



Acknowledgments, ix

Overview, xi

- CHAPTER 1: Assessment of Current Situation 1**
 - Sec. 1.1 Assessment of Disinfection Drinking Water Regulatory Requirements . . . 1
 - Sec. 1.2 Assessment of Risks Associated with Existing Disinfection 4
 - Sec. 1.3 Assessment of Existing Disinfection Facilities 7
 - Sec. 1.4 Assessment of Wastewater and Reuse Requirements 7
 - Sec. 1.5 Development of Risk Communication Plan 8
 - Sec. 1.6 Bibliography 11

- CHAPTER 2: Identification of Options 13**
 - Sec. 2.1 Background. 13
 - Sec. 2.2 Screening 13
 - Sec. 2.3 Disinfection Options for Drinking Water Systems 14
 - Sec. 2.4 Options for Wastewater and Water Reuse Systems 29
 - Sec. 2.5 Options for Detailed Evaluation 31
 - Sec. 2.6 Public Involvement and Stakeholder Communication 31
 - Sec. 2.7 Bibliography 37

- CHAPTER 3: Evaluation of Options 39**
 - Sec. 3.1 Attributes for Option Evaluation 40
 - Sec. 3.2 Community Security and Safety 49
 - Sec. 3.3 Risk Communication 55
 - Sec. 3.4 Bibliography 56

- CHAPTER 4: Selection of Option Using Decision-Analysis Tools 59**
 - Sec. 4.1 Overview of Decision-Analysis Tools. 59
 - Sec. 4.2 Multi-Attribute Utility Analysis 60
 - Sec. 4.3 Expanded Social Cost-Effectiveness Analysis. 62
 - Sec. 4.4 Risk Communication 66
 - Sec. 4.5 Reporting Evaluation and Selection Results. 66
 - Sec. 4.6 Bibliography 67

CHAPTER 5:	Implementation	69
	Sec. 5.1 Project Prioritization	69
	Sec. 5.2 Design and Communication of Change	70
	Sec. 5.3 Schedule, Construction, and Startup	71
	Sec. 5.4 Bibliography	71
APPENDIX A:	Supplemental Information Regarding Safety, Security, and Emergency Preparedness	73
	Sec. A.1 USEPA and OSHA Programs	73
	Sec. A.2 Bioterrorism Act of 2002	74
	Sec. A.3 All-Hazards Emergency Preparedness	74
	Sec. A.4 Water Sector–Specific Plan	74
	Sec. A.5 Bibliography	75
APPENDIX B:	Risk Communication Tools	77
	Sec. B.1 Methods and Practices for Communicating Risk	77
	Sec. B.2 Bibliography	81
APPENDIX C:	Security Operations and Management Practices	83
	Sec. C.1 Bibliography	94
APPENDIX D:	Expanded Social Cost-Effectiveness Analysis Methodology	95
APPENDIX E:	System Case Studies	97
	Sec. E.1 Case Study 1: Drinking Water with Chlorination	97
	Sec. E.2 Case Study 2: Wastewater with Chlorination	111
	Sec. E.3 Case Study 3: Groundwater with Chlorine	121
	Glossary, 131	
	Acronyms, 135	