

## SOURCE AND REFERENCE LIST

### 1.0 Regulatory and Scientific Sources:

**1.1 United States Environmental Protection Agency (EPA)** – The EPA is the federal agency that is responsible to safeguard both human health and the environment based upon sound scientific principles. The Agency conducts research on ways to prevent pollution, protect human health, reduces risk as well as enforces the federal codes pertaining to the specific areas associated with the interaction between human health and the environment. These areas include: air, climate change, ecosystems, water, wastewater, land/waste cleanup, pesticides and toxins. The United States Congress has passed laws that provide the EPA authority to establish regulations in order to define and describe the technical, operational and legal details necessary to implement the laws.

- A. Safe Drinking Water Act (1974) – The law establishing the authority to monitor and govern the “safe” limits of contamination acceptable within our drinking water.
- B. Code of Federal Regulations (CFR) – The federal register that records the details necessary to implement the law on safe drinking water.
- C. EPA Policies and Guidance - Significant Guidance Documents (SGD) are developed and maintain within EPA as required by the Office of Management and Budget (OMB).
- D. EPA Journals – Peer-reviewed, scientific articles on all aspects of the health and the environment under the EPA oversight.
- E. EPA website – <http://www.epa.gov>

**1.2 State of Oklahoma Department of Environmental Quality (DEQ)** – The DEQ is the state agency responsible to safeguard both human health and the environment based upon sound scientific principles.

- A. State of Oklahoma Statute (O.S.) Title 27A – The State of Oklahoma law that establishes the authority and provides the power for the DEQ to write regulations that govern the “safe” limits of contamination acceptable within our drinking water. These limits must be equal to or more stringent than those identified by the EPA.
- B. Oklahoma Administrative Code (OAC) Title 252 – The actual regulations established by DEQ that govern the design, construction, operation and maintenance of public water and wastewater treatment and collection or distribution systems.
- C. DEQ website – <http://www.deq.state.ok.us>

**1.3 American Water Works Association (AWWA)** – The AWWA is an international, nonprofit, scientific and educational society dedicated to the improvement of drinking water quality and supply. Founded in 1881, the Association is the largest organization of water supply professionals in the world. The 57,000-plus members represent the full spectrum of the drinking water community including: treatment plant operators and managers, environmental advocates,

engineers, scientists, academicians, and others who hold a genuine interest in water supply and public health. AWWA membership includes more than 4,200 utilities that roughly supplies 80 percent of the United States' drinking water.

- A.
- B. AWWA Journal - Peer-reviewed, scientific articles on all aspects of water treatment and distribution system issues.
- C. AWWA Opflow – Water operator's periodical
- D. AWWA website – <http://www.awwa.org>

**1.4 Water Research Foundation (WRF)** – The Water Research Foundation, which was formerly known as the American Water Works Association Research Foundation (AwwaRF), is the world's largest and most well-known research foundation dedicated to safe drinking water. The organization that has served community water systems and regulatory agencies by conducting vital research to protect the United States' drinking water supply. Its scientific research and studies have strategically guided water utility owners and managers as well as environmental regulators and policy makers in making critical decisions that protect the purity of our drinking water supplies.

- A. WRF Literature – Peer-Reviewed, scientific research studies focused on water chemistry, water treatment and water quality.
- B. WRF website – <http://www.waterrf.org>

## **2.0 Literary References:**

### **2.1 Federal Rules and Regulations:**

- A. 40 CFR Parts 9, 141 and 142 – National Primary Drinking Water Regulations: Stage 1 Disinfectants and Disinfection Byproducts; Final Rule, December 16, 1998.
- B. 40 CFR Parts 9, 141 and 142 – National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts; Final Rule, January 4, 2006.

### **2.2 State Laws and Codes:**

- A. OAC Title 252: Chapter 626 – Public Water Supply Construction Standards
- B. OAC Title 252: Chapter 631 – Public Water Supply Operation
- C. OAC Title 252: Chapter 710 – Operator Certification

### **2.3 AWWA or AwwaRF Manuals:**

- A. Manual of Water Supply Practices (M20): Water Chlorination/Chloramination Practices and Principles, 2<sup>nd</sup> Edition, 2006.
- B. Manual of Water Supply Practices (M56): Fundamentals and Control of Nitrification in Chloraminated Drinking Water Distribution Systems, 1<sup>st</sup> Edition, 2006.
- C. A Guide for the Implementation and Use of Chloramines, AwwaRF, 2004.

### **2.4 Peer-Reviewed Research Literature:**

- A. The Chlorination/Chloramination Handbook, AWWA, 1996.
- B. Ammonia From Chloramine Decay: Effects on Distribution System Nitrification, AWWA Research Foundation, 2003.

- C. Disinfection By-Products and Human Health, Australian Water Association, 2012.
- D. The Chlorine Revolution: Water Disinfection and the Fight to Save Lives, AWWA, 2013.

**2.5 Peer-Reviewed Scientific Articles:**

- A. "Selecting Disinfectants: Supporting Resources," AWWA Website Article.
- B. "Drinking Water Disinfection and Utility Choice of Disinfectant," AWWA publication.
- C. "Drinking Water Contaminant Regulation – Where are we heading?" AWWA Journal Article , March 2004.
- D. "Nitrosamines from pipeline materials in drinking water distribution systems," AWWA Journal Article, October 2011.
- E. "The nitrification index: a unified concept for quantifying the risk of distribution system nitrification," AWWA Journal Article, January 2011.
- F. "Accelerated chloramines decay and microbial growth by nitrification in premise plumbing," AWWA Journal Article, November 2009.
- G. "Effects of changing disinfectants on lead and copper release," AWWA Journal Article with Errata Sheet, November 2008.
- H. "The Safe Drinking Water Act: Current and Future," AWWA Journal Article, January 2012.
- I. "How Waterborne Disease Outbreaks Relate to Water Treatment Failures," Association of Environmental Engineers & Science Professors, 2006.

**2.6 Other Literary Publications:**

- A. "Disinfection By-Products – Meeting the Challenges of Compliance," Opflow Magazine, January 2012.
- B. City of Tulsa Memorandum, Subject: Granular Activated Carbon Alternative to Conversion to Chloramine, From Joan Arthur, P.E. to Tulsa Metropolitan Utility Authority, December 7, 2011.

**3.0 Video References:**

**3.1 AWWA Videos:**

- A. "Converting Distribution Systems from Chlorine to Chloramines," AWWA DVD, 2004.