lagoon and Liberty Bay

#### Basic Facts about the Jefferson, Mason, and Kitsap On-Site Sewage Programs

A summary of on-site sewage system inventory and activity for Jefferson, Mason, and Kitsap counties is shown below in Table 1.

Table 1
Summary of OSS Activity for Hood Canal Local Health Jurisdictions

	Local Health Jurisdiction			
	Jefferson	Mason	Kitsap	
Est. Number of OSS in County	13,500	25,740	56,690	
Est. Number of OSS in Hood Canal Watershed	3,790	10,450	10,760	
Number of New OSS Permits in County in 2012	93	235	172	
Number of OSS Repair Permits in County in 2012	31	82	175	
Number of OSS Complaints Investigated in 2012	31	51	686	
Number Property Sale OSS Inspections Completed in 2012	511*	TBD	1,430	
OSS Inspector Staff Level (FTE)	1.18	<2.0	6.0	
Ratio of OSS : OSS Inspector FTE	11,441	12,870	9,448	

Notes: OSS = on-site sewage system; FTE = full time equivalent.

<sup>\*</sup>Includes ALL OSS inspections, not just property sales

#### Discussion

<u>State and/or Local Regulation Adoption.</u> All three of the Hood Canal local health jurisdictions have adopted their own local regulations, and all three regulations adopt WAC 246-272A by reference. The state Department of Health has approved the local regulations for all three health jurisdictions. Therefore, all three local health jurisdictions are in compliance with state laws and regulations.

The content and format of the local regulation documents do vary between the jurisdictions. For example, the Mason County on-site sewage regulations defer to WAC 246-272A for most aspects related to the location, size, design, installation, operation, maintenance, and monitoring, and adopt specific local standards by reference; these specific on-site standards are contained in an appendix to the regulation document.

Conversely, the Kitsap County on-site sewage regulations are a stand-alone document, containing all aspects of WAC 246-272A and more, including adoption by reference of separate policies by topic area which are posted on their website.

Jefferson County's regulations fall in between the regulation models of Mason and Kitsap --- they include some elements of WAC 246-272A for design, inspection, and monitoring, but defer to the WAC for many of the specifics. Jefferson County also posts their topic area policies on their website.

The on-site sewage system regulations for Mason, Jefferson, and Kitsap counties all meet the state minimum requirements and are all approved by the state Department of Health.

Marine Recovery Areas. RCW 70.118A.030 requires that the local health officers of the health jurisdictions in the twelve counties boarding Puget Sound, to develop a written management plan to guide local health jurisdiction staff in the management of on-site sewage systems. The criteria to be addressed in the local on-site sewage system management plan are detailed in WAC 246-272A-0015. RCW 70.118A.050, like WAC 246-272A-0015, requires local health jurisdictions to specify how they will find:

- 1. Existing failing systems and ensure that owners make necessary repairs; and
- 2. Unknown systems and ensure that they are inspected as required to ensure that they are functioning properly, and repaired, if necessary.

Additionally, RCW 70.118A.060 requires that the local health officer shall:

 Require that persons completing on-site sewage system inspections submit a report of the inspection to the local health jurisdiction regarding any failing system; and 2. Develop and maintain an electronic data system to manage all systems within the marine recovery area.

All three local health jurisdictions are in compliance with these rules. Pollution Identification and Correction (PIC) programs, public complaints, and maintenance inspection reports are used to identify and correct failing on-site systems. Electronic database systems are in place to manage onsite sewage permit and maintenance inspection information. In addition to PIC work and maintenance reports, all three counties also review system status through building permit application reviews and required system inspections for property sales.

In addition to the information contained in each jurisdiction's local management plan, a summary of the status of Hood Canal PIC work is contained in a new report titled "Hood Canal Watershed, 2005-2011 Pollution Identification and Correction Status Report" (Hood Canal Coordinating Council, February 2013).

<u>Permit Approval Required.</u> All three local health jurisdictions require permit approval to construct, modify, alter, expand, repair, replace, relocate, or connect to an on-site sewage system. Application and plan approval is required by each health jurisdiction before a permit will be issued to begin construction of, or on, an on-site sewage system.

<u>Design Approval Required.</u> All three health jurisdictions require approval of an on-site sewage system design by a state certified on-site sewage system inspector before an installation/construction permit will be issued. The design is required to show how the on-site sewage system will meet the minimum location, size, sewage treatment, and system access and maintenance requirements of WAC 246-272A based on the soil and site characteristics of each individual property.

WAC 246-272A-0230 requires that an on-site sewage system design be prepared only by state licensed engineers or designers, but allows a resident owner or the health officer to design a system under two specific exceptions:

- At the discretion of the local health officer, a resident owner of a single-family residence not adjacent to a marine shoreline may design a system for that residence; or
- 2. If the local health officer performs the soil and site evaluation required by WAC 246-272A-0220, the local health officer may design the system.

Generally speaking, all three health jurisdictions require that designs be prepared and submitted by state licensed engineers or designers. Jefferson and Kitsap do not allow resident owners to do any design work, and Mason allows only a few resident owner designs per year under the state rule. Between 2007 and 2012, Mason allowed an average of four resident owner designs per year, none are shoreline parcels and

approximately two-thirds are for new construction and one-third for repairs. The average of four resident designs per year represents about 1% of the total number of permits issued.

All three health jurisdictions adhere to the state requirements for on-site sewage system location, size, and minimum treatment level that must be met based on each site's available soil type and depth, and the planned vertical separation measurement between the infiltrative surface of the dispersal component (i.e., drainfield) and the highest anticipated water table or restrictive layer.

<u>Installation Permit Inspections/Inspection of System Construction.</u> Each of the three local health jurisdictions conduct installation inspections for new, replacement, or repair septic systems --- however there is some variability between the three health agencies regarding when, and how many, inspections are completed.

Kitsap Health conducts a pre-cover inspection for 100% of all on-site sewage system installation permits. Jefferson and Mason counties complete a pre-cover inspection on most of their permit installations, but not all. All three local health jurisdictions require the On-Site Sewage System Designer/Engineer to also complete a pre-cover inspection to ensure the installation is complete and to draft a record of construction for the system installation.

Jefferson conducts a post-cover inspection for all alternative on-site sewage system installs, and Mason plans to start doing a post-cover inspection in 2014. At this time, Kitsap only does post-cover inspections if requested or needed on a case-by-case basis.

All three health jurisdictions require the use of materials and components that have been approved by the state Department of the Health for use in constructing on-site sewage systems, in accordance with WAC 246-272A.

<u>Operation, Monitoring, and Maintenance Inspections and Reporting.</u> Jefferson, Mason, and Kitsap all adhere to the state requirements for operation, monitoring, and maintenance: once per year for alternative on-site sewage systems, and once every three years for standard gravity systems.

Kitsap requires Health District certification for any person to qualify to do monitoring and maintenance inspections and reporting. Resident homeowners are allowed to become certified to do their own system inspections (i.e., owners can only do inspections for properties where they reside); the certification process is the same for homeowners as it is for professional contractors. Certified professional contractors are required to do inspections of commercial property.

Jefferson also requires certification of their professional contractors to do on-site system monitoring, maintenance, and reporting; state licensed designers are also allowed to do monitoring and maintenance inspections. Homeowners may become authorized to do their own inspections by completing two classes and submitting an application for authorization. Homeowners may do inspections and reporting on all residential properties they own, whether they reside there or not, however they are not allowed to complete inspections on systems that utilize proprietary treatment components. Homeowners who do their own inspections are required to periodically have a third-party certified professional inspection on a periodic basis. Certified professional contractors are required to do inspections of commercial property, at time of property sale, and for many building permit applications.

Mason Health is similar to Jefferson in that they require certification for professional contractors and allow homeowners to do their own inspections --- provided that their system does not utilize any proprietary products. However, Mason does not require homeowners to attend training or to become certified to do their own maintenance inspections. Certified professional contractors are required to do inspections of commercial property.

<u>Inspections Required for Property Sales.</u> When a property with an on-site sewage system is intended to be sold or transferred to a new owner, all three health jurisdictions require an inspection and report be completed for the system.

<u>Waivers.</u> As allowed under state law, all three health jurisdictions do issue waivers to the on-site sewage system rules when needed. All three health jurisdictions utilize and follow the state Department of Health Waiver Guidelines to process waiver requests; and Kitsap and Mason submit waiver reports to the state on a quarterly basis.

<u>Expansions.</u> When an expansion of structure connected an existing on-site sewage system (i.e., increase in waste water flow or number of bedrooms, increase in wastewater strength, or change in use) is proposed, all three health jurisdictions require conformance with the current regulations as required under state rules.

<u>Repairs.</u> Repairs of failing on-site sewage system are also handled in the same manner throughout all three counties. Jefferson, Mason, and Kitsap all employ the state hierarchy for repairs (order of preference for type of system repair/replacement):

- 1. Conforming system
- 2. Connect to public sewer (if available)
- 3. Table IX Repair (WAC 246-272A)
- 4. Non-conforming repair or holding tank system
- Vacation of residence

<u>Enforcement.</u> All three health jurisdictions have the same type of enforcement process and define system failure in the same manner. Step one is a notice of violation / order to correct letter, and step two is the ability to issue a civil infraction notice (i.e., a ticket) to violators who choose not to comply with the health order to repair their system. Injunctions, stop work orders, and orders to vacate are options for extreme enforcement cases in all three counties, and require the assistance of an attorney to execute. Extreme enforcement cases are a rarity for all three health jurisdictions.

All three LHJs track confirmed OSS failures and verified OSS repairs.

<u>Contractor certification.</u> Persons wishing to become professional on-site sewage system contractors are required to become certified with the local health jurisdiction in all three counties.

# SUMMARY AND COMPARISON OF ONSITE SEWAGE SYSTEM REGULATIONS FOR LOCAL HEALTH JURISDICTIONS OF HOOD CANAL WATERSHED REGION

State	Standard	Jefferson	Mason	Kitsap	
WAC 246-272A	Description	Jefferson County Code Chapter 8.15	MCBOH OSS Regulations	KCBOH Ord. 2008A- 01	Notes
-0001	Purpose, objectives, authority of rules	.010 & .020	One & Two	1	
-0005	Administration of rules by local health officer & local health jurisdiction	.030 & .040	Three & 6.01	2	All three LHJs adopt WAC 246- 272A by reference
-0010	Definitions	.050	Four	5	All three LHJs use WAC 246- 272A definitions and also include additional local definitions
-0015	Local management and regulations	By reference to WAC in .030	6.03	7	All three LHJs have DOH approved OSS local management plans and regulations
-0020	Applicability	By reference to WAC in .030	Five	4	regulations
-0025	Connection to public sewer	.060(1)	By reference to WAC in 6.01	6.H.	
-0170	•	By reference to WAC in .030	_	By reference to WAC in 2.B.	Rarely, if ever, used
-0200	Permit requirements	.080, .090, and by reference to WAC in .030	6.04 and by reference to WAC in 6.01	6.E - G., and 10 - 12	Regulation language and format varies by LHJ, but intent and adoption of WAC is consistent. Jefferson and Mason rely on WAC for details; Kitsap's regulation is more detailed and inclusive of WAC language

	Location standards	.080, .090, and by	By reference to WAC	10	Same as above
			in 6.01		
-0210		.030			
	Soil and site	.080, .090, and by	By reference to WAC	10	II
	evaluation	reference to WAC in	in 6.01		
-0220		.030			
	Design requirements -		By reference to WAC	10	
	general		in 6.01		
-0230		.030			
	Design requirements -	.080, .090, and by	By reference to WAC	10	
	septic tank sizing	reference to WAC in	in 6.01		
-0232		.030			
	Design requirments -	.080, .090, and by	By reference to WAC	10	
	soil dispersal	reference to WAC in	in 6.01		
-0234	components	.031			
	Design requirements -	` ,	By reference to WAC	10 & 12	
	facilitate operation,	reference to WAC in	in 6.01		
	monitoring and	.031			
-0238	maintenance	D ( )	D (		
00.40			By reference to WAC	14.E.	
-0240	systems	in .030	in 6.01	10	
	Installation	.110 and by	By reference to WAC	12	
		reference to WAC in	in 6.01		
-0250		.030	D (	10.0	
	Inspection	.110 and by	By reference to WAC	12.C.	
			in 6.01		
-0260	December 1	.030	D(	10.00	
-0265	Record drawings	.110(10)	By reference to WAC	12.C.3.	
-0203	Operation	.150	in 6.01	13	
	Operation,	. 130	Seven	13	
	monitoring, and				
	maintenance				
-0270	owner responsibilities				
-0210					

	Operation,	.150(7)	By reference to WAC	13.E.	
	monitoring, and		in 6.01		
	maintenance food				
	service				
-0275	establishments				
	Repair of failures	By reference to WAC	By reference to WAC	14	
		in .030 and Policy 1-	in 6.01		
-0280		89			
	Expansions	.080 and Policy 1-89	By reference to WAC	10 & 11	add KC policies
-0290			in 6.01		
	Abandonment	By reference to WAC	By reference to WAC	6.l.	
-0300		in .030	in 6.01		
	Developments,	.105 and by	By reference to WAC	15 & 16	
	subdivisions, and	reference to WAC in	in 6.01		
	minimum land area	.030			
-0320	requirements				
	Certification of	.120, .130, .140, &	Eight, Nine, and Ten	17	
	installers, pumpers,	.145			
	and maintenance				
-0340	providers				
	Waiver of state	.165	By reference to WAC	18	
-0420	regulations		in 6.01		
	Enforcement	.180	Thirteen	19	All three LHJs have civil
					infraction (tickets) &
					misdemeanor (criminal) authority
-0430					and penalty provisions
	Notice of decision -	.170	Fourteen	20	
	adjudicative				
-0440	proceeding				
-0450	Severability	.190	Fifteen	24	