

Large On-Site Sewage System (LOSS)

SITE RISK SURVEY

Flows between 3,500 – 100,000 gallons/day



The Washington State Department of Health (DOH) requires a Site Risk Survey (SRS) for all new Large On-Site Sewage Systems (LOSS). DOH may also require an SRS for existing LOSS. Information provided in the SRS may identify potential health and environmental impacts resulting from the LOSS. If so, DOH may require further information such as a Hydrogeology Report. You may choose to submit a Hydrogeology Report instead of the SRS. If so, please discuss that option with LOSS staff beforehand. You may disregard this form, although this information should be included in the Hydrogeology Report.

Completing this Form

1. Before you begin filling in the form, be sure and save it to your hard drive. **Your data will be lost if you close the form without saving it to your hard drive.**
2. The SRS should be sent electronically as a PDF. If you prefer to complete the form by hand and submitted as a hard copy, please contact LOSS staff for instructions.
3. All SRS must be signed and dated. An electronic signature is acceptable on a PDF copy.
4. Please provide references for the information you use to complete the SRS. References can be attached to your electronic submittal or provided as an on-line link.
5. When you send the SRS electronically, please attach maps and other supporting data. All attachments must be legible at a printable size of 11" x 17". Please send a hard copy if the attachments cannot be read at this size.
6. Answer all questions on the SRS. If the question is not applicable to your site, write N/A.
7. Use the comment sections in the SRS to provide additional information.
8. If completing the form on the computer, use your tab key to move forward to the next box or use shift/tab to reverse.
9. Save your file. Email to wastewatermgmt@doh.wa.gov.
10. If sending by FAX, send to 360-236-2254.

For questions on completing this form you can contact wastewatermgmt@doh.wa.gov or call 360-236-3330.

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 doh.information@doh.wa.gov

Part 1. General Information

1.1 Check One: New LOSS Existing LOSS

1.2 LOSS Name and Location:

Name of LOSS

LOSS Address (Physical Location) If the drainfield is offsite, provide a separate location address.

(City)

(State)

(Zip Code)

(County)

1.3 LOSS Owner:

(Name of Legal Owner)

(Mailing Address)

(City)

(State)

(Zip Code)

(County)

(Daytime Phone Number)

(Fax Number)

(Email)

1.4 Name and Contact Information for Person Completing the SRS:

(Authorized Representative, if different from owner)

(Title)

(Mailing Address)

(City)

(State)

(Zip Code)

(County)

(Daytime Phone Number)

(Fax Number)

(Email)

1.5 LOSS Description

1.5.1 Daily Maximum Effluent Volume: _____ gpd (measured) _____ gpd (design) Unknown

1.5.2 Describe Sewage Treatment Process: _____

1.5.3 Treatment Level: HQE B C E STE N₁₀ N₂₀ P Unknown

WAC 246-272B-01100 – Acronyms and Definitions:

<http://apps.leg.wa.gov/WAC/default.aspx?cite=246-272B-01100>

1.5.4 For existing LOSS, do you have effluent or environmental monitoring data? Yes No
If yes, please provide a summary.

1.5.5 For existing LOSS, does your drainfield show any signs of failure or has it shown signs in the past? Yes No If yes, please describe (include dates): _____

1.5.6 Additional comments: _____

Part 2. Soil Description

2.1. Has there been a site review with soil logs confirmed by DOH? Yes No Unknown

2.2. Soil Type: 1 2 3 4 5 6 7 Unknown

WAC 246-272B-03400 – Soil Characterization:

<http://apps.leg.wa.gov/WAC/default.aspx?cite=246-272B-03400>

2.3. What is the vertical separation? _____ inches Unknown
(Distance from the bottom of the drainfield to the top of Type 6 soil, Type 7 soil, or water table)

2.4. Does the soil show signs of a water table within 72 inches of the soil surface such as mottling, bright gray soils, a water line, or standing water? _____ If yes, please describe: _____

2.5. Additional Comments: _____

Part 3: Land Use

3.1. Is the drainfield located in any of the following sensitive areas? Yes No Unknown
Check all that apply:

a) Sole Source Aquifer
<https://www.epa.gov/dwssa>

b) Critical Aquifer Recharge Area (CARA)
<http://mrsc.org/Home/Explore-Topics/Environment/Critical-Areas-and-Species/Critical-Areas.aspx>

<https://ecology.wa.gov/Water-Shorelines/Water-quality/Groundwater/Protecting-aquifers/Critical-aquifer-recharge-areas>

- c) Designated Wellhead Protection Area (WPA) 1 yr. 5 yr. 10 yr.
<https://fortress.wa.gov/doh/swap/>
- d) Marine Recovery Area:
<https://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/OnsiteSe wageSystemsOSS/ManagementStrategy/ManagementAreas>
- e) Shellfish Growing Area (within ½ mile)
<http://www.doh.wa.gov/Portals/1/Documents/4400/ai-map.pdf>
- f) U.S. Department of Homeland Security FEMA Flood Maps
<http://msc.fema.gov/portal>
- g) Describe any other sensitive areas located within 1000 feet of the drainfield such as fish hatcheries, water recreation areas, etc. _____

3.2. Describe any other local ordinances which might affect the design of your LOSS. _____

3.3. Are there other drainfields located on the property or serving customers in your development?
 Yes No Unknown If yes, describe their size and what they serve. _____

3.4. Attach a topographic map of 1:7,200 or other suitable scale that clearly shows section, township, range, property boundary, primary and reserve drainfield, areas prone to flooding including 100-year flood, boundary of sensitive areas, surface water within 1000 feet of the drainfield, unstable areas prone to erosion, and other drainfields on the property. The map must have a scale and north arrow. The topographic scale must be clearly marked. The maps MUST be readable at a printable size of 11"x17" or smaller.

Part 4: Hydrogeology

4.1. If you answer yes to all the questions in this box, skip the rest of the questions in Part 4 and go directly to Part 5. Please provide information to support your "yes" answers.

- a) Is your daily design flow less than 14,500 gpd?
 Yes No Unknown
- b) Is the total nitrogen in your effluent 10 mg/L or less?
 Yes No Unknown
- c) Is there at least 36" of vertical separation below the infiltrative surface of your drainfield?
 Yes No Unknown
- d) Is the water table greater than 60 inches below the infiltrative surface?
 Yes No Unknown
- e) Is the nitrate concentration in the groundwater under your site less than 4 mg/L?
 Yes No Unknown
- f) Is your drainfield located in an area that is not designated a sensitive site (See Part 3.1)?
 Yes No Unknown

- 4.2. List all wells within 300 feet of the primary and reserve drainfield in the following table. If there are less than 5 wells within 300 feet, list wells within 1000 feet (maximum 5 wells). Start with the well closest to the project. Attach and label well logs for all listed wells and include a map showing the well locations. This map can be a separate map or can be combined with the map in Part 3.4.

Well data is on Ecology’s website at <https://apps.ecology.wa.gov/wellconstruction/map/WCLSWebMap/default.aspx> Water quality information for public wells is on DOH’s website at <https://fortress.wa.gov/doh/swap/>.

Type of Well P-Private PB – Public M-Monitoring	Depth to surface aquifer (described as water bearing or saturated on well log)	Static Water Level	Surface aquifer Water Quality - List most recent sample date and value.		Is the surface aquifer confined? If so, describe the confining layer – depth, thickness, materials
			Fecal or Total Coliform	Nitrate	
1.					
2.					
3.					
4.					
5.					

4.3. Has a well been drilled or will be drilled for this project? Yes No Unknown

4.4. Does irrigation affect the seasonal water table in the area of your drainfield?
 Yes No Unknown

4.5. Has there been a high water study done on your site to determine the seasonally high groundwater? Yes No Unknown If yes, please provide a copy of the study.

4.6. Do you know of any other groundwater quality data that is pertinent to this site?
 Yes No If yes, please provide a description and reference: _____

4.7. Nitrate Balance: To determine, complete the Level 1 Nitrate Balance Spreadsheet at [337-070.xlsx \(live.com\)](#) For instruction for completing the spreadsheet see <http://www.doh.wa.gov/Portals/1/Documents/Pubs/337-069.pdf>.

Check which boxes apply: (DOH considers an SRS complete when all information has been received.)

- I am submitting a nitrate balance with the SRS.
 - I am submitting the nitrate balance map and references electronically.
 - I will mail the nitrate balance map and references.
- I will submit a nitrate balance at a later date. The approximate date is _____.

4.8. Additional Comments: _____

Part 5: Surface Water

5.1. If you can answer yes to both of the questions in this box and provide supporting monitoring data, skip the rest of the questions in Part 5 and go directly to Part 6.

<p>a) Is the total nitrogen in your effluent less than 10 mg/L? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>b) Is the total phosphorus in your effluent less than 1.0 mg/L? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p>
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5.2. List surface water within 1000 feet of the drainfield in the following table.

Name	Type*	Distance	Up or Down Gradient	Known Water Quality Issues

*Types of Surface Water: stream, river, spring, lake, wetland, irrigation ditch, storm water pond, Puget Sound, ocean, irrigation canal, other (please describe).

5.3. Are you aware of any information that supports hydraulic continuity between the groundwater under the drainfield site and surface water? Yes No Data Source? _____

5.4. Has a Total Maximum Daily Load (TMDL) analysis been conducted on surface water located within ½ mile of your drainfield or reserve area? Yes No Unknown
<http://www.ecy.wa.gov/programs/wq/tmdl/tmdlsbywria/tmdlbywria.html>

5.5. Additional Comments: _____

Part 6. Certification

I certify under penalty of law that this document and all attachments, to the best of my knowledge and belief, are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or revocation of the LOSS operating permit.

 Printed Name (owner or owner's agent)

 Title

 Date

 Signature (owner or owner's agent)