

GRANT COUNTY

County Courthouse
P.O. Box 37
Ephrata, WA 98823
(509) 754-6060



HEALTH DISTRICT

1038 W. Ivy Avenue
Moses Lake, WA 98837
(509) 766-7960

Ordinance 2008-3

Rules and Regulations of the Grant County Health District Providing Amendments and Additions to WAC 246-272A Regarding On-site Sewage Systems.

Section 1. Authority.

- (1) Pursuant to the authority of R.C.W. 70.05.060 (Powers and duties of local board of health.), these regulations are hereby established as minimum requirements of the Grant County Board of Health governing on-site sewage disposal systems.

Section 2. Administration.

- (1) Washington Administrative Code Chapter 246-272A, governs on-site sewage disposal systems as now written or as it may be hereafter amended and this ordinance supplements those rules. Where the provisions of Chapter 246-272A and the amendments of this ordinance conflict, the more strict regulation shall apply.
- (2) The Grant County Board of Health adopts in its entirety as a rule and regulation of this Board of Health *Recommended Standards and Guidance for Pressure Distribution* as adopted by the Department's On-Site Sewage Technical Advisory Committee as the same may be amended from time to time
- (3) Where the provisions of any local, State, or Federal regulation shall conflict with this ordinance, the more strict regulation shall apply, with the order of enforcement proceeding from federal, state, then Health District.
- (4) Ordinance 96-1 and all amendments thereto are hereby repealed to be replaced by this ordinance.

Section 3. Amends WAC 246-272A-0010 Definitions

“Area of special of concern” Means a location proposed for septic system installation designated by the Health Officer where porous soil conditions and depth to ground water create a condition of likely contamination to the aquifer if a gravity septic system design is allowed.

“Caliche, non restrictive” Refers to a lower soil horizon comprised of calcium carbonate precipitate with sufficient permeability to absorb drain field effluent.

“Department” means the Washington State Department of Health.

“GCHD” means Grant County Health District.

“Health Officer” means the Health Officer of the Grant County Health District.

“Local Technical Review Committee” means 2 or more environmental health specialists employed by the GCHD and certified as Wastewater Treatment inspectors by the Department.

“Ordinance” refers to the Grant County Health District ordinance regulating on-site sewage disposal and treatment.

“Redundant drain field” means parallel drain field trenches designed far enough apart to allow installation of replacement drain field trenches between those of the primary drain field.

“Septic system maintenance provider” means a person qualified by experience or by examination to evaluate the condition and functioning of the components of an on-site sewage disposal system. A septic system installer, septic system pumper, septic system designer, or other person approved by the Health Officer may qualify for certification.

“Site evaluation” also referred to as **“site registration”** means a report normally prepared on a form provided by the GCHD of the soil and terrain conditions for a location proposed for installation of an OSS.

Section 4, Amends WAC 246-272A-0015, Local management and regulation

The Health Officer shall organize a local technical review committee to identify Areas of Special Concern where OSS could pose an increased public health risk. The following areas will be given priority in this activity

- (a) Designated well head protection areas for Group A water systems.
- (b) Areas where nitrogen has been designated as a contaminant of concern.
- (c) Frequently flooded areas including areas delineated by the Federal Emergency Management Agency and or as designated under the Washington State Growth Management Act, Chapter 36.7A RCW.
- (d) Areas in which aquifers used for potable water as designated under the Washington State Growth Management Act, chapter 36.70A RCW are critically impacted by recharge.
- (e) Areas with seasonally high ground water.
- (f) Areas with type 1 soil.

Section 5, Amends WAC 246-272A -0020 Applicability

- (1) The Health Officer:
 - (a) Shall apply this ordinance to OSS treating sewage and dispersing effluent from residential sources with design flow up to three thousand five hundred gallons per day;
 - (b) May apply this ordinance to OSS for nonresidential sources of sewage if treatment, siting, design, installation, and operation and maintenance measures provide treatment and effluent dispersal are equal to that required of residential sources.
 - (c) May not apply this chapter to industrial wastewater.

- (2) A valid sewage system design approval, or installation permit issued prior to the effective date of these regulations:
 - (a) Shall be acted upon in accordance with regulations in force at the time of issuance;
 - (b) Shall have a maximum validity period of one year from the date of issuance or remain valid for an additional year beyond the effective date of these regulations, whichever assures 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.
- (3) This Ordinance does not apply to facilities regulated as reclaimed water use under chapter 90.46 RCW.
- (4) Every place where people congregate or reside shall be provided with a means of sewage disposal approved by the Health officer. This shall include all recreational sites, all work and construction sites in which three or more people are employed for more than three consecutive days, and all other places where, in the opinion of the Health Officer toilet facilities are necessary to protect the public health.

Section 6, Amends WAC 246-272A-0210- -Location

**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 non-perforated distribution pipe
Well or suction line	100 ft.	50 ft.	50 ft.
Public drinking water well	100 ft.	100 ft.	100 ft.
Public drinking water spring measured from the ordinary high water mark	200 ft.	200 ft.	100 ft.
Spring or surface water used as drinking water source measured from the ordinary high water mark ¹	100 ft.	50 ft.	50 ft.
Pressurized water supply line	10 ft.	10 ft.	10 ft.
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
Interceptor/curtain drains/foundation drains/drainage ditches			
Down-gradient ² :	30 ft.	5 ft.	N/A
Up-gradient ³ :	10 ft.	N/A	N/A
Other adjacent non-sewage soil dispersal components/subsurface storm water infiltration systems	10 ft.	N/A	N/A
<u>Hydrophilic Trees</u>	50 ft or outside the canopy	N/A	N/A
<u>Seasonal irrigation ditches</u>	50 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
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

¹If surface water is used as a public drinking water supply; the Designer shall locate the OSS outside of the required source water protection area.

²The item is down-gradient when liquid will flow toward it upon encountering a water table or a restrictive layer .

³The item is up-gradient when liquid will flow away from it upon encountering a water table or restrictive layer.

Section 7, Amends WAC 246-272A-0220- Soil and site evaluation

- (1) The person evaluating the soil and site shall show with stakes the four corners of the proposed primary and replacement drain field
- (2) If a well is planned but has not been drilled, the owner of the property or his agent shall show the proposed location with a stake or other temporary monument having a minimum height of 4 feet.
- (3) Type 5 soil shall include caliche as shown in Table V.

TABLE V-Soil Type Descriptions

Soil Type	Soil Textural Classifications
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding Soil Types 5 and 6, 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, CALICHE, 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, non-restrictive platy structure.
7 Unsuitable for treatment or dispersal	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 expending clays.

Section 8, Amends WAC 246-272A-0230- Design requirements—General

- (1) On-site sewage systems may only be designed by professional engineers, licensed under chapter 18.43 RCW or on-site sewage treatment system designers, licensed under chapter 18.210 RCW, except that the Health Officer may allow a resident owner of a single family residence to design the septic system if the property is suitable for a gravity OSS.
- (2) The treatment standard required is determined by the texture and depth of soil as illustrated in Table VI.
- (3) The public domain OSS design meeting the requirements of treatment levels A, B, C, and D is shown on Table VI A.

**TABLE VI
NEW BUILDING SITES ¹**

Soil Type	SOIL TYPE	Loading Rate (gal./sq. ft./day)	VERTICAL SEPARATION ON 12" < 18"	VERTICAL SEPARATION ON ≥18" < 24"	VERTICAL SEPARATION ON ≥24" < 36"	VERTICAL SEPARATION ON ≥36" < 60"	VERTICAL SEPARATION ON ≥60"
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding Soil Types 5 and 6, all Soil Types with greater than or equal to 90% rock fragments	1.0	A TIMED DOSING	B TIMED DOSING	B TIMED DOSING	B TIMED DOSING	C Pressure
2	Coarse sands	1.0	B TIMED DOSING	B TIMED DOSING	C Pressure	E Pressure	E Gravity
3	Medium Sands, loamy coarse sands, loamy medium sands	0.8	B TIMED DOSING	B TIMED DOSING	E Pressure	E Gravity	E Gravity
4	Fine sands, loamy fine sands, sandy loams, loams	0.6	B TIMED DOSING	B TIMED DOSING	E Pressure	E Gravity	E Gravity
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)	0.4	B TIMED DOSING	B TIMED DOSING	E Pressure	E Gravity	E Gravity
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2	B TIMED DOSING	B TIMED DOSING	E Pressure	E Gravity	E Gravity
7	Sandy clay, clay, silty clay, strongly cemented or firm soils, soil with moderate or strong PLATY STRUCTURE, any soil with a MASSIVE STRUCTURE and any soil with EXPANDING CLAYS	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
"GRAVELLY" - Means soil with ≥15%, but < 35% ROCK Fragments by volume.							
"VERY GRAVELLY" - Means soil with ≥35%, but < 60% ROCK Fragments by volume							
"EXTREMELY GRAVELLY" - Means soil with ≥60%, but < 90% ROCK Fragments by volume							

¹ Gravity design will not be allowed for Type 1 soil in Areas of Special Concern

Table VI A

Public Domain Technology Name*	TS1	TS2	TLA	TLB	TLC	TLD	TLE	TLN
Intermittent Sand Filter System		✓		✓	✓	✓		
Mound System		✓		✓	✓	✓		
Recirculating Gravel Filter System					✓	✓		
Sand Lined Trenches/ Bed System		✓		✓	✓	✓		
Stratified Sand Filter System	✓	✓	✓	✓	✓			

* Listed treatment technologies meet levels of treatment performance when constructed and used according to their respective departmental recommended standards and guidance documents.

Section 9 Amends WAC 246-272A-0232 Design requirements-Septic tank sizing

(1) The required volume and of the septic tank and pump chamber are shown in Table VII.

**TABLE VII
Required Minimum Liquid Volumes of Septic Tanks and Pump Chambers in Gallons**

Number of Bedrooms	¹Septic Tank Size	² Pump Chamber Working Volume (gal.)	³ Pump Chamber Total Required Volume (gal.)
3	1000	600	<u>1000</u>
4	1000	800	<u>1250</u>
For each added bedroom	250	200	<u>250</u>

¹Tank volume refers to is the area below the invert outlet.

²Pump Chamber Volume does not include space below pump inlet for sludge accumulation. This is usually measured as 18 inches, the distance from the top of the shroud to the bottom of the tank.

³Total required volume is based on liquid depth of 48 inches and height of shroud.

(2) Septic tanks shall have an effluent filter approved by the Department installed in the outlet baffle.

(3) A riser or manhole shall be installed over the lids of septic tanks and pump chambers with a bolted lid extended to the level of final surface grade.

Section 10 Amends WAC 246-272A-0234 Design requirements—Soil dispersal components

(1) Maximum Hydraulic Loading Rates shall be based on the rates described in Table VIII

**TABLE VIII
MAXIMUM HYDRAULIC LOADING RATE**

Soil Type	Soil Textural Classification Description	Loading Rate (gal./sq. ft./day)		Loading Rate (sq. ft./Bedroom)	
1	Gravelly and very gravelly coarse sands, all extremely gravelly soils excluding soil types 5 & 6, and all soil types with greater than or equal to 90% rock fragments.	1.0	<u>1.0*</u>	120	<u>120*</u>
2	Coarse sands.	1.0	<u>1.25*</u>	120	<u>96*</u>
3	Medium sands, loamy coarse sands, loamy medium sands.	0.8	<u>1.0*</u>	150	<u>120*</u>
4	Fine sands, loamy fine sands, sandy loams, loams.	0.6	<u>1.0*</u>	200	<u>120*</u>
5	Very fine sands, loamy very fine sands; or silt loams, sandy clay loams, clay loams, <u>CALICHE</u> , and silty clay loams with a moderate structure or strong structure (excluding a platy structure).	0.4	<u>.67*</u> <u>.50**</u>	300	<u>180*</u> <u>240***</u>
6	Other silt loams, sandy clay loams, clay loams, silty clay loams.	0.2	<u>.33*</u>	600	<u>360*</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		Not suitable	

* Gravelless chamber system

**Gravelless chamber system in Caliche soil

(2) All SSAS shall meet the following requirements:

(a) A pressure dosing design is required for all seepage beds.

(i) Bed width may not exceed 10 feet.

(ii) A bed design is allowed in Soil Type 4 if fine sand and in type 1, 2, and 3.

(b) Separation from edge to edge between trenches and beds shall be 4 feet minimum.

- (3) For SSAS with drain rock and distribution pipe:
- a. A minimum of two inches of drain rock is required above the distribution pipe;
 - b. Clean gravel $\frac{3}{4}$ inch to 2 $\frac{1}{2}$ inch in diameter is required.
 - c. The trench sidewall below the invert of the distribution pipe must be original undisturbed soil.
- (4) For SSAS with gravelless drainfield
- (a) A reduced drainfield area will be allowed as described in “Guidelines for Gravelless Drainfields” except that a reduction of 20% will be allowed for soil described as “non-restrictive Caliche”.
 - (b) Back fill material to 6 inches above the top of the drainfield device shall be soil not having gravel more than 3 inches in diameter.
- (5) The Health Officer may permit systems consisting solely of a Septic Tank and a gravity SSAS in soil type 1 if all the following criteria are met:
- (a) The system serves a single-family residence or a business having Sewage flow of less than 480 gallons per day.
 - (b) The lot size is two and one-half acres or greater.
 - (c) Annual precipitation in the region is less than twenty-five 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)
 - (d) The geologic conditions beneath the dispersal component must satisfy the minimum unsaturated depth requirements to Ground Water 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).
 - (e) The building site is not designated as an area of special concern.

Section 11 Amends WAC 246-272A—Installation

- (1) **All sewage disposal systems shall be installed by approved installers, with the following exceptions:**
- a. **A residential system with a conventional gravity design may be installed by the resident owner of the property for a single family dwelling as allowed under WAC 246-272A-0250 (2) subject to an approval and review of the environmental staff..**
 - b. **In response to a written request, the Health Officer may allow a person or organization under some circumstances to be allowed to install an OSS if the Health Officer determines a threat to public health will not result from allowing this installation. In no circumstance shall any non-licensed installer be allowed to install more than one OSS in a 12 month period.**

- (2) The soil used as back fill cover over a gravel drainfield shall not have rock particles greater than 6 inches in diameter.
- (3) The non-perforated pipe in the OSS shall be covered with soil or sand with gravel less than ¼ inches in diameter with a minimum of 4 inches of this material under the pipe 6 inches over the pipe.

Section 12 Amends 246-272A-0260—Inspection

- (1) For all activities requiring a permit, the 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 does not have a conflict of interest such as a business or family relationship with the installer of the system.
 - (c) Keep the record drawings on file with the approved design documents.
- (2) The person responsible for the final construction inspection shall assure the OSS meets the standards of this Ordinance or the conditions of any authorized waiver.
- (3) The installer of the septic system shall be responsible to assure that the OSS meets the approved design and system location.

Section 13 Amends 246-272A—Record Drawings

- (1) If the Record Drawings is not provided at the time of final construction inspection, no additional inspections for any other OSS completed by the Installer responsible will be completed until the required information is submitted.

Section 14 Amends 246-272A—Operation, Monitoring, and Maintenance—Food Service establishments

- (1) An evaluation and inspection of all OSS for food establishments shall be required annually except as excluded by the Health Officer.
- (2) The required annual evaluation and inspection of OSS shall be done by a Septic System Maintenance Provider authorized by the GCHD.
- (3) Other OSS as determined by the Health Officer may also require an annual report as determined by the conditions of the permit when issued.

Section 15 Amends WAC 246-272A-0280—Repair of failures

- (1) The person responsible for the design shall locate and design Repairs to 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 2 of Section 10, WAC 246-272A. Pressure distribution with timed dosing in the soil dispersal component is required in all cases where a conforming system is not feasible.

(2) Table IX shall be amended as follows:

TABLE IX
Treatment Component Performance Levels for Repair of OSS Not Meeting
Vertical and Horizontal Separations¹

VERTICAL SEPARATION (in inches)	Horizontal Separation ²											
	< 25 feet			25 < 50 feet			50 < 100 feet ³			≥ 100 feet		
	Soil Type			Soil Type			Soil Type			Soil Type-4		
	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	⁵ Conforming System		
≥ 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			

¹ 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.

² The horizontal separation indicated in Table IV of Section 6 is the distance between the soil dispersal component and the surface water, well, or spring. If the soil dispersal component is up-gradient of surface water, well, or spring to be used as a potable water source, the next higher treatment level shall apply unless treatment level A is already required.

³ 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, 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 Section 10 (4) shall be installed if feasible.

⁴ A Gravity OSS may not be allowed on land identified as an Area of Special Concern by the Health Officer

⁵ An effluent filter may be used to meet some requirements for Performance Testing Levels of WAC 246-272A, Table III

Section 16 Amends WAC 246-272A-Developments, Subdivisions, and minimum land area

(1) The available land area calculation when using Method 2 shall exclude portions of the property with unsuitable soil conditions, with dedicated easements, and the area 100 feet from wells and surface water.

Section 17 Amends WAC 246-272A-Certification of installers, pumpers, and maintenance service providers

- (1) OSS Installers and pumpers must obtain approval from the Health Officer prior to providing services within Grant County.
- (2) The Health Officer may establish programs and requirements for approving maintenance service providers.

Section 18 Amends WAC 246-272A- Waiver of state regulations

(1) A Local Technical Review Committee shall establish guidelines regarding conditions of mitigation for which waivers of the requirements of this ordinance may be granted.

(2) For any provision of WAC 246-272A subject to waiver by the GCHD, the Local Technical Review Committee may also establish guidelines of mitigation for which the application may be granted. If there is any guideline of mitigation developed by the Technical Review Committee which is in conflict with a guideline presently or hereafter provided by the Department, the guideline of the Department shall be followed.

Section 19- Enforcement

In addition to any other penalties prescribed by law, any person who violates or refuses or fails to comply with any of the provisions of this ordinance shall be deemed to have committed a civil infraction and be subject to a penalty of up to \$1000.

Section 20 Appeals

7.01 Any person requesting appeal of an action by GCHD staff regarding the administration of these rules may appeal in writing to the Health Officer within ten (10) days of a written notice or directive of the District. If the written appeal does not provide sufficient evidence for the Health Officer to change the GCHD staff decision:

- (a) Within 30 days after receipt of an appeal, the Health Officer may conduct an administrative hearing in the disputed matter.
 1. The hearing may include taking evidence oral and written from GCHD staff, the party aggrieved, and witnesses.
 2. A decision will be given in writing to the person or party making the appeal.
 3. Such administrative hearing may take place sooner than 30 calendar days if the aggrieved party shows extraordinary hardship or duress caused by the GCHD staff decision
- (b) Following a written request to the Health Officer, within ten (1) days of the Health Officer's written decision, any person not satisfied with the Health Officer's decision or the results of the administrative hearing shall make a written request for a meeting with the Grant County Board of Health.
 1. The appellant will be provided the opportunity to address the Board of Health at the next regularly scheduled meeting, or sooner if the aggrieved party demonstrates extraordinary hardship or duress caused by the Health Officer's decision.
 2. The matter under appeal will be decided by a majority vote of the Board of Health.

7.02 Pending hearings or appeals shall not stay the orders of the Regulatory Authority.

Section 21- SEVERABILITY

If any section, sentence, clause, or phrase of this ordinance should be held to be invalid, the invalidity thereof shall not affect the validity of any other section, sentence, clause, or phrase of this ordinance.

Section 22-Effective date

Passed by the Grant County Board of Health and signed by the chair on September 10, 2008 with the new Ordinance going into effect on September 11, 2008.

Attest:

Alexander Brzezny, MD, Clerk

Mark Wanke, Chair

James Whitaker
Health District Attorney

Date adopted