

June 17, 2009

**Town of Old Saybrook Wastewater Upgrade Program Standards (“Standards”)**

**Effective Date:** \_\_\_\_\_, 2009

**§1. Definitions**

For the purposes of the Old Saybrook Decentralized Wastewater Management District (and specifically not under the State of Connecticut Public Health Code or Connecticut Department of Environmental Protection regulations), the following shall have the definitions as provided herein. Any capitalized term not herein defined shall have the meaning as provided in the WWMD Ordinance.

**Alternative Sewage Treatment System:** A sewage treatment system serving one or more buildings that utilizes a method of treatment other than a Subsurface Sewage Disposal System and that involves a discharge to the ground waters of the state.

**AT [advanced treatment] System:** A type of Alternative Sewage Treatment System that provides reduction of effluent nitrogen concentration by a) a minimum of fifty percent (50%), exclusive of the leaching system component, or b) by a minimum of sixty percent (60%) if measured within twenty four (24) inches of the bottom of the leaching system. An AT System may include both a biological or mechanical treatment system component and a leaching system component. Only those biological or mechanical treatment systems approved by the WPCA and the DEP for use in AT Systems in the WWMD shall be considered to meet the requirements of these Standards. Such biological or mechanical treatment system approvals shall be based upon, among other things, the manufacturer’s certification and/or acceptable (to the WPCA and DEP) test results showing a minimum of fifty percent (50%) or sixty percent (60%), as applicable reduction in total effluent nitrogen concentration.

**AT Lot** – (i) any Non-Water Proximity Lot that requires the installation of an AT System, as provided in Section 8C(3) of the WWMD Ordinance, and (ii) any Water Proximity Lot.

**AT System Operator** – A person who is qualified to provide operations and maintenance services for the specific AT Systems selected for use in the WWMD. An AT System Operator is required to meet training and experience requirements set forth by the WPCA and the DEP Delegation.

**AT System Installer** – A person who is qualified to install the AT Systems selected for use in the WWMD. AT System Installers are required to meet training and experience requirements set forth by the WPCA and the DEP Delegation.

**Bedroom:** An area within a residential building which is or has the potential to be utilized as a sleeping area on a consistent basis. In order to be deemed a bedroom the area must meet all of the following standards:

1. Be a habitable or planned habitable space per Building Code requirements. Planned habitable spaces would include those areas which contain the appropriate “roughed-in” mechanicals, such as heating ducts, hot water lines or plumbing waste lines, etc., but are not currently “finished” to meet Building Code requirements for habitable space.
2. Provide privacy to the occupants. Large (minimum 5 feet width) openings or archways can be utilized to eliminate room privacy.
3. Full bathroom facilities (containing a bathtub and/or shower) are conveniently located to the bedroom served. Convenience in this case means on the same floor as the bedroom or directly accessed from a stairway.
4. Entry is from a common area, not through a room already deemed a bedroom.

**Cesspool:** A buried structure which receives sewage from a House Sewer/Building Sewer for the purpose of collecting solids and discharging liquid to the surrounding soil.

**Change in Use:** Any structural, mechanical or physical change to a building which allows the occupancy to increase; or any change in the activities within a building to expand or alter such building or the use thereof such that, when the building is fully utilized, the design flow or required effective leaching area of the Subsurface Sewage Disposal System will increase. A Change in Use also includes any internal change to a building which, while not increasing the square footage of habitable space, changes the configuration in such a way that there is an increase in design flow of the Subsurface Sewage Disposal System.

**Developed Lot:** A Lot on which structure(s) and a Sewerage System existed as of the date of adoption of the WWMD.

**DEP:** State of Connecticut, Department of Environmental Protection, acting by its Commissioner or duly authorized representative.

**Director of Health:** The Director of Health for the Town of Old Saybrook.

**DPH:** State of Connecticut, Department of Public Health, acting by its Commissioner or duly authorized representative.

**Effluent Filter:** A device installed at the outlet baffle of a septic tank for the purpose of preventing solids from entering the Leaching System and distribution piping. Effluent filters must be approved by the Commissioner of DPH.

**House Sewer/Building Sewer:** A pipe conveying Wastewater directly from a structure.

**Leaching System:** A structure, excavation or other facility designed to allow effluent from a septic tank or AT System to percolate into the underlying soil without overflow and to mix with the groundwater.

**Lot:** A parcel of land within the WWMD that is occupied or capable of being occupied by one or more principal buildings and the customarily incidental accessory buildings or uses, and which meets the minimum area, width, and other applicable requirements of the Town zoning regulations for the zone in which such parcel of land is located, or is a legal non-conforming parcel, as defined in such zoning regulations and which conforms to the ordinances of the Town.

**Maximum Ground Water Level:** The level to which ground water rises for a duration of one month or longer during the wettest season of the year.

**Non-Water Proximity Lot** – Any Lot that is not a Water Proximity Lot.

**Person:** Any individual, group of individuals, corporation, limited-liability company, association, partnership, or public or private entity, including a district, county, city, town, or other government unit.

**Property Owner:** Any Person who alone, jointly or in common with others has legal title to any real property located in the WWMD.

**Public Health Code:** The State of Connecticut Public Health Code, including "Technical Standards for Subsurface Sewage Disposal Systems" established by DPH pursuant to Section 19-13-B103d(b) of the Regulations of Connecticut State Agencies, as established pursuant to C.G.S. § 19a-36, as may be amended.

**Septic Tank:** A watertight receptacle which receives the discharge of Wastewater and is designed and constructed to permit the deposition of settled solids, the digestion of the matter deposited, and the discharge of the liquid portion into a Leaching System or other method of Wastewater treatment.

**Sewerage System:** Any device, equipment, appurtenance, facility and method for collecting, transporting, receiving, treating, disposing of or discharging **Wastewater**, including, but not limited to, Decentralized Systems within the WWMD.

**Subsurface Sewage Disposal System:** A system consisting of a House Sewer/Building Sewer, a Septic Tank followed by a Leaching System, any necessary pumps and siphons, and any ground water control system on which the operation of the Leaching System is dependent.

**Town:** The Town of Old Saybrook.

**Vacant Lot:** A Lot without Wastewater generating structures.

**Wastewater:** Domestic and commercial Wastewater consisting of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building, as may be detrimental to the public health or the environment, but not including manufacturing process water, cooling water, wastewater from water softening equipment, blow down from heating or cooling equipment, and water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains.

**Wastewater Management District (WWMD):** The decentralized wastewater management district in the Town established in accordance with General Statutes § 7-247(b) of the General Statutes.

**WWMD Ordinance:** The ordinance adopted by the Town establishing the WWMD in accordance with § 7-247(b) of the General Statutes.

**Water Pollution Control Authority (WPCA):** The Town of Old Saybrook Water Pollution Control Authority acting by its duly appointed agents.

**Water Proximity Lot** – A Lot that is designated as a Water Proximity Lot on the map identified in Section 5A of the WWMD Ordinance. Every Water Proximity Lot shall be deemed to be an AT Lot.

## **§2. Applicability**

These Standards apply to the management of Wastewater in the WWMD as follows:

### **A. Developed Lots**

Every Developed Lot shall comply with these Standards as specified below:

- i. For any Developed Lot that cannot provide a minimum vertical separating distance to groundwater of twenty-four (24) inches: (i) fill systems to achieve the twenty-four (24) inch minimum vertical separating distance to groundwater shall be provided, or (ii) other approved technology or system shall be installed. With the exception of AT Lots, and only with respect to minimum vertical separating distance to groundwater, if an existing Subsurface Sewage Disposal System on a Developed Lot has been constructed, repaired or upgraded to the standards of the Public Health Code since and as in effect on January 1, 2000, then such system may remain so long as it otherwise complies with the Public Health Code.
- ii. If the Public Health Code is amended to increase the minimum vertical separating distance above twenty-four (24) inches, these Standards shall utilize such increased minimum vertical separating distance for any Developed Lot not yet repaired to meet the Upgrade Program standards. Any Developed Lot repaired to the twenty-four (24) inch minimum vertical separating distance prior to such a change in the Public Health Code shall not be required to meet the increased minimum vertical separating distance to groundwater until and unless a future Change in Use or repair is made. Any new Leaching System on a Developed Lot shall be installed in accordance with the requirements of the Public Health Code, but in no case shall the minimum vertical separating distance be less than twenty-four (24) inches.

- iii. If an existing Sewerage System upgrade is required pursuant to the WWMD Ordinance and these Standards such that the effective leaching area must be increased by fifty percent (50%) or more, then the minimum vertical separating distance to groundwater shall be twenty-four (24) inches.

B. Vacant Lots

Proposed Construction on a Vacant Lot shall not occur unless the Property Owner demonstrates that a proposed SSDS complies with the requirements of the current Public Health Code including but not limited to providing a one hundred percent (100%) reserve area for a Leaching System, these Standards, and in addition, no proposed development of such Vacant Lot shall result in a density of greater than one Bedroom per 0.11 acres. Vacant Lots that are AT Lots shall also comply with the standards applicable to such lots as provided herein and in the WWMD Ordinance.

C. Changes in Use

No Change in Use shall occur unless the Property Owner demonstrates to the satisfaction of the Director of Health a Subsurface Sewage Disposal System could be installed that satisfies all requirements of the Public Health Code and these Standards, except for the one hundred percent (100%) reserve area as provided in the Public Health Code. In addition, any Change in Use on a Lot shall not result in a density of greater than one Bedroom per 0.11 acres.

**§3. Upgrade Program Standards**

For all Wastewater treatment within the WWMD, the following performance requirements, design parameters and standards shall apply:

A. General

- i. Sewerage Systems that do not meet the minimum requirements of these Standards shall be upgraded as provided herein and in accordance with the WWMD Ordinance.
- ii. Failure to meet these Standards for a Leaching System shall require the installation of an approved AT System.
- iii. Except as provided in Section 2A herein, existing Leaching Systems may remain in use only if a minimum vertical separating distance of twenty-four (24) inches exists between the bottom of the Leaching System and the Maximum Ground Water Level. If the twenty-four (24) inch separating distance is not available, the existing Leaching System shall be replaced with a new Leaching System compliant with these Standards.

- iv. Any new Subsurface Sewage Disposal System component installed consistent with these Standards shall be field located, including elevations, and as-built plans prepared and filed with the Director of Health.

B. Cesspools

All existing Cesspools shall be replaced by a Subsurface Sewage Disposal System or AT System, as applicable, meeting the Public Health Code and these Standards.

C. Septic Tank

- i. Any new Septic Tank installed or replaced after the effective date of the WWMD Ordinance shall meet, at a minimum, the requirements of the Public Health Code.
- ii. Any Septic Tank existing as of the effective date of the WWMD Ordinance and meeting the requirements of the Public Health Code including two compartments, inlet and outlet baffles and minimum capacity established under the Public Health Code, may remain in use, provided Effluent Filters are installed.
- iii. Criteria and standards for Septic Tanks associated with AT Systems shall be the same as for the then current Public Health Code.

D. Leaching System

- i. The maximum height of a newly installed Leaching System component shall be four feet (e.g. a 4' x 4' gallery).
- ii. Each Lot shall provide the maximum effective leaching area for a Leaching System as required by the Public Health Code. In no case shall the effective leaching area be less than two-thirds (2/3) of that specified in the Public Health Code (unless an AT System is provided and with the exception as noted in Section 4.A.ii. below). Out-buildings, above-ground swimming pools, decks, trees, and other interference to a Subsurface Sewage Disposal System installation may be considered removable in the discretion of the Director of Health.
- iii. In cases where the effective leaching area is less than the Public Health Code requirement, a water conservation plan shall be implemented by the Property Owner, and a permit to discharge issued by the Director of Health may implement a lower Wastewater flow.

- iv. The maximum vertical depth to bedrock from the bottom of a newly installed leaching component is limited to eight (8) feet below final grade consistent with Public Health Code.
  - v. Minimum vertical depth to bedrock from the bottom of a Leaching System component shall be four (4) feet.
- E. Garbage Disposals
- i. Garbage disposal units are permitted in the WWMD only if the existing Septic Tank is of adequate size to accommodate a garbage disposal, per the Public Health Code.

#### **§4. AT Systems**

- A. An AT System shall be required:
- i. For each Water Proximity Lots.
  - ii. For each Non-Water Proximity Lot unable to construct two-thirds (2/3) or more of the effective leaching area required by the Public Health Code.
- B. The Leaching System component of an AT System shall be constructed to the following standards:
- i. pressure distribution,
  - ii. seventy-two (72) square feet of leaching area per Bedroom,
  - iii. a minimum vertical separating distance of twenty-four (24) inches between the bottom of the Leaching System and the Maximum Ground Water Level, and
  - iv. Leaching Systems shall be either shallow pressure-dosed systems, bottomless sand filters or other structure approved by the WPCA.
- C. Each AT System shall be located on the same Lot as the building served; provided however, that an AT System, or a portion thereof, may be located on an adjacent Lot (or other Lots or land as the WPCA may approve) so long as there is an easement for such purpose recorded on the Old Saybrook Land Records, which easement (i) includes rights of access for Maintenance (ii) provides that such easement rights may only be revoked by the written agreement of the owners of such Lots and the WPCA, and (iii) where applicable, compliance with § 7-246f of the General Statutes applicable to Community Sewerage Systems, except that individual Property Owners need not be members of a property owner's association as provided therein.

- D. Each AT System shall be designed by a Connecticut licensed professional engineer and approved by the WPCA.

**§5. Amendments to Upgrade Program Standards.**

The WPCA may propose amendments to these Standards. Such amendments shall be proposed by the WPCA at any regularly scheduled or special meeting of the WPCA, provided the proposal is duly noted in the notice and/or agenda posted for such meeting. The proposal, with supporting documentation, shall be thereafter forwarded to the DEP, DPH, and Director of Health for review and approval prior to implementing such amendments. The amendments shall have an effective date and shall be placed on file with the Town Clerk and in the offices of the WPCA, DPH, and the Director of Health, and shall supersede any previous version of the Standards as of the effective date.