

Operator Certification Reference Materials

California State University, Sacramento (CSUS) Foundation, Office of Water Programs

(916) 278-6142

<http://www.owp.csus.edu/>

Water Distribution System Operation and Maintenance

Designed to train operators in the safe and effective operation and maintenance of water distribution systems, this manual describes the responsibilities of being an operator for water storage and distribution systems. Material in this manual will provide an understanding of the basic operational and maintenance concepts of water distribution systems and will help operators develop the ability to analyze and solve problems when they occur.

Operation of Water Treatment Plants Vol. 1

Designed to train operators in the safe and effective operation and maintenance of water treatment plants, Volume I emphasizes the knowledge and skills needed by an operator working in a conventional water treatment plant used for treating surface waters.

Operation of Water Treatment Plants Vol. 2

Designed to train operators in the practical aspects of operating and maintaining water treatment plants, emphasizing safe practices and procedures. Information is presented on drinking water regulations (including the Safe Drinking Water Act), iron and manganese control, fluoridation, softening, trihalomethanes, demineralization, handling and disposal of process wastes, maintenance, instrumentation, and advanced laboratory procedures. Administrative procedures for dealing with budgeting, setting rates, recordkeeping, personnel administration, public relations, and emergency planning.

Operation and Maintenance of Wastewater Collection Systems Vol. 1

Designed to train operators in the practical aspects of operating and maintaining wastewater collection systems, emphasizing safe practices and procedures. Information is presented on the importance and responsibilities of a collection system operator, the need for collection system O&M, and the components and typical layouts of collection systems. Operators learn safety procedures for construction, inspection and testing of sewers, inspection of manholes, and underground construction and repair. Detailed instructions are included for using closed-circuit television, clearing stoppages, cleaning sewers, and controlling roots, grease, odors, and corrosion in collection systems. Focuses on the knowledge and skills operators need to identify actual collection system problems and select appropriate methods to solve them. Operators also learn to solve arithmetic problems relating to the operation and maintenance of wastewater collection systems.

Operation and Maintenance of Wastewater Collection Systems Vol. 2

Focuses on three areas: (1) lift stations, (2) sewer rehabilitation, and (3) administration of a collection system agency. Detailed information is provided on the components and practical operation of lift stations. Operators learn to operate and maintain a variety of types of motors, supervisory controls, pumps, valves, and other equipment. They will also learn to examine the condition of a sewer system, set up a sewer rehabilitation program, and safely use various methods to replace or repair damaged sewers. Covers critical aspects of effectively administering a wastewater collection agency or department. Administrative topics include overall organization of the agency as well as employment, training and compensation of personnel, selection and acquisition of equipment and facilities, system mapping, management information systems, report writing, and public relations. Operators learn to organize and administer all facets of a collection system agency.

Operation of Wastewater Treatment Plants Vol. 1

This widely used professional program trains operators in the safe and effective operation and maintenance of city wastewater treatment plants. Volume I emphasizes the knowledge and skills needed to operate plants efficiently. Operators will gain an understanding of the basic operational aspects of their plant and learn how to analyze and solve problems.

Operation of Wastewater Treatment Plants Vol. 2

This widely used professional program trains operators in the safe and effective operation and maintenance of city wastewater treatment plants. Volume II shifts the focus toward larger conventional treatment plants and teaches operators in supervisory and management positions how to use best practices, including following regular maintenance programs, accurate recordkeeping, maximizing information technology, and preparing and writing meaningful reports.

Advanced Waste Treatment

This text provides advanced training for operators of wastewater treatment plants. From California State University, Sacramento, the program covers biological treatment processes and physical–chemical treatment processes.

Manual of Cross-Connection Control Tenth Edition

The Manual of Cross-Connection Control, Ninth Edition contains field test procedures for backflow prevention assemblies (with illustrations for each step), specifications for backflow prevention assemblies, sample forms for a cross-connection control program, a model ordinance for a cross-connection control program and much more information.

Manage for Success

This training manual stresses problem identification and solutions, working together as a team, communication, motivation, and evaluating and improving solutions to problems. Managers completing the training program will be confident that they have the tools and the ability to apply them to be successful managers. Utilities can help ensure that they have the needed management capacity by having their management personnel complete this training program

American Water Works Association

(800) 926-7337

<http://www.awwa.org/store/operator.aspx?Category=TRAIN>

Water Supply Operations I: Water Sources, Textbook

Water operator training text teaches fundamentals of water sources for drinking water. Edition: 2003, Hardback, 212 pp. ISBN 1-58321-229-9; Catalog Number 1955.

Water Supply Operations II: Water Treatment, Textbook

Water operator training text teaches fundamentals of common water treatment processes and techniques. Edition: 2003, Hardback, 552 pp. ISBN 1-58321-230-2; Catalog Number 1956.

Water Supply Operations III: Water Transmission and Distribution, Textbook

Basic principles of design, construction, operation, and maintenance of water transmission and distribution systems. Edition: 2003, Hardback, 553 pp. ISBN 1-58321-231-0; Catalog Number 1957.

Water Supply Operations IV: Water Quality, Textbook

Water operator training text teaches fundamentals of water quality analysis and drinking water regulations. Edition: 2003, Hardback, 214 pp. ISBN 1-58321-232-9; Catalog Number 1958.

Water Supply Operations V: Basic Science Concepts and Applications

Water operator training text teaches fundamental mathematics, hydraulics, chemistry, and electricity as they apply to municipal water supply. Edition: 2003, Hardback, 645 pp. ISBN 1-58321-233-7; Catalog Number 1959.

Math Problems for Water Distribution Operators: A Guide to Preparing for Distribution System Operator Certification Exam

Math study text is designed to help water distribution operators improve their math skills, pass certification exams, perform their jobs better, and advance their careers. This book is ideal study guide for the mathematics portion of certification examinations. Each book is organized into four parts consisting of material associated with the first four grade levels. Edition: 2007, Softbound, 250 pp. ISBN 1583214550; Catalog Number 20628.

Math for Water Treatment Operators: A Guide to Preparing for Water Treatment Operator Certification Exams

This book is ideal study guide for the mathematics portion of certification examinations. Each book is organized into four parts consisting of material associated with the first four grade levels. John Giorgi. Math study text is designed to help water treatment operators improve their math skills, pass certification exams, perform their jobs better, and advance their careers. Edition: 2007, Softbound, 250 pp. ISBN 1583214542; Catalog Number 20618

Water Operator Certification Study Guide, Sixth Edition

This study guide is specially designed to give water operators and students practice in answering questions that are similar in format and content to the questions that appear on state certification exams. ISBN 9781583218525 - 20517-6E

Wastewater Operator Certification Study Guide

Sample questions are provided for Classes I, II, III, and IV wastewater operator certification exams, so you can study the questions that are specific to your grade level. Answers and references are included for questions. Math questions include the method to solve. ISBN 978-1-58321-728-3 - 20683

Field Guide to SDWA Regulations

This operations-oriented book explains all the regulations and how they fit together. The book provides regulatory guidance and advisories related to USEPA regulations in a single, easy-to-follow guide. It compiles information from USEPA, AWWA, and others and presents it in an understandable format. Useful to water utility managers, treatment and distribution operators, and environmental engineers. ISBN 978-1-58321-385-8 - 20599

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Flash Cert

FlashCerts!™ enable users to recall facts and numbers with ease. FlashCerts!™ improve memory retention and instill confidence. FlashCerts!™ are ideal for certification levels I through III. FlashCerts!™ are available for Wastewater, Water Treatment, and Water Distribution

Simplified Math for Waterworks Operators

This 80 page workbook guides users through math applications commonly used in the waterworks industry. It separates formulas, conversion tables, glossaries, and friction loss tables into easy-to-use sections. While most math books are divided into math concepts, this text is divided into application topics such as volume, flow, etc. so you can easily use the material for real-world applications.

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