LEGAL GUIDE TO SAFE DRINKING WATER

William Piermattei
Managing Director, Environmental Law Program
University of Maryland Francis King Carey School of Law
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
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)
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
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
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
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
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?