

Connecticut Department of Environmental Protection Publishes Guidance Document

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In March 2007, the Connecticut Department of Environmental Protection added the following document to its web site: “Guidance Document for Design of Large Scale On-Site Wastewater Renovation Systems”. The document was developed by Nathan L. Jacobson & Associates, Inc. under contract with the CTDEP. Nathan L. Jacobson, P.E. was in responsible charge of the preparation of the document and was its principal author, aided by staff members of the firm. Also contributing to the development of the document were Dr. Kent A. Healy, P.E., retired Professor of Civil Engineering at UCONN and Dr. Gary A. Robbins, Professor of Geology at UCONN. Warren Herzig, Supervising Sanitary Engineer in charge of the Subsurface Disposal Section in the CTDEP Bureau of Materials Management and Compliance Assurance was responsible for administering the contract and he and his staff also made important contributions to the development of the document.

The document provides information on the design, construction, operation and maintenance of on-site wastewater renovation systems that are regulated by the CTDEP, including conventional on-site systems with design flows greater than 5,000 gallons per day, sites where multiple smaller systems on a single "lot" have a combined flow greater than 5,000 gallons per day, community systems serving two or more residential buildings regardless of system size, and any system utilizing alternative treatment, regardless of size. An on-site wastewater renovation system consists of wastewater pretreatment facilities followed by a subsurface wastewater absorption system (SWAS). While domestic wastewater receives some pretreatment, either in a septic tank or other pretreatment facilities, the effluent from these facilities still contains pollutants that can adversely affect human health or the environment.

When the pretreated wastewater is discharged to the subsurface via a properly designed SWAS it is further renovated as it travels through the subsurface soils and eventually reaches and commingles with the ground water. The ground water in turn is eventually extracted via wells for various water supply purposes, including drinking water, or discharges to surface waters that are used for many purposes. Therefore, the chief objective for design, construction, operation and maintenance of a SWAS and the associated pretreatment facilities must be to renovate the wastewater so as to protect the public health and the environment.

[Click here to download the document from the CTDEP website.](#)

Air, Land, Water

Water

Regulating Water

Subsurface Sewage Treatment and Disposal Systems/Septic Systems

Guidance Document for Design of Large Scale On-Site Wastewater Renovation System