

ON-SITE WASTEWATER SURVEY

Jurisdiction:	Mason County Public Health
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I. Permit Process and Design Requirements

A. Permits required for:

1. New Construction on Existing Parcels

a. Permit process

- Are there separate site evaluation and system construction applications?

Yes, site evaluation is included with the permit application, good for 3 years. Installation permit is at time of install and good for 1 year.

- What are the steps through the process?

Hire licensed designer, design submitted, soil confirmed and design approved by environmental health specialist. Approval letter sent.

- How long are site evaluations valid?

3 years

- How long are construction permits valid?

1 year

b. Design Flow

- What is used as the daily design flow per bedroom for single family residences?

120 gallons per bedroom, minimum 2 bedrooms.

- How are design flows determined for other types of development?

EPA manual, WA state method II, and/or actual usage from like business.

c. Septic Tank Sizing

- What are your septic tank sizing requirements per bedroom for single family residences?

1,000 up to 3 bedroom, 1,250 for 4, 1,500 gal for 5.

- How is septic tank sizing determined for other types of development?

One and ½ times the daily flow.

- Are septic tanks inspected or certified for water tightness?

Not by the health department, some may be by purveyors.

d. Minimum Lot Size?

- Governed by General Plan and Zoning?

For new lot formation only, existing legal lots of record are allowed even if smaller than defined by WAC.

- Wastewater Ordinance?

For new lot formation.

e. Slope

- Is there a maximum slope?

Yes. What is it?

f. Soil

- What is the range of allowable soil textures?

Defined by WAC 246-272 and WAC 246-272A.

- What is the range of allowable percolation rates?

Do not use perc tests, look at soil profiles.

- Do you rely on textural classification, perc tests, or both?

Textural classification.

- Are perc tests optional or mandatory?

Not used.

g. Vertical Separation or Total Effective Soil Depth

- Are your system design requirements based on soil maps, vertical separation, depth of effective soil, or a combination?

Vertical separation.

- What are your vertical separation and/or effective soil requirements for gravity systems?

Three feet.

- For alternative systems?

Can be reduced to 12" with mitigation and increased treatment (ATU, chlorination.... WAC 246-272 defined Treatment Standards 1 & 2).

- Do you distinguish between perched, seasonal water table in measuring vertical separation? No

h. Groundwater

- Do you rely on evaluation of the soil profile or winter monitoring to determine presence of groundwater?

In some cases winter observation is done, especially if a curtain drain has been installed around the designated drainfield area.

i. System Design

- Who determines Type of System, county staff, a consultant, both?

Determined by licensed designer or engineer, confirmed by county staff.

2. Creating New Parcels through Subdivision Process

- Is minimum lot sized determined by wastewater requirements or by the General Plan and Zoning?

Currently planning and zoning, we are working to incorporate wastewater requirements in to our local code as well.

- Does your sewage regulation have minimum lot sizes? If so, how are they determined and what are they?

Only for newly created lots. Otherwise minimum is 12,500 with public water, or 1 acre with an individual well. See WAC 246-272.

- Does your regulation have requirements for minimum useable drainfeld areas?

Yes, an original system and one reserve that cannot be encumbered.

- Are there more stringent requirements for subdivisions than for existing parcels in the following areas:

No, only for any property over the critical aquifer recharge area.

- Allowable soil texture
- Allowable percolation rate
- Required vertical separation or total effective soil depth?
- Maximum slope?

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- Use of supplemental treatment to allow creation of new parcels?
- Required setbacks?
- Are determinations of nitrogen or phosphorous loading required?

Will be a component of new WAC 246-272A as part of a county plan.

3. Repair

- Are system repairs brought up to code to the maximum extent allowed by the site?

Yes, we call it a table 6 repair.

- Are there differences in site evaluation procedures?

No, except for area covered by buildings... that would interfere with appropriate set backs.

- Are there less stringent requirements for repairs than for existing parcels in the following areas:

No, usually just set backs.

- Allowable soil texture
- Allowable percolation rate
- Required vertical separation or total effective soil depth?
- Maximum slope?
- Use of supplemental treatment to allow creation of new parcels?
- Are there differences in who may design a repair system?

No, Designer, engineer or homeowner in some instances.

II. Designer Certification

- Who can design standard, gravity systems?

Licensed designer (by State of WA)

- Certified Engineering Geologist?
- Certified Professional Soil Scientist?
- Registered Civil Engineer? Yes
- Registered Environmental Health Specialist?
- Registered Geologist?
- Other Consultant Certified by Environmental Health?

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- Contractor?
- Homeowner? Yes
- County REHS staff?
- Who can design supplemental treatment systems?
Licensed designer
 - Certified Engineering Geologist?
 - Certified Professional Soil Scientist?
 - Registered Civil Engineer? Yes
 - Registered Environmental Health Specialist?
 - Registered Geologist?
 - Other Consultant Certified by Environmental Health?
 - Contractor?
 - Homeowner?Yes, in some instances.
 - County REHS staff?
- How does County assure that someone submitting a design is qualified to design a specific type of system?
They are either an engineer, state licensed designer or homeowner in certain circumstances.
- Will the County require certification of system construction by designer?
No, but working toward that end.
- Will the County require inspection of system construction by designer?
Not yet, but working toward that.

III. Installation Requirements

- A. Installers
 - Who may install standard and alternative systems?
Licensed installer.
 - Is the homeowner allowed to install either or both of these types of systems?
In certain circumstances.
 - Do you certify installers? Yes
- B. Inspections
 - Does County staff inspect all components of an installation? Yes

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- Does County staff meet with the installer on the site or consult with the installer prior to initiation of the installation?

Sometimes.

- How many installation inspections by staff for installation of a standard, gravity system?

One.

- How many installation inspections by staff for installation of a sand filter?

Usually One.

C. As-Built Requirements

- Does the installer provide an as-built drawing? Yes
- Who provides the as-built drawing for a supplemental treatment system?

Installer

D. Certification of Completion

- How does the county provide final approval of the system and its installation?

Site visit and receipt of as built.

- Is the designer required to inspect and certify the installation as meeting the requirements of the design?

No, working toward this.

- Does the installer certify the completion of the system per the design?
Yes

IV. Renewable Operating Permits

- Are ROPs required for the following?

No, we do not have operating permits

- Existing systems?
- Standard gravity trench
- Pump to gravity
- Pressure dosed
- Supplemental treatment

V. Operation and Maintenance Program

- Does your county have an O&M program? Yes
- Who performs the O&M inspections?

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Professionals

- Service providers certified by the county? Yes
- Services provides certified by the proprietary manufacturer? Yes
- Septic tank pumpers?

For pumping only.

- Home owners?

For gravity and pressure under certain circumstances

- Professional engineers? No
- Consultants other than engineers? No
- County staff primarily? No

➤ What types of systems receive O&M inspections?

All

- Existing systems?
- Standard gravity trench
- Pump to gravity
- Pressure dosed
- Supplemental treatment

VI. Appeal/Variance Process

➤ What are the major steps in your appeal/variance process?

We now use a hearings examiner.

➤ Who makes the final decision?

Hearings examiner, with appeal potential to superior court.