

On-Site Management Plan Quarterly Report
July 1, 2008 – September 30, 2008
Snohomish Health District
Contract Number: C14964

Task 1

Identify all failing and unknown onsite sewage systems (OSS) in the Warm Beach beachfront community.

-Review all Snohomish Health District (SHD) files for properties with unknown OSS in the Warm Beach area, along Soundview Drive and Beach Drive.

-Complete a sanitary survey of Warm Beach.

-Confirm that any OSS found to be failing is repaired.

Task #1a: SHD File Review

Up to 170 properties along Soundview Drive and Beach Drive in Stanwood, Washington will be included in the review. In preparation for the sanitary survey, files for properties along these roads will be reviewed to determine 1) the location of known OSS and 2) the likely location of unknown or assumed OSS.

Deliverable

Completed – see Appendix A of 04-01-2008 – 06-30-2008 Quarterly Report

Task #1b: Public Notification and Education

Notification will be given to the occupants of up to 170 properties along Soundview Drive and Beach Drive in the form of an informational mailing. The mailing will include a brief summary of why we are conducting the survey and when the survey will begin. During the month of April, 2008, concerned or interested community members will be invited to provide feedback about the project via telephone call or appointment at the Health District.

All correspondence regarding the survey between SHD and Warm Beach community member will be documented throughout the designated response time period indicated in the mailing.

Deliverable

Completed - see Appendices B, C, & D of 04-01-2008 – 06-30-2008 Quarterly Report

Task #1c: Property Inspections

For each inspection, the sanitarians will be equipped with the SHD file for that property, including the as-built, a report notebook to report findings, a digital camera to document suspected failures or outfalls to be tested, and standard field equipment such as a post hole digger, compass, clinometer, and tape measure.

During inspection, the sanitarians will first attempt to greet the homeowner and explain the purpose of their visit. Once granted access, the sanitarians will inspect the septic and pump tanks for any signs of failure. Next they will inspect the drainfield for signs of distress or failure. Any surfacing sewage will be documented and samples collected.

If site review reveals that the as-built does not correctly reflect the location of the drainfield, a sanitarian will attempt to contact the homeowner to collect any information he/she may have regarding the present location and condition of the OSS.

After the initial inspection, the sanitarians will attempt to inspect the bulkhead of beachfront properties for any outfalls or suspected drainfield outlets to the Puget Sound. When any sample is collected, the location will be documented by property tax account number and a brief sketch of the location of the sample on the property. Photographs will also be taken to document all samples taken from the bulkhead.

Once laboratory results are received, any test results with a fecal coliform MPN level higher than 3000 mg/l will initiate correction procedures for the property indicated. If the sample does not come from an obvious drainfield source, further testing may be necessary. Options for confirmation testing include repeat testing of the original source, dye testing, and questioning of the homeowner.

150 initial surveys/inspections were done in May and June as noted in the previous quarterly report. During July 1 through September 30, 2008, SHD water/wastewater field staff completed site visits to all remaining properties within the designated Warm Beach survey area. In addition, 37 properties were revisited following contact with the property owners or obtaining additional information. In some cases, locked gates or unoccupied residences precluded complete site inspections of the septic systems. In these cases, as much information as possible was obtained regarding the status of the system by reviewing the SHD files and by observations of the system from adjacent properties.

In summary, all 179 properties within the defined Warm Beach survey area were evaluated either by an on-site inspection of the septic system, or by a review and update of SHD information on file based upon observations of the system from adjacent properties if the property was not accessible. There were only four (4) properties where the owners refused to allow SHD personnel access to the property for evaluation of the system.

During inspections, there appeared to be no evidence of surfacing sewage observed at any of the properties. No suspect sewage outfalls/outlet pipes directly discharging raw sewage into Puget Sound were observed. Any observed pipes on the bulkhead or beach appeared to be carrying either surface water or roof/footing drains only.

Since there was no evidence of system failures or direct sewage discharges to the beach, no bacteriological/suspect sewage samples were taken.

Next Steps

Information gathered from the surveys/inspections is currently being entered into the database created for the project. When all data has been entered, a complete summary of the survey findings will be compiled and provided in the next quarterly report.

Task #1d: Enforcement Procedure for All Identified Failures

All failing OSS discovered during this project will be addressed with standard procedure.

One property within the survey area may have a possible failure of the sandfilter component of the on-site sewage disposal system. Access to the property was not allowed so conformation of a failure could not be made. As of this date, SHD has not received any complaints from neighbors. A follow-up inspection will be made and the situation will continue to be monitored.

Task 2

Enhance the Drainfield As-Built Viewed Electronically (DAVE) database to reflect known or unknown status of all OSS in Snohomish County

-Identify all properties in DAVE without scanned record drawings (as-builts) and modify DAVE to show known/unknown status accordingly.

-Conduct a targeted review of files related to suspected OSS with scanned record drawings (as-builts)

-Complete a homeowner survey to identify unknown systems in a limited area

Tasks #2a and #2b:

Determine the number of records in DAVE with OSS and what we currently know about those systems and how many we don't know anything about. Upgrade DAVE to link related files and show 'known' and 'unknown' status.

Deliverable

SHD has met the project deliverable of 80% system classification for this portion of Task 2 as documented in the previous quarterly report. If funding and staff time is available, SHD will continue reviewing files and complete the project by July 2012.

Task 3

Develop and implement an online system for routine OSS Operation and Maintenance (O&M) monitoring for all types of OSS in Snohomish County

- 1) Design operational check forms to be distributed to O&M service providers**
- 2) Update DAVE database to accept O&M information online**
- 3) Develop O&M protocol for gravity and low pressure distribution OSS**
- 4) Update all permit processes to indicate necessity to submit O&M information after the first two years**

Task #3A

SHD will be creating a list of O&M information that we would like to collect and make available on DAVE

Deliverables/Outcome: O&M database prototype (O&M form)

Deliverable

Completed- See Appendix H of 04-01-2008 – 06-30-2008 Quarterly Report

Task 3b: Partner with the IT staff at SHD to determine how the O&M information can be linked into the current DAVE database.

The DAVE database gives the general public access to all as-builts on record and property information directly linked to the Snohomish County Assessor's records. It is not practical to give industry professionals direct access to input or modify data within DAVE.

In order to address this challenge, SHD will hold a key informant meeting to determine the best way to link current O&M information to DAVE in a timely manner without making DAVE vulnerable to erroneous modifications.

The primary outcomes sought by linking the O&M reports to DAVE:

1. Give the public real-time access to both as-builts and O&M information simultaneously.
2. Simplify the process by which industry professionals collect and submit O&M paperwork,
3. Give industry providers an easy way to access OSS performance history when needed.
4. Give SHD staff an easy way to track compliance with O&M requirements.

The primary challenges involved in doing so are to create a system that links the reports to DAVE without compromising the system and to develop a mechanism for reporting that is so convenient for industry professionals, they prefer it to current O&M procedures.

During this quarter, the developed draft Operation and Maintenance form was sent to the SHD IS team where the program operating code was written. The on-line O&M form was then placed on the SHD in-house testing environment server. Water/wastewater field staff had an opportunity to evaluate the draft program on their desktop computers and offer comments and suggestions.

The program allows users to log in to an account unique to their company and enter yes/no answers into all the operation and maintenance fields. An area to enter text comments is provided. When a type of septic system is chosen, the program automatically populates all fields specific to that type of system. Once all data has been entered, you can then submit a report to the Snohomish Health District and print out a copy of the completed form.

A presentation of the draft on-line program was given to the Snohomish Health District Septic Issues Committee (SIC), a group of licensed designers, installers, and pumpers that meet monthly with selected SHD Water/wastewater staff to discuss various topics regarding the on-site sewage industry. The members were favorably impressed with the initial program and also offered some comments and suggestions.

At this time, all offered comments and suggestions regarding the on-line program are being reviewed and will be incorporated into the program by the SHD IS team. It is anticipated that the updated program will be ready for a final on-line review within the next month.

Once this has taken place, we will work with the IS department to create an actual test copy of the program that members of the SIC committee can try out from their home computers. There are still some security issues that must be addressed before this takes place.

Once the final draft copy of the on-line O&M report form has been completed, it will be linked to our DAVE on-line as-built program. The ultimate goal will be for a property homeowner, realtor, O&M professional or interested person to call up a specific property, obtain assessor information, scanned drainfield as-builts, and current septic system operation and maintenance reports.

Next Steps

We will complete the integration of suggestions and comments into the on-line O&M program and work with the SHD IS team to incorporate these changes. An outside testing environment for specific SIC members will be set up. Discussions will continue between water/wastewater staff and IS on the best way to link the on-line O&M form to the existing DAVE program and to incorporate search and O&M compliance tracking capabilities into the program

