

Awwa Manual M41

This handbook includes basic information plus valuable resources to help troubleshoot and resolve problems by such organisms as Actinomycetes, Bloodworms, Crustacea, and more. Each section carries a brief description, the problems it can cause, control strategies and relevant references, color plates and more.

"This manual provides the user with both general and technical information to aid in design, procurement, installation, and maintenance of PVC pipe and fittings. This manual presents a discussion of recommended practices"--

This comprehensive manual of water supply practices explains the design, selection, specification, installation, transportation, and pressure testing of concrete pressure pipes in potable water service.

Annotation "This fourth edition of AWWA's manual M11 Steel Pipe - A Guide for Design and Installation provides a review of experience and design theory regarding steel pipe used for conveying water. Steel water pipe meeting the requirements of appropriate AWWA standards has been found satisfactory for many applications including aqueducts, supply lines, transmission mains, distribution mains, and many more."--BOOK JACKET. Title Summary field provided by Blackwell North America, Inc. All Rights Reserved.

External Corrosion and Corrosion Control of Buried Water Mains

M41

Emergency Power Source Planning for Water and Wastewater

PVC Pipe-- Design and Installation

Rehabilitation of Water Mains

An ideal reference for design engineers and operators in water treatment, this manual of water supply practices describes ductile-iron pipe manufacturing, design, hydraulics, pipe wall thickness, corrosion control, installation, supports, fittings and appurtenances, joining, and installation.

Effectively managing valves as an asset can have a significant impact both for the water utility and the customer. This revised manual covers valve selection and installation as well as the importance of location, condition, and frequency of operation. The updated figures show commonly used valves and their components, including: globe; butterfly; plug; ball; cone; and gate. Special-use valves are also discussed, but the intent here is only to introduce their availability and applications. The authors incorporate the latest methodologies and technologies for handling, inspecting, shipping, and storing valves and their associated parts. A brief history of valves and an overview of the theory and flow characteristics of valves provides context. Valves are an indispensable component of the water distribution system; they can regulate, modulate or isolate. This manual provides essential information for water operators, technicians, and engineers on this powerful appurtenance.

This operations manual explains the basic principles of electrical power distribution, automation, and instrumentation in water distribution, treatment, and storage systems.

Chapters cover hydraulic and electrical principles, electric motor controls, measurement instruments and displays, pumps and valves, and automatic and digital controls.

P. 16.

Ductile-Iron Pipe and Fittings, 3rd Ed. (M41)

An Introduction to Water System Pumps and Drivers

Ductile-Iron Pipe and Fittings

M49

An Introduction to Groundwater Sources Operation and Maintenance

Recommended Practice for Backflow Prevention and Cross-connection Control

This manual explains the design, installation, and maintenance of steel water pipe and fittings for potable water service.

Provides practical information about the design and installation of ductile iron pressure piping systems for water utilities. The 12 chapters outlines the procedure for calculating pipe wall thickness and class, and describes the types of joints, fittings, valves, linings, and corrosion protection a

Introductory technical guidance for civil engineers, mechanical engineers, environmental engineers and construction managers interested in planning, design, construction and operation of water supply systems. Here is what is discussed: 1. DOMESTIC WATER DISTRIBUTION 2. DOMESTIC WATER TREATMENT 3. PUMPING STATIONS FOR WATER SUPPLY SYSTEMS 4. TREATED WATER STORAGE 5. WATER DESALINATION 6. WATER DISTRIBUTION IN COLD REGIONS 7. WATER DISTRIBUTION SYSTEM APPURTENANCES 8. WATER SAMPLING AND TESTING 9. WATER SUPPLY SOURCES 10. WATER SUPPLY SYSTEMS OPERATION AND MAINTENANCE 11. TREATMENT AND STORAGE IN COLD REGIONS 12. PUMPS OPERATION AND MAINTENANCE.

Now updated, this manual discusses design, operation, and maintenance of water distribution systems that supply water for fire protection and suppression.

Emphasis is placed on public water systems and includes methods of fire protection.

M55 PE Pipe - Design and Installation, Second Edition

Distribution System Requirements for Fire Protection

Answers to Common Questions

M53

Handbook of Environmental Degradation of Materials

Water Utility Capital Financing

AWWA's most popular handbook for distribution operators, this handbook provides a complete introduction to water distribution system operation and equipment. This brand new manual provides thorough coverage of water membrane science, concepts, and theory. Chapters discuss membrane applications, testing of membrane systems, design concepts and operations, costs, residuals, plus the various manufactures. The final chapter covers future trends in low-pressure membranes followed by extensive tables and figures.

Introductory technical guidance for civil and mechanical engineers and water system managers interested in operation and maintenance of water distribution systems. Here is what is discussed: 1. OVERVIEW 2. REFERENCES 3. DISTRIBUTION 4. STORAGE 5. VALVES AND HYDRANTS 6. APPLICABLE PUBLICATIONS.

This AWWA manual of practice provides water professionals with solutions to algae-related problems. Topics covered include identification of algal species, monitoring programs, and best management and treatment strategies.

Butterfly Valves - Torque, Head Loss, and Cavitation Analysis

Problem Organisms in Water

Distribution Infrastructure Management

M27

A Guide for Design and Installation

Review of the Bureau of Reclamation's Corrosion Prevention Standards for Ductile Iron Pipe

Introductory technical guidance for mechanical and civil engineers interested in pumps and motors for water systems. Here is what is discussed: 1. OVERVIEW 2. REFERENCES 3. PUMPS 4. ACCESSORIES 5. APPLICABLE PUBLICATIONS.

Introductory technical guidance for civil engineers and other professional engineers and facility managers interested in operation and maintenance of groundwater supply sources. Here is what is discussed: 1. OVERVIEW 2. REFERENCES 3. WATER SUPPLY HYDROLOGY 4. WATER USE 5. GROUNDWATER SUPPLIES 6. SURFACE WATER SUPPLIES 7. WATER QUALITY 8. APPLICABLE DOCUMENTS.

Introductory technical guidance for civil and environmental engineers interested in domestic water treatment. Here is what is discussed: 1. INTRODUCTION 2. ADVANTAGES AND DISADVANTAGES OF SULFIDE PRECIPITATION. 3. CARBONATE PRECIPITATION 4. OTHER PRECIPITATION TECHNIQUES.

This manual describes the design, specification, installation, and maintenance of polyethylene (PE) water pipe.

Water Treatment Operator Handbook

Water Distribution Operator Training Handbook Third Ed

M23 PVC Pipe

Microfiltration and Ultrafiltration Membranes for Drinking Water

Internal Corrosion Control in Water Distribution Systems (M58)

Source to Treatment

The Handbook of Environmental Degradation of Materials, Third Edition, explains how to measure, analyze and control environmental degradation for a wide range of industrial materials, including metals, polymers, ceramics, concrete, wood and textiles exposed to environmental factors, such as weather, seawater, and fire. This updated edition divides the material into four new sections, Analysis and Testing, Types of Degradation, Protective Measures and Surface Engineering, then concluding with Case Studies. New chapters include topics on Hydrogen Permeation and Hydrogen Induced Cracking, Weathering of Plastics, the Environmental Degradation of Ceramics and Advanced Materials, Antimicrobial Layers, Coatings, and the Corrosion of Pipes in Drinking Water Systems. Expert contributors to this book provide a wealth of insider knowledge and engineering expertise that complements their explanations and advice. Case Studies from areas such as pipelines, tankers, packaging and chemical processing equipment ensure that the reader understands the practical measures that can be put in place to save money, lives and the environment. Introduces the reader to the effects of environmental degradation on a wide range of materials, including metals, plastics, concrete, wood and textiles Describes the kind of degradation that effects each material and how best to protect it Includes case studies that show how organizations, from small consulting firms, to corporate giants design and manufacture products that are more resistant to environmental effects

Recommended practices, calculations, and data for correctly specifying and using butterfly valves in any water piping system. Second edition.

Ductile iron pipe (DIP) was introduced about 50 years ago as a more economical and better-performing product for water transmission and distribution. As with iron or steel pipes, DIP is subject to corrosion, the rate of which depends on the environment in which the pipe is placed. Corrosion mitigation protocols are employed to slow the corrosion process to an

acceptable rate for the application. When to use corrosion mitigation systems, and which system, depends on the corrosivity of the soils in which the pipeline is buried. The Bureau of Reclamation's specification for DIP in highly corrosive soil has been contested by some as an overly stringent requirement, necessitating the pipe to be modified from its as-manufactured state and thereby adding unnecessary cost to a pipeline system. This book evaluates the specifications in question and presents findings and recommendations. Specifically, the authoring committee answers the following questions: Does polyethylene encasement with cathodic protection work on ductile iron pipe installed in highly corrosive soils? Will polyethylene encasement and cathodic protection reliably provide a minimum service life of 50 years? What possible alternative corrosion mitigation methods for DIP would provide a service life of 50 years?

Introductory technical guidance for civil and environmental engineers and other professional engineers and construction managers interested in design and construction of water supply systems. This is what is discussed: 1. DOMESTIC WATER DISTRIBUTION 2. DOMESTIC WATER TREATMENT 3. PUMPING STATIONS FOR WATER SUPPLY SYSTEMS 4. TREATED WATER STORAGE 5. WATER DESALINATION 6. WATER DISTRIBUTION IN COLD REGIONS 7. WATER DISTRIBUTION SYSTEM APPURTENANCES 8. WATER SAMPLING AND TESTING 9. WATER SUPPLY SOURCES 10. WATER SUPPLY SYSTEMS OPERATION AND MAINTENANCE 11. TREATMENT AND STORAGE IN COLD REGIONS 12. PUMPS OPERATION AND MAINTENANCE.

Instrumentation and Control, 3rd Ed. (M2)

Design and Installation

Water Meters--Selection, Installation, Testing, and Maintenance

An Introduction to Water Distribution Systems Operation and Maintenance

Manual de entrenamiento para operadores de sistemas de distribución de agua

Awwa C104/A21.4-16 Cement-mortar Lining for Ductile Iron Pipe and Fittings

This manual of water supply practices explains the causes and prevention of external pipe corrosion. Third Edition.

Annotation Covering both general and technical information related to PVC use, this illustrated manual discusses the properties of the material, its testing and inspection, hydraulics, design factors, pressure capacity, receiving and storage, installation, testing and maintenance, and service connections. Although intended as an aid to the design, procurement, installation, and maintenance of PVC pipe and fittings, its technical information is not directly correlated to AWWA standards. Appendices feature chemical resistance tables and flow friction loss tables.

Annotation copyrighted by Book News, Inc., Portland, OR.

Ductile-Iron Pipe and Fittings, 3rd Ed. (M41) American Water Works Association Ductile-iron Pipe and Fittings American Water Works Association

Annotation A guide to selecting, installing, testing, and maintaining water meters. Coverage includes selecting meter types, impacts on service adequacy, meter installation, testing of meters, and maintenance and repair of displacement meters. Also discusses shop layout and equipment, records, and remote registration. Includes a list of AWWA manuals. This manual discusses recommended practices; it is not an AWWA standard calling for compliance with certain specifications. Can be used by new and existing utilities of all sizes, and by design engineers and consultants. Member price \$40.00. Annotation copyrighted by Book News, Inc., Portland, OR.

An Introduction to Water Supply Systems

M7

An Introduction to Water Treatment by Sulfide and Carbonate Precipitation

External Corrosion Introduction to Chemistry and Control

Selection, Installation, Field Testing, and Maintenance

Concrete Pressure Pipe, 3rd Ed.

Planning and addressing the causes and effects of power outages and standby power supplies, this handbook establishes reliable plans and addresses financial and public health risks of using standby power supplies.

Water utilities often do not know the specific cause of external corrosion observed on their water mains, and consequently, the chosen preventative measure may not work effectively. Historically, these choices are based on data from other industries (e.g., gas and oil) and may not be suitable for the water industry. Corrosion of metallic pipes can be caused by a variety of mechanisms, each of which requires a different solution. Determining which corrosion mechanism is at work is not a simple matter, because the resulting pipe damage looks similar for all of them. The failure to properly identify corrosion sources may produce prevention systems that are ineffective or do not last. For example, it is not effective to install an anode bag on a main that has a bacteriological corrosion problem. Similarly, an anode bag installed to reduce corrosion caused by a stray impressed current would be quickly used up and would provide only short-term protection. Much recent research on corrosion has focused on internal corrosion, primarily related to water-quality issues, such as lead and copper control and red water. This project will examine external corrosion, which affects the structural integrity of the pipe and makes it vulnerable to leaks and breakage. After identifying the causes of external corrosion, the study will find economical solutions for each type of corrosion and verify them through field trials.

Now available in Spanish, AWWA manual, Emergency Planning for Water Utilities, 3e (M19) presents techniques for developing contingency plans for a variety of emergencies from natural disasters to human-caused crises. The manual explains how to develop an emergency preparedness plan, how to identify

vulnerabilities in your water system, and how to determine how a disruption would likely impact service. The manual includes a separate, 20-page booklet section "Security Analysis & Response for Water Utilities," which provides guidance in hazard assessment, vulnerability assessment, mitigation, development of a response plan, and crisis communications for a utility security breach. (Spanish edition of ISBN 9781583211359)

Steel Pipe

Filter Troubleshooting and Design Handbook

M9

M44--Distribution Valves

Ductile-iron Pipe and Fittings

M6