Chemical Spills Are Poisoning Our Drinking Water

In January 2014, a chemical storage tank at Freedom Industries near Charleston, WV, leaked over 10,000 gallons of the toxic chemical MCHM into the Elk River, contaminating drinking water for nearly 300,000 people in nine counties, and costing local businesses and the local economy $19 million a day.1,2

Each year, thousands of hazardous substance spills occur from aboveground storage tanks (ASTs) across the country, poisoning land, lakes, rivers, and drinking water. In the ten years from 2005–2014, there were 20,432 spills self-reported by facilities (an average of over 2,000 spills per year). These incidents included 149 different hazardous substances, most commonly ammonia, benzene, hydrogen sulfide, sulfuric acid, chlorine, hydrogen cyanide, hydrochloric acid, sodium hydroxide, toluene, and sodium hypochlorite.3 Many of these commonly spilled chemicals cause immediate severe health effects, such as burns or even death. Others can cause a range of chronic health problems, including impairment of nervous system functions, corrosion of the respiratory and gastrointestinal organs, cancer, and disability.4

Major spills occur frequently. Just a few examples are:

- a 2006 spill in Garyville, LA (2,500 gallons of sodium hypochlorite);
- a 2007 spill in Madera, CA (13,000 gallons of sodium hydroxide or caustic soda);
- and a 2013 spill in Petersburg, VA (257,782 pounds of iron chloride, 32,595 pounds of ammonium chloride, and 73,754 pounds of hydrochloric acid).5

These chemical spills pose a disproportionate threat to low-income communities and communities of color. Hazardous spills from ASTs are more likely to occur in majority non-white counties than majority white counties.6 Madera County, CA is over 75% Hispanic or Latino, Petersburg, VA is nearly 80% African American, and Garyville, LA was over 50% African American at the time of its spill. Over 25% of the population in each of these communities lives in poverty.7 Workers in lower-wage, service industries were affected more by the Elk River spill than workers in higher-wage industries.8

No one, not even the federal government, knows how many ASTs exist across the country (although they number at least several tens of thousands), what chemicals they contain, how close they are located to drinking water sources, how often they are inspected (if ever), or what spill prevention or containment measure are (or are not) in place.

Most drinking water providers don’t know where tanks are, what chemicals they hold, or how close they are to water sources.

A U.S. Chemical Safety Board (CSB) investigation found that the 46,000-gallon chemical storage tanks at Freedom Industries had not been internally inspected for at least 10 years. Freedom Industries did not have any “secondary containment” systems in place in case a tank leaked, or a spill response plan.9

In 1972, the Clean Water Act required the U.S. Environmental Protection Agency (EPA) to adopt a rule to prevent spills of hazardous chemicals from aboveground storage tanks into water. EPA never produced that rule, but now—as the result of a lawsuit by the Environmental Justice Health Alliance (EJ4All.org), the...
Natural Resources Defense Counsel (NRDC.org), and People Concerned about Chemical Safety (peopleconcernedaboutmic.com) — it must do so.

Action Agenda to Protect Our Water

Federal and state agencies, facilities that use or store hazardous substances, and drinking water providers should act immediately to understand and address hazardous chemicals that threaten water. See our full action agenda at EJforSafeWater.org.

- EPA should quickly adopt a strong rule to prevent chemical spills from aboveground storage tanks, as required by the Clean Water Act over 40 years ago (but never completed).
- Federal and state agencies should adopt rules to:
  - Understand the Danger — Learn where all ASTs are, what chemicals they contain, what protections are already in place, inspection history, and proximity to drinking water sources;
  - Focus on Prevention — Require that companies and facilities implement comprehensive measures to prevent spills;
  - Require Containment Systems — Require additional measures to contain spills if they do happen using the best available methods and technologies;
- Ensure Complete Notification, Response, and Cleanup — Require immediate public notification of any leaks or spills, aggressive responses to spills, and pre-funding of response and cleanup costs;
- Honor Public Right to Know — Require reporting to the agency, and online disclosure to the public, of all ASTs, size, chemicals, spills, and other information;
- Cover More Chemicals — Agencies should ensure that all chemicals that threaten drinking water are addressed.
- EPA should also adopt a rule to require facilities that store hazardous chemicals in ASTs that could harm communities or the environment to prepare plans for responding to a worst case spill (as required by the 1990 Oil Pollution Act).
- Facilities that use or store hazardous substances should adopt policies, plans, and systems to prevent spills, share critical information with local emergency responders and communities, and prepare comprehensive spill response plans.
- Drinking water providers should work with facilities, government agencies, and emergency responders to understand chemical dangers to drinking water, prevent spills, inform and engage communities, and respond quickly to leaks or spills.

What You Can Do

Visit www.EJforSafeWater.org to:

- Have your organization, business, school board, local elected officials, or faith leader endorse the water protection agenda developed by Coming Clean, the Environmental Justice Health Alliance, and other allies;
- Sign up to get campaign updates and action opportunities.

ENDNOTES
6 Ibid.
7 Ibid.
8 Marshall University.
9 U.S. Chemical Safety Board.