

# **NEHA Certified Installer Onsite Wastewater Treatment Systems (CIOWTS)**



Candidate Information Brochure



## **CIOWTS Examination**

### **Eligibility Requirements**

To be eligible to sit for the CIOWTS credential examination, a candidate must meet the criteria as follows:

- A. Be at least 18 years old.

And for the Advanced Level CIOWTS exam:

- B. Have at least 2 years verified experience as an installer. Verification must be included in application—please see application for more details.

### **Completing the Application**

Applications must be completed and returned to NEHA for review at least 4 weeks prior to the exam date. If an application is received less than 4 weeks prior to when an examination is being given you may have to schedule the exam for another date.

A complete application should include:

- 1. Completed NEHA Application.
- 2. Copy of Drivers License to verify age.
- 3. Appropriate fees.

### **Exam Fees**

All fees should accompany the NEHA Application.

	<u>Member Rate</u>	<u>Non-Member Rate</u>
<u>CIOWTS-Basic Level</u>		
Application fees:	\$25.00	\$50.00
Examination fees:	\$125.00	\$150.00
<u>CIOWTS-Advanced Level</u>		
Application fees:	\$50.00	\$85.00
Examination fees:	\$145.00	\$170.00
Pearson VUE fee (if applicable):	\$110.00	\$110.00

## **Exam Scheduling and Locations**

Candidates can choose to schedule the CIOWTS examination in several different ways:

1. Regional Meetings periodically offer the CIOWTS exam at their meetings/conferences. An up to date listing of these meeting/conference offerings can be found on the NEHA website at <http://neha.org/news-events/community-calendar>
2. Candidates can choose to take the exam on computer through **Pearson VUE**. By choosing this option candidates can schedule the examination at their convenience at one of **Pearson VUE's** testing locations nationwide. To find a **Pearson VUE** testing center near you please visit [www.pearsonvue.com/neha](http://www.pearsonvue.com/neha). Taking the exam at **Pearson VUE** not only offers the candidate flexibility in scheduling the exam, but also allows the candidate to receive his/her unofficial scores immediately following the conclusion of the exam.
3. Special test sites may be arranged through NEHA in cooperation with its test vendor, PTI. In order to accommodate requests for special test sites, arrangements must be made a minimum of 6-8 weeks prior to the requested date. The fee to set up a special test site is \$350.00. For groups of 10 or more CIOWTS candidates, the special test site fee is waived. Please complete the Special Test Site Request Form (Appendix A) and return it to NEHA with your application. There must be at least three (3) people taking the exam to set up a special test site.

## **Special Accommodations for Candidates with Disabilities or Impairments**

NEHA is committed to ensuring that no individual is deprived of the opportunity to take a credentialing examination solely by reason of a disability or impairment. All test centers are fully accessible and compliant with the American with Disabilities Act (ADA).

To make a request for special accommodations you must complete the Accommodation Request Form and Documentation of Disability Related Needs Form including the specific diagnosis of your disability; medical records, or other written proof of the diagnosis by an appropriate licensed professional; and the type of accommodation being requested. All form and documentation must be returned to NEHA at least 8 weeks prior to the scheduled test date. To receive a copy of the form please contact [Credentialing@neha.org](mailto:Credentialing@neha.org).

If the forms are not returned to NEHA at least 8 weeks prior to the scheduled test date your request for special accommodations may not be honored or may be delayed.

With respect to all matters related to testing accommodations, NEHA will only communicate with the candidate, professionals knowledgeable about the candidate's disability or impairment, those responsible for administering the exam, and the candidate's authorized representative (if applicable).

## **ADMISSION TO THE EXAM**

### **Paper and Pencil Exams:**

NEHA will send an admission ticket approximately 2 weeks prior to your test date. The admission ticket will detail the exam date and location, reporting time, and starting time. Those that do not appear on the date of the exam at the appropriate time will forfeit all exam fees. Persons arriving after the examination has started may not be admitted.

If you lost your admission ticket or have not received an admission ticket at least 2 days prior to the test date, please contact NEHA immediately.

Only approved candidates will be admitted to the exam. No walk-in applicants will be admitted.

On test day please bring with you your admission ticket, photo identification (i.e. driver's license or passport), and sharpened #2 pencils.

**Pearson VUE Computer Candidates:** NEHA will send you an authorization letter via e-mail when your application is processed as approved. The letter will have your PTI ID number and the Pearson VUE website to schedule a testing time.

On test day please bring your photo identification (i.e. driver's license or passport).

### **Scores**

The passing score for the NEHA CIOWTS exam Levels A & B, is 70%. Your score will be based on the number of questions answered correctly. If you are unsure of the answer it is better to guess. You will not be given credit for any question left blank.

Your exam results will be mailed and/or emailed to you from the NEHA office 4-6 weeks after the administration.

### **Credential Maintenance**

Once you have obtained the CIOWTS credential you must maintain it. To keep your credential in good standing you must:

1. Earn a minimum of 12 hours of continuing education every two years; and
2. Submit renewal fees for your credential every two years (\$125.00 Basic level; \$125.00 Advanced level).

### **NEHA's Credentialing Handbook**

It is strongly recommended that you read NEHA's Credentialing Handbook: *Guide to Policies and Procedures for NEHA's Credentialing Programs*. This handbook which can be downloaded from the NEHA website at <http://www.neha.org/sites/default/files/pd/cred-cert/Credentialing-Handbook.pdf>, outlines all the policies you are expected to follow by being a NEHA credential holder. The handbook also outlines in further detail the procedures for applying for a credential, submitting continuing education, and maintaining your credential.

## **Exam Description and Content Outline**

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. You will have 2 hours to complete the basic level exam and 3 hours to complete the advanced level exam. The CIOWTS exam is based upon the following content areas. Next to each subject area the approximate percentage of questions in that content area on the 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.

### **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

## **Recommended Study References**

Below is a list of study references that are recommended to assist the candidate in preparing for the CIOWTS examination.

## **References**

1. Installation of Wastewater Treatment Systems, CIDWT – available for purchase through NEHA's [Bookstore](#). ☆ Recommended reference
2. U.S. EPA Onsite Wastewater Treatment Systems Manual (PDF- free to download [here](#))
3. Residential Building Design & Construction. Jack Willenbrock, Harvey Manbeck, and Michael Suchar, (1998) Prentice-Hall.
4. Septic System Checkup: The Rhode Island Handbook for Inspection and Inspection Report Forms (PDF- free to download [here](#))
5. *Small and DeCentralized Wastewater Management Systems*. Crites & Tchobanoglous. (1998) McGraw-Hill.
6. *Wells and Septic Systems, 2nd Edition*. Max & Charlotte Alth, Revised by S. Blackwell Duncan, (1992) TAB Books.
7. *Plumber's Handbook Revised Edition*. Howard Massey (1978).
8. OSHA Guidelines
9. *Plumber's Guidelines*
10. Glossary of Terms by CIDWT (PDF free to download [here](#))

**Appendix A.**

**Special Test Site Request Form**

**Name of Person Requesting Site:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Employer:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_

**Email Address:** \_\_\_\_\_

**Requested Test Date:** \_\_\_\_\_

**Requested Location:** \_\_\_\_\_

**\*Number of Expected CIOWTS Candidates:** \_\_\_\_\_

\*Please attach a list of candidate names, and which exam they are taking, to this application.

## Acknowledgement Statement

I, \_\_\_\_\_, acknowledge that this request to the National Environmental Health Association (NEHA) for a special test site is only a request and not a binding agreement to provide such a test site. I also acknowledge that if there are at least 3 and fewer than 10 candidates testing for the CIOWTS A and/or CIOWTS B, a fee of \$350.00 will be incurred and must be paid in full prior to the setting up of the test site. There must be at least three (3) people taking the exam to set up a special test site.

My signature below attests to my understanding and abiding to the above statement.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Proctor Information:

Proctor Name: \_\_\_\_\_

Title: \_\_\_\_\_

Mailing Address (cannot ship to P.O. Box address, APO, FPO):

Street: \_\_\_\_\_

City: \_\_\_\_\_ ST: \_\_\_\_\_ Zip: \_\_\_\_\_

Day Phone: \_\_\_\_\_

Evening Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_