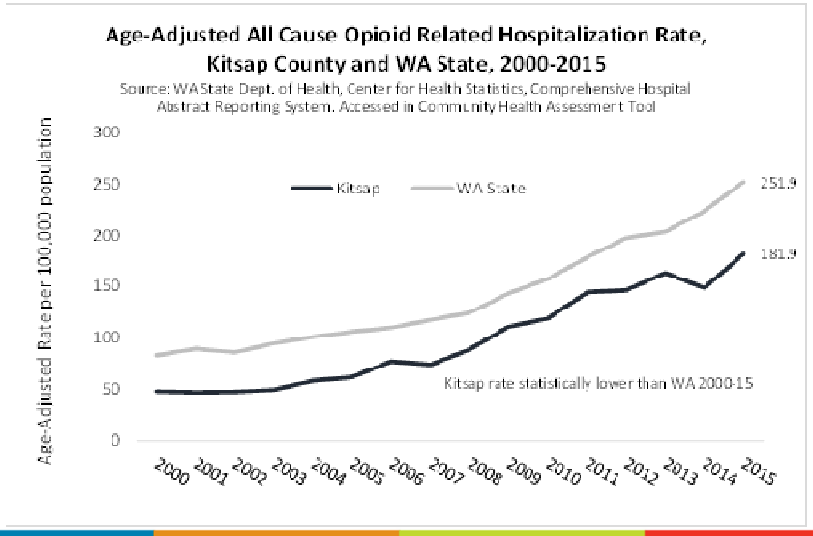
New Health Risks Posed by Illicit Manufacture and Use of Fentanyl

Susan Turner MD, MPH, MS
Health Officer

KITSAP PUBLIC HEALTH DISTRICT

Opiate-Related Hospitalizations



Comprehensive Hospital Abstract Reporting System

KITSAP PUBLIC HEALTH DISTRICT

Substance Use Affecting Moms & Babies

Figure 1
Maternal Hospital Stays including Substance Use Dx
WA and U.S. Trend of Rates, 1990–2014

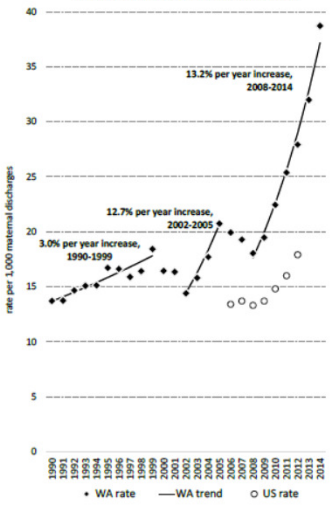
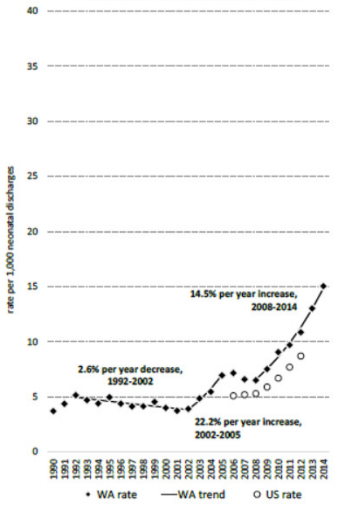


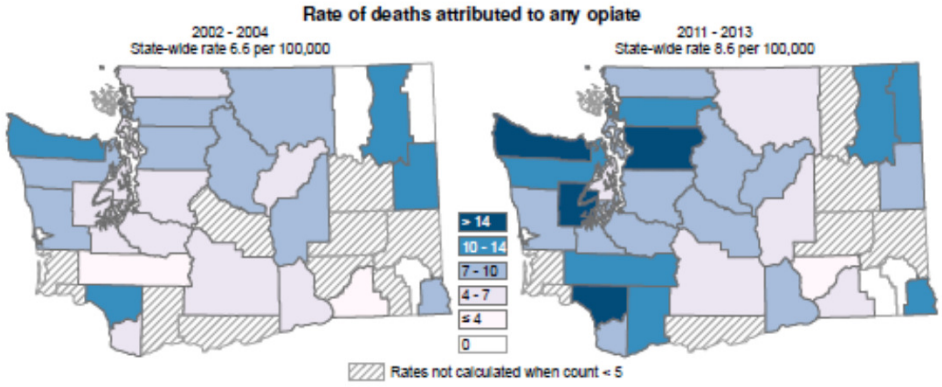
Figure 2
Newborn Hospital Stays including a Substance Use-Related Dx
WA and U.S. Trend of Rates, 1990–2014



The Office of Financial Management Health Care Research Center, February 2016

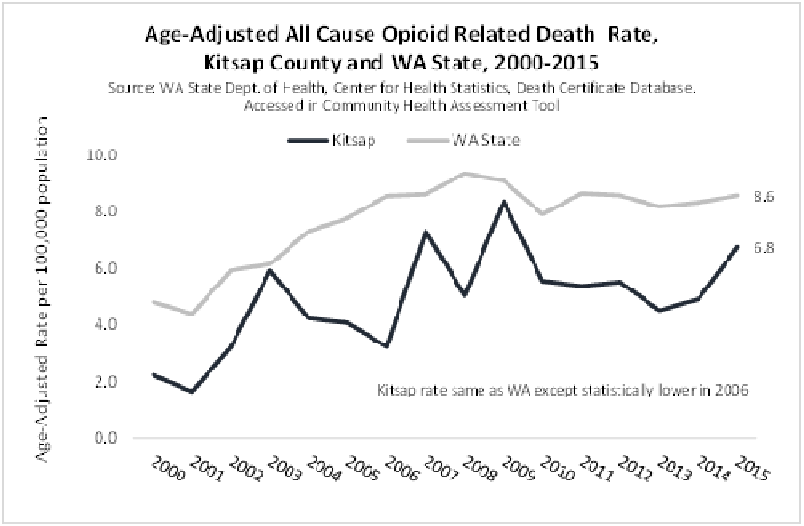
KITSAP PUBLIC HEALTH DISTRICT

Washington Opioid Death Rates by County, Comparison 2002-2004 & 2011-2013



KITSAP PUBLIC HEALTH DISTRICT

Opiate-Related Death Rate



Death Certificate Database

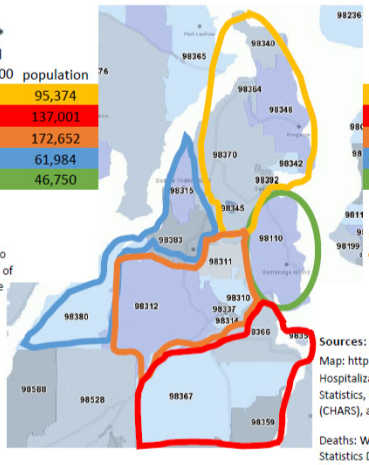
KITSAP PUBLIC HEALTH DISTRICT

Kitsap Opioid Hospitalizations and Deaths 2014-15* by Zip and County Region

INPATIENT HOSPITALIZATIONS, 2014-2015*

	number	age-adjusted rate per 100,000	population
North Kitsap	165	210.4	95,374
South Kitsap	241	179.7	137,001
Bremerton	288	160.0	172,652
Central Kitsap	83	137.3	61,984
Bainbridge Island	48	121.1	46,750

*To handle the mid-year code conversion from International Classification of Disease (ICD) version 9 to version 10, the 2015 Hospitalization data is comprised of 2015 data for the first 9 months, and 2014 data for the last 3 months.



DEATHS, 2014-2015

	number	age-adjusted rate per 100,000
North Kitsap	7	7.0
South Kitsap	10	6.6
Bremerton	11	5.9
Central Kitsap	1	**
Bainbridge Island	1	**

**Rates are not calculated when there are fewer than 5 cases.

Prepared by:
Siri Kushner
Epidemiologist
Kitsap Public Health District
siri.kushner@kitsappublichealth.org
September 23, 2016

Sources:
Map: http://www.unitedstateszipcodes.org/print_this_map.php
Hospitalizations: WA State Dept. of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS), accessed in Community Health Assessment Tool.

Deaths: WA State Dept. of Health, Center for Health Statistics, Vital Statistics Database, accessed in Community Health Assessment Tool.

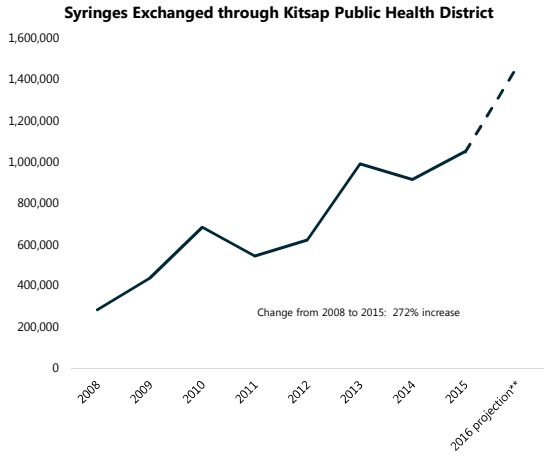
KITSAP PUBLIC HEALTH DISTRICT

Syringes Exchanged in Kitsap

	# of syringes exchanged	# of participants served*
2008	282,039	4,546
2009	436,390	7,524
2010	682,462	9,975
2011	543,794	
2012	620,582	
2013	990,218	3,599
2014	914,265	3,294
2015	1,049,116	3,445
2016 projection**	1,466,816	
2008-2015 % change	272%	-24%

**projection based on Jan-June actual 733,408

*duplicated count



KITSAP PUBLIC HEALTH DISTRICT

Illicitly Manufactured Fentanyl (IMF)

- Increases in overdose fatalities in multiple states
- In March 2015, DEA issued a nationwide alert on fentanyl as a threat to health and public safety
- Snohomish County and Seattle law enforcement have encountered
- Kitsap law enforcement taking precautions
- Local illicit drug sellers claim local availability

KITSAP PUBLIC HEALTH DISTRICT

Why is IMF Dangerous?

- Potency—50-100X heroin, 100X morphine
- Nanogram difference between "high" and overdose
- Toxic in small doses
- Exposure to skin or inhalation of powders
- Hidden in heroin or masquerading as Rx
- More difficult to reverse overdose
- Analogs even more toxic (e.g. carfentanil)
- Increasingly available in U.S., and potentially in Kitsap

2 milligrams of powder next to a penny.

KITSAP PUBLIC HEALTH DISTRICT

Drug-related Deaths Involving Fentanyl: Coroner Data

Opioid Overdose Deaths Occurring in Kitsap County*

Source: Kitsap County Coroner's Office

Year	Total Overdose Deaths Involving At Least One Opioid	Fentanyl	% Fentanyl of Total	Multi-drug	% Multi-drug of Total
2007	8	1	13%	6	75%
2008	12	0	0%	7	58%
2009	10	0	0%	8	80%
2010	2	0	0%	1	50%
2011	9	0	0%	5	56%
2012	7	0	0%	4	57%
2013	5	0	0%	3	60%
2014	12	1	8%	8	67%
2015	19	4	21%	12	63%

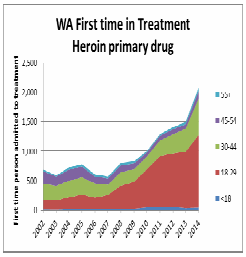
*Deaths that occured in Kitsap County; can be Kitsap residents or residents of other counties and/or states.

Table prepared by Kitsap Public Health District

September 26, 2016

KITSAP PUBLIC HEALTH DISTRICT

Who is at risk?



- Those using heroin or any illicit street narcotic or benzodiazepine
  - Others in their environment
  - Babies in utero
- Law enforcement
- EMS/Fire
- ED personnel

KITSAP PUBLIC HEALTH DISTRICT

CDC Health Update Recommendations: Improve Detection

- Public Health Departments:

  Explore methods for more rapidly detecting drug overdose outbreaks, including fentanyl
- Medical Examiners/Coroners:

  Screen for fentanyl in suspected opioid overdose cases in regions seeing increasing fentanyl confiscations or high spikes in overdose deaths
- Law Enforcement:

  Identify and respond to increases in the distribution and use of IMF

https://emergency.cdc.gov/han/han00395.asp

KITSAP PUBLIC HEALTH DISTRICT

CDC Health Update Recommendations: Expand Use of Naloxone and Treatment

- Health Care Providers:

  Multiple dosages of naloxone may be needed per overdose event

- Harm Reduction Organizations:

  Conduct trainings on naloxone use to persons at risk for opioid-related overdose, and their friends and family

https://emergency.cdc.gov/han/han00395.asp

KITSAP PUBLIC HEALTH DISTRICT

Kitsap Public Health Advisory on Fentanyl

- Health care professionals, EMT/Fire, law enforcement, coroner, behavioral health treatment providers
- Be aware of the presence of IMF in our community
- Use PPE when handling items from the scene, including victim's clothing
- Be aware that more than one dose of naloxone may be required

KITSAP PUBLIC HEALTH DISTRICT

Health Advisory--What is Being Done?

- KPHD:
  - Exploring use of Essence ED Data for real time surveillance
  - Engaged with law enforcement and coroner to determine local level of risk
  - Raising level of awareness
  - Communicating federal recommendations to local healthcare providers
  - Champion for local implementation of state opiate response plan
- Ostrich Bay Needle Exchange
  - Makes naloxone kits available to clean syringe services clients

KITSAP PUBLIC HEALTH DISTRICT

Health Advisory--What is Being Done?

- The Salish Behavioral Health Organization is increasing the availability of SUD treatment options, integrated with treatment of mental health disorders
- Peninsula Community Health Services has obtained certification for all physicians to provide Suboxone therapy
- Kitsap Mental Health Services Medical Director now certified to provide Suboxone
- Harrison Family Medicine Residency Director has increased Suboxone therapy cap to 100 slots, and additional faculty soon to be added
- Both tribes have physicians providing Suboxone therapy
- Group Health also provides

KITSAP PUBLIC HEALTH DISTRICT

2016 Washington State Interagency Opioid Working Plan

Priority Goals

GOAL 1: Prevent opioid misuse and abuse.	GOAL 2: Treat opioid dependence.	GOAL 3: Prevent deaths from overdose.	GOAL 4: Use data to monitor and evaluate.
↓	↓	↓	↓
Improve prescribing practices.	Expand access to treatment.	Distribute naloxone to people who use heroin.	Optimize and expand data sources.

Priority Actions

Washington State Interagency Working Opioid Response Plan, January 2016

KITSAP PUBLIC HEALTH DISTRICT

Questions, Thoughts, Discussion?

KITSAP PUBLIC HEALTH DISTRICT

Onsite Sewage System Design/Construction/Permitting

Presented by:
John Kiess
Environmental Health Director

KITSAP PUBLIC HEALTH DISTRICT

Onsite Sewage System Regulatory Overview

- Large Onsite Sewage System – 3,500 or greater gallons per day
  - Regulated by WA DOH
    WAC 246-272B
- Community OSS <3,500 gallons per day and all individual systems
  - Regulated by KPHD
    KPHB Ord. 2008A-01

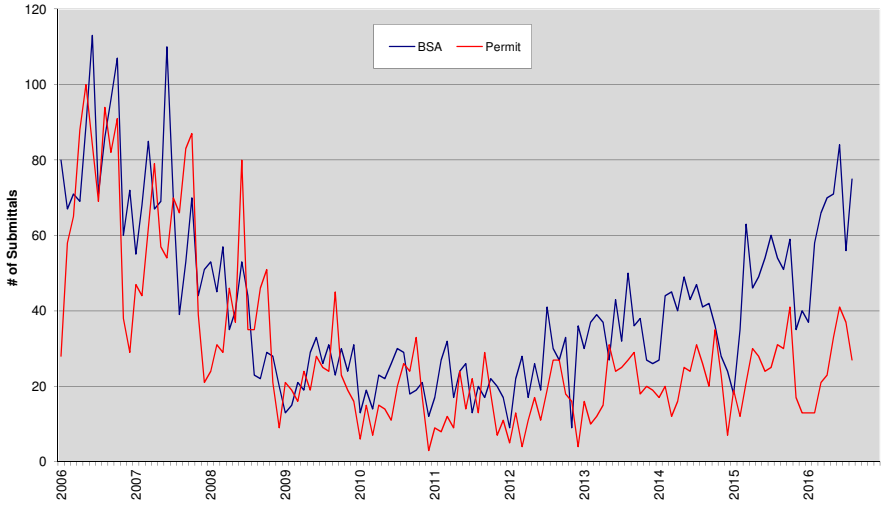
KITSAP PUBLIC HEALTH DISTRICT

Health District Onsite Sewage Program Services

- Building permit review for an adequate wastewater disposal system
- New construction septic design review
- Septic system installation permits
- Replacement / Repair design and review
- Property Conveyance Inspection Reports
- Monitoring and Maintenance
- Certification for Installers, Maintenance Specialists, and Pumpers
- Complaint response (PIC Program)

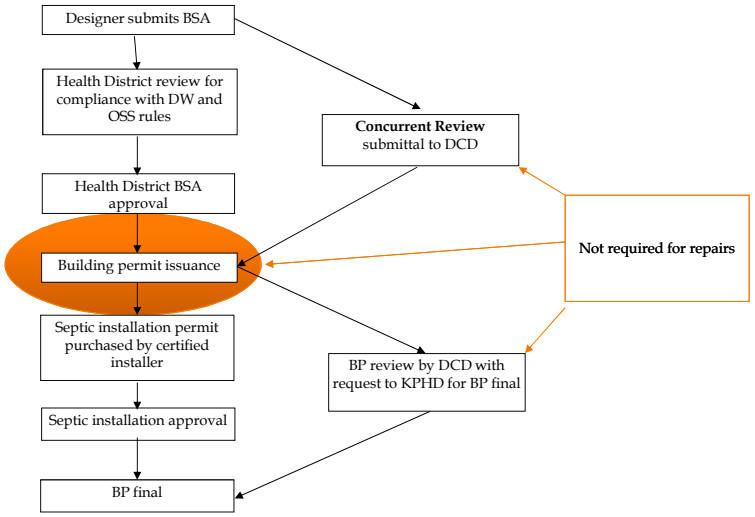
KITSAP PUBLIC HEALTH DISTRICT

Onsite Sewage Program Workload



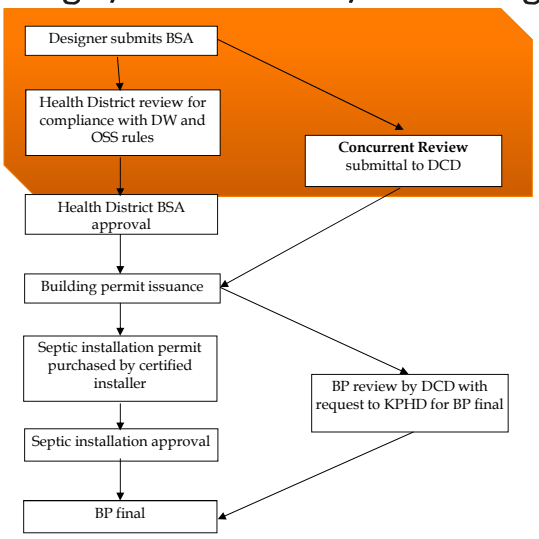
KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process



KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process

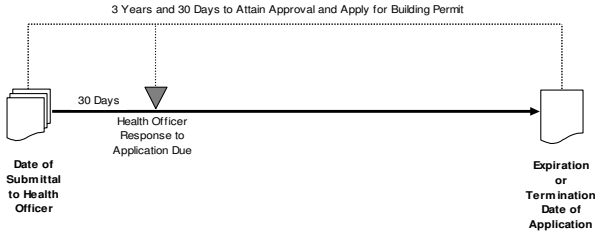


KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process

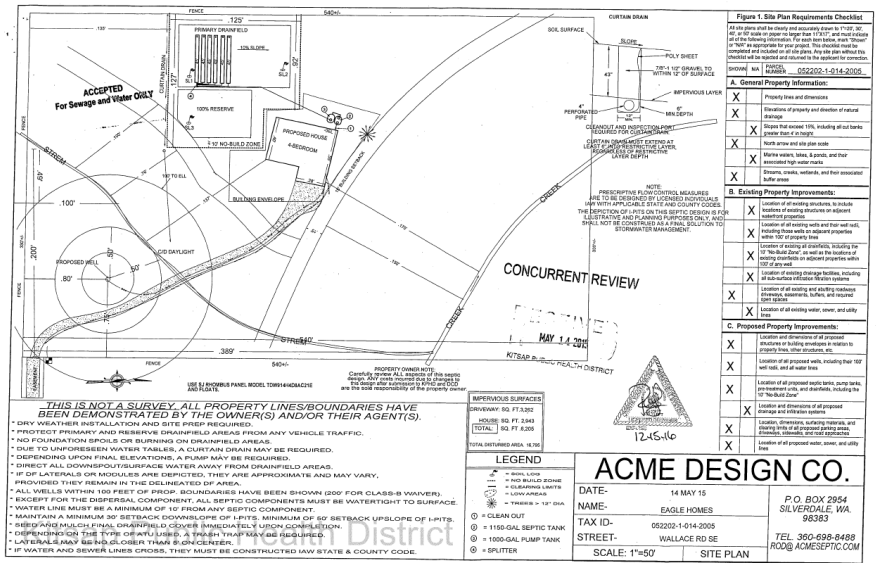
WA State Licensed Septic Designer submits a Building Site Application (DCD concurrent review can occur at this time)

Timelines for Building Site Application Review & Validity



Health District Review for compliance with DW and OSS codes (<u>must</u> provide response in 30 days, we average **14**)

KITSAP PUBLIC HEALTH DISTRICT



KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

Septic Design

Minimum Treatment Performance Levels[1] and Method of Distribution

Vertical Separation (inches)	Soil Type 1	2	3 - 6
12 to < 18	**A** - pressure with timed dosing	**B** - pressure with timed dosing	**B** - pressure with timed dosing
≥ 18 to < 24	**B** - pressure with timed dosing	**B** - pressure with timed dosing	**B** - pressure with timed dosing
≥ 24 to > 36	**B** - pressure with timed dosing	**C** - pressure with timed dosing	**E** - pressure with timed dosing
≥ 36 to > 60	**B** - pressure with timed dosing	**E** - pressure	**E** - gravity
≥ 60	**C** - pressure	**E** - gravity	**E** - gravity

[1] The treatment performance levels correspond with those established under the product listing requirements in WAC 246-272A-0110, Table 3, and those treatment components approved for use by the Department.

KITSAP PUBLIC HEALTH DISTRICT

Septic Design

- Standard gravity & pump-to-gravity
- Alternative (necessary when there are shallow soils, reduced setbacks to wells or surface waters, or poor soil permeability)
  - Sand-Based Treatment
  - Pressure Distribution
  - Aerobic Treatment Units
  - Drip Irrigation
  - Glendon® BioFilters

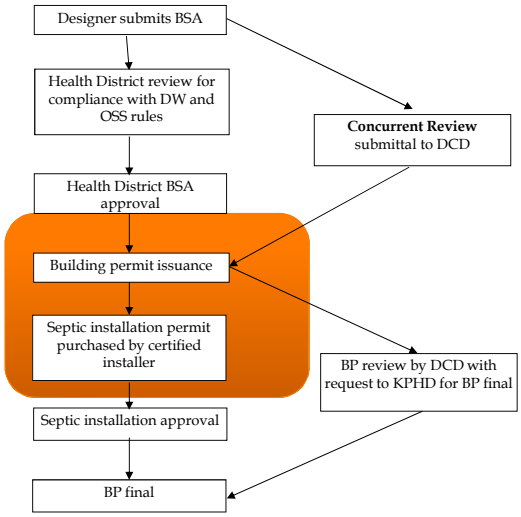
KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process

BSAs are reviewed for both Drinking Water and Onsite Sewage

KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process



KITSAP PUBLIC HEALTH DISTRICT

Septic Installation and KPHD Review

- Permit purchased by KPHD Certified Installer
- Conformance with design and construction requirements
- Standard practices and methods
- Tanks / treatment vessels
- Piping
- Drainfield / Effluent Distribution System
- System installation oversight by the designer of record

KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

345 6th Street, Suite 300
Bremerton, WA 98337
360-337-5235

ONSITE SEWAGE PERMIT APPLICATION
Onsite Sewage Disposal Systems

Submittal Date	Memo Number	Review Fee	S.S.I.

BUILDING SITE ADDRESS

Street Address: 345 6th Street
City: Bremerton
Tax Parcel Number:

OWNER OR APPLICANT INFORMATION

First Name: Kitsap | Last Name: Health | Contact Phone: 360-337-5290
Mailing Street Address: same
Mail City | Mail State | Mail Zip/Postal

PERMIT INFORMATION

Permit Type: [x] New; [ ] Alteration/Repair Alt; [ ] Repair; [ ] Component; [ ] Tank(s) Only; [ ] Remediation; [ ] Connection Only; [ ] Curtain Drain

System Type: [ ] Standard; [x] Alternative; [ ] Holding Tank

Use Type: [x] Single Family; [ ] Community; [ ] Commercial

Other Details: KSA/SC Memo #: 320090
Building Permit #: 16-12345

Capacity: Number of Units: 1; Number of Bedrooms: 4; Daily Design Flow (GPD): 480

RELEASE AND ACKNOWLEDGMENT

Designer/Engineer Release Section *(Required for New, Alteration/Repair, Repair and Remediation Applications)*

I certify that the property site and soil conditions are conducive and suitable to install the onsite sewage system pursuant to the approved plan and Kitsap County Board of Health Ordinance 2008A-01.

Comments or Conditions: Install in dry weather conditions only

Designer/Engineer Name	Signature	Release Date	Contact Number
Joe Designer		12/12/1234	360-337-5290

Installer Acknowledgment Section

I agree to adhere and conform to the requirements of Kitsap County Board of Health Ordinance 2008A-01, follow and abide by the approved Building Site application or plan for the construction of this system, and / or any specified instructions from the Designer.

Comments:

Name/Company	Signature	Date	Contact Number
Joe Installer		12/12/1234	360-337-5290

KITSAP PUBLIC HEALTH DISTRICT

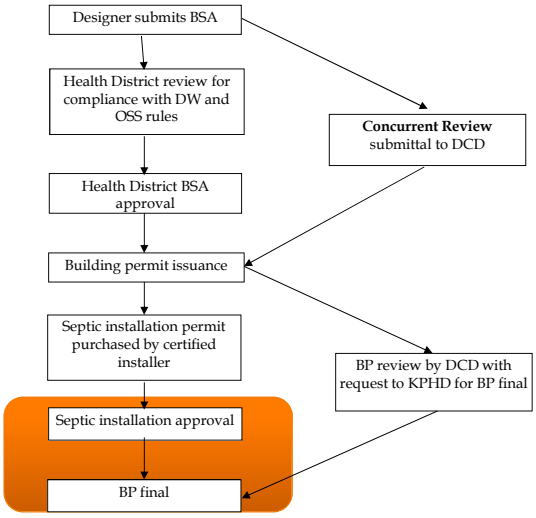
KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

Septic Design / Construction / Permitting Process

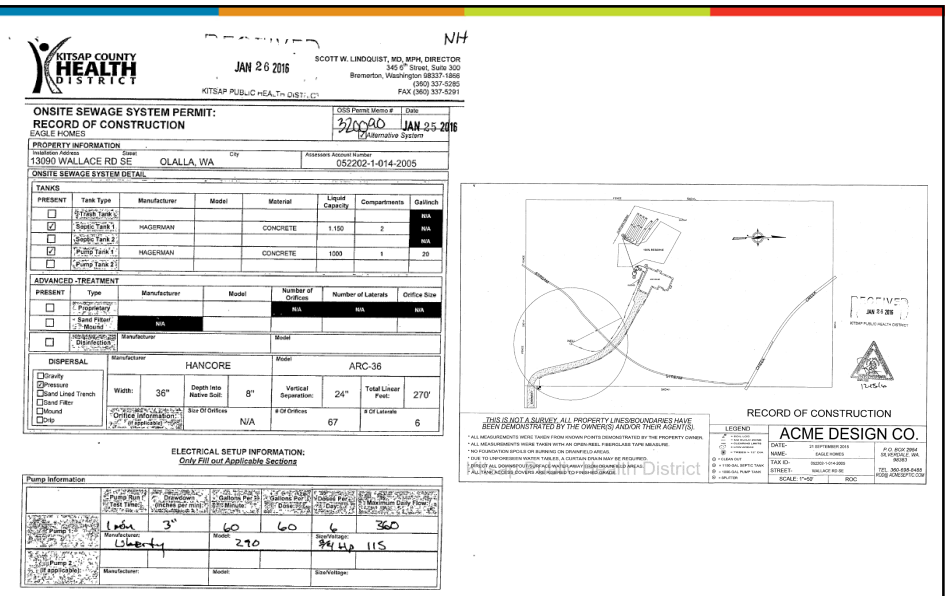


KITSAP PUBLIC HEALTH DISTRICT

Septic Permit Approval

- Record of Construction from designer of record
- "As-Built" Drawing
- System operational settings
- Documents that become part of the Health District's permanent record for the property
- After permit approval, building permit final is okay with the Health District

KITSAP PUBLIC HEALTH DISTRICT



KITSAP COUNTY HEALTH DISTRICT

RECEIVED JAN 26 2016 KITSAP PUBLIC HEALTH DISTRICT

NH

SCOTT W. LINDQUIST, MD, MPH, DIRECTOR
345 6th Street, Suite 300
Bremerton, Washington 98337-1866
(360) 337-5285
FAX (360) 337-5291

ONSITE SEWAGE SYSTEM PERMIT:
RECORD OF CONSTRUCTION
EAGLE HOMES

OSS Permit Memo # 320090 | Date JAN 25 2016
☑ Alternative System

PROPERTY INFORMATION

Installation Address	Street	City	Assessors Account Number
13090 WALLACE RD SE	OLALLA, WA		052202-1-014-2005

ONSITE SEWAGE SYSTEM DETAIL

TANKS

PRESENT	Tank Type	Manufacturer	Model	Material	Liquid Capacity	Compartments	Gallinch
☐	Trash Tank						N/A
☑	Septic Tank 1	HAGERMAN		CONCRETE	1,150	2	N/A
☐	Septic Tank 2						N/A
☑	Pump Tank 1	HAGERMAN		CONCRETE	1000	1	20
☐	Pump Tank 2						

ADVANCED -TREATMENT

PRESENT	Type	Manufacturer	Model	Number of Orifices	Number of Laterals	Orifice Size
☐	Proprietary			N/A	N/A	N/A
☐	Sand Filter/ Mound	N/A				
☐	Disinfection	Manufacturer		Model		

DISPERSAL
☐ Gravity
☑ Pressure
☐ Sand Lined Trench
☐ Sand Filter
☐ Mound
☐ Drip

Manufacturer		Model	
HANCORE		ARC-36	
Width: 36"	Depth Into Native Soil: 8"	Vertical Separation: 24"	Total Linear Feet: 270'
Orifice Information: (if applicable)	Size Of Orifices N/A	# Of Orifices 67	# Of Laterals 6

ELECTRICAL SETUP INFORMATION:
Only Fill out Applicable Sections

Pump Information

	Pump Run Test Time	Drawdown (inches per min)	Gallons Per Minute	Gallons Per Dose	Gallons Per Day	Maximum Daily Flow
Pump 1	1 min	3"	60	60	6	360
	Manufacturer: Liberty		Model: 290		Size/Voltage: 3/4 HP 115	
Pump 2 (if applicable)	Manufacturer:		Model:		Size/Voltage:	

KITSAP PUBLIC HEALTH DISTRICT

Septic System Monitoring and Maintenance

- Tank pumping
- Maintenance inspection contracts with KPHD certified maintenance specialist for all alternative systems
- Maintenance inspection requirements for the service providers.

KITSAP PUBLIC HEALTH DISTRICT

KITSAP PUBLIC HEALTH DISTRICT

Mail To: EAGLE HOMES INC
7624 RAY NASH DR NW
GIG HARBOR, WA
98335

Use: Residential, Single Family (4 bdrm)
System Design Flow: 480
GENERAL SYSTEM TYPE: Pressure drainfield
Owner: EAGLE HOMES INC

ON ID: 1026145.0

Fold here

ON-SITE WASTEWATER TREATMENT SYSTEM INSPECTION REPORT

Inspected: 01/28/2016 - Inspection Type: STARTUP - Correction Status: No corrections needed

Company:	Work Performed By:	Submitted 02/11/2016 by:
Acme Septic Design and Maintenance	Rod Left	Alita DeLaCruz

Fold here

COMMENTS & GENERAL INSPECTION NOTES

No Deficiencies Noted

THE SYSTEM IS BRAND NEW AND FUNCTIONING AS DESIGNED. THE HONE IS CURRENTLY UNOCCUPIED.

GENERAL SITE & SYSTEM CONDITIONS

The General Site and System Conditions were:	Fully Inspected
Components accessible for service:	YES
All required service performed (if no - specify omitted inspection items in notes):	YES
Surfacing effluent from any component (including mound seepage):	NO
Components appear to be watertight - no visual leaks:	YES
Improper encroachment (structures/impervious surfaces); cover; or settling problems observed:	NO
Structures connected to onsite sewage system occupied. If NO explain in comments:	NO
All riser lids securely fastened upon departure:	YES
Inspected components appear to be in good physical condition:	YES

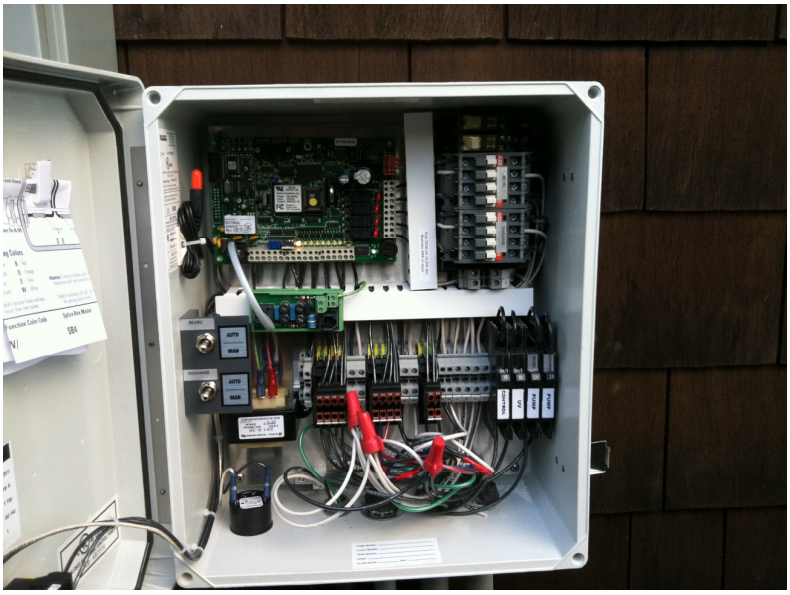
ONSITE SEWAGE SYSTEM INSPECTION DETAIL

Panel: Control - T Pump

Manufacturer: SJE Rhombus

This component was:	Fully Inspected	
The panel has been setup to dose the system a maximum of _____ gpd):	38D	
Panel functioning:	YES	
Alarm mechanism functioning as intended:	YES	
Pump 1: Arrival on minutes (override in parentheses - if present):	N/A	
Pump 1: Arrival off hours (override in parentheses - if present):	N/A	
Pump 1: Arrival gallons per dose (override in parentheses - if present):	N/A	
Pump 1: ETM hours (override in parentheses - if present):	0000087	
Pump 1: Cycle Count (override in parentheses - if present):	999838	
Pump 1: Timer setting adjustments were required (if yes indicate new timer settings below - state reason in comments):	YES	
Pump 1: New gallons per dose (override in parentheses - if present):	80	
Pump 1: New off hours (override in parentheses - if present):	4	
Pump 1: New on minutes (override in parentheses - if present):	1	

KITSAP PUBLIC HEALTH DISTRICT



KITSAP PUBLIC HEALTH DISTRICT

Septic System Information Initiatives

- Records updating project for our 58,000+ systems
- Online mapping system to provide septic system information to the public
- Septic Sense Workshops in conjunction with Clean Water Kitsap

KITSAP PUBLIC HEALTH DISTRICT