

Large On-Site Sewage System  
Rule Advisory Committee

February 28, 2008 Meeting Summary Notes

**Welcome and Introductions** ..... 1  
**Task 1 – 2007 Legislation and Chapter 90.48 RCW** ..... 1  
**Task 2 – 2008 LOSS Rule Foundation Document**..... 2  
**Task 2 – (continued) & Task 5 – Key Questions and Issues** ..... 2  
**Task 3 – Audience Comments**..... 3  
**Task 4 – Updates** ..... 3  
**Task 2 – (continued) & Task 5 – Key Questions and Issues** ..... 4  
**Wrap-Up, and Action Items**..... 6  
**Meeting Attendees**..... 7  
**Parking Lot Items** ..... 7

**Welcome and Introductions**

Dave Lenning welcomed committee members, reviewed the agenda with committee members, and asked for introductions.

Dave told the committee we have a full agenda, beginning with a presentation on the 2007 legislation and Chapter 90.48 RCW. Dave reminded the committee that the 2007 legislation gave the Department of Health (DOH) responsibility to regulate LOSS systems up to 100,000 gal./day and requires that DOH protect public health and the environment. The legislation specifically requires that LOSS systems comply with “applicable sections” of Chapter 90.48 RCW to control and prevent water pollution.

Dave introduced John Stormon (member) from Dept. of Ecology, who will present information on requirements to protect water quality.

**Task 1 – 2007 Legislation and Chapter 90.48 RCW**

John Stormon’s presentation discussed the 2007 legislation and the water quality protection requirements to in Chapter 90.48 RCW. He covered ESSB 5894, water pollution control requirements, (Chapter 90.48 RCW), ground water protection requirements (Chapter 173-200 WAC), and examples of Ecology permits. Please see the Department of Health website to view John’s PowerPoint presentation.

*Questions/Comments:*

- Examples of discussion examples
  - Cascadia – N = 10 ppm in permit
  - Spokane County – Spokane – Rathdrum aquifer – impact on mobile home parks.
- Is “treatment” a vital part of the LOSS definition – “subsurface treatment and disposal”?
  - Answer: not as important as disposal – unless discharge as reclaimed water (*then not LOSS*)

Dave pointed out that the 2007 legislation also requires that DOH consult with Ecology on LOSS issues and that DOH is meeting with Ecology to work through a number of these issues. Dave asked the committee what is the best way to keep them informed? Provide feedback opportunities? After discussion, the committee agreed that:

- DOH-Ecology should continue to meet and bring options back to the RAC.
- Keep RAC updated on progress as part of RAC meetings.

## **Task 2 – 2008 LOSS Rule Foundation Document**

Dave introduced the 2008 LOSS Rule Foundation Document, which incorporates:

- 2007 Legislation
- 2004 LRDC decisions
- Consistency issues with Small System Rules
- Staff Recommendations

Dave explained that the 2008 LOSS Rule Foundation Document highlights issues and key questions and that he wanted to give committee members a chance to tell us any issues or questions we missed.

Dave noted the agenda ‘lumped’ all the key questions and issues into a Task for the afternoon (Task 5). He suggested that a better approach might be to discuss and add key questions and issues as we work through each topic area. The committee agreed this approach would work better for them.

## **Task 2 – (continued) & Task 5 – Key Questions and Issues**

Richard provided an overview of the topic areas and presented information on each section, including issues and questions that DOH knows need to be addressed. (See the website for the PowerPoint and 2008 Foundation Document)

Topic Areas:

- Purpose & Administration
- Approval & Permitting Process
- Design & Technical Standards
- Specific Technologies
- Specific Requirements
- Fees
- Other
- Definitions

### Purpose and Administration:

*Questions and Issues (pgs 1-4)*

- What is definition of “common point”? (*already mentioned in LOSS rule; not in new legislation*)
- What do “3500”, “100,000” GPD refer to?
  - Answer: Design flow of LOSS. Must have a way to deal with peak flows and leakage.

### Approval and Permitting Process:

#### Questions and Issues (pgs 4-15)

- If operating parameters are specified in the permit, can we reduce requirements for approvals and certification?
  - Answer: Should be a balance - to be discussed.
  - Note: Performance-based vs. standard-based?
- Will a public entity continue to be required to manage LOSS?
  - Answer: To be discussed.
- Will rule allow drain field size reduction due to treatment technology improvements?
  - Answer: To be discussed
- Will reclaimed water < 100,000 GPD be regulated by DOH?
  - Answer: Not through LOSS rule. One statute- possibly more than one regulation. To be discussed.
    - Ecology Rule-Making: Size < 100,000, no environmental discharge. Discharge to vadose zone.
  - Note: See Ecology Rule-Making at present.
- What is “industrial wastewater”?
- Nitrate Balance
  - Required for LOSS?
  - How much detail in rule; in guidance?
  - What should the limits be?
- If nitrate is an issue –
  - What treatment is needed?
  - What treatment is approved?
  - Is an “operator” required?
- If structure/properties are individually owned, who manages?
  - Link to certified operator?
  - Will private, for-profit companies be allowed? (*non-public entity*)
- Short and long-term “certified operator” requirements for LOSS.
- Treatment product manufacturer involved in O&M? Trained by manufacturer?
- Effluent water quality
  - Monitory-define
  - Answer: See DOH, Ecology definitions. May need to evaluate based on project specifics.
- UTC regulation of private for-profit O&M companies: Will the rule allow non-public management?
  - Note: Allowed for reclaimed projects.
  - Answer: Prior UTC response: need regulation

### **Task 3 – Audience Comments**

No comments. (Audience members were invited to ask questions and give comments during the presentations.)

### **Task 4 – Updates**

Melissa McEachron provided updates on the listserv, the website, and progress on meeting location changes. She asked if this location worked for everyone. Most members said yes. Melissa noted that we have this (WSDOT) reserved room for April, but it was booked for March.

The locations for the next 2 meetings are:

- March in Kent at DOH
- April in Olympia (WSDOT)

Melissa said she will continue to work on location changes for future meetings.

## **Task 2 – (continued) & Task 5 – Key Questions and Issues**

Richard continued through the 2008 Foundation Document and PowerPoint.

### Approval and Permitting Process (continued):

#### *Questions and Issues (pgs 4-15)*

- What is a “qualified installer”?
  - Small system installers approved at county level
  - Should there be something at LOSS level?
    - By state
    - By other entity (*DOL, National Organization*)
- Who’s responsible for operation, maintenance, management?
- Level of monitoring/sampling needed?
- How do we issue operating permit?
  - When in process
  - Permit conditions
  - Identify “older” LOSS not already getting an operating permit (*County & Ecology records*)
  - How do we handle “new” “older” LOSS?
  - Different categories of operating permits
  - How much effluent and water quality sampling should be required for the “new” “old” systems?
  - Expectation to inspect “new” “old” systems?
    - State staff do inspection
    - Owner must supply information with engineer

### Design and Technical Standards:

#### *Questions and Issues (pgs.16-24):*

- With larger flows, use same horizontal setbacks as On-site Systems?
  - Water supply sources
  - Property lines, building foundations, easements
  - Cuts/banks
  - Other
  - **Comment:** dovetail with nitrate balance and/or site risk assessment.
  - Infiltration for storm flow – up gradient – will flood drain field – does this change setbacks?
  - Down gradient cuts, 30% slope
  - Set backs for building – property lines, foundation, swimming pools
  - Suggest site evaluation (*like Drinking Water source approval*) – map and score hazards.
  - Surface water
  - Hydraulic continuity
  - Other conditions identified for health and environmental risks

- Soil types 1-5
- Level of treatment – effluent quality
- Linear loading rate
- Number of soil log /test pits
- Level of detail on nitrogen balance and hydrogeology report.
- LOSS okay when soils get more shallow and coarse?
- Other soil and site evaluation issues or requirements?
  - Who does evaluation – hydro geologist or ?
  - Soil typing classifications
    - Okay by RAC to use 272A- to start with.
- Appropriate design flow for different types of development?
  - Peak – surge – less important for larger systems.
    - How often is peak flow reached? – Affects design
  - Over design = problem for some LOSS
  - Park-type flow variations (*Schools*)
  - Required flow metering?
- Wastewater quality: How considered?
  - Strength of sewage
  - Other, different from usual residential sewage
- Use performance-based standards? If yes, which ones?
  - Flexibility
  - Consistent with 272 A
  - By different size LOSS?
- Technology approval process or should we just use on-going monitoring/sampling to verify treatment
  - Feasibility for smaller LOSS? (\$)
  - **Comment:** don't agree that approval guarantees continued long-term performance.
  - Use performance monitoring for short-term. If okay, reduce monitoring for future.
  - Need easy access to new technology
  - Performance-based: depends on operator attention and skill
  - Low staffing at DOH for approval
- Loading rates where soils used only for dispersal.
- Reductions in vertical separation allowed? If yes, what requirements?
- With increased daily flows, what is the concern with groundwater mounding?
- 150% drain field installation or ? Minimum land area (*DOH*) or maximum flow/acre (*Ecology*).
  - Nitrogen removal/treatment
  - If remotely – located LOSS, is this pertinent? Or how do we deal with this? (***use nitrogen balance and hydrogeo assessment***)
  - Level of treatment may impact
  - Cook-book or site specific assessment: could offer both choices. (*Example: Ecology storm water*)
- Sizing requirements for residential development/
- Sizing requirements for non-residential development?
- Sizing requirements for pump/surge tanks
  - Need minimum tank volume size identified or changed
  - Measure volume from top of pump motor

- O&M professional to review and comment on O&M manual before DOH approval.
- More detail to be included in collection system, transmission lines, monitoring parts?
  - Manholes still appropriate?
- Specific technologies – what level of detail moves from RS&G to WAC?
- (Page 24) Sewage Tanks
  - Question: Minimum liquid volume sizing?
- (Page 24) Impellor pumps - need over top of motor volume measured from top of pump motor, not top of outlet. (*L&I requirement: submerged*)
- Collection studies should be reviewed.
  - Question: Are manholes needed for LOSS?

### **Wrap-Up, and Action Items**

Dave stopped discussion after the Design and Technological Standards section. He reviewed the areas of agreement with the group, asked members for comments on the meeting, and outlined items for the March 25 meeting.

### **Agreements:**

- DOH go-ahead and work on the language for the Purpose, Administration, Pre-inspection and process sections.
- DOH and ECY should continue to meet to work out issues and update the committee.

### **Committee member comments at the end of the Day:**

- Pass-out information sooner
- Well run meeting
- Got through lots of information fast
- Process went well
- Room is good
- Downtown location is good
- Easy to follow Richard's presentation (for non-tech)
- Glad to be here learning and hearing comments

### **Audience Comments:**

None

### **Action Items:**

- If committee members have any additional issues or questions to add on material presented so far - Email Melissa, so she can add them to the list.

### **For Next Meeting:**

- Continue working through the 2008 Foundation Document. Start at with Specific Technologies.
- In-put from RAC in-between meetings- priorities.
- DOH may take an initial priority cut.
- Prioritization exercise – March
- Homework: read handouts and remaining sections of the 2008 Foundation Document.

Adjourn 3:40

**Meeting Attendees**

***Department of Health***

Maryanne Guichard, Director, Office of Shellfish and Water Protection  
 Dave Lenning, Manager, Wastewater Management Program  
 Denise Lahmann P.E., Engineering Supervisor, WWMP  
 Melissa McEachron, Wastewater Rules Coordinator  
 Richard Benson P.E., Technical Issues Lead

<b>Committee Members and Alternates</b>	<b>Guests</b>
Bill Stuth, Installers	Jim Gleason, Enviroquip
David Jensen P.E., Design Engineers	Jerry Walton, Geoflow Inc.
Dale Broyles, WA State Parks	Ray Gauthier, AIM Mfg. inc.
John Stormon, Ecology	Robert Nation, Fextex Systems, Inc
Jenn Kunkel, BIAW	Craig Goodwin, Northwest Cascade
Theresa Janzen, Manufactured Housing Communities of WA	
Judy Hockett, WSDOT- Operations	
John Poppe, West Sound Utility Dist.	
Art Stary, Local Health Jurisdictions (Thurston Co. Health Dist).	
Scott Jones P.E., Design Engineers	
Matt Lee, LOSS O&M Companies (Aqua Test Inc.)	
Mark Nelson, Private Utility District (Evergreen Valley Utilities)	
Melodie Selby P.E., Ecology	
<b>DOH Staff</b>	
Linda Pang P.E., Wastewater Management Program	
Nancy Darling, Wastewater Management Program	

**Parking Lot Items**

2/28/08

*Legislative Issues:*

- UTC regulation of private, for-profit management companies, if allowed.
- Staffing to implement the rule. (inspection workload)