

On-Site Wastewater Technical Advisory Committee

April 8, 2009

Days Inn, Ellensburg, WA

Meeting Summary

MEETING ATTENDEES

Members Present

Brent Stenson, Adams Co. Heath
Scott Jones, P.E. Scott Jones & Assoc
Eric Knopf, L.D., Indigo Design, Inc.
Robert Monetta, Windermere Real Estate-
Methow Valley
Cindy Waite, Mason Co. Health
Keith Grellner, Kitsap Co. Health District

Members Inactive

John Storman, WA DOE
Bill Peacock, Spokane Sewer Utility
District

Guests

Tom Rogers, NW Cascade
Peter Lombardi, L.D., Orenco
Steven Wecker, L.D., Onsite Consulting
Services
Kevin Plemel, Snohomish H.D.
Marie-Christine Bélanger, PremierTech
Environmental

DOH Staff

Richard Benson, P.E., LOSS
Leslie Turner, LHSP Staff
John Eliasson, LHSP Mgr
Stuart Glasoe, WWMS Mgr

INTRODUCTION:

John Eliasson called the one-day meeting to order at 9:35 on April 8, 2009 in the conference building of Days Inn, Ellensburg. John listed the committee members, both current and inactive. All attendees introduced themselves.

PLANNING/ADMINISTRATIVE ISSUES:

The agenda was reviewed and approved.

John Eliasson discussed the history and background of the technical advisory committee (TAC), formerly known as the technical review committee. The role of the TAC is to advise DOH regarding OSS design and siting; public-domain technologies and the recommended standards and guidelines for their use; and testing and design standards for proprietary product registration and the recommended standards and guidance for their use.

The committee last met in June 2004. The lapse of time was related to a number of factors, including significant changes in responsibilities and staffing in the DOH wastewater program. The work of the TAC is important, and many technical issues

need technical review and feedback, including the renewal of proprietary product registrations and updates to recommended standards and guidance (RS&G).

John mentioned that the department has added two staff to its local health support unit, including Lynn Schneider who covers management plans in the Puget Sound region, product registration, and technical assistance, and Leslie Turner who covers waivers, technical assistance, and product registration.

John explained that DOH has a limited budget to support the work of the TAC and will not be able to reimburse travel costs or provide lunches for meetings. Budget restrictions also result in using meeting rooms with no associated fee.

FUTURE OF THE TAC:

Stuart Glasoe started the discussion with a legislative update. The Governor introduced legislation this session that would eliminate many boards and committees, including the DOH technical and policy advisory committees (SB 5994). The bill aims to reduce committee costs and scale down government, and directs agencies to “identify new, less costly and more effective opportunities” to ensure that citizen input is maintained. The use of modern technology is mentioned as a vehicle for communication.

Stuart said that the department needs to maintain good communication with the groups represented on the TAC. The department also needs to explore strategies to replace or modify the structure of the TAC to comply with the governor’s policy directive.

Stuart facilitated a discussion of the future of the TAC around following key questions:

What are the essential needs and functions of the TAC?

What are some optional approaches?

What are the priority issues?

The discussion pointed to two general approaches. The first approach would have DOH continue to coordinate and meet with a core group of stakeholders on technical issues. The group’s basic functions would be similar to the TAC, but the group would operate less formally and would operate at little or no cost to the agency. The second approach would involve the creation of a new committee and sponsorship by a broader set of interests, for example, WOSSA and LHJ directors. The structure and scope of the group’s work would need to be developed. The TAC agreed that it should continue to focus on technical and science issues, but also discussed the option of broadening to include issues related to evaluating the effectiveness of the on-site sewage rules. Regardless of the form, the TAC agreed that effort should continue to focus on the RS&G’s and proprietary product reviews.

The TAC voiced support and discussed options for using web-based technology and interactive forums to facilitate work on the technical issues.

The TAC agreed that the current committee plays a very important role and has a reputation for its integrity. A small core group would be more efficient, effective, and respected than a larger, less structured group or process.

As noted above, members discussed possible changes in the scope to the TAC's work depending on its form (e.g., evaluating the effectiveness of the rules), but DOH staff agreed to follow up with the TAC on the results of the proposed legislation and provide more information on alternative strategies and formats for carrying out the essential functions of the TAC.

SUMMARY OF TECHNICAL DISCUSSIONS

Timed Dosing Requirements for Soil Dispersal Components:

John Eliasson presented this topic. His power point handout is in this binder.

Product manufacturers posed the question of whether demand dosing preceded by timed dosing satisfied the requirements of timed dosing. If the beginning of the treatment sequence has timed dosing, is another timed dosed pump needed or will an on demand dosing be sufficient? Questions have also come from some LHJ's requesting clarification about how many components in a treatment sequence need to have timed dosing.

A concern about adequate surge capacity with timed dosing was raised. John offered that this is a different issue which should be addressed separately in the Pressure Distribution RS&G.

Another concern was that drip is more sensitive in some soils and there should be specific guidance for drip. The volume for drip may be an issue. This issue will need to be addressed in the Subsurface Drip Systems RS & G.

In the 1999 Pressure Distribution RS&G, timed dosing followed by on demand dosing with a cycle counter and hour meter (or water meter) was allowed. The 2003 report to the RDC concluded that if timed dosing to a treatment component was provided, then it would in turn provide timed dosing to the final treatment and dispersal component, thus timed dosing should not be required for the soil dispersal component.

It was agreed that timed dosing followed by demand dosing with a cycle counter and hour meter (or water meter) would be allowed for all low pressure systems, excluding drip systems.

Treatment Performance of One Foot of Sand Filter Media:

Leslie Turner presented this topic. Her handouts are in this binder. The literature review was presented to reconfirm former RS&G decisions of the TRC to allow the use of natural soil and filter media to achieve a minimum unsaturated flow depth of 3 feet of soil. Both the 2000 Mound Systems RS &G and the 1999 Sand Lined Trenches RS &G referenced the use of intermediate depths of sand. This was omitted in the current RS&G's because treatment levels were not established for the use of intermediate depths of sand.

The literature review summary illustrated in the charts indicated that sands at depths from 10 – 15 inches are capable of treating septic tank effluent to Treatment Level C treatment performance level. The group agreed that one foot of sand is expected to meet the treatment performance level of TL C.

It was also agreed that Table 5 from the 2007 Mound RS & G will be amended to include "Mound with two feet of filter media beneath bed" to all categories specifying TL B and "Mound with one foot of filter media beneath bed" will be added to the categories of TL C and TL E.

Ecoflo Biofilter ST500 & ST650 (open bottom):

John Eliasson provided an overview of technical issues related to Premier Tech's Ecoflo open bottom configuration. Marie-Christine Bélanger of Premier Tech gave a presentation on the issue. Her handout is in this binder. Effluent enters the peat based treatment unit and a dipper dispenses the liquid over the peat bed. Currently the closed bottomed treatment units are registered as meeting TL B.

Premier Tech proposes direct dispersal to a bed from an open bottomed unit. The TL B dispersal is required to have timed dosing as per WAC 246-272A Table VI. How does the proposal meet the intent of Table VI? They plan to slope the soil beneath the Ecoflo unit to increase the ability of the effluent to flow more evenly in the bed.

Premier Tech would like to have their open bottomed treatment system with a gravity bed configured dispersal component. They are proposing doubling the HLR. This would result in point loading the soil at 6 g/ft²/day. The soil will load until it can not take any more effluent and then it would flow, and not provide uniform distribution.

How much soil will have to cover the drainfield? Two and one half feet of soil will be needed on the drainfield where the unit is located.

- Gravity distribution per Table VI requires greater vertical separation. Options include using the open bottom where gravity distribution is allowed.
- The treatment unit cannot be used as part of the vertical separation.

The Committee did not agree with the proposal. DOH will continue to work with Premier Tech as other proposals are developed. Presentations may be given to the committee for additional discussion when a proposal is more in-line with the requirements in the rules.

WRAP UP:

Stuart Glasoe asked the group if the meeting was worth their time and the technical discussions fruitful. A meeting summary will be forwarded and we need to form future options for future meetings.

The committee will hopefully reconvene in June. The agenda and technical issues are to go out in advance to allow the committee members time to review them and confer with their constituents.

The group decided to have the same current members and perhaps add some more stakeholders, as per the WAC.

The group will be willing to continue to meet without reimbursement. DOH will look for a free meeting room.

LIST OF MEETING MATERIALS:

Legislative Updates:

- “Protecting Our Values During Tough Times” Policy Brief, Governor Gregoire
- Substitute Senate Bill 5994, selected sections

Timed Dosing Requirements for Soil Dispersal Components:

- Power point presentation

Treatment Performance of One Foot of Sand Filter Media:

- Power point presentation
- Literature review charts
- Annotated Bibliography

Proposed Open Bottom Ecoflo:

- Power point presentation by John Eliasson
- Handout from Premier Tech