

On-Site Wastewater Advisory Committee

Summary Report

September 30, 2001



Office of Environmental Health and Safety

On-Site Wastewater Advisory Committee

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Executive Summary

Background – In October 2000, the Department of Health’s Office of Environmental Health and Safety convened the On-Site Wastewater Advisory Committee to advise the Department on policy matters relating to the Wastewater Management Program. The OAC is comprised of stakeholder representatives from federal, state and local government agencies, academia, the private sector, and the public. The charge of the OAC was to:

1. Assist the Department of Health in scoping the future of the on-site wastewater management program
2. Establish a clear and mutually understood direction for the future before the Department undertakes a new round of rule modification, and
3. Look at the Department of Health’s program and generate a written report with recommendations.

Recommendations – The committee met from October 2000 through June 2001, and developed 55 policy-related recommendations for changing, enhancing, and re-directing the Department's Wastewater Management Program. Although the committee noted the importance of all of their recommendations, they prioritized recommendations in the following three areas to assist the Department in identifying which initiatives to pursue first.

1. *Operation & Maintenance (O&M) Initiatives:* From the first meeting to the last, issues and concerns about long-term operation and maintenance of on-site sewage systems were the highest priority of the OAC. Members of the committee are fully aware of the need to continue to develop management methods and support systems to assure timely, appropriate, and cost-effective monitoring and maintenance of on-site sewage systems. The committee, through their discussions and recommendations, promotes the development of public sector / private sector partnerships in implementing O&M management systems characterized by a risk-based model approach, strong linkages with private-sector monitoring, data collection and reporting. To promote effective, coordinated efforts in this arena the OAC recommends the establishment of a position dedicated to developing the linkages between agencies, organizations, and practitioners involved in operating, maintaining, and monitoring on-site sewage systems.

2. *Rule Development Initiatives:* Second to the concerns and discussions about O&M, the committee repeatedly expressed their agreement that implementation of most of the recommendations developed by the committee is dependent upon the development of new and revised on-site sewage system rules. In support of observation the committee has recommended that the Department dedicate the resources necessary to initiate a rule development process that is effective, timely, and responsive to the recommendations of the OAC and other stakeholders.

3. *Funding Initiatives:* The OAC identified several areas where progress in the long-term effective use on on-site sewage systems is hampered by lack of adequate funding. Three areas of particular concern resulting in recommendations for the Department to seek solutions were:

- Repair and replacement of failing on-site sewage systems.
- Development of local O&M management programs (to offset cost of developing infrastructure, e.g. computer systems)
- LOSS program fees (failure to recoup the costs of services provided).

Implementation — To implement the OAC recommendations with existing program resource capacity, the Department must:

- Schedule activities, implementing some recommendations before others;
- Balance staff workloads (de-emphasize some program elements in order to emphasize other program elements and new program initiatives); and,
- Re-direct program funding resources to meet the financial needs of implementing some of the recommendations (such as meeting the costs associated with the development of new on-site sewage system rules-committee support and facilitation).

List of Abbreviations

DOH.....	Washington State Department of Health
DOL.....	Washington State Department of Licensing
Ecology.....	Washington State Department of Ecology
EPA.....	US Environmental Protection Agency
LHJ.....	Local Health Jurisdictions (Local health departments/districts)
LOSS.....	Large On-Site Sewage Systems
NOWTC.....	Northwest On-Site Wastewater Training Center
NSF Standards.....	National on-site wastewater treatment system standards developed by NSF International, Inc.
O&M.....	Operation and Maintenance
OAC.....	Washington State On-Site Wastewater Advisory Committee
PSWQAT.....	Puget Sound Water Quality Action Team
RS&G Document.....	Department of Health Recommended Standards and Guidance for Alternative On-Site Wastewater Treatment Systems
SAC.....	Shellfish Advisory Committee
SeaGrant.....	Washington SeaGrant Program, Marine Advisory Services
TA.....	Technical Assistance
TRC.....	Washington State On-Site Wastewater Technical Review Committee
UIC.....	Underground Injection Control Program
WOSSA.....	Washington On-Site Sewage Association

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OAC MANUAL

Electronic copies of the OAC Manual may be obtained on compact disk (CD) by contacting the Department of Health, Environmental Health and Safety Program, Wastewater Management Program at (360) 236-3062.

Introduction

Purpose – In October 2000, the Department of Health’s Office of Environmental Health and Safety convened the On-Site Wastewater Advisory Committee (OAC) to advise the Department on policy matters relating to the Wastewater Management Program.

During the committee’s first meeting, Bill White, Assistant Secretary of Environmental Health Programs for the Department of Health (DOH) and Executive Sponsor for the OAC, provided an opening statement to the committee to set the stage for the work and function of the committee. Mr. White described the charge of the committee, which is “... *to look at the Department’s program and generate a written report that can be used for future work in rule development and other administrative/management actions to improve the wastewater program. This will require the committee to balance competing agendas and desires, and to understand the drivers that are influencing public policy and financing around this issue, both today and in the future.*”

Representation – The OAC is comprised of various stakeholder representatives from federal, state and local government agencies, academia, the private sector, and the public. In convening the committee, the Department of Health identified 20 stakeholder groups for representation on the OAC. The list of OAC members is presented on page iii.

Committee Materials — Full Committee and Sub-Committee meeting minutes and all meeting materials have been collated into the *OAC Meeting Manual*, which will be periodically referred to in this report. Electronic copies of the *OAC Meeting Manual* may be obtained on CD by contacting the Department of Health, Wastewater Management Program at (360) 236-3062. Content headings of the *OAC Manual* are presented in Appendix A of this report.

Committee Task Phases

The OAC approached its task of developing recommendations to the Department of Health based on the following three phases:

- Phase 1 – Goals, Process, Issues, and Background
- Phase 2 – Sub-Committee Recommendations Development
- Phase 3 – Full Committee Recommendations Development

Phase 1 – Goals, Process, Issues, and Education Development –

The purpose of Phase 1 was to:

1. Establish an understanding by the committee about its goals and expectations
2. Establish ground rules for conducting meeting and making decisions
3. Raise initial issues, ideas, and concerns about on-site wastewater management, and
4. Establish a baseline of understanding regarding how on-site wastewater management is conducted in Washington state.

Background – During Phase 1, DOH staff presented a baseline of information to OAC members regarding the current on-site wastewater management system in Washington state. Presentations were based upon the following wastewater management program areas and elements:

PROGRAM INFRASTRUCTURE –

- Organizational structure and program distribution (internal to DOH)
- Puget Sound Water Quality Action Team (PSWQ AT): Management Plan & Work Plan
- Jurisdictional relationships [Local health jurisdictions (LHJs), the Department of Ecology (Ecology), and DOH]
- Advisory committees [Technical Review Committee (TRC), On-Site Wastewater Advisory Committee (OAC), Shellfish Advisory Committee (SAC)]
- Budget (Funding source and available dollars)
- Staffing [full time employees (FTEs), job descriptions and office locations]
- Statutes, rules, and guidance
- Practitioner certification [Department of Licensing (DOL) & LHJs]

REGULATORY PROGRAMS –

Direct Regulatory Programs – Direct regulatory programs are considered those directly addressed by the DOH either in statute or rule. The following direct regulatory programs were described to OAC members:

- Experimental System Program
- Proprietary Device Review, Approval, and Listing
- Large On-Site Sewage Systems
- Septic Tank Additives

Indirect Regulatory Programs – Indirect regulatory programs are those wastewater management programs that fall outside of the direct jurisdiction of the DOH, such as those conducted by local health jurisdictions:

- Implementation of state and local on-site sewage system rules
- Application of DOH recommended standards and guidance
- Management of operation and maintenance programs.

TECHNOLOGY TRANSFER –

- *Information Gathering* – Information gathering efforts conducted by the DOH include:
 - Technical area assignments / Study (literature search & other)
 - National contacts / Small Flows Clearinghouse, EPA
 - Field surveys
 - Data collection and coordination.
- *Information Sharing* – Information sharing activities with DOH involvement include:
 - Consultations, presentations, and conferences
 - Publications (DOH Recommended Standards and Guidance (RS&G) documents, internet web page, brochures)
 - Training at the Northwest On-Site Wastewater Training Center.

Phase 2 – Sub-Committee Recommendations Development

During Phase 2, the committee established three Sub-Committees to develop policy recommendations to the DOH. The Sub-Committees were based upon the wastewater management program areas and issues described above (Program Infrastructure; Regulatory Programs; Technology Transfer).

The purpose of the Sub-Committees was: 1) to provide members with the opportunity to closely examine specific issues and 2) to develop a report establishing recommendations for later consideration by the Full Committee. Several OAC members volunteered to work on more than one of the Sub-Committees. Sub-Committee membership and a list of OAC meeting dates are presented in Appendices B and C respectively.

Three reports were developed from the Sub-Committees for consideration by the Full Committee. Each addressed the program elements within its program area, first by presenting the current status of the issues, secondly by developing a problem statement where problems were noted, and lastly by establishing a series of recommendations to address the problem areas. Sub-Committee reports appear in Appendices D, E, and F.

Phase 3 – Full Committee Recommendations Development

The purpose of Phase 3 was to:

1. Review recommendations provided by the Sub-Committees
2. Establish a final list of recommendations with consensus agreement, and
3. Rank these recommendations in a priority order.

Phase 3 meetings were facilitated by Ms. Mary Campbell of the Washington State Library at the request of the Department of Health.

Merging and Modifying Sub-Committee Recommendations – Under Ms. Campbell’s direction, the Sub-Committee reports were reviewed by the Full Committee. At that time, she led the committee through an exercise in which recommendations were grouped by following topical areas:

- | | |
|------------------------------------|--|
| 1. Jurisdiction/Organization | 7. Rules / Guidance |
| 2. Proprietary Products | 8. Planning |
| 3. LOSS Program | 9. Practitioner Standards of Practice |
| 4. Septic Tank Additives | 10. Non-Regulatory Enforcement Options |
| 5. O & M/Data Collection | 11. Funding / Fees |
| 6. Technical Assistance / Training | |

Ranking Recommendations Within Topical Areas – Ms. Campbell led the committee through an exercise to rank the recommendations within the topical areas to highlight recommendations of higher importance within those areas.

Ranking Topical Areas – The committee considered ranking the 11 topical areas, but determined that this would lead to an emphasis on some recommendations to the exclusion of others. The committee chose instead to rank all recommendations independently of the topical groupings.

Overall Ranking of Recommendations – During the next step, Ms. Campbell led the committee through the exercise of prioritizing all recommendations as a list, regardless of the topical area under which they had been originally placed.

Re-Evaluation of the Ranking Process – Once the voting was complete, the committee reviewed the results and discussed the effectiveness of the balloting process in identifying the recommendations of most importance to the committee. The committee was satisfied that recommendations involving operation and maintenance programs had received a high voting rank, but determined that recommendations involving the use of guidance documents, rule revisions, and long term funding issues needed to be raised in priority. The committee therefore agreed by consensus to prioritize those specific issues, and present the recommendations in three groupings based on the following criteria:

Recommendation Group 1 – Recommendations involving:

1. Operation and maintenance programs
2. Guidance documents and rule revision issues.
3. Long term funding issues

Recommendation Group 2 – Remaining recommendations ranked by the number of votes received during the prioritization process.

Recommendation Group 3 – Recommendations that received no ranking votes during the prioritization process.

Significance of Groupings –The committee observed that while all of its recommendations were important, it was not possible for DOH to undertake all of them at once. By grouping these recommendations, it is hoped that the order will assist the Department in assigning resources to provide timely and coordinated implementation of the recommendations.

By the nature of the process the OAC used to rank the 55 recommendations, recommendations relating to similar topics or categories may exist in different recommendation groups. The committee acknowledged that while recommendations in Recommendation Group 1 are the “first order of business” for the Department, various recommendations residing in the two other groups may be best implemented along with those of the first priority group.

Recommendation Group 1: First-Order Issues for the OAC—

The recommendations in Group 1 highlight three primary areas of interest and concern expressed by the OAC:

1. Operation, maintenance and monitoring (O&M) of on-site sewage systems.
2. Funding options for:
 - a. Local health jurisdiction O&M programs and the repair & replacement of failed on-site sewage systems, and,
 - b. A revised and updated fee schedule for the DOH Large On-Site Sewage Program (LOSS).
3. Development of new / revised on-site sewage system rules, meeting the requirements of the Regulatory Reform Act, yet continuing the use of technical guidelines where legally feasible.

O&M Initiatives:

From the first meeting to the last, issues and concerns about long-term operation and maintenance of on-site sewage systems were the highest priority of the OAC. Members of the committee are fully aware of the need to continue to develop management methods and support systems to assure timely, appropriate, and cost-effective monitoring and maintenance of on-site sewage systems. The committee, through their discussions and recommendations, promotes the development of public sector / private sector partnerships in implementing O&M management systems characterized by a risk-based model approach, strong

linkages with private-sector monitoring, data collection and reporting. To promote effective, coordinated efforts in this arena the OAC recommends establishing a position dedicated to developing the linkages between agencies, organizations, and practitioners involved in operating, monitoring, and maintaining on-site sewage systems.

Rule Development Initiatives:

Second to the concerns and discussions about O&M, the committee repeatedly expressed their agreement that implementation of most of the recommendations developed by the committee is dependent upon the development of new and revised on-site sewage system rules. In support of this, the OAC has recommended that the Department dedicate the resources necessary to initiate a rule development process that is effective, timely, and responsive to the recommendations of the OAC and other stakeholders.

Funding Initiatives:

The OAC identified several areas where progress in the long-term effective use on on-site sewage systems is hampered by lack of adequate funding. Three areas of particular concern resulting in recommendations for the Department to seek solutions were:

1. Repair and replacement of failing on-site sewage systems.
2. Development of local O&M management programs (to offset cost of developing infrastructure, e.g. computer systems)
3. LOSS program fees (failure to recoup the costs of services provided).

Full Text of the OAC Recommendations—

The On-Site Wastewater Advisory Committee's recommendations to the Department of Health are as follows:

RECOMMENDATION GROUP 1

O&M Coordinator – Explore establishing an Operation and Maintenance Coordinator position and developing and implementing a model risk based O&M program. Direct the coordinator to provide technical assistance to counties in implementing their O&M programs, establishing effective O&M data tracking, homeowner education programs and identifying funding mechanisms to support local O&M programs. Explore implementing this position through WOSSA or SeaGrant.

Industry-Based Program – Support WOSSA's efforts to develop a comprehensive statewide O&M program as well as insurance/warranty programs for on-site sewage systems.

Risk-Based Model – Develop a model risk based O&M program.

O&M Program Development Experiences – Emphasize and promote the development of O&M management programs, models, and methods, based on national, state, local, public and private experiences. Continue to work with the industry on these issues.

Utility Model – Explore establishing and demonstrating the utility model for O&M activities.

Funding Assistance for Local O&M Programs – Promote state funding programs to assist counties in establishing effective O&M programs and encourage counties to establish dedicated local funding that will maintain these programs over time.

Explore Funding Options / Fees for Services – Explore program funding options to reduce future reliance on state general fund sources and provisory PSWQ AT funding, including developing fees to cover the true cost of these programs.

- **LOSS Program** – Establish and/or revise fees for services to cover the costs of the LOSS program with the understanding that the fees do not supplant general fund contributions to the on-site wastewater management program.
- **PSWQ AT Funding Related** – Use the planning and policy making elements of the PSWQAT Work Plan, recognizing that although the PSWQAT is Puget Sound-related, the plan can assist the Department in addressing statewide on-site wastewater management issues from the perspectives of both environmental protection and public health.

Rules Vs. Guidance – Continue to use the elements of rule and guidance as appropriate, as provided by state and local laws, acknowledging that there is a need for both rule and guidance as appropriate. Review what standards should be appropriately adopted in rule or guidance, noting that specific requirements with a regulatory impact need to be placed in rule. Consult with the Washington State Attorney General’s office to determine what standards must be placed in rule, and what can be left in guidance.

Initiate On-Site Sewage System Rule Revision Process – Initiate the rule review and revision process as soon as reasonably possible, to bring wastewater stakeholders together to identify issues and solutions. This review must be broad in its scope and not limited to the rule-related recommendations of the On-Site Advisory Committee.

RECOMMENDATION GROUP 2

Technology Transfer Vs. Review and Approval – Emphasize technology transfer (education/outreach / standards and guidance) and de-emphasize product and technology review/approval.

DOH Training Participation and Format – Increase the level of DOH participation in developing, presenting, assessing, and scheduling NOWTC training curricula, to assure that the presentation of information meets the needs of public and private sector practitioners, occurs at regional locations, and is consistent with the rules and technical guidance in Washington.

Two-Way Jurisdictional Split – Promote and facilitate changing the on-site wastewater jurisdiction from the current three-way split (Ecology / DOH / LHJs) to a two-way split (DOH / LHJs), specific to sub-surface disposal systems

- Develop criteria for dividing LOSS jurisdiction between the DOH and LHJ based on issues such as design elements, wastewater origin, and pre-treatment character, in addition to gallons per day.
 - Criteria should address all facets of project development to insure that appropriate large or small system decisions are made.

LOSS Management (O&M and Oversight) – Refine or tighten rules and oversight associated with LOSS operation and management for both new and pre-existing systems.

Facilitate Standards of Practice Discussions – Facilitate discussions among LHJs and the private sector to develop statewide standards of practice for inspectors, installers, O&M specialists, and pumpers, exploring certification through the private sector with licenses to practice issued by LHJs based on private sector certification.

UIC Program Coordination – Lead discussions with LHJs, Ecology and the industry regarding the EPA Underground Injection Control (UIC) Program.

Funding Assistance for Failing On-Site Systems – Improve funding assistance opportunities for homeowners to provide an incentive for cooperation in identifying and repairing failed systems (state revolving fund, community development block grant, shellfish on-site septic grants).

PSWQ AT Work Plan Coordination – Use the planning and policy making elements of the PSWQ AT Work Plan, recognizing that although the PSWQ AT is Puget Sound-related, the plan can assist the Department in addressing statewide onsite wastewater management issues from the perspectives of both environmental protection and public health.

O&M in Rule – LHJ Requirements – Provide more explicit guidance in rule to what is required of LHJs regarding O&M.

O&M in Rule – Uniform Process of Enforcement – Develop a uniform process of enforcement to insure that O&M is conducted as prescribed by rule.

O&M in Rule – Statewide Definition of Failure – Develop a detailed statewide definition for failure.

Testing Standards in Rule – Place the standards and testing methodologies required to document product performance levels (e.g., NSF Standards) in rule, working with stakeholders, industry, and other interested parties, relying on nationally accepted third-party testing entities and testing protocols, so that testing and re-testing methods are applied equally to all applicants. Cease regulating sewage treatment systems by standards established in guidelines.

Sewage Dispersal / Disposal Components – Establish in rule the framework for on-site gravelless drainfield dispersal and/or disposal systems or components, so that systems or components meeting the requirements as established in rule could be permitted by LHJs for use in Washington state.

Continue Advisory Committees – Continue to support the work of the TRC as a technical advisory group, and the OAC as a policy advisory group, with adequate funding and program support.

Rename the Technical Review Committee – The name of the TRC should be changed from the Technical Review Committee to the Technical Advisory Committee to more accurately reflect its advisory role.

Data Collection System Development – Develop a data collection system for practitioners to use to collect data in the field.

Pilot Project – A pilot project is encouraged to demonstrate the benefits and function of the data collection & reporting systems.

Data Collection System Promotion and Assistance – Promote and assist developing a comprehensive data collection and reporting system, in collaboration with the Washington State On-Site Sewage Association (WOSSA), other practitioners, and local and state agencies.

Routine Reviews of Technologies - Conduct routine review of technologies and products to insure their performance.

NOWTC Long Term Funding Mechanisms – Explore with the partners of the NOWTC (WOSSA, WSU—Extension, and DOH) and other stakeholders, long-term funding mechanisms to operate the NOWTC.

Product Development Permit – Develop a rule-based framework to promote an in-state product development permit that would allow manufacturers to install and evaluate the function and performance of new products in the early stages of development. Product development permits would be limited to sites where a conforming system is allowed and installed simultaneously. A goal of this product development framework would be to provide the developer with a means to retain control of product development information while assuring public health protection. Upon completion of product development, the manufacturer would subject the product to testing according to the nationally recognized testing protocol established in the rules (see Treatment System Performance Verification recommendation).

Additives Workgroup - Establish a workgroup to identify problems and solutions to the current limited review and approval program for septic tank additives, with a goal to subject the industry to product claim verification as a condition of continued / future approval. Other “additives” such as ecosystem products, not currently reviewed by the program, should also be addressed.

Use of Collected Data – Incorporate field data collection into DOH review of the different technologies. Shift the current focus away from technology approval to O&M and technical assistance.

DOH Orientation Sessions – Improve the orientation sessions to new and revised Recommended Standards and Guidance documents by:

- Enhancing the instructional elements of orientation sessions (such as including a technical companion document) so that attendees will understand the technical basis supporting the new or revised information, and
- Coordinating these regional training activities with the curricula and class schedule of the NOWTC.

Public Education – Promote public education programs for increased awareness of on-site wastewater system operation and maintenance.

Explore Raising Standards of Practice—Explore ways to raise both the industry and consumer standards of practice, recognizing that the current system only establishes a baseline of practice.

Annual Re-Certification - Explore annual re-certification, and issues related to periodic performance verification of products.

System Tracking – Improve the LOSS system tracking.

Field Experience Integration – Integrate real-world field experience obtained from O&M-based data gathering with the information from other sources, such as DOH-conducted or coordinated field study, when technical assistance and other technical standards documents are developed or updated.

Technical Assistance Needs Assessment/Tracking – Assess Technical Assistance (TA) needs and track technical issues allowing the program to identify and target improvements in TA materials and outreach activities.

Public Domain RS&G Documents – Adopt new RS&G documents addressing public domain technologies as “interim” documents that provide for a field-monitoring period to demonstrate how the public domain systems function under various field conditions, and to allow for the RS&G documents to be evaluated for its technical accuracy.

Recommended Standards and Guidance (RS&G) Documents –Integrate real-world field experience obtained from O&M-based data gathering with the information from other sources, such as DOH-conducted or coordinated field study, when technical assistance and other technical standards documents (e.g., RS&G documents) are developed or updated.

RECOMMENDATION GROUP 3

Engineering Group Approach – Explore reorganizing the Department’s current structure to placing one or more engineers in each of the DOH regional Drinking Water Division offices assigned to LOSS Program duties. This would provide for a strong link with the water conservation, reuse and reclamation activities, as well as the drinking water elements of the Drinking Water Program.

Explore Non-Regulatory Options – Recognize the potential resource or political limitations of local enforcement capabilities, and that other “non-regulatory” approaches or incentives for achieving compliance should be explored, such as locally-developed, community-based solutions (e.g., the STEP – Small Town Environment Program).

Explore Failure Remedies – From the consumer standpoint, explore reasonable remedies, including funding sources, warranties and insurance, for solving problems associated with failing systems.

Explore Options to Reduce Government Oversight During Product Development – Explore approaches that maintain appropriate levels of public health protection while reducing the level of governmental oversight during initial product development.

Treatment System Oversight Period – Develop a rule-based regulatory framework for assuring that during the first two years that a new product or technology is being appropriately applied in Washington state that information is gathered and reported to the applicable LHJ and DOH regarding the functional aspects and record of new technologies. This period is not a replacement for routine O&M activities. The purpose of this oversight period is to help assure that the treatment product or technology is being appropriately applied to sites within Washington state and that these systems are functioning as expected.

LOSS Operator Competency – Address LOSS operator competency.

LOSS Surface and Ground Water Criteria – Establish better criteria for addressing impacts to surface and groundwater.

LOSS Wastewater Strength Issues – Address issues associated with wastewater strength and minimum treatment.

LOSS Flow Splitting of Large Projects – Develop a clear definition of LOSS and explore any other program or statutory changes necessary to avoid the practice of flow splitting of large projects to avoid LOSS design requirements.

Accessing Private Property Experiences and Remedies –Survey LHJs as to whether private property access is an issue for conducting sanitary surveys (e.g., dye tests) and O&M. If so, explore remedies that have been utilized by counties in Washington state and elsewhere in the country.

General Technical Assistance/Training Statement - Emphasize technology transfer (education/outreach / standards and guidance) and de-emphasize product and technology review/approval.

Technical Assistance Information Coordination – Facilitate coordination between the various governmental providers of technical information and practitioner training.

DOH Technical Expertise – Continue to gather, develop and maintain an up-to-date and comprehensive knowledge of on-site wastewater treatment, disposal, operation and management, and continue providing technical assistance to LHJs, practitioners and the public.

Continuing Education Units – Encourage standardizing continuing education (CEU) requirements among local health jurisdictions of Washington state.

Next Steps

Share the Summary Report –

To strengthen the constituent base of support for the recommendations of the OAC, the Department will present this Summary Report to various audiences, including:

- Washington State Board of Health
- Washington State Directors of Environmental Health
- NW On-Site Wastewater Treatment Short Course (University of Washington / September 2001).

Develop and Initiate an Implementation Plan –

The OAC has developed 55 recommendations for changing, enhancing, and re-directing the Department's Wastewater Management Program. Implementing these recommendations will require a variety of concurrent and/or consecutive actions including:

- Shifting program focus and re-assigning staff resources to new projects and tasks;
- Networking with stakeholders and other agencies;
- Developing new, and revising existing, Memoranda of Agreement;
- Maintaining existing budgetary support for program activities;
- Developing new, and revising existing, on-site sewage system rules; and,
- Pursuing legislative authority and additional funding, if needed.

The OAC has ranked their recommendations to assist the Department in identifying which initiatives to pursue first. As implementation plans are developed, the Department will strive for the most time and resource efficient implementation, combining second and third order recommendations with first order recommendations, where such combining seems appropriate.

To implement the OAC recommendations with existing program resource capacity the Department must:

- Schedule activities, implementing some recommendations before others;
- Balance staff workloads (de-emphasize some program elements in order to emphasize other program elements and new program initiatives); and,

- Re-direct program funding resources to meet the financial needs of implementing some of the recommendations (such as meeting the costs associated with developing new on-site sewage system rules-committee support and facilitation).

OAC Involvement –

In one year, the DOH will develop and forward a report to the OAC regarding the progress that it has made in implementing the committee recommendations. The DOH may convene the OAC in the interim should assistance be required with constituency groups during implementation of the OAC recommendations.

Appendices

Appendix A - OAC Manual Contents

Appendix B - List of OAC Sub-Committee Representatives

Appendix C - List of Full and Sub-Committee Meeting Dates

Appendix D - Program Infrastructure Sub-Committee Report to the Full Committee

Appendix E - Regulatory Sub-Committee Report to the Full Committee

Appendix F - Technology Transfer Sub-Committee Report to the Full Committee

Appendix A

OAC Manual Contents

All materials associated with each of the OAC Full and Sub-Committee meetings are presented in the *OAC Manual*. The *OAC Manual* content headings are as follows:

- Tab 1 – OAC Committee Meeting #1 – October 12, 2000
- Tab 2 – OAC Committee Meeting #2 – November 21, 2000
- Tab 3 – On-Site Wastewater Related Statutes of the Revised Code of Washington
- Tab 4 – On-Site Wastewater Related Rules and Regulations of the Washington Administrative Code
- Tab 5 – DOH Recommended Standards and Guidance Technical Assistance Document Examples
- Tab 6 – Puget Sound Water Quality Planning
- Tab 7 – US Environmental Protection Agency Draft Guidelines
- Tab 8 – OAC Committee Meeting #3 – December 12, 2000
- Tab 9 – Program Infrastructure Sub-Committee Meeting #1 – January 4, 2001
- Tab 10 – Regulatory Sub-Committee Meeting #1 – January 10, 2001
- Tab 11 – Technology Transfer Sub-Committee Meeting #1 – January 16, 2001
- Tab 12 – Program Infrastructure Sub-Committee Meeting #2 – January 26, 2001
- Tab 13 – Regulatory Sub-Committee Meeting #2 – February 6, 2001
- Tab 14 – Technology Transfer Sub-Committee Meeting #2 – February 14, 2001
- Tab 15 – Program Infrastructure Sub-Committee Meeting #3 – February 20, 2001
- Tab 16 – Regulatory Sub-Committee Meeting #3 – March 1, 2001
- Tab 17 – Technology Transfer Sub-Committee Meeting #3 – March 6, 2001
- Tab 18 – Program Infrastructure Sub-Committee Meeting #4 – March 14, 2001
- Tab 19 – Regulatory Sub-Committee Meeting #4 – March 22, 2001
- Tab 20 – Technology Transfer Sub-Committee Meeting #4 – March 28, 2001
- Tab 21 – Program Infrastructure Sub-Committee Meeting #5 – April 9, 2001
- Tab 22 – Regulatory Sub-Committee Meeting #5 – April 11, 2001
- Tab 23 – OAC Sub-Committee Reports to the Full Committee – May 3, 2001
- Tab 24 – OAC Full Committee Meeting #4 – May 9, 2001
- Tab 25 – OAC Full Committee Meeting #5 – May 23, 2001
- Tab 26 – OAC Full Committee Meeting #6 – June 22, 2001
- Tab 27 – OAC Final Report – September 30, 2001

OAC MANUAL – Electronic copies of the *OAC Manual* may be obtained on CD by contacting the Department of Health, Environmental Health and Safety Program, Wastewater Management Program at (360) 236-3062.

Appendix B

OAC Sub-Committee List of Participants

Program Infrastructure Sub-Committee

Dean Bannister [Bill Stuth, Jr.]*
Kirk Cook
Larry Fay
Dave Ghylin [Carl Garrison]*
Maryanne Guichard [Mark Soltman]*
Dave Lenning [Steve Wecker]*
Mike Morris [Jerry Stonebridge]*
Bruce Wulkan [Stuart Glasoe]*

Regulatory Sub-Committee

Dean Bannister [Bill Stuth, Jr.]*
Kevin Barry
Kirk Cook
Linda deBord
Bill Dewey [Brett Bishop]*
Dave Ghylin [Carl Garrison]*
Maryanne Guichard [Mark Soltman]*
James Hart
Dave Lenning [Steve Wecker]*
Mike Morris [Jerry Stonebridge]*
Sharon Nelson
Paula Rioux
Mike Shelton
Art Starry [Steve Peterson]*
Ed Stanton [Brian Minnich]*
Bruce Wishart

Technology Transfer Sub-Committee

Dean Bannister [Bill Stuth, Jr.]*
Dave Ghylin [Carl Garrison]*
Maryanne Guichard [Mark Soltman]*
James Hart [Dick Fitzwater]*
Teri King
Dave Lenning [Steve Wecker]*
Mike Morris [Jerry Stonebridge]*
David Swink

*[Designated Alternate]

Appendix C

List of Full and Sub-Committee Meetings

Following is a list of OAC Full and Sub-Committee meeting dates:

Phase 1 – Goals, Process, Issues, and Background

- Full Committee Meeting #1 – October 12, 2000
- Full Committee Meeting #2 – November 21, 2000
- Full Committee Meeting #3 – December 12, 2000

Phase 2 – Sub-Committee Recommendations Development

Infrastructure Sub-Committee

- Sub-Committee Meeting #1 – January 4, 2001
- Sub-Committee Meeting #2 – January 26, 2001
- Sub-Committee Meeting #3 – February 20, 2001
- Sub-Committee Meeting #4 – March 14, 2001
- Sub-Committee Meeting #5 – April 9, 2001

Regulatory Programs Sub-Committee

- Sub-Committee Meeting #1 – January 10, 2001
- Sub-Committee Meeting #2 – February 6, 2001
- Sub-Committee Meeting #3 – March 1, 2001
- Sub-Committee Meeting #4 – March 22, 2001
- Sub-Committee Meeting #5 – April 11, 2001

Technology Transfer Sub-Committee

- Sub-Committee Meeting #1– January 16, 2001
- Sub-Committee Meeting #2 – February 14, 2001
- Sub-Committee Meeting #3 – March 6, 2001
- Sub-Committee Meeting #4 – March 28, 2001

Phase 3 – Full Committee Recommendations Development

- Full Committee Meeting #4 – May 8, 2001
- Full Committee Meeting #5 – May 23, 2001
- Full Committee Meeting #6 – June 22, 2001

Phase 1 and Phase 2 meetings were scheduled from 10:00 AM – 2:00 PM. Phase 3 meetings were scheduled from 10:00 AM – 3:00 PM. The first meeting of the OAC (October 12, 2000) was held at the Sea-Tac Occupational Skills Center in Sea-Tac, Washington. All other meetings were held at the Department of Health’s Northwest Regional Office in Kent, Washington.

Appendix D

Program Infrastructure Sub-Committee – Report to the OAC May 9, 2001

Program Infrastructure	<ul style="list-style-type: none"> • Organizational Structure & Program Distribution (internal) • PSWQ AT: Management Plan & Work Plan • Wastewater Management Work Plan • Jurisdictional Relationships • Advisory Committees (TRC, OAC, SAC) • Budget (Funding Source & \$\$\$) • Staffing (FTEs, Job Descriptions & Office Locations) • Statutes, Rules, Guidance • Practitioner Certification (DOL & LHJs)
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Organizational Structure & Program Distribution (internal) —

- ***Current Status*** — Wastewater treatment & disposal activities are conducted in two different offices within DOH Environmental Health Programs. On-site sewage systems, including the direct-service Large On-Site Sewage (LOSS) Program, are within the Office of Environmental Health & Safety, with program staff located in Tumwater, Spokane, and Kent. The LOSS program, located in Spokane, employs two engineers and an office assistant. LOSS projects are distributed approximately 60% — 40% between the eastern and western regions of Washington. The Division of Drinking Water has program responsibilities for review of municipal sewage treatment systems, and the application of wastewater reuse and reclamation standards, responsibilities they share with the Department of Ecology. The Drinking Water Division employs one engineer in their Spokane regional office to perform these wastewater-related duties, plus three other staff members with water conservation duties, located in the three regional Drinking Water offices (Kent, Lacey, & Spokane).
- ***Problem Statement*** — Program efficiency may not be optimized with all LOSS program staff located in Spokane. If recommendations to reduce the jurisdictional split (currently between three agencies) to involve only Local Health Jurisdictions (LHJs) and DOH LOSS program, the potential increased workload resulting from assuming projects currently under Ecology review may necessitate a different organizational scheme for optimum program efficiency.

PSWQ AT: Management Plan & Work Plan, and the Wastewater Management Work Plan —

- ***Current Status*** — The Puget Sound Water Quality Management Plan provides goals and objectives, and establishes a wide variety of plan elements, to assist state and local agencies and citizens in their activities to improve water quality in the Puget Sound Basin. Through biennial work plans, the PSWQ Action Team links with state and local agencies to identify specific tasks and allocate funding to support agencies in conducting this work. The Wastewater Management Program Work Plan blends elements of our public health mission with the water quality elements of the PSWQ AT Work Plan.
- ***Problem Statement*** — The PSWQ AT Work Plan focuses on the Puget Sound region. Opportunities for promoting the PSWQ AT Work Plan activities of the Wastewater Management Program as public health initiatives may not be effectively used. Long-term funding of these environmental health

activities may be in jeopardy if a strong link to the public health benefit of these activities is not emphasized.

Jurisdictional Relationships —

- ***Current Status*** — Jurisdictional responsibilities for on-site sewage systems are divided between the departments of Health and Ecology and the Local Health (LHJ) jurisdictions based on gallons of wastewater produced (e.g., < 3,500 gallons per day / LHJ jurisdiction; 3, 500 – 14,500 / DOH LOSS jurisdiction; > 14,500 – Ecology jurisdiction).
- ***Problem Statement*** — Jurisdictional split among three agencies defies functional efficiencies and leads to some confusion among project proponents. Projects are often designed with these jurisdictional splits—and their different level of requirements—in mind, dividing otherwise larger projects into smaller pieces. This situation may jeopardize the application of appropriate review criteria.

Underground Injection Well Control Program (UIC) —

- ***Current Status*** — The US Environmental Protection Agency, in their newly published Underground Injection Control (UIC) regulations, regulates drainfield systems as shallow injection wells. Under the UIC program, all systems that serve more than 20 people, which roughly corresponds to systems generating about 2,000 – 2,500 gallons of wastewater per day, are considered as Class V underground injection wells. Ecology is about to enter in to rule writing to incorporate the new federal UIC standards. For on-site systems, a problem is created for Ecology because two agencies (DOH and Ecology) have jurisdiction for on-site systems of which Ecology holds UIC primacy. At this time, Ecology only reports to the EPA on systems within its jurisdiction (e.g., on-site systems that exceed 14,500 gallons per day). On-site systems that fall within either DOH or local jurisdiction are currently not being reported to the EPA.
- ***Problem Statement*** — The future is unclear regarding the impact of Federal UIC rules on the regulatory structure used in Washington to oversee drainfield systems that fall within the purview of the EPA UIC program.

Advisory Committees (TRC, OAC) —

- ***Current Status*** — Two primary advisory committees are established by the DOH for on-site issues: the Technical Review Committee (TRC), and the On-Site Wastewater Advisory Committee (OAC). Both are established in Chapter 246-272 WAC, to address technical issues (the TRC) and policy issues (the OAC). The TRC and DOH have been placed in a difficult situation, particularly with regard to Experimental Systems and Proprietary Products, where due to the current on-site regulations, the TRC has been perceived as a “review & approval” body.
- ***Problem Statement*** — The name “Technical Review Committee” implies that the TRC is a “review and approval” body, which it is not. The roles and responsibilities of these two standing committees—the OAC and the TRC needs to be clarified so that policy-related items are presented and addressed by the OAC, while technical issues remain the sole purview of the TRC.

Budget (Funding Source & \$\$\$) —

- ***Current Status*** — The Wastewater Management Program 1999-2001 budget receives funding from two sources. Of the \$1,440,807 biennial budget only \$24,000 is received from fees associated with the Large On-Site Sewage System program, and experimental system and proprietary product reviews; the balance is entirely from the state General Fund. Seventy-five percent of the General Fund monies are provisoed for implementation of the PSWQ Management Plan.
- ***Problem Statement*** — The Wastewater Management Program relies heavily on General Fund monies, most of which have a strong tie to the activities of the PSWQ Action Team. This arrangement de-emphasizes the public health needs being met by this program.

Staffing (FTEs, Job Descriptions & Office Locations) —

- ***Current Status*** — With offices in Tumwater, Spokane, and Kent, the Wastewater Management Program is staffed by four Public Health Advisors (Technical Expertise), two Environmental Engineers (60% LOSS work), two clerical (one each in Spokane & Tumwater), one Health Educator, and one Supervisor. Work loads and assignments are established by the PSWQ AT Work Plan and the Wastewater Management Program Work Plan, but are dramatically impacted by conflicts generated in the proprietary product and experimental system review and approval processes of the current on-site sewage system rules. Testing protocols and requirements are not established in rule resulting in product testing protocols that are frequently based on negotiation between the DOH, the TRC and the proponent, on a case-by-case basis.
- ***Problem Statement*** — Due to the demands of defending decisions based on standards established in guidelines rather than in rule, technology transfer issues—such as O&M management, system monitoring methodologies, or critical assessment of new & emerging technologies, are often not addressed to the degree that would be desirable.

Statutes, Rules, Guidance —

- ***Current Status*** — Minimum state standards for on-site sewage systems are established in State Board of Health rules (Chapter 246-272 WAC), under general legislative authority to establish regulations to protect public health. These rules address conventional on-site sewage systems, and provide for alternative on-site sewage treatment and disposal systems. Specific requirements for alternative systems are provided in companion guideline documents. Guidelines, however, must be integrated into local rules in order to be implemented as law, as the development of guidelines is not subject at the state level to the public review process required for administrative rules. The development and revision of guidelines is generally a less-involved process that allows for timely response to changes in the technology. The department currently regulates (reviews and approves / denies) proprietary and experimental systems based on these guideline documents.
- ***Problem Statement*** — The benefit of establishing experimental and alternative system standards in guidelines—relative ease and flexibility in modifying and updating the guidelines—has become significantly offset by the level of risk to the department and the TRC for challenges, appeals, and lawsuits when treatment and disposal products are regulated by standards not established in rule or statute.

Practitioner Certification (DOL & LHJs) —

- ***Current Status*** — On-site sewage system designers are currently certified (licensed) by the Department of Licensing (DOL), and local health department inspectors are examined to the same degree as designers. This statewide program is developing “standards of practice” for these two practitioner groups. Other practitioners—installers, O&M service personnel, and septic tank pumpers—are currently certified and/or licensed by local health jurisdictions, and a statewide set of practice standards remains to be developed and implemented.
- ***Problem Statement*** — The recommendations of the 1997 Certification Work Group—which recommended the following levels of credentialing for other practitioner groups—remain unimplemented.
 - Installers – Mandatory State Certification with Local Registration Authority
 - Pumpers – Mandatory State Certification with Local Registration Authority, or Mandatory Local Certification with Minimum State Developed Competency Requirements
 - O&M Specialists – Mandatory State Licensure with Local Registration Authority

RECOMMENDATIONS OF THE INFRASTRUCTURE SUB-COMMITTEE

We recommend that the department:

1. **Jurisdictional Split / 3-Way to 2-Way**—Promote and facilitate changing the on-site wastewater jurisdiction from the current three-way split (Ecology / DOH / LHJs) to a two-way split (DOH / LHJs). Review and evaluate program efficiencies of the existing LOSS program framework to identify program improvements for cost effectiveness, timeliness, and consistency.
2. **2-Way Jurisdictional Split Criteria**—Develop criteria for dividing LOSS jurisdiction between the DOH and LHJ based on issues such as design elements, wastewater origin, and pre-treatment character, in addition to gallons per day. Criteria should address all facets of project development to insure that appropriate large or small system decisions are made.
3. **Engineering Group Approach**—Explore reorganizing its current structure to placing one or more engineers in each of the DOH regional Drinking Water Division offices assigned to LOSS Program duties. This would provide for a strong link with the water conservation, reuse and reclamation activities, as well as the drinking water elements of the Drinking Water Program.
4. **UIC Program Coordination**—Lead discussions with LHJs, Ecology and the industry regarding the EPA Underground Injection Control (UIC) Program.
5. **PSWQ AT Work Plan Coordination**—Use the planning and policy making elements of the PSWQAT Work Plan, recognizing that although the PSWQAT is Puget Sound-related, the plan can assist the department in addressing statewide onsite wastewater management issues from the perspectives of both environmental protection and public health.
6. **Advisory Committees**—Continue to support the work of the TRC as a technical advisory group, and the OAC as a policy advisory group, with adequate funding and program support. The name of the TRC should be changed from the Technical Review Committee to the Technical Advisory Committee to more accurately reflect its advisory role.

7. **Rules vs. Guidance**—Continue to use the elements of rule and guidance as appropriate, as provided by state and local laws, acknowledging that there is a need for both rule and guidance as appropriate. Review what standards should be appropriately adopted in rule or guidance, noting that specific requirements with a regulatory impact need to be placed in rule.
8. **Practitioner Standards of Practice**—Explore ways to raise both the industry and consumer standards of practice, recognizing that the current system only establishes a baseline of practice. Facilitate discussions among LHJs and the private sector to develop statewide standards of practice for inspectors, installers, O&M specialists, and pumpers, exploring certification through the private sector with licenses to practice issued by LHJs based on private sector certification.
9. **Technology Transfer**—Emphasize technology transfer (education/outreach / standards & guidance) and de-emphasize product and technology review/approval. Emphasize and promote the development of O&M management programs, models, and methods, based on national, state, local, public and private experiences. Continue to work with the industry on these issues.
10. **Proprietary Product Review**—Place the standards and testing methodologies required to document product performance levels (e.g., NSF Standards) in rule, working with stakeholders, industry, and other interested parties.
11. **Budget**—Explore program funding options to reduce future reliance on state general fund sources and provisory PSWQ AT funding, including developing fees to cover the true cost of these programs.

Appendix E

Regulatory Programs Sub-Committee – Report to the OAC May 9, 2001

Regulatory Programs	<p>DOH Programs</p> <ul style="list-style-type: none"> • Experimental Systems Program • Large On-Site Sewage Systems (LOSS) • Proprietary Product Review, Approval & Listing • Septic Tank Additive Review, Approval & Listing <p>Local Health District / Department Activities</p> <ul style="list-style-type: none"> • On-site Rules (WAC 246-272) • Recommended Standards & Guidance • O&M Management
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DOH PROGRAMS

Experimental Systems Program –

- ***Current Status*** – WAC 246-272-05001 provides for the review and approval of experimental on-site sewage systems, and describes required action for the experimental system proponent, the department (DOH), and the Local Health Jurisdiction (LHJ). The proponent must submit a written proposal to the department that includes among other requirements, a proposed testing protocol, monitoring details, number of installations and locations, etc. The DOH must obtain recommendations from the TRC prior to approving a proposal. Once approved by the DOH, the proponent must obtain a permit from the LHJ prior to installing systems. LHJs are under no obligation to permit any experimental system. Once installed, the proponent must follow the experimental system protocol, meet any additional requirements imposed by the LHJ, conduct monitoring, and submit monitoring reports to the LHJ. Experimental system applicants / proponents typically fall into two categories; 1) proprietary product manufacturers seeking product approval for statewide use, and 2) an individual homeowner desiring to use a wastewater technology not otherwise approved for use.

The on-site rules identify the type of information that is required in the application for an experimental system. They do not, however, identify the specific requirements of the testing or evaluation criteria or protocol. The outcome of the application process and the presentation to the Technical Review Committee (TRC) is frequently a negotiated testing protocol. When test protocol agreements are not reached contentious appeals and lawsuits have resulted, consuming significant program human and financial resources.

- ***Problem Statement*** – Without an existing testing protocol or minimum testing requirements established in rule, testing protocols are negotiated between the proponent, DOH, and the TRC on a case-by-case basis; a difficult, extensive, expensive, and variable process that leaves the department vulnerable to legal challenges and liability concerns. DOH doesn't have the necessary controls or expertise to oversee a sound scientific experimental program. Local resources to monitor experimental systems are often undefined or unavailable. A better system for product development is needed.

Proprietary Product Review, Approval & Listing –

- ***Current Status*** – A proprietary product is an alternative on-site wastewater system held under a patent, trademark, or copyright. Requirements are addressed in WAC 246-272-04001. Under the current system, LHJs can only permit proprietary products that appear on the DOH list of approved products and systems. To get on the DOH approved list, the DOH must have developed recommended standards and guidance (RS&G) for a given technology, and the proponent must demonstrate to the DOH that the proprietary product meets the requirements established in the applicable RS&G document. To remain on the DOH approved list, a system proponent must submit an annual report that includes any changes in the product and certifies that the device meets appropriate guidelines; and required fees.
- ***Problem Statement*** – The current approval criteria are established in guidance, rather than rule. As a result, the DOH often finds itself under legal challenge to its decisions. Under some circumstances, proponents are allowed to either meet the standards of a national testing protocol, or an equivalent protocol, yet there are no criteria to determine protocol equivalency. In a situation like that which exists with experimental system testing protocols, similar products may undergo significantly different testing protocols, depending on the negotiation skills and/or stature of the proponent proposing an equivalent protocol. The DOH has not established a process for system proponents to submit an annual report and fee to remain on the list of approved systems and products. There is no process for system de-listing or annual re-certification.

Large On-Site Sewage Systems (LOSS) –

- ***Current Status*** – Regulations for large on-site sewage systems—systems over 3,500 gallons per day design flow—are established in WAC 246-272-08001, and supplemented by guidance established in DOH’s “Design Standards for Large On-Site Sewage Systems,” and other guidance documents, such as the Recommended Standards and Guidance for Pressure Distribution. DOH shares responsibility for Large On-Site Sewage Systems (LOSS) with the Department of Ecology (they regulate systems with design flows over 14,500 gallons per day, and systems with lagoons or mechanical treatment over 3,500 gallons per day). DOH has, by contract with five Local Health Jurisdictions (LHJs) delegated authority for LOSS project review and approval. There is currently no fee for operating permits and administration of the program requires a significant amount of DOH staff time.
- ***Problem Statement*** – Much of the DOH regulatory program is based on guidance, which is contrary to current state requirements that regulatory issues be established in rule. The DOH review system is based on residential strength wastewater although many LOSS systems involve high-strength wastewater, which impacts subsurface soil-based treatment systems if improperly designed. Although LOSS project proponents are required in rules and guidance to address impacts from LOSS to ground and surface water (including nitrates) the criteria for evaluating such impacts are not clearly defined. The WAC currently requires that LOSS serving residential projects where lots are to be owned individually must be owned or managed by a public entity, or may be managed by some other acceptable entity (such as a homeowner association) with a “standby agreement “with a public entity. Management of some systems with standby agreements has been inadequate. LOSS operator qualifications have not been addressed in rule or guidance. Jurisdictional splits between the DOH and the Department of Ecology are based on both flow volume and treatment. This jurisdictional split may result in staffing inefficiencies. In addition, a definition for mechanical treatment has not been established. The practice of splitting flows from subdivisions or complexes so that system daily flow is less than or equal to 3,500 gallons per day (GPD) often occurs so that the proponent will not have

to address LOSS design requirements. A clear definition of LOSS is needed to avoid this practice. There is no LOSS tracking program in place to identify LOSS locations and system status. DOH fees are inadequate to recover expenses associated with issuance and tracking of LOSS operating permits, plan review, and other activities. LOSS failures can have significant public health consequences, yet there is no mechanism to streamline corrective actions, such as warranties, practitioner insurance, or other means.

Septic Tank Additive Review, Approval & Listing –

- ***Current Status*** – The septic tank additive program is established in statute under Chapter 70.118 RCW, and in rule under Chapter 246-273 WAC. The DOH review is limited to reviewing the ingredients in the product, and determining whether or not, by their nature or function, the additive will have a detrimental effect on the system. The DOH review does not involve investigating the validity of product performance claims.
- ***Problem Statement*** – Under the current system, the DOH “approval” leads users to believe that these products are effective in improving system performance. This condition may lead system owners to a false sense of security relative to these products and encourage system owners to forgo otherwise more prudent methods of on-site sewage system maintenance. This sends a contradictory message regarding the need for O&M and additive approvals. The additive program also does not address reviewing other products that are inadvertently added to septic tanks, such as other “ecosystem friendly” products or household chemicals.

LOCAL HEALTH DISTRICT / DEPARTMENT ACTIVITIES

On-site Rules (Chapter 246-272 WAC) –

- ***Current Status*** – Under Chapter 246-272 WAC, LHJs are charged with implementing state on-site wastewater rules to on-site sewage systems with effluent flows below 3,500 gallons per day. Most LHJs conduct these responsibilities through local rules and regulations, which provide them a means to address local issues and common practices.
- ***Problem Statement*** – Attaining timely and satisfactory correction to on-site sewage system failure is a time-consuming and sometimes political process. This is in part due to limited correction options that are available to homeowners (making LHJ enforcement actions more problematic), limited funding to conduct enforcement actions, and property access difficulties.

Recommended Standards & Guidance –

- ***Current Status*** – Chapter 246-272 WAC allows the DOH to develop guidelines for alternative on-site sewage systems (systems other than a septic tank and conventional gravity-flow or pressure-flow gravel-filled drainfield). Local Health Jurisdictions may issue permits for only those alternative systems for which guidelines—currently referred to as Recommended Standards and Guidance documents (RS&G)—have been developed by DOH. The WAC does not require LHJs to follow the provisions of the RS&G documents, but in order for the recommended standards to be applied as law, they must first be incorporated into the local code. Public domain systems (e.g., intermittent sand filter systems), that have been addressed by an RS&G document may be permitted by the LHJ.

- **Problem Statement** – RS&G documents currently address regulatory issues in guidance, which is contrary to current requirements that regulatory issues be addressed only in rule. Establishing all guidance in rule runs the risk of impeding innovation due to the static nature of rules, which should be considered during any rule writing effort. New RS&G documents featuring new technologies currently do not require a period of “truthing” to determine that systems meeting the new RS&G specifications would necessarily work in the various environmental and use conditions of Washington state. LHJs apply RS&G standards inconsistently as they address regional differences, local public health needs, and political realities. Public domain systems are not subjected to either formal testing following an established protocol or a period of field evaluation prior to their use. Rather, they are installed based on the assumption that they will function properly if designed and installed as directed by the applicable RS&G document.

O&M Management –

- **Current Status** – WAC 246-272-15501 requires that Local Health Jurisdictions (LHJs) provide Operation & Maintenance (O&M) information and educational materials to system owners, and develop and implement plans to monitor on-site sewage systems within their jurisdiction. O&M practitioners other than designers are not uniformly certified or licensed, as recommended by the Governor’s 1997 On-Site Wastewater Certification Work Group. There is also limited funding for LHJs to develop O&M programs. LHJs are often reluctant, without adequate education, to conduct local O&M assessments, recognizing the regional and site specific differences in O&M needs. Recognizing a need to bolster state and local activities leading to O&M system, the Washington On-Site Sewage Association (WOSSA) is currently developing an O&M management system that will use practitioner resources in conjunction with public agencies.
- **Problem Statement** – LHJs and the DOH lack the resources to effectively implement O&M rule requirements. There is no coordinated reporting system to track systems, O&M activities and failures. There is a need for on-going education and guidance to both the public and the LHJs on O&M to build the public and political will to support adoption of effective local programs. The LHJ’s ability to access properties remains a problem. Although the Administrative Search Warrant Bill was passed, LHJs are unable to use it for broad access to shoreline properties for sanitary surveys (dye testing) because the probable cause required to obtain the search warrant is too stringent. There is no uniform process of enforcement to insure that O&M is conducted. The current language in the on-site sewage regulations defining what is required to be included in an effective O&M program is inadequate. There is a need for a comprehensive, coordinated statewide O&M education program. There is also a need for a model O&M risk-based program. There is a need for a more detailed statewide definition for failure, and a mechanism for consumers to address corrective actions (e.g., system insurance, warranty programs and repair funding assistance).

RECOMMENDATIONS OF THE REGULATORY SUB-COMMITTEE

We recommend that the department:

1. **On-Site Sewage System Rules** – Initiate the rule review and revision process as soon as reasonably possible, to bring wastewater stakeholders together to identify issues and solutions. This review must be broad in its scope and not limited to the rule-related recommendations of the On-Site Advisory Committee (OAC).
2. **Experimental Systems & Proprietary Product Review Programs** – Continue to work with stakeholders during the rule review & revision process to promote and facilitate changes in the Experimental and Proprietary Product Review Programs, placing product performance verification protocol requirements in rules so that testing methods are applied equally to all applicants. Approaches that maintain appropriate levels of public health protection while reducing the level of governmental oversight during initial product development should be explored.
3. **Treatment System Performance Verification** – Develop a rule-based regulatory framework for verification of sewage treatment product performance, relying on nationally accepted third-party testing entities and testing protocols. Explore annual re-certification, and issues related to periodic retesting of products. Cease regulating sewage treatment systems by standards established in guidelines.
4. **Treatment System Oversight Period** – Develop a rule-based regulatory framework for assuring that during the first two years that a new product or technology is being appropriately applied in Washington state that information is gathered and reported to local and state health regarding the functional aspects and record of new technologies. This period is not a replacement for routine O&M activities. The purpose of this oversight period is to help assure that the treatment product or technology is being appropriately applied to sites within Washington state and that these systems are functioning as expected.
5. **Product Development Permit** – Develop a rule-based framework to promote an in-state product development permit that would allow manufacturers to install and evaluate the function and performance of new products in the early stages of development. Product development permits would be limited to sites where a conforming system is allowed and installed simultaneously. A goal of this product development framework would be to provide the developer with a means to retain control of product development information while assuring public health protection. Upon completion of product development, the manufacturer would subject the product to testing according to the nationally recognized testing protocol established in the rules (see Treatment System Performance Verification recommendation).
6. **Sewage Dispersal / Disposal Components** – Establish in rule the framework for on-site system dispersal and/or disposal systems or components, so that systems or components meeting the requirements as established in rule could be permitted by LHJs for use in Washington state.
7. **Large On-Site Sewage Systems** – Continue conducting the LOSS program, but establish all requirements of the LOSS program in rule, as appropriate. Address issues associated with wastewater strength and minimum treatment. Establish better criteria for addressing impacts to surface and groundwater. Refine or tighten rules associated with LOSS management. Address LOSS operator competency. Explore jurisdictional issues (such as by flows or method of treatment) to optimize efficiency and delivery of services. Develop a clear definition of LOSS to avoid the practice of flow

splitting of large projects to avoid LOSS design requirements. Improve LOSS system tracking. Establish and/or revise fees for services.

8. **Septic Tank Additives** – Establish a workgroup to identify problems and solutions to the current limited review and approval program for septic tank additives, with a goal to subject the industry to product claim verification as a condition of continued / future approval. Other “additives” such as ecosystem products, not currently reviewed by the program, should also be addressed.
9. **Non-Regulatory Enforcement Options** – Recognize the potential resource or political limitations of local enforcement capabilities, and that other “non-regulatory” approaches or incentives for achieving compliance should be explored, such as locally-developed, community-based solutions (e.g., the STEP – Small Town Environment Program). From the consumer standpoint, explore reasonable remedies, including funding sources, warranties and insurance, for solving problems associated with failing systems.
10. **Recommended Standards and Guidance** – Continue to use and develop guidance documents where appropriate. Those elements of existing guidance documents that place requirements on products or citizens must be move to rules. Consult with the Washington State Attorney General’s office to determine what standards must be placed in rule, and what can be left in guidance. Adopt new RS&G documents addressing public domain technologies as “interim” documents that provide for a field-monitoring period to demonstrate how the public domain systems function under various field conditions, and to allow for the RS&G document to be evaluated for its technical accuracy.
11. **Operation and Maintenance Programs** – Provide more explicit guidance in rule as to what is required of LHJs regarding O&M. Develop a uniform process of enforcement to insure that O&M is conducted as prescribed by rule. Develop a model risk based O&M program that can be adopted in whole or part by LHJs utilizing examples such as provided by EPA's draft national guidelines or Thurston County. Explore establishing and demonstrating the utility model for O&M activities. Support WOSSA's efforts to develop a comprehensive statewide O&M program as well as insurance/warranty programs for on-site sewage systems.
12. **Field Data Collection and Technical Review**– Conduct routine review of technologies and products to insure their performance. Develop a data collection system to collect data in the field. Incorporate this data source into DOH review of the different technologies. Shift the current focus away from technology approval to O&M and technical assistance.
13. **System Monitoring and Property Access** – Develop a detailed statewide definition for failure. Survey LHJs as to whether private property access is an issue for conducting sanitary surveys (dye tests) and O&M. If so, explore remedies that have been utilized by counties in Washington and elsewhere in the country.
14. **Funding Assistance: O&M Practices and Septic System Repair** – Promote state funding programs to assist counties in establishing effective O&M programs and encourage counties to establish dedicated local funding that will maintain these programs over time. Improve funding assistance opportunities for homeowners to provide incentive for cooperation in identifying and repairing failed systems (state revolving fund, community development block grant, shellfish on-site septic grants).

Appendix F

Technology Transfer Sub-Committee – Report to the OAC May 9, 2001

<p>Technology Transfer: Outreach, Consumer Education, Practitioner Training</p>	<p>Information Gathering</p> <ul style="list-style-type: none">• Technical Area Assignments / Study (Literature search & other)• National Contacts / Small Flows Clearinghouse, EPA• Field Surveys• Data Collection & Coordination <p>Information Sharing</p> <ul style="list-style-type: none">• Consultations (Technology & Rule Implementation)• Publications (RS&Gs, Internet Web Page, Brochures, etc.)• NOWTC Partnership & other practitioner training (orientations)• Presentations (community groups, conferences & others)• Conferences (sponsoring & participating; state & regional)
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INFORMATION GATHERING

Sources of Information –

- ***Current Status*** —There are many existing and potential sources of information about on-site sewage treatment and disposal technologies. Washington State has historically relied on information derived from study, research, and experimentation conducted elsewhere and reported in the scientific / academic literature. DOH professional / technical staff members link with national leaders and sources of technical information, such as National Small Flows Clearinghouse (NSFC) and the National Sanitation Foundation (NSF), as they develop and maintain technical proficiency.
- ***Problem Statement*** - Field experience-based information has seldom been gathered in a meaningful way and rarely integrated in the technical assistance (guidelines) document review and revision process.

INFORMATION SHARING

Technical Assistance (TA) –

- ***Current Status***—The Department of Health currently provides information to local health jurisdictions, on-site wastewater practitioners, and the public, via direct consultations, presentations (e.g., conferences, community groups, orientations sessions), and DOH publications (e.g., RS&G documents, reports, brochures) both in hard copy and documents posted to the World Wide Web.
- ***Problem Statement*** –DOH has no mechanism to assess and track technical issues allowing the program to identify and target improvements in TA materials and outreach activities.

Practitioner/Regulator Training –

- ***Current Status*** - Training of on-site wastewater private practitioners and government regulators is conducted primarily by the Northwest On-Site Wastewater Training Center (NOWTC) in Puyallup, although several classes are offered at regional locations throughout Washington.
- ***Problem Statement*** – Local Environmental Health Directors have identified several barriers to their staff participating in center-sponsored classes, including the expense associated with registration and per diem, the perception that the training is geared toward private practitioners rather than regulator needs, and failure to adhere to developed instructional curriculum consistent with state standards. Continuing education unit (CEU) requirements vary between local health jurisdictions.

Training Venues and Activities –

- ***Current Status*** – DOH conducts orientation sessions for new and up-dated recommended standards and guidance (RS&G) documents or for individual technologies as needed. Many local health jurisdictions (LHJs) also provide training classes and/or technical training information for practitioners, as do other entities including the University of Washington Sea Grant Program, Washington State University—Extension, Washington State Environmental Health Association (WSEHA), Washington On-Site Sewage Association (WOSSA), National Small Flows Clearinghouse, National Environmental Health Association (NEHA), and National On-Site Wastewater Recycling Association (NOWRA).
- ***Problem Statement*** – There is currently no mechanism to coordinate the training and information dissemination activities to provide for accuracy and consistency of information, or to maximize available resources by avoiding duplicative efforts.

Funding –

- ***Current Status*** – In 2000-2001 the DOH provided \$60,000 in stipend funding to LHJs to participate in NOWTC training sessions, and \$10,000 to the Center for equipment improvements,
- ***Problem Statement*** – This level of financial support is unlikely in upcoming biennial budgets.

RECOMMENDATIONS OF THE TECHNOLOGY TRANSFER SUB-COMMITTEE

We recommend that the department:

1. **Data Collection and Reporting System** – Promote and assist the development of a comprehensive data collection and reporting system, in collaboration with the Washington State On-Site Sewage Association (WOSSA), other practitioners, and local and state agencies. (A pilot project is encouraged to demonstrate the benefits and function of the data collection & reporting systems.)
2. **Field Experience/Technical Standards Development** – Integrate real-world field experience obtained from O&M-based data gathering with the information from other sources, such as DOH-conducted or coordinated field study, when technical assistance and other technical standards documents are developed, or updated.
3. **DOH Training Participation and Format** – Increase the level of DOH participation in the development, presentation, assessment, and scheduling of NOWTC training curricula, to assure that the presentation of information meets the needs of public and private sector practitioners, occurs at regional locations, and is consistent with the rules and technical guidance in Washington. Improve the orientation sessions to new and revised Recommended Standards and Guidance documents by:
 - Enhancing the instructional elements of orientation sessions (such as including a technical companion document) so that attendees will understand the technical basis supporting the new or revised information, and
 - Coordinating these regional training activities with the curricula and class schedule of the NOWTC.
4. **DOH Technical Assistance Needs Assessment/Coordination** – Assess Technical Assistance (TA) needs and track technical issues allowing the program to identify and target improvements in TA materials and outreach activities. Facilitate coordination between the various governmental providers of technical information and practitioner training.
5. **DOH Treatment and Disposal Technology Expertise/Technical Assistance** – Continue to gather, develop and maintain an up-to-date and comprehensive knowledge of on-site wastewater treatment and disposal technologies, and continue providing technical assistance to LHJs, practitioners and the public.
6. **Continuing Education Units** – Encourage standardizing continuing education (CEU) requirements among local health jurisdictions of Washington state.
7. **Long Term Funding Mechanisms** – Explore with the partners of the NOWTC (WOSSA, WSU—Extension, and DOH) and other stakeholders, long-term funding mechanisms to operate the NOWTC.
8. **O&M Coordinator** – DOH establish a position of state operation and the development and implementation of a model risk based O&M program. In addition the coordinator would provide technical assistance to counties in implementing their O&M programs, establishing effective O&M data tracking, homeowner education programs and funding mechanisms to support local O&M programs. Furthermore, it is recommended DOH explore implementing (funding) this position through WOSSA or SeaGrant.