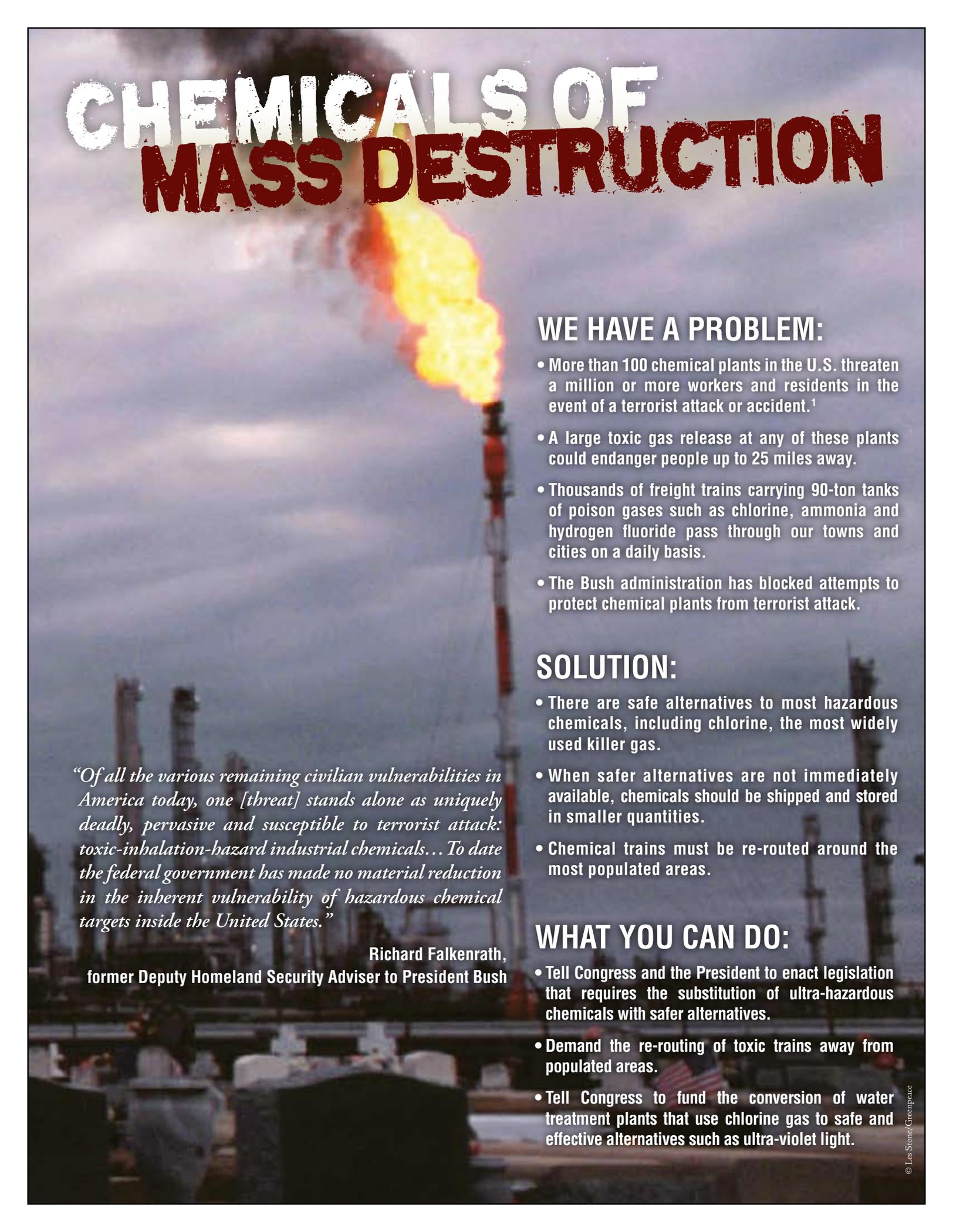


# CHEMICALS OF MASS DESTRUCTION



## WE HAVE A PROBLEM:

- More than 100 chemical plants in the U.S. threaten a million or more workers and residents in the event of a terrorist attack or accident.<sup>1</sup>
- A large toxic gas release at any of these plants could endanger people up to 25 miles away.
- Thousands of freight trains carrying 90-ton tanks of poison gases such as chlorine, ammonia and hydrogen fluoride pass through our towns and cities on a daily basis.
- The Bush administration has blocked attempts to protect chemical plants from terrorist attack.

## SOLUTION:

- There are safe alternatives to most hazardous chemicals, including chlorine, the most widely used killer gas.
- When safer alternatives are not immediately available, chemicals should be shipped and stored in smaller quantities.
- Chemical trains must be re-routed around the most populated areas.

## WHAT YOU CAN DO:

- Tell Congress and the President to enact legislation that requires the substitution of ultra-hazardous chemicals with safer alternatives.
- Demand the re-routing of toxic trains away from populated areas.
- Tell Congress to fund the conversion of water treatment plants that use chlorine gas to safe and effective alternatives such as ultra-violet light.

*“Of all the various remaining civilian vulnerabilities in America today, one [threat] stands alone as uniquely deadly, pervasive and susceptible to terrorist attack: toxic-inhalation-hazard industrial chemicals... To date the federal government has made no material reduction in the inherent vulnerability of hazardous chemical targets inside the United States.”*

**Richard Falkenrath,**  
former Deputy Homeland Security Adviser to President Bush



# TAKE ACTION TO STOP A TOXIC CATASTROPHE

## The Issue

As they work, rest and play, millions of Americans are at unnecessary risk from deadly chemicals. Across the U.S., chemical plants continue to use large quantities of obsolete but highly toxic gases. Many of these plants are located in or near residential neighborhoods. Approximately 4,000 such facilities each put 1,000 or more local people at risk<sup>2</sup> when thousands of trains carrying these dangerous chemicals pass through our towns and cities every day. Terrorism experts have repeatedly warned of how easy it would be to attack a train or plant. One government estimate warned that 100,000 people could be killed or injured within 30 minutes of a rupture in a chlorine tank on a rail line that passes a few blocks from the U.S. Capitol.<sup>3</sup>

## The Solution

The good news is that safer alternatives exist for most of these hazardous substances. Just four replaceable chemicals — anhydrous ammonia, chlorine, sulfur dioxide and hydrogen fluoride — are used in 55 percent of chemical processes. Since 2000, 284 facilities have either switched to safer chemicals and processes or moved to safer locations. For example, following the 9/11 attacks, the Blue Plains sewage treatment plant in Washington, D.C. switched from chlorine to safer chemicals in just eight weeks. The cost was estimated at less than 50 cents per customer per year.<sup>4</sup> An overhaul of security regulations for chemical plants and trains should be another urgent priority.

## The Opposition

Despite President Bush's rhetoric about homeland security, his administration has opposed legislation to eliminate this threat by reducing the use of toxic chemicals. Supported by the chemical lobby, the Bush administration has even gone to court in an attempt to reverse a new Washington, D.C. law banning toxic trains from passing through the nation's capital.



## What You Can Do

**SEND A MESSAGE:** Tell Congress and the President to enact legislation that requires the substitution of ultra-hazardous chemicals with safer alternatives.

**DEMAND SAFE NEIGHBORHOODS:** Call Congress and ask them to re-route toxic trains away from populated areas. All members of Congress can be reached at 202-224-3121.

**INSIST ON CLEAN ALTERNATIVES:** Tell Congress to fund the conversion of water treatment plants from chlorine gas to safe and effective alternatives such as ultra-violet light.

**GET INVOLVED:** Either on campus or online at:  
[www.greenpeaceusa.org/getinvolved](http://www.greenpeaceusa.org/getinvolved)

## Greenpeace Victories



- In 2005, Washington, D.C. enacts the nation's first law prohibiting toxic gas rail cars from passing through the city.
- In 2001, over 120 countries sign the Stockholm Treaty phasing out 12 persistent organic pollutants (POPs) such as dioxin.

**GREENPEACE**  
[www.greenpeaceusa.org](http://www.greenpeaceusa.org)

1. J. Belke, "Chemical Accident Risks in U.S. Industry," Environmental Protection Agency (2000) 2. R. Block, "Chemical Plants Still Have Few Terror Controls," *Wall Street Journal*, August 20, 2004. 3. J. Boris, PhD, U.S. Naval Research Laboratory, testimony before Washington, D.C. City Council, January 2004. 4. *PBS Now*, PBS, March 21, 2003. Transcript available at: [http://www.pbs.org/now/transcript/transcript212\\_full.html](http://www.pbs.org/now/transcript/transcript212_full.html)