

# LEGAL GUIDE TO SAFE DRINKING WATER

William Piermattei

Managing Director, Environmental Law Program

University of Maryland Francis King Carey School of  
Law

# DRINKING WATER CONTAMINATION

- U.S. all but eliminated drinking water as a vector for cholera, typhoid fever, dysentery, hepatitis
- Despite success of environmental laws to protect source water and drinking water, problems persist:
  - Hydraulic Fracturing or “Fracking”
  - Agricultural Run Off (Lake Erie case)
  - Accidental Discharges/Spills (West Virginia case)
  - Neglected Water Infrastructure (Flint)
  - Poor Compliance

# FEDERAL LAW

- ◉ Safe Drinking Water Act
  - Federal Regulations - Lead and Copper Rule
  - Standard setting
  - Protects underground water sources
- ◉ Clean Water Act
  - Protects surface waters
- ◉ Federal Emergency Planning and Community Right-To-Know Act
  - Hazardous and Toxic Chemicals

# SAFE DRINKING WATER ACT (SDWA)

- Federal standard setting, state implementation
- Different water systems with different requirements (e.g., small, medium, large)
- Protects underground water (aquifers) by regulating underground injections, but fracking exempt
- Does NOT regulate private wells or protect surface source water (lakes, rivers, streams)

# SDWA STANDARD SETTING

- EPA sets national health-based standards for public water systems (at least 15 connections)
  - 168,000 public water systems nationwide
  - Serve 90% of Americans
- EPA selects contaminants to regulate
  - Step 1: contaminant may adversely affect public health (frequency, level). **Study**
  - Step 2: If regulation, determine Maximum Contaminant Level Goal (MCLG). Health-based, **Unenforceable**
  - Step 3: Set Maximum Contaminant Level (MCL) or Treatment Technique (TT). **ENFORCEABLE**

# SDWA STANDARD SETTING CONT.

- ⦿ EPA sets standards for water treatment plant operation (e.g., Lead and Copper Rule)
  - Water testing protocols
  - Operational guidance
- ⦿ Contaminant Candidate List (CCL)
  - Published every 5 years
  - Currently has 100 chemicals and 12 microbial contaminants
  - Contaminants added/removed, subject to public notice and comment

# STATE & LOCAL SDWA AUTHORITY

- ◉ States adopt drinking water programs at least as stringent as federal standards
  - MCLs and Treatment Techniques, Underground Injection Control
  - Enforcement procedures (monitoring, inspection, reporting)
  - Authority to issue penalties
  - Maintain records and issue reports per EPA rules
  - Ensure operator certification, provide technical assistance
  - Can grant variances and exceptions to water system operators

# CLEAN WATER ACT (CWA)

- Protects surface waters (lakes, rivers, reservoirs) from “point source” pollution through state-administered permit program
  - 68% of community water system users drink treated surface water
  - Like SDWA, states administer based on federal standard as minimum
  - National Pollution Discharge Elimination System (NPDES) permits
  - States have discretion to “designate uses” of surface water, including drinking water, then craft permit limits to support such uses



# PROBLEMS WITH SDWA/CWA PROTECTIONS

- SDWA regulates underground injection of waste, but fracking is exempt
- Private wells not covered under SDWA standards; small systems lack expertise
- CWA does not regulate “non-point source” water pollution (storm water run off) - The Lake Erie Problem
- Both statutes regulate only listed contaminants (Lake Erie revisited)
- When SDWA violation, difficult to enforce (compliance-driven statute)

# *THE FLINT CRISIS*

- ◉ Water supply switch precipitated a cascade of problems and violations (Coliform ->TTHM -> Legionella -> Lead Crisis)
- ◉ No corrosion control for 18 months (TTHM treatment made corrosion worse).
- ◉ MDEQ misreads LCR(?) Informs EPA it is utilizing corrosion control when it is not(??)
- ◉ EPA “expresses concern” about no corrosion control (May 2015); MDEQ agrees to corrosion control (July 2015); requires compliance by Jan. 2016(!?!)

# PUBLIC HEALTH ROLE

- Obtain publicly available information on drinking water and provider
  - Consumer Confidence Reports (operator)
  - Source Water Assessments (state)
  - EPA and State Contaminant Standards
  - Toxic and Hazardous Chemicals (EPRCA)
- If violations reported in documents, ask state regulators what is being done
- Determine private well usage, whether fracking is prevalent in area, testing ?
- Water quality permit notice & comment

# PUBLIC HEALTH ROLE II

## ◉ Standard setting input

- Candidate Contaminant List - Is it complete?
- Prioritizing CCL - what should be regulated?
- If regulated, do the standards protect public health?
- Water criteria under Clean Water Act: What has your state done? Adopted federal standards?
- Agriculture stormwater BMPs?