

## WATER SUPPLY SYSTEM OPERATOR EXAM REFERENCES

The Water Supply System Operator Examinations are comprised of five levels - Class A – E, with A the highest. The exams are closed book; time allowed is three (3) hours; each exam has 100 multiple-choice questions; and math formula sheets will be provided. These training materials, along with your operating experience and common sense, should help you pass the certification exam.

### CLASS "E"

Minnesota Class E Study Guide.

Contact Noel Hansen at 651-201-4690 or [noel.hansen@health.state.mn.us](mailto:noel.hansen@health.state.mn.us) ,  
or the Minnesota Rural Water Association at 800-367-6792 or [mrwa@mrwa.com](mailto:mrwa@mrwa.com).

### CLASS "D"

The standard reference material for this examination is

1. Minnesota Class D Study Guide. The Minnesota Department of Health study guide provides information about chemical addition, math and much more.

Contact Noel Hansen at 651-201-4690 or [noel.hansen@health.state.mn.us](mailto:noel.hansen@health.state.mn.us)  
or the Minnesota Rural Water Association at 800-367-6792 or [mrwa@mrwa.com](mailto:mrwa@mrwa.com).

2. Small Water Systems Operation and Maintenance, Office of Water Programs  
California State University, 916-278-6142, <http://www.owp.csus.edu/>

3. AWWA Water System Security, A Field Guide 2002, #20501, 800-926-7337,  
<http://www.awwa.org/>

A reference that many operators have found to contain similar information is the Water Treatment Plant Operation and Maintenance Manual, Volume 1, and Water Distribution Systems Operation & Maintenance Manual, both published by California State University, 916-278-6142, <http://www.owp.csus.edu/>.

### CLASS "C"

The standard reference material for this examination is all references listed under Class “D” and

1. AWWA Water Treatment Operator Handbook, #20481, 800-926-7337,  
<http://www.awwa.org/>

2. AWWA Water Distribution Operator Training Handbook, #20428, 800-926-7337,  
<http://www.awwa.org/>

3. AWWA Principles and Practices of Water Supply Operations Book Series:

- Water Sources #1955
- Water Quality #1958

800-926-7337, <http://www.awwa.org/>

Other materials containing much of the same general information is Water Treatment Plant Operation and Maintenance Manual, Volumes 1 and 2, and the Water Distribution Systems Operation & Maintenance Manual, all published by California State University, 916-278-6142, <http://www.owp.csus.edu/>.

### **CLASS "B"**

The standard reference material for this examination is all references listed under Class "C" and

1. AWWA Principles and Practices of Water Supply Operations Book Series:
  - Water Treatment #1956
  - Water Transmission and Distribution #1957800-926-7337, <http://www.awwa.org/>
2. AWWA Basic Science Concepts and Applications, #1959, 800-926-7337, <http://www.awwa.org/>

### **CLASS "A"**

All references listed under Classes "B" and

1. Utility Management, and Manage for Success, Office of Water Programs, California State University, 916-278-6142, <http://www.owp.csus.edu/>  
<http://www.owp.csus.edu/>
2. Code of Federal Regulations, Title 40, Part 141, [www.gpo.gov](http://www.gpo.gov)

### **OTHER GOOD REFERENCE SOURCES**

#### **The Minnesota Water Works Operations Manual.**

Download the Chapters and then test your knowledge by taking online E-Training Quizzes. <http://www.mrwa.com/E-trainingquiz.htm>

#### **Safe Drinking Water for Your Small Water System: An Operator's Guide**

The manual provides basic, user-friendly information about the operation of small non-transient non-community public water systems. Download the Chapters from <http://www.mrwa.com/NTNCManualpage.htm>

Hardcopies of these manuals can be ordered for a fee by contacting the Minnesota Rural Water Association  
217- 12th Avenue SE  
Elbow Lake, MN 56531  
Phone: 218-685-5197 or 800-367-6792  
E-mail: [mrwa@mrwa.com](mailto:mrwa@mrwa.com)

#### **Montana Water Center Operator Basics Training Series**

A multimedia CD-Rom that includes the following topics:

- Ground Water Systems

- Surface Water Systems
- Math Practice [500 problems]
- Exam Prep [500 questions]
- Resources
- Glossary Games

Download free from <http://water.montana.edu/training/default.htm>

### **Security Vulnerability Self Assessment Guide for Small Drinking Water Systems**

To order, contact: ASDWA

1025 Connecticut Ave NW Ste 903

Washington DC 20036

Phone: 202-293-7655

Web site: <http://www.asdwa.org/>

Available online in PDF format (select .Security.)

### **California State University, Sacramento, Office of Water Programs**

These are distance-learning courses for persons interested in learning the operation and maintenance of drinking water systems.

- Water Treatment Plant Operation, Volumes I and II
- Water Distribution System Operation and Maintenance

To order, contact: Office of Water Programs

California State University, Sacramento

6000 J St

Sacramento CA 95819-6025

Phone: (916) 278-6142

Web site: [www.owp.csus.edu](http://www.owp.csus.edu)

### **AWWA Operator Certification Study Guide, Fifth Edition**

Provides sample questions and answers in all certification exam areas. #20517, (800) 926-7337, <http://www.awwa.org/>

### **AWWA Iron and Manganese Removal Handbook**

This book covers understanding processes for removing iron and manganese from both groundwater and surface water sources, as well as basic operation of water treatment and filtration plants. # 20440, (800) 926-7337, <http://www.awwa.org/>

### **AWWA Basic Science Concepts and Applications Student Workbook**

Practice for students in solving math, chemistry, electricity, and hydraulics problems as taught in Basic Science Concepts and Applications, #1954, (800) 926-7337, <http://www.awwa.org/>

### **AWWA Basic Chemistry for Water and Wastewater Operators**

This book covers all chemistry topics for water treatment and wastewater treatment, #20494, (800) 926-7337, <http://www.awwa.org/>

**AWWA Videos/DVD:** (800) 926-7337, <http://www.awwa.org/>

**Operator Math Made Easy**

DVD provides calculations for volume measurements, conversions, flow rates, and other basic math problems that water operators must know on the job and for passing certification exams. 1999 edition. Produced by AWWA, DVD, 20 minutes. #64127

**Operator Chemistry Made Easy**

DVD provides calculations for chemical dosages, feed rates, conversions, and other chemistry problems that operators must know on the job and for passing certification exams. 1999 edition. Produced by AWWA, DVD, 13 minutes. #64128