

Old Saybrook Water Pollution Control Authority

Frequently Asked Questions

June 2009

General

1. Why are we upgrading septic systems and establishing a Wastewater Management District (WWMD)? It is the town's responsibility to protect the environment according to the standards set by the regulatory agencies (EPA, CTDEP). Investigations determined that certain areas of Old Saybrook with aged systems, shallow groundwater table within close proximity to the State's waters, and dense development; need to improve upon the existing septic systems in order to meet current wastewater treatment standards. The Town selected an approach using on-site solutions instead of a central sewer system and wastewater treatment plant. The areas designated by the WWMD are subject to septic system upgrades; implemented according to the Engineering Report/Facilities Plan.

2. Why do we need a wastewater management district? Why can't our WPCA direct this process without adding another level of bureaucracy? A WWMD was authorized under the Connecticut General Statutes (Chapter 103, Sections 7-245 to 7-249a) in 2003 provide a mechanism for municipal Water Pollution Control Authorities (WPCAs) to manage decentralized wastewater programs and allows for adoption of standards for on-site systems that may differ from the current Public Health Code (PHC), including use of advanced treatment systems.

3. If my system is working well why am I required to upgrade my system? If you are within the WWMD and your system meets the Upgrade Standards and Ordinance 75, you would not likely need to upgrade. Malfunctioning systems are not always evident, however. An exception is that all properties designated as "Water Proximity Lots" will be required to reduce nitrogen loading. Properties outside of the WWMD are still subject to the PHC and Ordinance 75 requirements.

4. Why do we have to do this in the absence of any gross pollution? The Town is under a court Stipulation of Judgment which requires it to address these wastewater systems. Chapter 446k Water Pollution Control of the CT General Statutes states that there does not need to be evidence of "gross pollution." **Sec. 22a-427.** No person or municipality shall cause pollution of any of the waters of the state. **Sec. 22a-428.** If the commissioner finds a municipality is causing pollution of the waters of the state, or that a ***community pollution problem** exists, or that pollution by a municipality can reasonably be anticipated in the future, he may issue to the municipality an order to abate pollution. ***The existence of pollution which, in the sole discretion of the commissioner, can best be abated by the action of a municipality.** The court concluded that certain parts of OS are considered community pollution problems. In OS there are many old/aging wastewater treatment systems in environmentally sensitive areas that do not meet health code standards (depth to groundwater, tank and undersized leaching fields). These systems must be improved to meet the applicable treatment standard.

5. Can we postpone the septic system upgrades to a future date? No. Old Saybrook was shown to not have acted in good faith, assessed a fine by the Connecticut Supreme Court and ordered to remediate the groundwater pollution in identified areas. **"To do nothing"** would incur further Court actions (reinstated and additional fines, orders) and a loss of local control. DEP letter dated April 15, 2008 has made it clear that there can be no more delays and stated that the agency would resort to enforcement of the centralized alternative. See WPCA website for letter.

6. Why can't upgrades be done through attrition as old systems need to be replaced? The WPCA initially proposed replacing systems over time as property changed hands, as Massachusetts has done in their Title 5 regulation. DEP turned down this approach on the basis that the necessary improvements would not come fast enough.

7. Why are we only looking at focus areas? Why isn't this being addressed on a Town-wide basis? Wastewater management was looked at on a town-wide basis by Town consultants from the 1970s through the early 1990's, and certain neighborhoods (Focus Areas) were identified as requiring wastewater management. The WPCA is required to address these neighborhoods to comply with court order. In addition, Old Saybrook has a Town-wide 5-year pumpout program which requires repairs when system failures are discovered.

8. Will the septic system upgrades be limited to the 15 neighborhoods? Will 100% of the town need to be included in the WWMD? If so, wouldn't this make a central treatment plant more desirable? Yes. DEP has stated that addressing the identified areas will satisfy their concerns and the Stipulated Judgment. After the Stipulation of Judgment has been satisfied, the WPCA may consider adding other areas to the WWMD, if appropriate. Properties in many areas of Town have larger lots, less density, better depth to groundwater, and do not abut surface water. Thus they will not require upgrades if they have a Public Health Code compliant system, and it is very unlikely they would be added to the WWMD. Finally, the estimated cost for a treatment plant and sewers to serve 2500 properties is \$71 million, and it would cost many more millions to sewer the whole town. It would be more cost effective to upgrade onsite, in an incremental manner, than to either oversize a central treatment plant or to make future retrofit modifications.

9. Will an Advanced Treatment System allow me to convert my home to year-round occupancy (winterize)?

Having an ATS does not satisfy all of the year-round occupancy requirements. A code compliant septic system is only one of the criteria. Upgrades and/or ATS may help to meet requirements. The Code of Old Saybrook (Ordinances) contains Ordinance 62 – Winterization of Seasonal Properties. There are several factors listed in this section, sewage disposal being only one of them. Other factors required to re-classify a property include: compliance with Zoning Regulations; compliance with Flood Plain Regulations; and suitability of the structure with regard to wiring; heating system, insulation and plumbing.

10. Wouldn't a Central Sewer Treatment Plant allow me to increase the size of my house? Not necessarily. Hooking up to a central sewer does not eliminate Zoning regulations like setbacks and lot coverage. Nor would it allow construction on what was previously an unbuildable lot.

11. Does a seasonal home with a reasonably new septic system have to comply with the WWMD requirements?

Yes, if considered a lot requiring Advanced Treatment, in most cases. Otherwise, improvements that meet the 2000 or later Public Health Code, are "grandfathered." All septic systems are sized based on the number of bedrooms rather than estimated average annual water usage. Septic systems have to be sized to handle the amount of wastewater during peak flow. Seasonal vs. year-round use is not one of the criteria for the Upgrade Program.

12. Where can the public obtain definitive information on the Upgrade Standards to determine if a property requires a system upgrade? The WPCA and CRAHD are updating focus area maps that show preliminary estimates of what needs to be done on each lot. Legends show where septic tanks might need to be replaced and ATS need to be installed. The Ordinance and Upgrade Standards (revised to June 17, 2009) is in the Library, Town Hall, and the website. When the implementation process begins, research will be done on individual lots to determine what needs to be done. Possible requirements might include replacing the septic tank, expanding leaching, or nothing, if the lot meets the Upgrade Standards. Design and construction will take place on a neighborhood-by-neighborhood basis from 2010-2017.

13. Is Old Saybrook the only town the State required to do something? No, but we were taken to court and will be the first to establish a WWMD with on-site solutions. There are only 6 unsewered shoreline towns in CT at this point; from Guilford to Old Lyme. The DEP is requiring Clinton and Westbrook to manage their wastewater and we understand they have started discussions with Madison.

14. Of all the shoreline towns, why was Old Saybrook targeted for suit by the State first? Old Saybrook voted down the Tri-town sewer system in 1989, while under a DEP pollution abatement order. The Town took no other action to modify the project, propose an alternative solution, and bring it before the voters after the 1989 referendum. The non-compliance with a DEP order, combined with no good-faith effort on the part of the Town to find alternative solutions, led to DEP suing the town in 1990. Both Clinton and Westbrook are under DEP orders, have contracts with environmental consultants, and are pursuing solutions to their wastewater issues. Part of Old Lyme is currently installing sewers (to the New London treatment plant via East Lyme). Actions required for Madison and Guilford are proceeding.

15. What assurance do the residents have that the WWMD is a long-term solution? DEP has stated in writing that implementation of the WWMD will address the requirements of the Stipulation of Judgment. Upon passage of the referendum, both parties will return to court to formalize the selected alternative and a schedule for implementation. Compliance with the delegation conditions and modified judgment will obviate need for further enforcement action by DEP on this issue for the foreseeable future. Old Saybrook and DEP have invested years of effort and expense to reach this point. DEP has reserved Clean Water Funds for the project and is committed to making it successful.

16. How is the decentralized plan consistent with the Town Plan of Conservation and Development? The Town's Plan of Conservation and Development is based on a decentralized, or sewer avoidance, program. Land Use boards, the Board of Selectmen and the WPCA support sewer avoidance and a systematic, controlled pattern of growth.

17. How can the DEP require a sewer treatment plant when there is no place in town for such a plant? The DEP has indicated that they have several sites in mind, which cannot be discussed due to legal reasons. It is important to understand that a treatment plant does not have to be located right on the CT River, and there are adequately sized parcels available. The plant would be roughly the size of the Deep River plant.

18. What is going to happen to my landscaping during upgrade? Installation of upgrades will include restoring (or avoiding) existing landscaping. This will be addressed during the Design Phase on a lot-by-lot basis.

Area Selection

19. How were the WWMD areas selected? The areas were identified as study areas, originating with engineering reports that go back to the 1970's and continue through the 1990's, and for which solutions are required by the court order. These areas are cited as having a documented groundwater pollution problem by the Commissioner of the CT DEP, which must be addressed.

20. Why are the areas of Fenwick, Knollwood, and North Cove exempt? Knollwood and North Cove were not included in the final engineering studies (1989 Hayden Wegman, 1991 Nexus, and 2003 Fuss & O'Neill) and Fenwick was never a part of the initial upgrade program (as defined by DEP). The DEP advised the Town not to change the boundaries of the targeted areas during the 2005 Mediation. Note: the Special Act of the State Legislature that established the Borough of Fenwick in the 1890's includes their Charter which gives the Borough the authority to control their sewage treatment (not the Town of Old Saybrook).

21. Where do we find maps of areas included in the WWMD? Town Hall, the Library and at www.oswpca.org.

22. Will all waterfront lots be required to upgrade to AT Systems? Only those identified as "Water Proximity Lots" within the WWMD are required to install ATS at this time. Some "interior" lots may also require advanced treatment.

23. In what order will neighborhoods be addressed and why? The Mediation Results, Appendix E of the Draft Facilities Plan, lists 7 groups of neighborhoods in the following order: Group 1: Saybrook Acres, Group 2: Saybrook Point, Oyster River East, and Thompson, Group 3: Plum Bank, Great Hammock, and Indiantown, Group 4: Chalker Beach and Meadowood, Group 5: Cornfield Point, Group 6: Saybrook Manor, Cornfield Park, Ingham Hill, Group 7: Maple Ave. North and Fenwood. The least challenging areas (with few or no AT systems) will be addressed first in order to take advantage of technology advances and maturation of the program.

Financial

24. How do the costs for the decentralized wastewater program compare to the costs of a central treatment plant and sewers? Fuss & O'Neill (WPCA engineering consultants) calculated the following (before any grants are applied): Central Treatment System: Capital Costs: \$59.1 million for sewers + \$12.2 million for the treatment facility = \$71.3 million. This does not include the cost of land. Cost per property owner (via a "benefit assessment") would be \$15,000 or more. O & M = \$500 per year. Decentralized program: Capital Costs: \$40-45 million. Cost per upgrade in WWMD ranges from \$0 for those that are compliant up to \$28,100 for those who need ATS. O & M = \$250 every 5 years for conventional system, \$600 - \$800 per year for ATS.

25. Will grants or loans be available? Yes, the decentralized wastewater program is eligible for the DEP's Clean Water Fund, which provides 25% grants and a 20 year loan for the remainder of the capital cost at a 2% interest rate. Based on preliminary assessments most upgrades will cost less than \$14,000. Cost of upgrades will be reduced by grants (25% from the Clean Water Fund) and assisted by low interest loans (2% over 20-years). The average cost of an ATS upgrade after grants and Town contribution are in the range of \$9,200 - \$11,900, based on the proposed funding. In addition, homeowners who meet the income guidelines may apply for assistance through Youth and Family Services, which is administering a Small Cities grant available now town-wide for septic repairs.

26. Is grant money also available for a central treatment plant? Yes, Clean Water Funds are applicable for a central sewer and treatment plant alternative as well, with the same 25% grant and 20-year loan at 2% interest.

27. If we upgrade now are we eligible for a grant? No, the process for upgrade financing will not be in place until after the referendum is approved. However, you may qualify under the Small Cities grant for repairs to current septic systems through Youth and Family Services.

28. Who will pay for the monitoring and maintenance of the AT systems? The homeowner will pay for any needed maintenance, and will be required to enter a service contract with a qualified AT system operator. The Town will bear 100% of the administration, enforcement, and remote monitoring costs. The Town will provide staffing for the oversight of the upgrade program, while the Connecticut River Area Health District oversees conventional systems.

29. Why will the cost of ATS be passed on to the homeowners instead of sharing the costs equally among all residents? Like all septic systems, ATS serve the property they are on. It is the homeowner's property and responsibility. Homeowners outside the WWMD will be required to meet PHC regulations and maintenance for septic systems described in Ordinance 75 (5-year pumpout program).

30. Will the system upgrades de-value my property? Experience in other communities (MA, RI) suggest there was no loss of value associated with septic system upgrades or ATS installation. Indeed, having a properly operating system can enhance the value and in some cases the upgrades will improve the ability to sell a property which otherwise has a sub-standard septic system.

Technical

31. What's the guarantee the upgraded septic systems will operate reliably? Who is responsible for system failures? The WPCA intends to: design the right solution for each lot, select a specific set of AT systems with proven

track records, and recommend correct O & M for each system. Those with AT systems are required to have a qualified operations firm monitoring and maintaining those systems. The Town will install remote monitoring of the AT systems. An alarm condition reported to the service provider and WPCA office will initiate service. Proper care and maintenance of the system will insure operation and longevity and the manufacturer will warrantee components based on proper usage. Homeowners are ultimately responsible for proper use of these systems.

32. Is an AT system better than a conventional system? It depends on the situation. If you have enough land and reasonable soils, a conventional system is fine. Conventional systems work well and rely on solids settling and treatment in the septic tank, plus additional aerobic activity and biological treatment in the ground. However some lots are so small they are unable to support sufficient treatment. These lots require ATS for proper treatment and to remove nitrogen to protect the groundwater and the Long Island Sound.

33. How long have AT systems been in existence? Over 50 years with new designs being developed continuously.

34. Have any AT systems been installed? What were the results? There are hundreds of successful systems in coastal Rhode Island, Cape Cod, the NJ Pinelands and other locations. There is a nationally recognized test center for ATS on Cape Cod, and Barnstable County successfully administers over 1,400 ATS. These experiences show that properly installed and operated ATS can successfully treat wastewater to the standards in the OS WWMD regulations.

35. Should I install an AT System now if appears I'll need one? Some upgrades can be done before referendum but will not be eligible for grant money. For example, steel tanks, cesspool removal on a non-waterfront site or conventional septic system installation. The ATS permitting program the DEP has in place right now is designed for commercial not residential properties. The DEP will delegate to the WPCA authority to permit AT systems. The DEP and WPCA have developed the criteria for this delegation, but the jurisdiction cannot be transferred until OS adopts the WWMD Ordinance.

36. What types of AT systems are available? There are numerous ATS available today that can achieve nitrogen reduction. Many states have published lists of these systems. Once the WWMD Ordinance is passed, the OS WPCA will work with the DEP to select a limited set of models for use in the WWMD. For information on ATS visit www.nsf.org.

37. Will the property owner have choices over the type of system to be installed? The WPCA will be designing the conventional and AT system upgrades on a neighborhood basis, in order to provide economies of scale and to ensure maximum funding eligibility for the upgrades. If a property owner wants to install a different system from the WPCA's approved list, then they may submit a proposal (prepared, purchased and installed at their cost) and we'll determine if it's acceptable. However the buying power of the Town will be more efficient and the State Clean Water Fund grants and loans are only available through Town managed systems.

38. What kind of maintenance is required on an AT system and what is its longevity? ATS require cleaning filters, rotating and replacement of pumps, and replacement of media in some cases. Similar to conventional septic systems, an ATS should last 20-30 years.

39. Who will do maintenance on ATS? Qualified ATS operators. Annual costs estimated to be about \$600 - \$800.

40. Do the AT systems have any odor? No, not if working properly.

41. Does an AT system require a new leaching system? If it does not meet the leaching system guidelines, yes.

42. How much leaching is needed? Leaching field size for a conventional system is determined by number of bdrms: about 300 - 1800 sq. ft. (in consideration of side slopes & grading). It can be as small as 300 sq. ft. for a 3-bdrm home.

43. What if you don't have a large enough lot to accommodate the AT leaching system? AT leaching systems can be very compact compared to conventional leaching fields and there are many options for compact leaching systems and how they can be sited. What is best for your site will be determined during the Research Phase of the program.

44. Do the mechanical systems require electricity? Yes. Does the equipment run continuously? Typically the pumps and aerators do not run all the time. A programmable timer operates the equipment based on need then shuts off. **How long does the pump last?** About 8-10 years.

45. What happens during a power failure? The treatment system stops. ATS have some built-in capacity to provide short term storage for later treatment.

46. Do they have to be used continually or can they be used seasonally? They can be stopped and started. They require a little time to ramp up when restarted. There are a number of AT systems suited to seasonal use.

47. What happens if an AT system does not meet discharge requirements? There will be no discharge limits.

However the selected ATS will have demonstrated ability to meet its discharge requirements when installed and operated properly, and will have been certified by a testing program and/or in the field. ATS will have alarms monitored by the ATS operators and the Town. If a system malfunctions, the homeowner will be notified so that a service call can be initiated. Components of ATS will be warranted by the manufacturer.

48. What is considered an undersized septic tank? The current Public Health Code requires a 1,000 gallon tank for 2 or 3 bedrooms; a 1250 gallon for 4 bedrooms; and a 1500 gallon for 5 bedrooms. The proposed upgrade standards also require a 2-compartment tank. These provide better separation and treatment than single compartment tanks. Houses constructed in the 1950s and 1960s generally have 750 gallon tanks for a 2-bedroom house and 900 gallon tanks for 3 bedroom house – most of these are single compartment tanks.

49. How will properties in the WWMD be evaluated? The properties will be subject to evaluation during the Research Phase. Section 7.2.1 of the Wastewater Facilities Plan states, “The research, which will include a review of Town records, and in most cases, test pits, will be used to determine if the existing septic systems meet the requirements of the Upgrade Program Standards.” If not, the project engineer will determine what is needed to meet them. The homeowner will be notified in writing of the upgrades that are needed.

50. My septic system was recently installed; is there an exemption from upgrade? Whether or not a property meets requirements will be determined case-by-case, but recently installed systems are more likely in compliance. Standards in the last 5-years are closer to what is required today than put in 50-years ago. There should be less to do, if anything, if your septic system was recently installed. However, if you have a “Water Proximity Lot”, even if the system was put in last year, is not likely to have an ATS.

51. Why is dry well removal and replacement with new leaching system mandatory? New leaching chambers over 4’ in depth will not be allowed per WWMD Upgrade Standards. Most drywells are 7 or 8’ in depth, therefore they would not be allowed in the WWMD.

52. What happens after the septic system upgrade is completed? Homeowners get a permit to operate and continue to maintain the system. Monitoring for AT systems will be by remote telemetry to a central station.

Regulatory

53. What issues will be on the Town-wide referendum? The referendum will include two issues: a vote on the Ordinance for Management of On-site Sewage and Disposal Systems establishing the WWMD, and approval of associated funding to implement the program.

54. Who will be eligible to vote at the referendum? Please consult the Board of Selectmen on this issue. However we understand that you are eligible to vote at a town meeting if you are a property owner; individually or collectively, of a property assessed at more than \$1000. You can vote at a town meeting on any ordinance or financial issue.

55. Will absentee ballots be allowed? Yes.

56. How will I be notified about the referendum? Public notice in local papers, broadcasts, postings, and direct mail.

57. When will the Town Meeting take place? The Town Meeting will be held on July 29, 2009.

58. What happens if the referendum establishing the WWMD is voted down? If the Town fails to pass the referendum, DEP can take OS back to Court or seek other enforcement actions, such as fines. It may cause OS to lose autonomy, the Town’s bond rating to become jeopardized, and DEP to seek construction of a central treatment plant with sewers.

59. What recourse does a homeowner have if the information on their property is incorrect? The WWMD ordinance has an appeal process. When a determination is made that your lot is not code compliant or requires an ATS you will be issued an order & have an opportunity to appeal that order. We will work with homeowners to avoid surprises.

Disclaimer:

These questions and answers are designed to be useful guidance for understanding the Wastewater Management District proposal. As the program develops and is finalized, some answers may change. And these answers are advisory only. The actual program elements, when adopted in final form, will serve as the program, irrespective of the answers given here. The actual documents referenced herein, and the finally adopted program, must be reviewed and are controlling in all instances.