

I. Instructor Introductions

A. Suzanne Richardson, REHS

1. Began career as a septic installation regulator in 2001.
2. Managed on-site programs for Rockdale and Newton counties in Georgia
3. Moved to Oregon in 2019, hired on as Yamhill County's Sanitarian
4. Member National Environmental Health Association (NEHA)
5. Member Oregon On-Site Wastewater Association (O2WA)
6. Member Oregon Environmental Health Association

B. Ashley Watkins, REHS

1. Bachelor of Science in Environmental Science from Willamette University
2. Began Environmental Health career in impacts of on-site systems on water quality in Washington
3. Solid Waste Coordinator for Yamhill County
4. Member Oregon On-Site Wastewater Association

C. Brannon Lamp, REHS, Aqua Resource Design and Consulting

1. Began working in the on-site industry in 1999
2. Bachelor of Science in Environmental Science from Portland University
3. Licensed Septic Operation and Maintenance provider in Oregon

II. Plot Plans and As-Builts, requirements and best practices (SR and AW)

A. Plot Plans

1. Setback distances
2. System layout
 - a) *Equal vs. Serial configurations*
 - b) *Equal by gravity vs Equal by hydro-splitter*
 - c) *Capping Fill*
3. Spec Sheets Needed
 - a) *Pumps*
 - b) *Hydro-splitter (include orifice sizing calculations)*
 - c) *Alternative Treatment Technology Units (ATT's)*
4. Documentation/Contracts Needed
 - a) *Letter of Authorization*
 - b) *Alternative Treatment Technology (ATT's) maintenance contracts*

B. As-Builts

1. Accurate measurements
2. Forms
3. Additional Documents needed
 - a) *ATT start-up checklists – NEED TO BE SIGNED AND RETURNED!*
 - b) *Electrical permits*

III. System Layout and Design, (BL)

- A. Interpreting Site Evaluation Data
- B. Laying out a system design in the field
 1. Critical setbacks
 2. Staking out the system
 - a) *Elevations*
 - b) *Installation depth tolerances*
 - c) *Necessary tools for the layout process*
- C. System Design
 1. Types of Systems
 2. Documentation required for different types of systems
- D. Permitting
 1. Different types of permits
 2. Documentation required for permit issuance
- E. Installation
 1. Calculating elevations for installation depth
 2. Review of example projects

IV. Common Installation Issues

- A. DEQ Well driller setbacks vs. DEQ Wastewater setbacks
 1. 100' setback from well for all wastewater installations
 2. Different setback from existing wastewater systems for well installations due to property size or if water cannot be found elsewhere on property
 3. ONLY exception to 100' well setback is for repairs on properties too small
- B. Drop boxes vs. Distribution boxes
- C. Problems with Hydro-splitter installation
 1. Elevations
 - a) *Up elevation from highest line*
 - b) *Rises in pipes following hydro-splitter*
 - c) *NOT a pressurized system*

2. Orifice sizing – varies with line length
3. Container/Chamber suggestions vs requirements
 - a) *Drainage holes*
 - b) *Rodent intrusion*

V. Inspection Requirements

- A. As-Built submission PRIOR to inspection
- B. Watertight Tests on Tanks
 1. Requirements
 - a) *Marking level OR Level with top of inlet port*
 - b) *SECURING PLASTIC RISER LIDS*
 2. Repair vs. New construction
 3. Occupied dwellings
- C. Required Inspections for Different Types of Systems
 1. Pump System
 2. Hydro-splitter
 3. Alternative Treatment Technology Unit (ATT's)
 4. Capping Fill
 5. Pressurized Distribution