



# Texas Commission on Environmental Quality

Compliance Support Division  
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## **Curriculum Guidance for Water and Wastewater Operator Training** **ACCEPTABLE TOPICS FOR CONTINUING EDUCATION**

The purpose of this curriculum guidance is to identify the subject matter that is eligible for approval as continuing education for occupational licensing. All training for operator licensing must be reviewed and approved as described in the regulatory guidance document "Training for Occupational Licensing - the Approval Process" (RG-373). Copies are available on the Internet at [http://www.tceq.state.tx.us/comm\\_exec/forms\\_pubs/pubs/rg/rg-373.html](http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/rg/rg-373.html).

1. Any of the topics in the following approved operator training courses as taught by approved providers:

(courses in bold = core courses that may be required for initial certification)

### Water Operator Certification Courses

#### **Basic Water Works Operation\***

**Groundwater Production**

**Surface Water Production**

**Water Distribution**

**Water Laboratory**

**Customer Service Inspector's Course**

Taste and Odor Control for Municipal Water Systems

Water Sampling and Field Analysis

Water Technology

### Wastewater Operator Certification Courses

#### **Basic Wastewater Operations\***

**Wastewater Treatment**

**Activated Sludge Basics**

**Biological Treatment Processes**

**Operation of Activated Sludge Plants**

**Operation and Maintenance of Package Aeration Plants**

**Wastewater Collection**

**Wastewater Laboratory**

Wastewater Self-Reporting

Wastewater Sampling and Field Analysis

Anaerobic Digestion

Wastewater Technology

### Both

**Pump and Motor Maintenance**

**Valve and Hydrant Maintenance**

**Water Utility Calculations**

**Water Utility Safety**

**Water Utility Management**

**Backflow Prevention Assembly Tester's Course**

Applied Confined Space Safety

Excavation Safety (Competent Person Training)  
Math Basics  
Waterborne Pathogens  
Identification of Microorganisms in Water and Wastewater  
Operations and Maintenance of Chlorinator Systems  
Hazardous Waste Operations (40-hour course and 8-hour refresher)

2. Any of the topics in approved correspondence courses from various providers (list available.)

3. Any of the topics in the following textbooks or manuals:

"Manual of Water Utility Operations" - Texas Water Utilities Association, 8th Edition, 1988

"Manual of Wastewater Treatment" - ibid, 6th Edition, 1991

"Manual of Wastewater Collection" - ibid, 6th Edition, 1991

"Water Utilities Management Manual" - ibid, 2nd Edition, 1997

"Manual of Water Utilities Calculations" - ibid, 1st Edition, 1995

"Conducting a Pretreatment Inspection" Manual - ibid, 1st Edition, 1998

4. Any topic related to a job task identified during a TCEQ job analysis, including:

"A Job/Task Analysis of the Surface Water Treatment Operator Career Field" - The University of Texas at Austin, 1999

"Job Analysis of Groundwater Treatment and Water Distribution in Texas" - Southwest Texas State University (SWTSU), 2000

"Job Analysis of Wastewater Treatment and Collection in Texas" - SWTSU, 2002

5. Any topic addressed in the following chapters Title 30 Texas Administrative Code (the commission's rules):

Chapter 30 - Occupational Licenses and Registrations

Chapter 290 - Public Drinking Water

Chapter 291 - Utility Regulations

Chapter 293 - Water Districts

Chapter 294 - Underground Water Management Areas

Chapter 305 - Consolidated Permits

Chapter 307 - Texas Surface Water Quality Standards

Chapter 308 - Criteria and Standards for the National Pollutant Discharge Elimination System

Chapter 309 - Domestic Wastewater Effluent Limitation and Plant Siting

Chapter 311 - Watershed Protection

Chapter 312 - Sludge Use, Disposal, and Transportation

Chapter 314 - Toxic Pollutant Effluent Standards

Chapter 315 - Pretreatment Regulations for Existing and New Sources of Pollution

Chapter 317 - Design Criteria for Sewerage Systems

Chapter 319 - General Regulations Incorporated into Permits

Chapter 322 - Community Wastewater Planning

Chapter 327 - Spill Prevention and Control

OTHER TOPICS WILL BE CONSIDERED ON A CASE-BY-CASE BASIS.

*\*Basic courses not eligible for use in renewing 'A' or 'B' licenses (30 TAC Chapter 30).*