

Lecture Hall

Session Abstracts

National Environmental Health Association (NEHA)
72nd Annual Educational Conference & Exhibition

Onsite Wastewater Systems

Sunday, June 22

1:00 – 1:50pm

Pilot Testing of a Draft Standard for Gravelless Soil Absorption Technologies

George Heufelder, MS, RS, Director, Barnstable County Dept. of Health and Environment, MA

With funding from the Idaho Department of Environmental Quality, NSF International has developed a draft standard for onsite gravelless trench products, with the intention that the standard become an American National Standard. Several years of work by a task group of regulators, industry and consulting engineers resulted in a draft standard that included testing procedures and pass/fail criteria. Because of the complexity of evaluating a soil-based system, it was agreed that a pilot test of the draft standard be completed. Five replicates each of a gravelless product and gravel control systems were installed in a constructed soil matrix, providing for distribution of dosed wastewater within the trenches, and for collection, quantification and analysis of the water applied to the trenches. Soil analyses were completed on the constructed soils to determine the consistency of construction. Results obtained from the soil testing and pilot test, including ponding data within the test and control trenches, and chemical and fecal coliform analysis of the water samples collected from the trenches, have been used to evaluate and make revisions to the draft standard. This presentation will review the methods and results of observations and laboratory analyses obtained during the pilot test.

2:00 – 2:50pm

Speaking the Same Language: An Update on the CIDWT Decentralized Wastewater Treatment Glossary

Bruce J. Lesikar, MS, PhD, PE, Associate Professor, Extension Specialist, Associate Dept. Head and Extension Program Leader, Texas A & M University, TX

Onsite/decentralized terminology historically originated and evolved on the state or regional level in conjunction with regulatory or Agricultural Extension activities. Consistency of terminology is a barrier to acceptance of nationally-developed training materials and guidance documents. Local regulators continue to express concern about acceptance of nationally-developed materials because of inconsistency with their local terminology. Inconsistency in published materials has compounded the problem.

To promote standardized terminology, the Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT) developed a glossary by gathering terms and definitions from a variety of sources. With funding provided by the Environmental Protection Agency (EPA) through the Water Environment Research Federation (WERF), CIDWT began an intensive project that will result in a glossary of commonly-used terms in the field of onsite/decentralized wastewater treatment. Standardization of terms and definitions will facilitate the continued exchange of information within both the academic and field practitioner realms.

This paper will discuss the project concept and goals as well as provide insight into the initial development of the glossary. It will also present an overview of the rigorous review process used to refine the terminology and definitions. It will describe the extensive scope of the stakeholders invited to participate in this exercise and provide examples of terminology developed and/or refined during the project.

3:00 – 3:50pm

NSF/ANSI Wastewater Standards Update

Sharon Steiner, Business Unit Manager, NSF International, MI

NSF has provided independent, third party assessment services to the onsite wastewater industry for more than 40 years, enabling greater protection of public health and the environment. Today, NSF is the leading developer of performance-based American National Standards for onsite wastewater treatment technologies, providing comprehensive testing, auditing, field monitoring and certification of many treatment systems and components. Standards currently include:

- Standard 40: Residential Onsite Wastewater Treatment Systems
- Standard 41: Non-Liquid Saturated Treatment Systems
- Standard 46: Evaluation of Components and Devices Used in Wastewater Treatment Systems
- NEW: Standard 245: Wastewater Treatment Systems – Nitrogen Reduction
- COMING: Gravelless Drainfields and Existing Systems Field Performance Verification Protocol

During this presentation attendees will learn how the testing and certification against the standards is performed, pass/fail criteria, the limitations of standards and their application, and new draft standards in development. Standard 245, as the new standard for nitrogen reducing technologies, will be described in greatest detail.

4:00 – 4:50pm

Speaker and Topic TBA