

California  
Water  
Environment  
Association



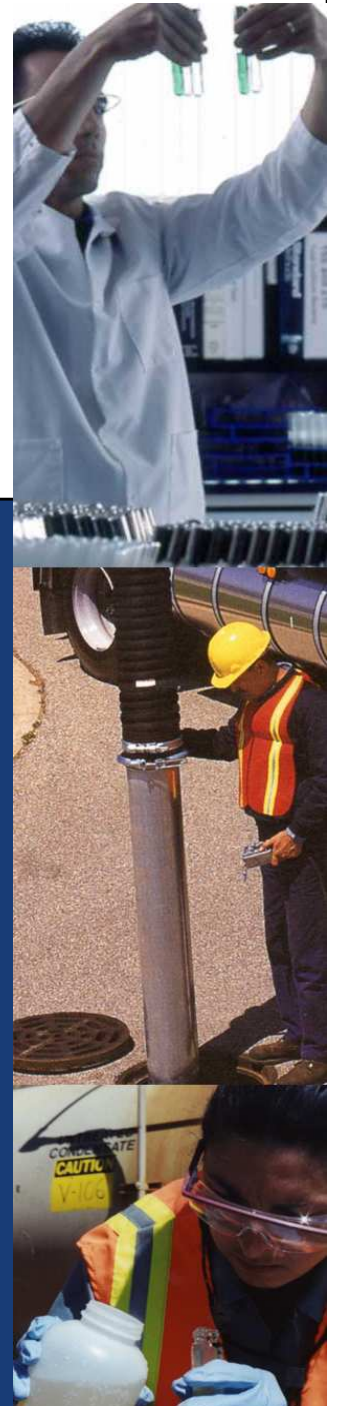
# Certification and CBT Overview

Presented by  
Paul D. Schmidtbauer  
Industrial Waste Administrator  
South Orange County Wastewater Authority

NACWA P3 Workshop  
March 27, 2009



2003 Technology  
Transfer Award



# CWEA

CWEA is a non-profit, voluntary organization dedicated to the educational development of wastewater professionals.



# What is Certification?



**Evidence of  
acceptable  
competence in  
a vocation.**

# What is Acceptable Competence?



**Acceptable competence for an employee should be the ability to safely perform key job duties without further training or supervision**

# What is Validation?

- Validation is the extent to which a certification program measures what it is supposed to measure
- Validation requires a documented link between occupational practices and the certifications Computer-Based Testing (CBT)



# Federal Standards for Professional Testing

- Title VII Civil Rights Act
- Equal Employment Opportunity Commission guidelines for employee selection procedures
- Americans with Disabilities Act (ADA)
- Fair process and procedures for all applicants and candidates



# Certification Vocations

- Biosolids Land Management Application
- Environmental Compliance Inspector
- Collection System Maintenance
- Laboratory Analysts
- Plant Maintenance
- Mechanical Technologist
- Electrical/Instrumentation
- Industrial Waste Treatment Plant Operator



# Certification Grade Levels

**Grade I:** Entry and basic working level

**Grade II:** Skilled or journey level

**Grade III:** Lead or advanced technical level

**Grade IV:** Program manager level

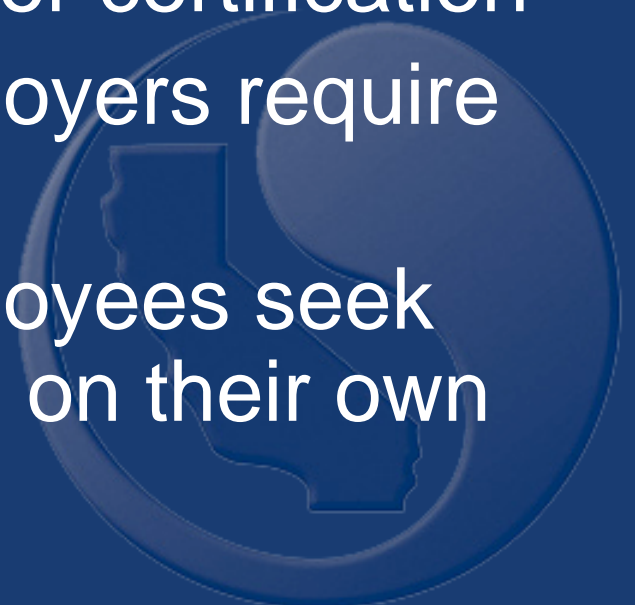




# Who Requires Certification?



- CWEA certification is employer mandated
- Some employers offer incentives for certification
- Some employers require certification
- Some employees seek certification on their own



# Benefits of Certification



1. Helps to fulfill employer's general obligation to ensure competency of the personnel providing services at public facilities.
2. Provides employers with evidence that the certificate holder has demonstrated a certain level of job-related knowledge, skills and abilities.

# Benefits of Certification



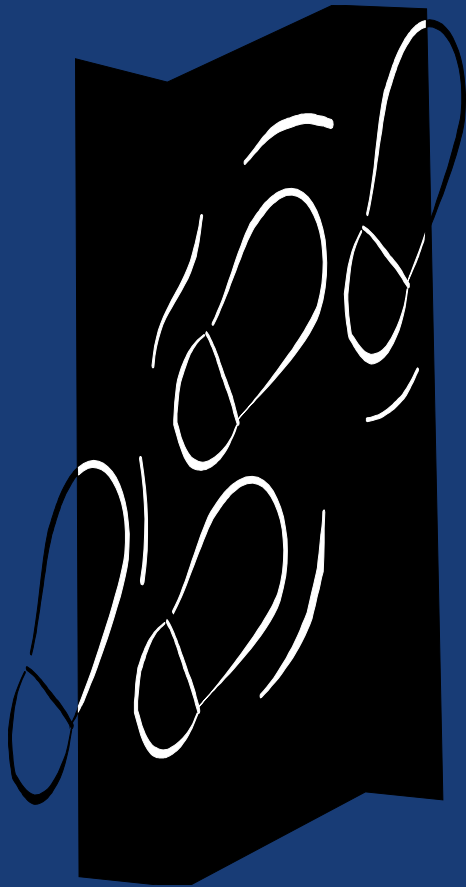
3. Provides a documented level of assurance that employees are competent in safe work practices.
4. Provides concrete evidence to board members and citizens that the agency is staffed with people who are well trained and is competitive in any comparison of quality of service.

# Benefits of Certification

- 5. Formal Recognition**
- 6. Demonstrated Proficiency**
- 7. Motivates employees to seek training and education**



# Steps Toward Certification



- 1. Complete required education and experience**
- 2. Apply for certification**
- 3. Pass CBT**

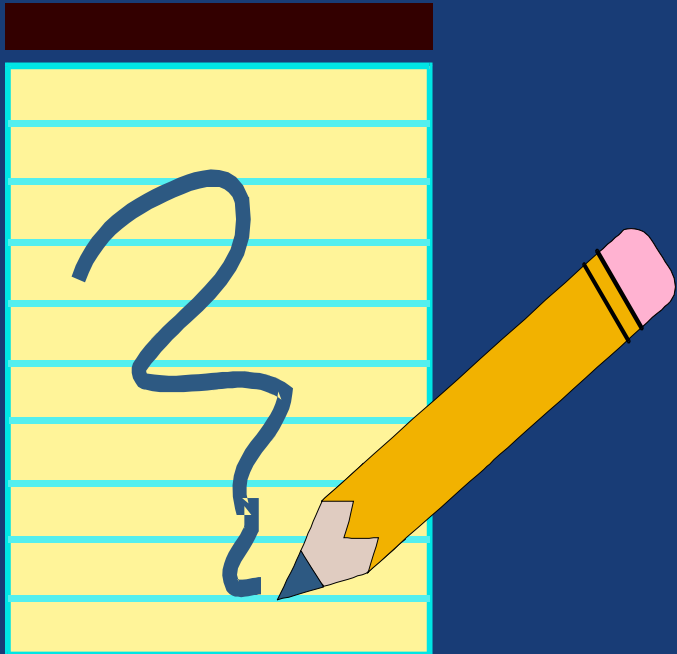


# Qualifying For The Test

- Get the candidate handbook
- Review the basic *Requirements*
- Review *Essential Duties*

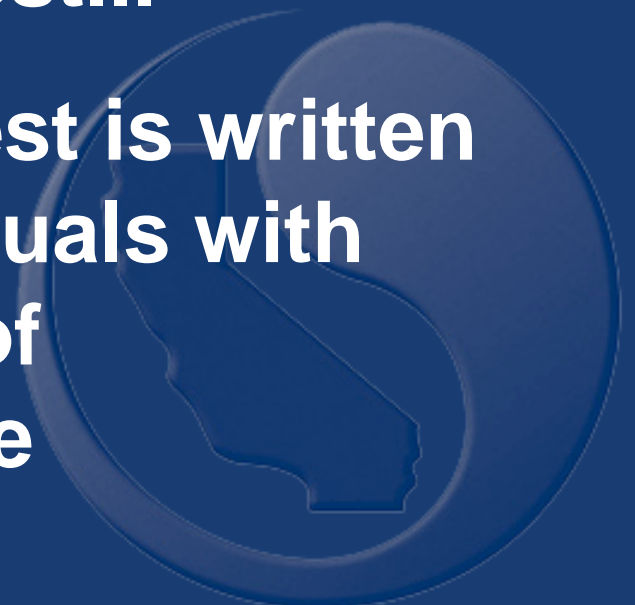


# Qualifying : Grade I



**No experience or education required to take the test...**

**But, the test is written for individuals with one year of experience**



# Qualifying: Grade II

## 4 Years Experience

Combination	EDUCATION & CERTIFICATIONS	EXPERIENCE
<b>A</b>	None	4 full-time years in Environmental Compliance Inspection
<b>B</b>	Grade I Environmental Compliance Inspector Certificate for 1 Year	2 full-time years in Environmental Compliance Inspection
<b>C</b>	Associate's degree in a related field	2 full-time years in Environmental Compliance Inspection
<b>D</b>	Bachelor's degree, or higher, in a related field	1 full-time year in Environmental Compliance Inspection



# Qualifying: Grade III

## 6 Years Experience

Combination	EDUCATION & CERTIFICATIONS	EXPERIENCE
<b>A</b>	None	6 full-time years in Environmental Compliance Inspection
<b>B</b>	Grade II Environmental Compliance Inspector Certificate for 2 Years	4 full-time years in Environmental Compliance Inspection
<b>C</b>	Associate's degree in a related field	4 full-time years in Environmental Compliance Inspection
<b>D</b>	Bachelor's degree, or higher, in a related field	3 full-time years in Environmental Compliance Inspection

# Qualifying: Grade IV

## 8 Years + Supervision Experience

Combination	EDUCATION & CERTIFICATIONS	EXPERIENCE
A	None	8 years in Environmental Compliance Inspection with one of those years supervising others
B	Grade III Environmental Compliance Inspector Certificate for 2 Year	6 years in Environmental Compliance Inspection with one of those years supervising others
C	Associate's degree in a related field	6 years in Environmental Compliance Inspection with one of those years supervising others
D	Bachelor's degree, or higher, in a related field	5 years in Environmental Compliance Inspection with one of those years supervising others

# Preparing For The CBT

- **Study Essential Duties & Knowledge, Skills and Abilities**
- **Use the Study Guide**
- **Study suggested references**
- **Attend a certification study session**



# Essential Duties & KSAs

**Essential Duties & Knowledge, Skills, and Abilities are found in the vocational Handbooks and study guides.**



# Study Guides

Study guides are available for each vocation and grade level and include:

- Description of Skill Sets
- Test preparation info
- Diagnostic test
- Reading assignments and references



# Re-certification

12 Contact Hours of training/education are required every two years

1 Contact Hour = 50 minutes



# Contact Hours

## **Purpose:**

To help ensure that certificate holders continue their training and remain knowledgeable in technological advances, safety, and management of wastewater systems and environmental programs.



# Biennial Window

- The “Biennial Window” is the time when Contact Hours can be earned for a certificate.
- Biennial Window = 2 Years immediately before the date that Contact Hours are due.





# Ways To Earn Contact Hours

- Participate in pre-approved training or education program
- Train, teach, or present
- Write articles, chapters, or books
- Be a member of a professional society
- Re-test



## Acceptable Training/Education Content

- Anything related to the Essential Duties of the vocation
- In-house, employer sponsored training will be accepted if related to the Essential Duties
- All other Contact Hours must be pre-approved by CWEA



[www.cwea.org](http://www.cwea.org)

- Applications
- Candidate Handbooks
- Order Study Guides
- Policies
- Training Programs Approved for Contact Hours





California  
Water  
Environment  
Association

## CWEA's Computer-Based Testing



CBT started  
January 2009.

July 2008 = Last  
paper & pencil test.



# Tests in Computer-Based Format

- Tests offered are the same vocations offered in the past
  - ✓ Biosolid Land Management Application
  - ✓ Environmental Compliance Inspector (Grade I-IV)
  - ✓ Collection System Maintenance (Grade I-IV)
  - ✓ Laboratory Analysts (Grade I-IV)
  - ✓ Plant Maintenance (Grade I)
  - ✓ Mechanical Technologists (Grade II-IV)
  - ✓ Electrical Instrumentation (Grade II-IV)
  - ✓ Industrial Waste Treatment Plant Operator (Grade I-IV)



# What's a computer-based test like?

- Same test and time— 3 hrs with 15 min. tutorial
- Sit at a computer in a “study carrel”
- Read and answer exam questions on screen
- Click box instead of filling in a bubble,
- Formulas given in window
- Dry erase sheet provided as scratch paper
- Approved calculators OK, onscreen calculator available
- Flag questions to review or comment
- Computer flags skipped questions



# What computer skills do I need?

- Be familiar with a mouse and a keyboard
- Be familiar with using an onscreen calculator
- 15 minute tutorial available at the testing center prior to taking an exam
- 15 min. tutorial time in addition to 3-hour test time
- Practice on our demo at [www.cwea.org/cbt](http://www.cwea.org/cbt)





# What to Bring at the Test Site

- A government issue photo ID
  - State ID or drivers license or Passport



- An approved calculator (if needed)



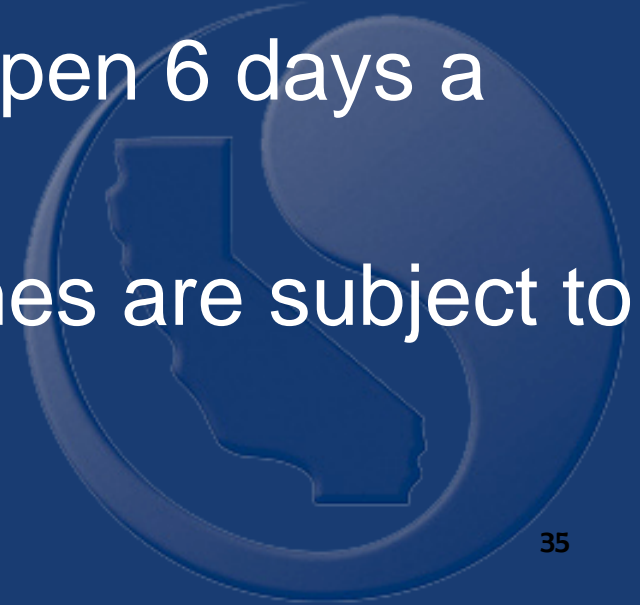
- Casio: All fx-115 models is allowed.
- Texas Instruments: All TI-30X and TI-36X are allowed.
- Sharp: EL models *except* EL-W516B and EL-W538B are allowed.

# Where do I take the test?

- Carefully controlled, consistent testing environment
- Pearson VUE offers 103 test centers in CA  
Hawaii – 11, Michigan - 43, Missouri – 31 and  
test sites open to CWEA through out the U.S.
- Test sites are Pearson VUE owned and  
Pearson VUE approved third-party sites
- Visit [pearsonVUE.com/cwea/](http://pearsonVUE.com/cwea/) to locate a test  
center

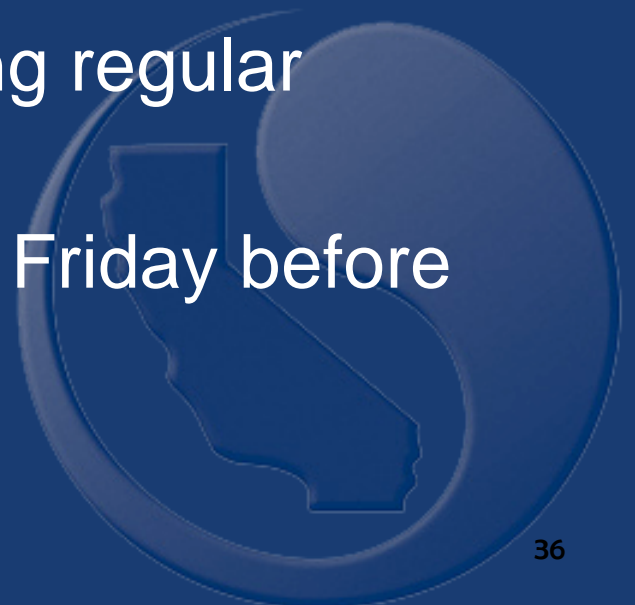
# How do I schedule a test?

- Once your application is approved, you'll schedule with Pearson VUE by calling their 800 # or going online to register at [pearsonVUE.com/cwea/](http://pearsonVUE.com/cwea/)
- Test centers are typically open 6 days a week
- Schedule early— testing times are subject to availability



# How do I unschedule a test?

- Contact Pearson VUE, not CWEA, 1 business day before your scheduled exam by calling their 800 number or through their online registration
- Rescheduling must occur during regular business hours
- Reschedule a Monday test the Friday before test



# ADA Accommodations for CBT

- Same as paper-and-pencil, must provide documentation
- Typical accommodation is 6 hour seat time + 15 minutes for tutorial
- A reader will be provided if necessary
- Optional unscheduled break permitted similar to non-ADA candidates

# What is the testing schedule for CBT?

Quarterly Testing Windows	Application Due Dates (post marks are OK)
January 1 through March 31 (Winter)	November 30
April 1 through June 30 (Spring)	February 28
July 1 through September 30 (Summer)	May 31
October 1 through December 31 (Fall)	August 31

# What will it cost?

- Application Fees
  - Grade 1 = \$115 members - \$245 nonmembers
  - Grade 2 = \$130 members - \$262 nonmembers
  - Grade 3 = \$145 members - \$277 nonmembers
  - Grade 4 = \$160 members - \$292 nonmembers
- Renewal/Recertification fees
  - Grade 1 = \$61 members - \$193 nonmembers
  - Grade 2 = \$66 members - \$198 nonmembers
  - Grade 3 = \$71 members - \$203 nonmembers
  - Grade 4 = \$76 members - \$208 nonmembers
- Reschedule and withdrawal fee: \$40

# How do I prepare?

- Check [www.cwea.org/cbt](http://www.cwea.org/cbt) for info & updates
- Try a demo
- Practice with online calculator
- Study guides (all vocations)
  - Now available free to CWEA members to download and print from our web site...a new member benefit
  - Reference Page lists books and articles as study materials
- Study sessions
  - Continue to offer at least twice a year with plan to increase frequency
  - Establishing Certification Prep Committee
  - If interested in joining, contact [mls@cwea.org](mailto:mls@cwea.org)



# How can I help others prepare?

- Try a demo yourself and let them know how easy it is
- Encourage them to try a demo
- Sit with them and walk them through a demo
- Collect their questions and send questions in to [cbt@cwea.org](mailto:cbt@cwea.org) so we can update FAQ
- Refer people to [www.cwea.org/cert\\_cbt.shtml](http://www.cwea.org/cert_cbt.shtml) for info & updates & the demo
- Use this PowerPoint at your agency...contact [cbt@cwea.org](mailto:cbt@cwea.org) for a copy

# What does CBT mean to you?

- ✓ More convenient scheduling
- ✓ More convenient locations
- ✓ Faster results



# Test drive the demo!

- [cwea.org/cbt](http://cwea.org/cbt)



**Computerized test demos at the CWEA Annual Conference April 2008**

[cwea.org/cbt](http://cwea.org/cbt)

- CBT information
- Take a Demo test
- Test sites
- Application info
- CBT - Frequently Asked Questions
- Calculator Policy

