

*Texas Commission on Environmental Quality*

**WATER UTILITY OPERATOR LICENSING ADVISORY  
COMMITTEE**

September 3, 2010

9:30 a.m.

**TCEQ  
12100 Park 35 Circle, Bldg. A, 1st Flr., Rm. 172  
Austin, Texas**

**MINUTES**

**Members Attending**

Russell Hamilton  
James Fischer  
Ginger Laird  
William Quinn  
Bobby Russell  
Allen Schreiber  
Roy Staggs  
Ghulam Sumdani  
Larry West

**Members Absent**

Matthew Boober  
Sharon Clark  
Adrian Montemayor  
Michael Vollmar

**TCEQ Staff Attending**

Joseph Hildenbrand, PRS  
Barbara Mendieta, PRS  
Sarita Nazareth, PRS  
Linda Saladino, PRS  
Maegan Warncke, PRS

**Others**

John Fenoglio  
Walt Shaw

The meeting was called to order at 9:30 a.m. by Allan Vargas, Manager of the Occupational Licensing Section. A quorum was confirmed. The members, guests and TCEQ staff were introduced. The minutes of the March 12, 2010 meeting were approved. Russell Hamilton nominated Matthew Boober as the New Chair of the Water Utility Advisory Committee and Larry West seconded the motion. All other present council members concurred with the selection. The TCEQ staff will follow up with Mr. Boober after the meeting. Russell Hamilton nominated Larry West as the Vice Chair of the Committee and James Fischer seconded the motion. All other present council members concurred with the selection.

## ***Surface Water (SW) Job Task Analysis***

John Fenoglio with Texas State University and Linda Saladino, TCEQ, began their presentation by defining job task analysis as the process by which a job's tasks and related knowledge and skills are identified through surveying job incumbents and statistically analyzing and prioritizing the resulting list.

The process included:

1. A survey task list
2. Determination of survey group
3. Subject Matter Expert (SME) Selection to review the survey and results.
4. On-line survey created, tested and administered, beginning April 1, 2010.
5. Download and statistical analysis of results.
6. Comparisons and demographic sorting
7. Change in critical job task list

The results indicated that the lists of critical tasks for Class A, Class B and C Surface Operators were:

- Similar in ranking and number of tasks per category regardless of license class.
- Level of accountability and knowledge differs for license class
- There were also differences regarding management, security, and record keeping tasks.

The conclusions and recommendations included:

- All license levels are very similar by critical tasks, but vary by accountability.
- Limit Class D Water Operator license to 2 years
- Add instruction on training and adult learning principles to the Utility Management Course.
- The number & type of management tasks differ by license level.
- No additional licenses recommended at this time.
- Update SW Production Curriculum to include bacteriological testing.
- Do not require Water Lab at the Class A and Class B SW levels and avoid duplication.

The members of the committee discussed the recommendations and felt that the topic of "training" could be added to the Water Utility Management course but did not agree with the value of eliminating Water Lab for the Class A and Class B SW licenses.

## ***Changing the Experience Requirements for the "A" Water License***

Background: The Water Licensing Program is structured into four levels of licenses (Class D - entry level, Class C and Class B – intermediate levels, and Class A – advanced level). The Class D license is issued to operators with a beginning or introductory level of expertise covering three fields of competency (surface water treatment plant operation, groundwater production facility operation, and water distribution system operation). The Class C & B licenses are issued to operators with an intermediate level of training, experience, & competency focused on only one of three field choices (surface water, groundwater, or water distribution). The Class A license is issued to operators with an advanced level of training, experience & competency in one to three of the three field

choices. However, the Class A license authorizes operators to operate all three types of systems at an advanced competency level even though their actual training and experience may only be in one of those three field choices.

This discussion was a continuation from the previous meeting to inform our new members of the ongoing discussion

Concerns:

1. Class A licenses may not be consistently representative of the level of competency obtained or required to operate a specific type of system.
2. No regulations preventing distribution system operators from obtaining Class A Water System Operator Licenses and being placed in charge of a surface water treatment plant without surface water treatment experience. Likewise, no regulations preventing surface water treatment operators from obtaining Class A Water System Operator Licenses and being placed in charge of a large metropolitan distribution system without distribution experience. (Potential for operators to be given operational authority without having operational experience/expertise).
3. Surface water operators employed by a system without any groundwater sources may be wasting time taking groundwater or distribution training. Groundwater operators employed by a system without any surface water or distribution training may be wasting time taking surface water or distribution training. Distribution operators only performing distribution duties may be wasting time taking groundwater or surface water training. (Time may be better spent focusing on their field of expertise/employment).
4. There may not be enough advanced training/testing/licensing to address distribution and collection system operation issues/needs.
5. The delineation between the Class B Surface Water and Class A Water license may need enhancement (Class A training requirements may need elevation/Class B Surface exam may need scaling back).
6. The water operator licensing program is not identical to the wastewater operator licensing program, but the majority response was that these programs should mirror each other.

### ***Action Items:***

New committee chairman will initiate electronic comments/suggestions document for committee circulation & contributions to be presented at next scheduled meeting.

### **Webinars**

Joe Hildenbrand introduced us to the latest in webinars. Current Webinar Capabilities include:

- Collaborative Learning Software which include

1. Audience communicating over their phones to a speaker phone
  2. Audience using keyboards to ask questions and answer inquiries from the instructor and
  3. Audience using VoIP audio technology to allow for a completely web based communication
- Electronic Meeting Systems(EMS)
    1. Webinars can become online workshops using EMS technology, which provides a range of facilitation tools such as:
      - a) Brainstorming
      - b) Categorization
      - c) Multiple Testing Methods
      - d) Structured discussions

Potential features of a webinar include:

- Slide show presentations
- Live or streaming video
- Whiteboard with annotation
- Text chat
- Polls and Surveys
- Screen sharing/desktop /sharing/application sharing
- Customizable log in/ registration page to verify students' identity
- Breakout sessions
- Multiple choice-quizzes
- Matching
- Instant grading

In keeping with the rule, TCEQ requires:

- The training provider to have procedures to verify the identity of the participant
- The communication between the presenter and the student must be interactive and in real time
- The participant's comprehension must be monitored throughout the course with remedial feedback
- Training providers must demonstrate the successful completion of the course by each participant

- Materials used during the course need to be accessible for participants after the course is completed for future review.
- The material presented during a course needs to contain additional visual tools: videos, photographs, powerpoint presentations and hyperlinks with definitions and animation.
- The instructor must be able to limit the number of participants attending each course to the level that allows for effective teaching.
- Adequate instructions must be provided upfront on how to navigate through the course.
- Technical support must be available to students prior to and during a course
- Knowledge assessments must be available for valid, reliable and consistent with the level of difficulty of the material
- Training materials must be easily readable, viewable and audible
- At the end of each course, students must indicate through an electronic affidavit that they are who they say they are and they participated and successfully completed the course without outside assistance.

At this time webinars will only be considered for renewal credit and as a one for one credit hours.

### ***Other Business***

The committee proposed to have the next meeting in November.

The meeting was adjourned at 12.15p.m.