

WASHINGTON DEPARTMENT OF HEALTH
Sewage Tank Rule Advisory Panel
May 6, 2009, 9:30 – 3:30
Washington Department of Health, Tumwater Office

SUMMARY

KEY DATES:

1. Between May and August, DOH prepares and reviews the rule language for hearing in October and the Significant Analysis, which includes the economic components.
2. Early September, DOH files the appropriate documents with the Office of the Code Reviser, signaling the beginning of the “formal” hearing process.
3. The Sewage Tank Rule is scheduled for hearing before the State Board of Health in October 2009.

FOLLOW-UP:

1. RAP/DOH to-do: look for information about tank depth:
 - how that might impact treatment.
 - how it might relate to length to width ratios.

Note:

1. This meeting in Tumwater was linked by videoconference with the Liberty Lake DOH office.
2. Discussion at this meeting follows the agenda and hand-outs provided in advance of the meeting and a PowerPoint presentation made at the meeting.

Introduction and Opening Remarks

Stuart Glasoe and Melissa McEachron, welcomed both the panel members and audience members, reviewed the agenda, and asked panel members, DOH staff and audience members to introduce themselves. There were 10 panel members present establishing a quorum. There were no comments or additions to the agenda.

Task 1: Overview of the April 2009 Workshop Comments (on the Draft Sewage Tank Rule)

Melissa and Mamdouh El-Aarag reported they reviewed every comment letter submitted, along with the comments received at the workshops. (The comments letters and workshop flipchart notes were emailed to members prior to the meeting.) Melissa went on to explain that based on the comments received DOH is looking at changing the language in parts of the draft rule. The changes are organized into three categories: 1) “Just-make them” changes (Excel spreadsheet); 2) Changes to “Run by the Panel” (Excel spreadsheet); and 3) DOH management direction based on specific comments. (PowerPoint)

Melissa quickly summarized the types of changes in the “Just-Make-Them” category. She then asked panel members to review the individual comments for this category on their own. If panel members want to discuss any particular comments – please let her know during a break today or

by email. [Reference: Hand-outs: Workshop Comments on the Draft Sewage Tank Rule; Written Comments Packet (variety of sources)]

Melissa explained briefly that the “Run-by-the Panel” category is comprised of comments and suggestions on issues the panel already discussed and voted on last year. She pointed out that the group will spend a good portion on the day reviewing the “Run-by-the Panel” category of changes (Task 2), and that unless there were any objections, she would focus the remainder of the “overview” task on category 3 - DOH management direction based on specific comments. The panel agreed this would be the best use of their time.

Stuart reported that they had an opportunity to brief DOH management on key issues and comments received on the draft rule. Department of Health (DOH) management provided direction on 6 key issues, after their review of the rule and public comments. Melissa and Stuart presented the issues and explained the rationale to the panel. (PowerPoint.)

Panel Discussion and Comments

Reference: PowerPoint presentation.

1. Add DOH decision deadline for applications.

- Add 60 day decision deadline for renewals.
- Add response with estimated review time for initial applications.

Comments:

None.

2. Effluent screens aren't needed, don't work.

- Keep and clarify requirements.

Comments:

- Definition clarity: effluent screen = outlet filter. Need to better define screen vs. filter.
- Effluent screens should not be required to be installed by the manufacturer – they should be specified by the designer or engineer.
- Manufacturers should make provision for screens to be installed.
- DOH believes effluent screens are necessary to protect pumps/drainfield.

3. Extend transition date for registered list to allow time to sell existing inventory.

- Extend existing registered list to January 1, 2012, request initial applications for new list by July 1, 2011.

Comments:

- We like the 6 month extension for the existing list. Lets inventory be sold: due to poor economy, fewer sewage systems are being built.
- What if there is an “oddball” tank in inventory – could it be approved by local health for use after the expiration of the old list (1/1/2012)? Waiver? Possible.
- Can local health adopt the rule and new list right away? Yes. Jefferson and King Counties have already adopted DOH's Recommended Standards and Guidelines (RS&Gs). Counties can adopt stricter standards than state rule.

- Can we get approval and be on the new list before January 1, 2012? Yes.
- New registered list will start January 1, 2010.
- Old list becomes static (no additions or changes) January 1, 2010.
- Old list is valid until 1/1/2012.

4. Can local health jurisdictions (LHJs) have their own tank lists?

- Yes, LHJs can have lists, and they can be more restrictive.

Comments:

- What about changes required by LHJs? Must they be “engineered”? LHJs must decide this.
- Can there be some standard “blanket” language in submittals to cover all potential uses of the tank? Not really: manufacturers and engineers should carefully review and specify as much as they know today.
- Can LHJs allow tanks that do not appear on the state’s list? No. To be sold/used in this state, they must be on the DOH approved tanks list.
- King County will be phasing out their tank list. Most counties only use the state’s list.
- Manufacturers and others don’t want multiple lists; want state list only.
- Suggestion: if county has a more restrictive standard – must get design approved by DOH and noted on state list as also meeting that county’s specifications.
- Do we think counties will want their own tank lists? Most RAP members think not. However, some LHJs may be more restrictive on installation requirements (e.g. watertightness testing).

5. Allow professional engineers (PEs) from other states to stamp drawings and calculations.

- Allow licensed PEs from any state to stamp tank submittals.

Comments:

- Tanks in Washington State “should” be designed by Washington-licensed PEs.

6. Remove mandatory field watertightness testing for every tank.

- Testing adds to local permitting responsibilities.
- Allow more input from LHJs.
- Move testing requirements to LOSS and small system rules: field installation issue, not tank design issue (still required at point of manufacture). (LOSS Rule is now open; small system rule is not.)

Comments:

- For small on-site sewage systems (OSS), LHJs will continue to determine if needed – at least until/unless WAC 246-290-272A requires something different.
- Remove sections 400, 410, and 420 – they don’t follow committee recommendations. DOH agrees – not in the Tank Rule. But field testing will be considered in LOSS rule (now) and OSS rule (future).
- Does this mean there is no watertightness testing? No, manufacturers will still be required to do this at their location.

- If the LOSS rule requires a watertightness test, how will a designer know if a tank can meet that standard? “Generally” based on size (though some LOSS use multiple small tanks).
- Will the new list make a designation that a tank is to be used for OSS or LOSS? No, DOH wants to keep the list simple.
- What is the difference for OSS and LOSS for watertightness? Tank rule proposal was to test to the invert of the outlet. LOSS requirement could be testing into the riser.
- The LOSS engineer should be aware of this when selecting a tank – and can certify watertightness. Engineer may specify additional modification to ensure it can pass the field test. State in guidance or regulation.
- Opinion that individual thinks this is a political issue – and we are punting to move it to the other rules. Still needs a technical discussion during those rule processes.
- King County representative was asked if they will continue to require watertightness testing for OSS. Yes, probably.
- Does the tank design submittal to DOH have to include installation directions? Yes. May need to include different directions to meet installation requirements of some counties/LHJs.
- What about cast-in-place tanks? Yes, applies, since they must be engineered for the specific application – and must meet the requirement for water-tightness testing at point of manufacture (in the field).
- Direction from DOH management is to include language in the rule supporting and recommending field testing for watertightness.
- Is riser leakage a big problem? No documented answer – difference in opinion on panel, based on field experience. Some say it can be, based on soil, slope, other factors. Requirement to test into the riser could be made on a site-specific basis by LHJ or DOH.

Task 2: Review Specific Comments for Panel Review and Vote

Mamdouh walked-through each item in the “Run-by-the Panel” category of comments and suggested changes. (Excel handout). The panel reviewed, discussed, and voted on each suggested change. The panel also added an item (#13) to the list.

Panel Decisions and Recommendations

Reference: Hand-out: Changes to Run by the Panel.

Numbers below correspond to numbers in the hand-out.

1. Remove trash tank definition.

Comments:

- Term not used in Tank Rule
- Used in LOSS with very large tanks, which are difficult to pump.
- Option designers need.
- Include as a subset of “sewage tank” in that definition.
- Include a section in the rule – explain the application.
- Used in aerobic treatment systems.
- Defined as a pretreatment tank or pretreatment compartment: pre-septic.
- Should not include a screen requirement.
- Used as a pretreatment tank – add to definition so size is not specified.

- Can't use the volume of a trash tank as part of the active/treatment septic volume (similar to pump tank chambers).

Decision:

Could consider 3 options:

1. Take out
2. Leave in, as-is
3. Leave in, and further define and discuss in the rule.

Panel chose to vote on option 3.

Approved Option 3: 10-Green, 0-Yellow, 0-Red.

Additional Direction:

- Discuss in rule: "additional requirements for trash tanks": When and how used; currently approved sewage tank.
- No need to define separately on the approved tank list: can use septic tank.

2. Additional requirements for Fiberglass or polyethylene tanks?

Comments:

- Requirements for concrete tanks are higher (more detailed) than for others.
- IAPMO approach: State basic requirements that apply to all situations. Add specific requirements by material type.
- Would that be helpful here?
- What is the point of the issue? Increase requirements?
- Commenter may have missed that the design requirements apply to all tanks.
- Concrete manufacturers on RAP don't feel picked upon.

Decision: **Consensus to leave language as proposed in draft rule. No change.**

3. Sewage tanks with mid-lateral seams: prohibit?

Comments:

- Tank integrity is perceived as a problem with these kinds of tanks.
- Problems have been observed.
- But there are problems with many different types of tanks.
- This type of construction is needed for very large tanks.
- Performance standards could address this: watertightness testing.
- Manufacturer's submittals to DOH to get on approved tank list must include details on how to install and seal.
- Should be allowed.
- May separate due to settling. Over-excavation to be avoided.
- Some installations pour concrete around the seam.
- Address the concern of leakage or failure through guidance comments and/or manufacturer's submittal/directions.

Decision: **Language adequate as-is. Do not prohibit tanks with mid-lateral seams. 1-Green.**

4. Washington should allow one compartment sewage tanks.

Comments:

- Does this belong in the tank rule? RAP: Yes.
- Is it in the small system rule (246-272A), and therefore we can't change it and create a conflict?
- There are applications for one compartment tanks.
- Probably used because sludge height doesn't build up as fast.
- Two compartment tanks technically better for settling solids.
- Designers want flexibility to use what's needed for a specific design.
- Let 272A and 272B specify if suitable for use.
- We need to review past technical issue discussion. (for LOSS Rule?)
- The RAP should not vote it; send it to the LOSS Rule technical review subcommittee.

Decision: All septic tanks must be designed with a minimum of 2 compartments. Clarify that 2 single compartment tanks may be combined in series to meet the 2 compartment requirement. Result: one compartment tanks can be reviewed, approved and placed on DOH's tank list. 10-Green.

5. Modify 0210(11)(e): Insert “nominally” (24 inches) for riser openings.

Comments:

- The committee briefly discussed the issue, agreed that the openings should be approximately 24 inches, and recommended using the term “nominally” instead of approximately.

Decision: Agree to rewording proposal. 10-Green.

Lunch Break - On your own

Task 2: Continued.

***RAP members requested an additional topic to be added to the list of 12: Riser Lid Structural Integrity. Agreed (Added as item #13).

***Tank Identification/Labeling (Item #12): want to consider and discuss Sam Carter's language proposed in his comment letter to DOH. Agreed.

6. Section 0210(4)(a) and (e) contradict each other. Not all fasteners need to be attached to the tank. (See paragraph re-write on page 4 of handout)

Comments:

- Should we refer to any other standards, such as standards for sewer pipe?
- The committee agreed that not all components need mechanical fasteners.
- The discussion generated two minor edits: (1) add the verb “provide” at the end of item (a), and (2) add “nominal” to the minimum inside diameter of the sanitary tees.

Decision: Use the suggested alternate paragraph as written.
10 – Green; 1– Red; 1–Yellow

7. Modify 0220(3)(b)(i): Allow leeway in locating slots or ports used in intercompartmental fittings.

Comments:

- What does “approximately the same depth” mean to DOH? Mamdouh said he could live with up to 6 inches variation.
- The rule already allows a 30-40% range.
- Key item: slots and ports need to be located in the clear zone.
- Engineer, manufacturer should justify variations in the design during the design submittal to DOH.
- Mamdouh verified that the variation language is already in the proposed rule.

Decision: RAP consensus: no change needed.

***Additional Topic: 0220(3)(b)(ii): When using a slot or port instead of a tee, change the minimum vertical dimension from 4 inches to 3 inches, and still use the minimum square area specified.

Decision: Agree to reduce minimum vertical area to 3 inches and still use the minimum square area. 10-Green.

8. Modify 0220(3)(d): Remove “shall be”. Require at the discretion of the LHJ; use local conditions to determine. (Effluent screening device)

Comments:

- This requirement is redundant in some applications: double filtered.
- Intent: require an effluent filter on every tank when designed and installed. Protect drainfield.
- Should the requirement be in 272A and 272B instead?
- There should be an effluent filter somewhere in the line.
- Doesn't belong in tank requirements for the manufacturer.
- Can't have an effluent filter in an ATU.
- Required on every system or not?
- What is the tank design requirement for the rule?
- Screen should be designed for the specific volume/flow and strength of sewage.
- Effluent screen not required in 272A (OSS rule).
- The DOH project reviewer would have to verify that there's a filter in the design docs.
- The pressure distribution recommended standards and guidelines (RS&G) strongly recommend having an effluent filter.
- Separate issues out:
 - Manufacturing requirements: 272C
 - Treatment system design and installation requirements: 272A and 272B.

Decision: Tank rule requirement for the manufacturer is to design and build the product to accommodate effluent screening. 9-Green; 1-Yellow.

9. Modify 0220(3)(c): Add the option to measure at 6 inches above the liquid level of the tank.

Comments:

- Also add Sam Carter’s proposal: The outlet tee shall extend sufficiently to allow scum storage and venting and to a point not less than one inch from the underside of the top of the tank.
- Outlet tee may extend into the riser (with a vented lid) – allows venting, but doesn’t meet one inch requirement.

Decision: The outlet tee shall extend sufficiently to allow scum storage and venting, and to a point not less than one inch from the underside of the top of the tank, or it may extend into the riser for venting. 10-Green.

10. Modify 0220(5): Change 9 inches to 10%.

Comments:

- Makes sense for non-rectangular tanks.

Decision: Change 9 inches to 10%. 10-Green.

11. Modify 0220(7): Increase maximum depth for septic tanks.

Comments:

- Current maximum is 6 feet. What is proposed for a new maximum?
- Length to width ratios are specified and have research behind them.
- There is no science for length x width x depth ratio.
- Structural integrity (regardless of depth) is to be assured in the tank design submittal.
- Tanks are sold and used that have liquid levels greater than 6 feet.
- Bob will look at literature for ratios/guidance on depth – if able to.
- Concern that travel (and treatment) time could increase in a deeper tank. We should keep the length-width ratios.

Decision: Remove maximum depth language from the proposed rule. Keep minimum 3 foot depth language. 10-Green To-do: needs additional research to verify that there is no harm to using tanks with depths greater than 6 feet.

12. Modify 0250(1) and (2): Add embossment or engraving options to tank identification.

Comments:

- Another proposed option: Ziploc/laminate the tank information and then zip-tie to the tank.
- Is this still important? Yes, O&M providers can determine length, width, depth, but need other (manufacturing) information when doing a repair or maintenance.
- The info is also needed at time of final inspection to verify that the specified tank – including additional design details – is what is actually installed.
- Identify both inlet and outlet? Only one; don’t need both.

Decision: Delete language after “...sewage tank.” Add instead: “It shall display (a) manufacturer’s name; (b) capacity information marked at the inlet of the tank; (c) model number and/or serial number.” Also revise language to read: “(1) Manufacturers shall permanently identify each sewage tank with (a), (b), and (c) at the inlet of the tank.” Delete section 2 regarding the location of the permanent identification label. 10-Green.

13. Added Item: Modify 0210(11)(g) and (h): Loading requirements for risers and lids.

Comments:

- See Sam Carter's written comments on the draft rule.
- Suggested minimum loading on riser lid be specified: 2500 lbs. Safety issue.
- Suggestion: strike 0210(11)(e) through (h) – riser/access opening specifications.
- Manufacturer vs. design and installation issues.

Decision: Leave language in 0210 (11) as-is; no change. 1-Red, 1-Yellow, 8-Green.

Task 3: Significant Analysis: Economic Analysis Requirements.

Melissa presented information (using PowerPoint) on the Significant Analysis components that DOH must prepare before the rule goes to hearing. She concentrated on the economic analysis requirements.

Reference: PowerPoint presentation

Key Points:

- 2 statutes: Administrative Procedure Act and Regulatory Fairness Act
- Regulatory Fairness Act.
 - Requires agencies to identify if rule has a disproportionate impact to small businesses
 - If so, agencies must look at ways to reduce costs to small businesses.
- Administrative Procedure Act
 - Establishes rulemaking requirements and identifies different types of rules.
 - Significant Analysis is 9 separate determinations; 3 are economic requirements.
 - 3 economic pieces include: Cost Analysis, Benefit Analysis, and Least Burdensome Analysis.
- **What happens next? DOH will follow SBEIS requirements:**
 - Describe and analyze costs of compliance for small businesses;
 - Determine whether there is a disproportionate impact; and
 - If yes, determine ways to reduce or mitigate costs to small businesses.

DOH will prepare a Significant Analysis containing:

- A cost-benefit analysis;
 - A least burdensome analysis; and
 - Other 7 types of determinations.
- What will happen with DOH fees?
 - No fees for tank review have been authorized by the legislature at this time.
 - No fees will be part of the rule at the State Board of Health hearing in October.

Task 4 – Next Steps in the Rule Process

Melissa showed the panel the basic schedule for the Sewage Tank Rule over the next few months.

June-August 2009:

- Develop proposed rule, SBEIS, Significant Analysis

September 2009:

- File CR-102

October 2009:

- SBOH public hearing
- Complete Concise Explanatory Statement

November - December 2009:

- File CR-103
- Rule effective

Audience Comments and Wrap-Up

Since audience members participated throughout the meeting, there were no specific audience comments at this point in the meeting.

Stuart stated this is the last panel meeting and thanked all the panel members for their thoughtful participation and help with the Sewage Tank Rule. Melissa reminded panel members that she would still email the group with updates, although less frequently, through-out the remainder of the rule-making process.

Adjourn: 3:40pm

In attendance

Technical Advisory Panel

Members

John Richardson	Premier Plastics
Curt Davis	Davis Sales; Norwesco
Tom Rogers	Northwest Cascade, Inc.
Jim Wolfe	Evergreen Pre-Cast
Bob Sweeney	Environmental Management Systems Inc,
Mark Allen	Seattle-King County Health Dept.
Rocky Billings	Peninsula Tanks
Sam Carter	Orenco Systems, Inc.
Bob Nation	Fextex Systems Inc.
Jim Morgan	M-1 Tanks, Inc.

DOH Staff

Stuart Glasoe	Wastewater Management Section
Melissa McEachron	
Denise Lahmann	
Mamdouh El-Aarag (videoconferencing)	
Jeanne Andreasson	
Holly Calvert	

Guests

Jay Schinckie	Sound Placement Services
Kurt Olson	Kurt's Precast
J.R. Inman	NW Cascade/Flowhawks
Tony Gillingham	Premier Plastics