

## **NEHA's Onsite Wastewater Installer Credential (CIOWTS) Offered at CEHA in October 2009!**

An opportunity to improve your standing among other onsite wastewater treatment professionals is coming this year to CEHA's annual conference in Copper Mountain. **DO NOT MISS** this chance to prove your knowledge and skills in the field of onsite wastewater treatment systems installation. Through a cooperative agreement with the U.S. Environmental Protection Agency, NEHA worked with various partner groups to develop a national credential to certify installers of onsite wastewater treatment systems. The credential covers all forms of installation and will be offered at both a basic and advanced levels.

The Certified Installer of Onsite Wastewater Treatment Systems (CIOWTS-A/B) credential is designed to test the knowledge, skills and abilities needed for the successful installation of an onsite wastewater treatment system. It is a national credential; state and local codes are not covered. All involved in the installation process (regulators, engineers, excavators, etc.) are encourage to become credentialed

NEHA enlisted the participation of stakeholder groups such as The National Onsite Wastewater Recycling Association (NOWRA), The National Association of Wastewater Transporters Inc. (NAWT), National Small Flows Clearinghouse (NSFC), and the State Onsite Regulators Association (SORA), among others. Through recommendations from its partner organizations and NEHA membership, NEHA gathered together a group of industry stakeholders to help set guidelines for the credential development. This group included representatives from NOWRA, local and state onsite regulators (including representatives from Colorado), National Sanitation Foundation (NSF) and the Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT).

The installer credential is designed to be utilized in a variety of ways at both the state and local level. The goal for this is to alleviate some administrative duties for environmental health regulators and help create a uniform standard across state and county lines.

There are 75 questions on the basic level exam, and 125 questions on the advanced level exam. All questions are written in multiple choice format and examinees are allowed the use of a non-programmable calculator. Examinees have 2 hours to complete the basic level exam and 3 hours to complete the advanced level exam. The content areas and approximate percentages of exam questions are the same for both the basic level and the advanced level. The advanced level exam includes more questions and questions of greater difficulty. The CIOWTS exam is based upon the following content areas.

### **PLAN ASSESSMENT 10%**

- Knowledge of site plans; basic surveying; topography; site features
- Knowledge of materials requirements; standards and specifications; soil profile descriptions; pump performance; treatment and dispersal technologies
- Ability to conceptualize an installation activity

Ability to make mathematical calculations of area, volume, elevation, rates, measures and weights

### **JOB STAGING 20%**

Knowledge of installation plans; elevations; topography  
Ability to transfer designer's plan to site; reconcile variations; identify conflicts  
Knowledge of equipment needs and limitations; materials and supplies; soil characteristics  
Ability to make mathematical calculations  
Ability to identify subcontractor and homeowner needs and potential conflicts

### **SITE DEVELOPMENT/ INSTALLATION 70%**

Knowledge of soil characteristics; ability to recognize soil characteristics in the field  
Knowledge of specifications and installation techniques for tanks, baffles, filters and screens, piping and fittings, aggregate and fill material, proprietary treatment components, pumps and siphons, liner materials, valves, switches and tubing  
Knowledge of electrical requirements  
Knowledge of gravity and pump/siphon dosed system requirements  
Knowledge of timers and remote monitoring  
Knowledge of bedding, testing, pipe connection methodologies  
Knowledge of pump performance specifications; total dynamic head in pressurized systems  
Ability to make mathematical calculations, conversions

For the basic level examination, candidates must be at least 18 years of age.  
For the advanced level examination, candidates must be at least 18 years of age, have proof of a high school diploma/GED, and provide a work history that contains at least two years experience installing onsite wastewater treatment systems.

The costs for both the basic and advanced levels are broken down below.

**Basic Level:** Member Price: \$95 (membership in NEHA or NOWRA)  
Non-Member Price: \$110

**Advanced Level:** Member Price: \$110 (membership in NEHA or NOWRA)  
Non-Member Price: \$130

For both the basic and advanced levels of the credential, twelve (12) hours of continuing education is required for every two years.

All applications must be submitted directed to NEHA (**postmark deadline September 4, 2009**).  
The application can be downloaded from the NEHA website: [www.neha.org/onsite](http://www.neha.org/onsite).

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For more information on the credential development or implementation, contact Christl Tate, Onsite Wastewater Program Coordinator, at (303) 756-9090 , ext. 305 or [ctate@neha.org](mailto:ctate@neha.org). For more information on NEHA's credentialing program, please contact Heidi Shaw, Credentialing Coordinator at (303) 756-9090 x339 or [hshaw@neha.org](mailto:hshaw@neha.org). For information regarding the exam coordination at CEHA you may contact Brian Scheffe at [brians@flxx.com](mailto:brians@flxx.com) or (800) 783-3207.

Suggested references for preparation:

[http://www.neha.org/credential/CIOWTS/ciowts\\_references.shtml](http://www.neha.org/credential/CIOWTS/ciowts_references.shtml)

For additional opinions and information regarding the exam see NEHA's website, articles published in Pumper and Installer magazines:

<http://www.neha.org/onsite/index.htm>

<http://www.neha.org/pdf/cred/Onsite/Pumper%20Magazine%20article.pdf>

<http://www.neha.org/pdf/cred/Onsite/Installer%20Magazine%20article.pdf>