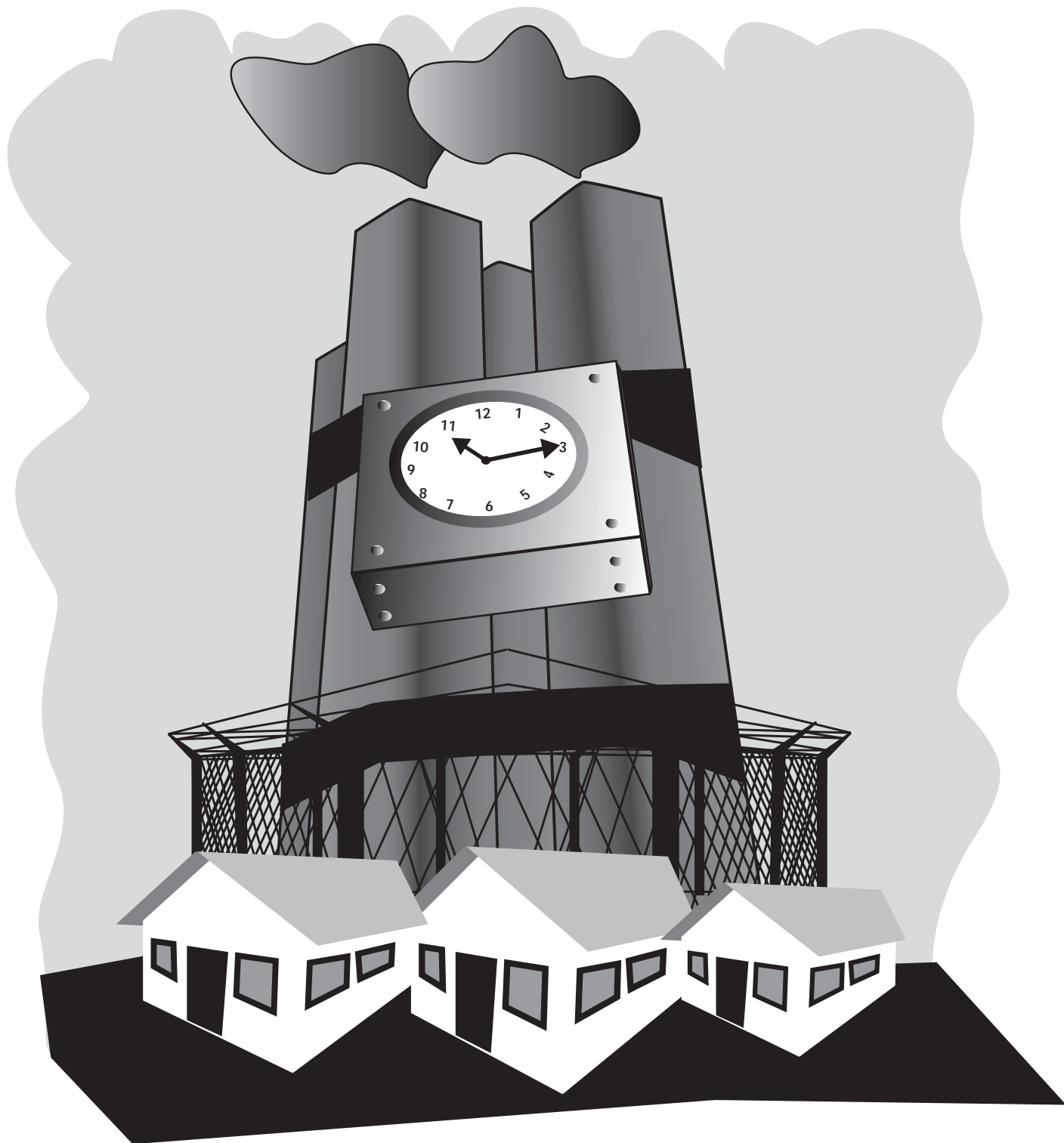


Chemical Industry vs. Public Interest: Redefining the Public Debate on Chemical Security



**Compiled by Niaz Dorry and Nityanand Jayaraman
For The No More Bhopals Alliance, June 2004**

Chemical Industry vs. Public Interest: Redefining the Public Debate on Chemical Security

Produced by the No More Bhopals Alliance, with inputs from Joe DiGangi, Rick Hind, Nadia Khastagir and Mark Floegel. Designed by Design Action Collective.

For The No More Bhopals Alliance, June 2004

The No More Bhopals Alliance is an ad hoc group of public interest entities, including environmental organizations, labor unions, labor-environment coalitions, individuals, community groups and environmental justice groups and networks to challenge the American Chemistry Council's June 2004 "2nd Annual Chemical Security Summit" in Philadelphia, USA.

Endorsers include: Clean Catch, Clean Water Action, Community Labor Refinery Tracking Committee, Design Action, Environmental Health Fund, Greenpeace, International Campaign for Justice in Bhopal, New Jersey Work Environment Council, PhilaPOSH, Ruckus Society, South Bronx Clean Air Coalition, Students for Bhopal

RESOURCES

Center for Public Integrity: www.publicintegrity.org

Center for Responsive Politics: www.opensecrets.org

Community Labor Refinery Tracking Committee: www.clrtc.freesevers.com/index.html

International Campaign for Justice in Bhopal: www.bhopal.net

Greenpeace: www.greenpeaceusa.org

Safe Hometowns: www.safehometowns.org

TABLE OF CONTENTS

Introduction	2
Hiding Behind the Bush.....	4
Driving Dangerously	7
Rolling Back Controls	8
Do You Live in Bhopal?	
A Checklist for Communities and Workers	10
Endnotes.....	11

INTRODUCTION

Even before the events of September 11, 2001, the U.S. Environmental Protection Agency (EPA) was concerned that short of a comprehensive site security plan, chemical facilities handling hazardous substances threatened the public's safety in case of an accident and/or intentional criminal mischief such as an act of terrorism.

As outlined in the February 2000 Chemical Security Alert, a major component of the EPA's proposal to reduce such threats involved deploying safer design and replacing the hazardous substances used and/or stored at such facilities with safer substances.¹

Later in September 2000, a U.S. EPA assessment showed that of the 15,000 facilities reviewed, 123 could threaten over a million people living near the facility should an accident or criminal act jeopardize the safety of the plant. According to the report, the remaining facilities could put anywhere from a few individuals up to hundreds of thousands at risk of immediate death or injury.²

The EPA had good reasons to be concerned about the operations of such facilities.

In 1984 a methyl isocyanate leak from the Union Carbide pesticide manufacturing plant in Bhopal, India claimed more than 8,000 lives in the immediate aftermath and at least 12,000 more since. Many more were injured. Twenty years later, thousands of survivors are suffering from respiratory ailments, cancers, and other health problems while their children are born with serious birth defects.

In the U.S., on April 23, 2004 a vinyl chloride leak in Formosa's Plastics' Polyvinyl Chloride (PVC) facility in Illiopolis, Illinois killed five workers (four died immediately and one died later of injuries sustained during the incident), injured three others, and caused the evacuation of a large number of residents. The incident caused a fire that burned for days, leading to concerns that "long-term contamination problems may be fairly monumental."³

These two disasters demonstrate that terrorist attacks shouldn't be the only source of concern when it comes to overseeing chemical plants. In fact, often the plants' operations and the substances used are the source of terror.

Following September 11th, concerned that the presence of highly hazardous substances at chemical plants could provide targets for terrorists, the EPA stepped

up its investigations into the operations of chemical facilities. In an internal document dated June 11, 2002, then-EPA Administrator Christine Todd Whitman and the White House Director of the Office of Homeland Security Tom Ridge, laid out a "Rollout Strategy for Chemical Facility Site Security" for the "week of June 10-14 or week



Photo: Al Caporali, The Community Labor Refinery Tracking Committee

Large Flare at Sunoco Refinery 9/13/03

South and Southwest Philadelphia houses a disproportionate amount of the city's industries, placing an unfair health burden on the over 100,000 residents of this area.

The top polluter in the city is the Sunoco refinery, which emits at least 32 different toxic chemicals totalling over 200,000 pounds of toxics released into the air we breathe.

of June 17-21, 2002” including a media event in “The White House Press Room.”⁴

Also spurred into action was Senator Jon Corzine (D-NJ) who on October 31, 2001 introduced the “Chemical Security Act of 2001” (S. 1602), requiring chemical facilities to use safer available technologies to prevent catastrophic attacks.

But the EPA never had a chance to implement its plans and Senator Corzine’s legislation never passed the U.S. Congress.

Once alerted of plans that could alter their operations, the U.S. chemical and petroleum industries began cashing in on favors to the Bush campaign. Since Mr. Bush took office, legislative and regulatory efforts that would make chemical facilities’ operations inherently safer have been killed or gutted. Based on reports submitted by ACC, and on file with the Senate Office of Public Records, during 2002 and 2003 the ACC spent \$4.3 million on in-house lobbyists, advocating against any mandatory standards for chemical plant security.

This report examines the actions of the chemical and petroleum industry between 2001 and the time of this writing. Hiding behind the Bush Administration’s “War On Terror,” the chemical industry—led by the American Chemistry Council (ACC), and other industry groups such as the American Petroleum Institute (API)—have lobbied the Administration to restrict discussions on plant safety to the adoption of voluntary, industry developed plans. These plans are narrowly focused on installing tougher locks on the gates and hiring more security guards to keep out intruders, and do nothing to address the inherent hazards associated with the use of hazardous process and large quantities of hazardous chemicals stored on-site.

Although the industry continued to promote their voluntary programs at the June 27-29, 2004 “Second Annual Chemical Security Summit” in Philadelphia, Pennsylvania, the No More Bhopals Alliance believes the industry’s conflict of interest prevents it from changing its operations to adequately protect the public.

To truly ensure public safety and prevent possible terror attacks at chemical facilities, the No More Bhopals Alliance offers the following recommendations:

- Mandate adoption of “inherently safe” materials and processes, that would require the use of safer, less hazardous substances starting with instances where such alternatives are readily available;
- Promulgate federal regulations mandating increased vulnerability assessments, site security and inherent safety changes for hazardous facilities, starting with the facilities that threaten the most people;
- Re-route shipments of hazardous substances (eg., chlorine, ammonia, hydrogen fluoride, etc.) that can be turned into weapons of mass destruction (WMD).
- Mandate the public disclosure of “technology and materials options analyses” requiring companies to report the rationale behind choosing a particular process or material over others;
- Strengthen Occupational, Safety, and Health Administration (OSHA) laws covering chemically reactive substances and reactive hazards as requested by labor organizations;
- Strengthen and expand the public’s right-to-know (eg. Toxic Release Inventory/TRI) by mandating the preparation and disclosure of toxics use reduction plans;
- Increase the number of chemicals and industries covered under TRI reporting;
- Strengthen the liability regime against polluters and facilities that fail to take adequate steps to protect workers, communities and the environment.
- Conduct and publish body burden and epidemiological studies on the general population with particular emphasis on vulnerable communities, including pollution-impacted communities, minorities, children, elderly, women and workers; and,
- Operationalize the Precautionary Principle in federal and state laws.

HIDING BEHIND THE BUSH

“We’re looking all over Iraq for biological and chemical weapons. We don’t have to look for ‘em very hard, they’re right here, right here in our backyards.”—Senator Jon Corzine D-NJ⁵

Follow The Money

Since September 11th, the Bush Administration has advised the public to be on the look out for strange faces and behaviors in public places while it looks for Weapons of Mass Destruction (WMDs) in Iraq.

All the while, unaided by terrorists and going about business as usual, chemical companies have injected terror agents into the general U.S. population in the form of a host of synthetic chemicals. Many, known to be highly toxic, are at levels above permitted thresholds established by federal health and environment agencies.

As early as September 2000 report, the EPA identified a number of chemical facilities using hazardous substances that could be used as WMDs to intentionally threaten up to millions of people.⁶ [See Table 1]

However, legislative and regulatory efforts to ensure inherent safety at chemical facilities have expectantly met with resistance from the industry aided by its allies in the Bush Administration. In fact, it’s clear that the industry knew it had an ally in the Bush Administration even before the rest of the world saw the events unfold on September 11th and beyond.

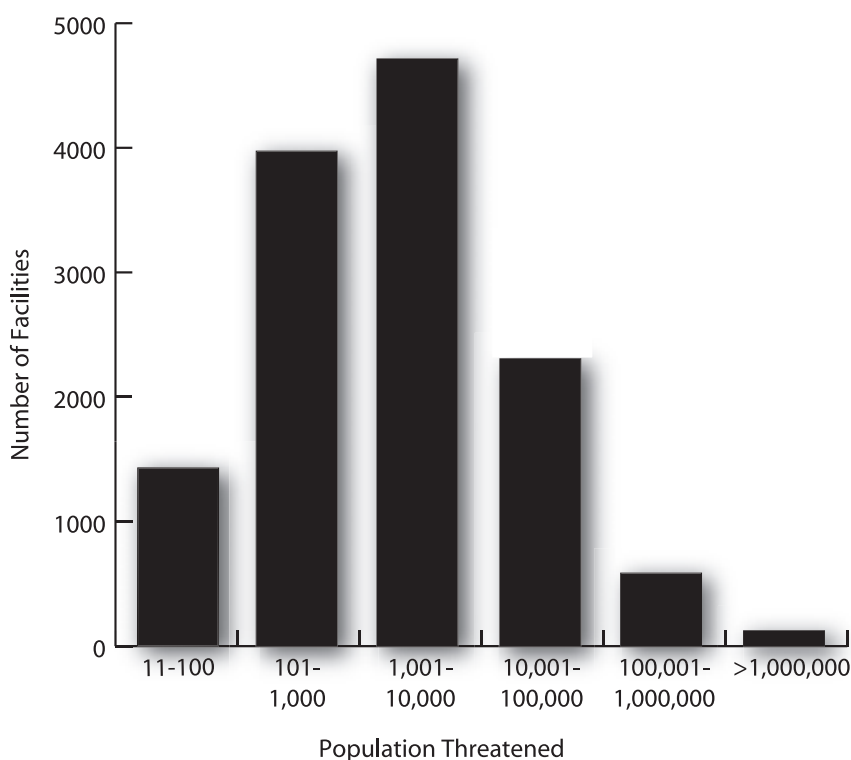
Since before the 2000 presidential elections, an elite group of donors to the Bush 2000 campaign known as the Bush Pioneers and Rangers have positioned themselves for favors from Mr. Bush. Pioneers and Rangers are contributors who agree to raise \$100,000 or more for the Bush Campaign.⁷

Chemical industry officials are prominent amongst Bush Pioneers and Rangers—at least seven are among this list of

special donors.⁸ One Pioneer, Fredrick Webber, was the chair of ACC from 1992 to 2002, when he retired. Following the 2000 elections, Bush appointed Mr. Webber to the Labor Department Transition Team.

Mr. Webber, along with two other Bush Pioneers, Department of Commerce (DOC) Secretary Don Evans and U.S. Ambassador to the European Union (EU) Rockwell Schnabel, played a key role in undermining legislative efforts in Europe requiring mandatory testing of chemicals for health and environmental risks before they can be used in the region. A 2002 internal DOC communiqué urged the U.S. chemical industry to “develop an official position and strategy as soon as possible to assist in influencing the EU’s draft.”⁹

TABLE 1: Number of Facilities vs. Population Threatened



Credit: Greenpeace

With Aid From Bush, Industry Thwarts Chemical Security Legislation

The chemical industry's war against chemical security began in full earnest after the introduction of the "Chemical Security Act of 2001" (S. 1602) by Senator Jon Corzine on October 31, 2001. The Corzine bill called for legislation requiring hazardous chemical-using companies to assess and improve their security, even while deploying safer alternatives to risky processes and the storage, use and manufacture of hazardous chemicals.

After being unanimously adopted by the 20-member Senate Environment Committee on July 25, 2002, Corzine's original bill, S. 1602, was subsequently challenged by seven members of the committee. In a letter dated September 10, 2002, the dissenting senators stated they may have to offer additional amendments to the Homeland Security Act of 2002 to "...address concerns... that have arisen from scores of stakeholders upon thoughtful consideration of this legislation."¹⁰

According to information gathered by Greenpeace from the Center for Responsive Politics, political action committee contributions from the chemical industry to the seven dissenters totaled \$992,346. In comparison, the remaining thirteen senators on the committee received a total of only \$756,221.¹¹

Despite unanimous approval in the Senate Environment Committee, the U.S. Senate passed the Homeland Security Department Act on November 19, 2002, but failed to include S. 1602 or any other chemical security provision while adding new loopholes for polluters that would allow them to evade enforcement and protect them from public disclosure of violations.

Even though they shunned the Corzine led initiatives, following the 2002 elections with a newly elected Republican controlled Congress, the industry and the White House suddenly warmed up to legislation. But none of the measures proposed by the Democrats seemed to fit the bill.

On January 7, 2003 Senator Daschle (D-SD) and 15 other senators introduced S. 6, a broad homeland security bill, including the July 25, 2002 Senate Environment Committee compromise bill on chemical security. Despite another attempt by Senator Corzine to introduce a chemical security bill (S. 157) on January 14, 2003 identical to the previous one as well as a companion bill in the U.S. House of Representatives filed on April 23, 2003 by Representative Frank Pallone (D-NJ), the bills were not included in the final versions of the Homeland Security Bill.

On May 5, 2003 Senator James Inhofe (R-OK), one of the seven republicans who suddenly backed out of supporting the Corzine Bill, introduced the Chemical Facilities Security Act of 2003 (S. 994) which excluded any roles for the EPA and endorsed voluntary industry programs.

Finally, on October 23, 2003 the Senate Environment Committee passed the flawed Inhofe bill (S. 994). The bill has no enforceable provision to prevent catastrophic attacks and merely rubber stamps voluntary industry programs.

Beating EPA's Plans To Implement Chemical Security

...the White House had more to do with the defeat of the Corzine legislative attempts as well as the EPA's efforts to institute chemical security measures.

An internal EPA document dated June 11, 2002 showed that concurrent to the legislative efforts ongoing at the time, the EPA and the White House Office of Homeland Security were collaborating on chemical security issues. This attempt by the EPA to take control of chemical security in the post-September 11th climate threatened the industry's current operations. As stated earlier in this report, the strategy outlined in the June 11, 2002 EPA document includes design changes that would require using safer chemicals when available.¹²

Although the EPA had indicated it might seek legislation to enforce its chemical security mandates, in the accompanying "Questions and Answers" sheet to the June 11 document, then-EPA Administrator Christine Todd Whitman states the "EPA is not seeking legislation on chemical security at this time." Instead, the EPA was going to use "...existing authority under the Clean Air Act, we believe that the guidance and regulation I have announced today are the quickest paths to improving chemical facility security... If we later find that there are legislative gaps, then we will consider seeking legislation."

EPA's attempts to introduce legislation expanding its authority under the Clean Air Act's Section 112 (r)¹³ to include chemical security against criminal attacks were also killed by industry lobby groups.

In addition, instead of adopting its original strategy, the EPA released yet another "Strategic Plan for Homeland Security" in October 2002. The new strategy contains no proposal for making the plants inherently safer.

White House To The Rescue

A paper trail discovered by Greenpeace, reveals the White House had a lot to do with the defeat of the Corzine legislative attempts as well as the EPA's efforts to institute chemical security measures.

In a letter written to James Connaughton, head of White House Council on Environmental Quality and former lobbyist for the power companies, American Petroleum Institute's (API) Red Cavaney suggests the EPA "has neither experience nor resources and questionable legal authority to address security." Instead, Cavaney proposed that the Department of Homeland Security (DHS) be vested with this responsibility.¹⁴ DHS has no history, experience or knowledge of managing chemical facilities nor does it seem to harbor any inclinations to regulate them.

Cavaney's language mirrors the line taken by the chemical industry. In September 2002, Michael Graff, president of Polymers Americas (a division of ACC member BP Amoco), wrote to the President Bush's Senior Advisor Karl Rove thanking him for ". . .meeting with my American Chemistry Council colleagues and I (sic). . .to share our concerns regarding S. 1602, the Corzine-Jeffords Bill."¹⁵ Graff, too, recommended that DHS be appointed to address chemical security issues by allowing ACC to provide the framework for implementation of the department's directives.

In response, Mr. Rove wrote to Mr. Graff acknowledging his letter and stating "We [at the White House] have a similar set of concerns about its [Corzine-Jeffords Bill] positions."¹⁶

In his December 2003 Directive on Homeland Security, President Bush limited the EPA's chemical security role to "drinking water and water treatment systems."¹⁷ In a legally

questionable move, this shifted all responsibility for the nearly 15,000 chemical plants from the EPA to the DHS.

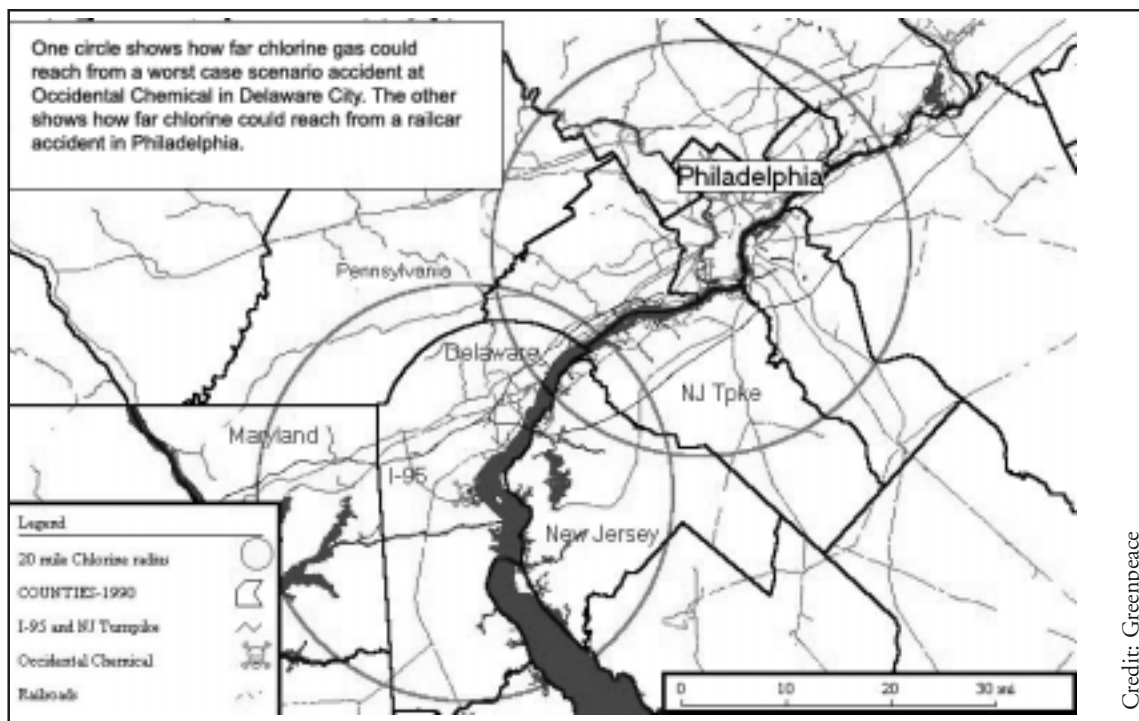
Workers Be Damned

The Bush and ACC team didn't stop at the EPA or the U.S. Congress.

After he took office, Mr. Bush resolved a long-standing issue for the ACC. In an October 1997 presentation to OSHA, four industry trade organizations, including the Chemical Manufacturers Association (CMA now renamed ACC) and the Synthetic Organic Chemical Manufacturers Association (SOCMA) jointly urged OSHA "not to expand the Process Safety Management (PSM) rule in an attempt to address the very difficult issue of reactive hazards."¹⁸ The PSM rule was aimed at enhancing occupational safety.

Finally, in 2002 with help from the White House, the industry got its wish. Ironically, on December 3, 2002—the 18th anniversary of the Union Carbide disaster in Bhopal—a note in the Federal Register revealed the chemicals initiative was being dropped because of "resource constraints and other problems." By February 2003, OSHA's budget was slashed by \$7.9 million and its workforce reduced by 83 jobs, according to the Center for Public Integrity's report.

Later, the public interest group OMB Watch, found that the chemicals initiative was part of a non-public industry "hit list" of 57 regulations comprising items that the industry considered too burdensome.



DRIVING DANGEROUSLY

Twenty years after a runaway reaction in Union Carbide's pesticide factory in Bhopal, India, killed more than 8,000 people in the immediate aftermath, chemical accidents in U.S. industries continue to occur with frightening regularity.

Between January 2003 and April 2004, at least 10 incidents serious enough to trigger root cause investigations by the U.S. Chemical Safety Board (CSB) have been reported. These industrial accidents, including one at ACC member company Honeywell, have claimed the lives of 20 workers, injured more than 230, and caused the evacuation of at least 2,000 people.¹⁹

Accidents at ACC member facilities run counter to ACC's claims that its Responsible Care program actively assesses and minimizes hazards.

CSB investigation of an accident on March 13, 2001 at ACC member BP Amoco Polymers plant in Augusta, Georgia implicates the company as having been negligent. The accident killed three workers. The CSB's notes on the contributing and root causes of the disaster are revealing. Most notably, the board observes that:

- Incidents and near misses tended to be treated as isolated events. Management did not have a review system to detect trends and patterns among incidents.
- Neither Amoco's R&D department nor the process design department had a systematic procedure specifically for identifying and controlling hazards from unintended or uncontrolled chemical reactions.²⁰

Working with a compilation of chemical accidents reported to the National Response Center, U.S. PIRG pegged the total number of accidents at facilities owned by ACC member companies at 25,188 between 1990 and 2003. Nearly 33 percent of all accidents at ACC facilities occurred in factories owned by industry leaders BP, Dow and DuPont.²¹

Following another CSB investigation into an October 2002 explosion at First Chemical Corp in Pascagoula, Mississippi, a CSB member said: "We are very fortunate that shrapnel from the tower did not cause a greater chemical release or a more damaging fire. This accident underscores once again the vital importance of properly managing dangerous reactive chemicals and the processes that use

them."²² Shrapnel from First Chemical's explosion narrowly missed chemical storage tanks at a neighboring Chevron refinery. The CSB investigation found the company had not properly evaluated hazards, although the company claimed to have been following SOCMA's voluntary safety policies.

Job Security = Chemical Security

Responding to a 1994 survey, the *Industrial Safety and Hygiene News* magazine found three-quarters of the respondents—mostly industry personnel—said business competition and downsizing is forcing them to cut safety spending. Nearly 80 percent believed accidents are more likely as employees work longer hours, handle new assignments and fear for their jobs.²⁷

Accidents at ACC member facilities run counter to ACC's claims that its Responsible Care program actively assesses and minimizes hazards.

A March 2003 GAO report "Voluntary Initiatives are Under Way at Chemical Facilities but the Extent of Security Preparedness is Unknown" cites industry officials to conclude that "...chemical companies must weigh the cost of implementing countermeasures against the perceived reduction in risk."

The Conference Board reports "The perceived need to upgrade corporate security has clashed with the perceived need to control expenses until the economy recovers."²⁸

Workers are often the first victims when safety is compromised to cut costs.

The most significant among the unlearned lessons from the Union Carbide disaster in Bhopal is the important role of workers. It is undisputed that Union Carbide systematically ignored workers' warnings about plant safety and even fired workers that raised such issues. During the cost-cutting drive that preceded the disaster, Union Carbide laid off safety personnel and other workers, reduced safety training and cut back expenditure on safety systems. "Maintenance personnel [at the fateful Methyl Isocyanate unit] were cut from six to two. In 1983, the fire and rescue squad was filled with unqualified persons and later changed to an emergency squad. One month prior to the disaster, the vital post of maintenance supervisor was eliminated from the night shift."²⁹ The rest of what happened at midnight on December 2-3, 1984, is history.

As the CSB's Poje observes, "The analogy of Bhopal still

resonates here because of the endangerment due to downsizing.”³⁰

Drawing upon limited data relating to the period 1992-2001, when 91 deaths of contract employees were known to have resulted from explosions or asphyxiation in industrial plants, the Center to Protect Workers’ Rights found many instances of injury/death were caused by the lack of workers’ knowledge of the presence of explosive material, or the lack of adequate precaution.³¹ The report recommends “the use of outside contractors working in industrial plants should be reviewed to determine unique safety risks and needs for this group.”

Lacking Hazard Prevention

The CSB’s second observation on reactive hazards and unintended or uncontrolled chemical reactions raises the far more sinister specter of a Bhopal-like disaster recurring. Limited data analyzed by the board “include 167 serious incidents in the United States involving uncontrolled chemical reactivity from January 1980 to June 2001. Forty of these incidents resulted in a total 108 fatalities.”³² Seventy percent of the incidents investigated involved the chemical manufacturing industry.

Reactive chemicals can become dangerously unstable when they inadvertently or improperly come in contact with other chemicals, water or air, or when they’re subjected to heat or pressure. The resulting instability can cause fairly rapid and large runaway reactions that could breach containment measures, as happened in Bhopal or more recently and less catastrophically in BP Amoco’s Georgia plant.

According to the EPA, in the early to mid-1980s at least 17 accidents in the U.S. had potential consequences that could have been more severe than Bhopal, given the toxicity and volume of release. Mass fatalities were averted only due to circumstances like wind conditions and plant location.³³

“The current regulatory regime to deal with reactive hazards and incidents is not adequate,” says CSB’s Gerald Poje. In October 2002, the CSB submitted its recommendations to the government, industry and labor unions on addressing vulnerabilities in sectors using or storing reactive chemicals. As is the case with most chemical facility hazards, reactive hazards place workers in the first line of fire.

Rolling Back Controls

The ACC—previously called the Chemical Manufacturers’ Association (CMA)—and their membership have been influencing policy and working to undermine environmental laws and regulations for years. Here are some examples:

- The public interest group Earthjustice warned that “An illegal chemical industry advisory committee is playing an inside role in weakening endangered species protections from harmful pesticides.”²³ The FIFRA endangered species task force of the EPA—comprising 14 agrochemical companies—set up in 2000 to develop data disclosing the locations of endangered species, “has shifted its efforts away from generating data to advocating that EPA circumvent the Endangered Species Act for pesticide uses that harm federally protected species.” Six out of 14 industry members of the taskforce are ACC companies or their subsidiaries.²⁴
- In a 1999 report,²⁵ U.S. PIRG and others outlined the role of the CMA in lobbying Congress—with occasional success—to:
 - Remove 90 percent of TRI chemicals;
 - Cut EPA’s 1996 and 1997 budget, including a proposal to cut \$1.5 million from funds designated to expand the TRI;
 - Block EPA’s authority to collect improved data under TRI; and,
 - Prevent EPA from prosecuting polluters who have hidden environmental violations in secret self-audits authorized by state law.
- The same U.S. PIRG report documents a paper trail showing how the CMA tried to directly block EPA efforts to improve Right-to-Know.
- In 1999, giving in to pressure from ACC and the American Petroleum Institute, Congress limited public access to Risk Management Plans (RMP) that companies are required to file as a measure leading to accident prevention under EPA’s Clean Air Act. After September 11th, information was further restricted purportedly to prevent access to sensitive data by terrorists and other criminal agents even though RMPs contain “no data on tank or process location, site security or other similar information.”²⁶

In April 2002, the Center for Public Integrity released a report of its investigations that found the Bush Administration had quietly shelved an OSHA proposal to improve workplace and chemical safety. The proposal was prompted by a petition by several industrial and firefighters' unions. The Clinton-era proposal, which aimed to expand the Process Safety Management (PSM) standard that forms the core of OSHA's accident-prevention regulations, was opposed by Bush campaign donors.

Poisoning the Vulnerable

In the year 2000, facilities required to report emissions of toxic pollutants under the Toxics Release Inventory regulation released more than:

- 100 million pounds of carcinogens
- 138 million pounds of chemicals that could cause developmental problems
- 50 million pounds of chemicals that could cause reproductive disorders
- 1 billion pounds of known/suspected neurotoxicants
- 1.7 billion pounds of respiratory toxicants
- 7000 grams of dioxins

According to the 2000 TRI, of the 7 kilograms of dioxins—the most dangerous chemical known to science—reported by all industries more than 2 kilograms were released by ACC members Dow Chemical and Solutia Inc., with Dow emitting about 1.4 kilograms.

People living near or working at incinerators, Superfund sites, and chemical and other industrial facilities and even the general population are forced to pay for industrial pollution by absorbing associated health care costs and wages lost due to ill-health.

A study by Dr. Philip Landrigan of Mt. Sinai Medical Center et al estimates the total annual costs of environmental pollutants and disease in American children at \$54.9 billion, or 2.8 percent of total US health care costs.³⁴ The authors report that, "This estimate is likely low because it considers only four categories of illness, incorporates conservative assumptions, ignores costs of pain and suffering..."³⁵

Between three and four million children and adolescents in the United States live within a mile of a federally designated Superfund hazardous waste disposal site and are at risk of exposure to chemical toxicants released from these sites.³⁶

The January 2003 study by Center for

Disease Control³⁷ analyzed a nationally representative group of 2,500 people for 116 synthetic toxicants. The study found adolescents and adult women were most disproportionately exposed to phthalates, a chemical used in cosmetics, children's toys and soft PVC items like shower curtains. Mexican Americans in the sample had higher levels than others of DDE, a breakdown product of DDT; African American women of child-bearing age carried the highest levels of the neurotoxin mercury in their bodies. Most worryingly, children had higher body burdens than adults for some of the most toxic chemicals including organophosphate pesticides such as chlorpyrifos, lead and tobacco smoke.

An authoritative 1997 study found that African American, and Hispanic residential areas are more likely to be exposed to higher levels of environmental risk associated with TRI facilities and TRI pollutant loads.³⁸ Often these communities are already overburdened, poor, and politically under-represented.

Chlorpyrifos, marketed under the Dow Chemical brand-name, Dursban, is dangerous, particularly to children. Using a Pesticide Trespass Index to estimate the extent to which individual manufacturers of pesticides are responsible for the body burdens, Pesticide Action Network North America analyzed the CDC data to find that 80 percent of the US population's chlorpyrifos body burden is the responsibility of the Dow Chemical Corporation.³⁹

The ACC's response to the CDC study twists the condemning data into a tribute to the chemical industry. "It is remarkable that modern chemistry allows CDC scientists to measure incredibly small amounts of certain nutrients, natural food chemicals and modern chemicals in our bodies," says the ACC.⁴⁰



Photo: The Community Labor Refinery Tracking Committee

Mable Mallard points to the Trigen facility, a constant source of pollution for South Philadelphia residents

DO YOU LIVE IN BHOPAL?

A CHECKLIST FOR COMMUNITIES AND WORKERS

The December 1984 Union Carbide disaster in Bhopal, India, is alluded to, even by industry officials. The facts of the disaster are sobering. Here's a checklist of why things went so horribly wrong in Bhopal before, during and after the disaster. To get an idea of your vulnerability, go down the checklist to see how many of the items resonate with the context of your neighborhood facility or the factory you work in.

- Does the plant use inherently unsafe technology?
- Are large quantities of extremely hazardous substances used or stored onsite?
- Is the facility located in a densely populated community?
- Are community members predominantly low-income and disadvantaged?
- Is the factory run by a powerful corporation with the lobby muscle of the industry behind it?
- Does the company practice a management pattern that ignores worker and community concerns about frequent incidents and injuries?
- Is the company actively engaged in downsizing and cost-cutting?
- Are your local, state and federal Governments beholden to Corporations?
- Does your legal system have a weak liability regime to hold offenders accountable?
- Does your regulatory system lack adequate public disclosure standards for information related to chemicals stored, hazards, disaster potential and disaster management?
- Can the company refuse to disclose unpublished chemical-specific information relating to issues such as toxicity under trade secret laws?

If your answer is "Yes" to all or most of these questions, then you Live in Bhopal.



Sunoco Philadelphia refinery explosion

Photo: Al Caporali, CLETC

ENDNOTES:

- 1 “Chemical Accident Prevention: Site Security,” U.S. EPA Chemical Safety Alert. February 2000.
- 2 “Chemical accident risks in the U.S. industry – A preliminary analysis of accident risk data from U.S. hazardous chemical facilities,” James C. Belke, U.S. EPA, Chemical Emergency Preparedness and Prevention Office. September 2000.
- 3 Phone interview with Gerald Poje, U.S. Chemical Safety Board. June 3, 2004.
- 4 Internal U.S. EPA document “Rollout strategy for Chemical Facility Site Security.” June 11, 2002.
- 5 Senator Jon Corzine in an interview with Steve Kroft, CBS News Correspondent, 60 Minutes transcript. Aired June 13, 2004.
- 6 “Chemical Accident Risks in U.S. Industry—A Preliminary Analysis of Accident Risk Data From U.S. Hazardous Chemical Facilities.” James C. Belke, U.S. EPA, September 2000.
- 7 “Across Federal Spectrum,” James V. Grimaldi & Thomas B. Edsall, *The Washington Post*, May 17, 2004
- 8 Chemical/Electrical Industry Pioneers, www.tpj.org
- 9 www.tpj.org, “Chemical/Electrical Industry Pioneer.” June 10, 2004.
- 10 “Dear Colleague” letter entitled “The Chemical Security Act Misses The Mark,” signed by Senators James Inhofe (R-OK), “Kit” Bond (R-MO), Arlen Specter (R-PA), Bob Smith (R-NH), George Voinovich (R-OH), Pete Domenici (R-NM), and Mike Crapo (R-ID). September 10, 2002.
- 11 “Seven Senate Republicans Aid Chemical Industry Campaign to Kill Chemical Security Bill,” Greenpeace.
- 12 “Rollout strategy for Chemical Facility Site Security,” Internal EPA document. June 11, 2002.
- 13 Section 112(r) of the Clean Air Act assigns chemical plants the general duty of preventing dangerous accidents.
- 14 “Dear Jim” letter to James Connaughton of the CEQ from the American Petroleum Institute President & CEO Red Cavaney. September 6, 2002.
- 15 Letter from Michael J. Graff, President, Polymers Americas, to Karl Rove, Senior Advisor to President Bush. September 23, 2002.
- 16 Letter from Karl Rove, Senior Advisor to the President, to Michael J. Graff, President BP Amoco Chemical Company. October 31, 2002.
- 17 Homeland Security Presidential Directive/Hspd-7. December 17, 2003
- 18 “OSHA PSM Revisions: Discussions with OSHA.” American Petroleum Institute, Chemical Manufacturers Association, Organization Resources Counselors, Synthetic Organic Chemical Manufacturers Association. October 1997.
- 19 Compiled from “CSB Current Investigations,” extracted from www.csb.gov on 10 June 2004.
- 20 “Investigation Report: Thermal Decomposition Incident, BP Amoco Polymers, Augusta, Georgia, March 13, 2001.” US Chemical Safety and Hazard Investigation Board. June 2002.
- 21 “Irresponsible Care: The Failure of the Chemical Industry to Protect the Public from Chemical Accidents.” Meghan Purvis and Julia Bauler, U.S. PIRG Education Fund, April 2004.
- 22 “Investigators Present Final Report on First Chemical Corp. Explosion – Cite Inadequate Safety Systems; Lack of Warning Devices.” US Chemical Safety and Hazard Investigation Board Press Release. October 15, 2003. Pascagoula, Mississippi.
- 23 “Illegal Chemical Industry Advisory Committee Urging EPA to Weaken Endangered Species Protections from Pesticides.” Earthjustice. 1 December, 2003.
- 24 Industry members of the FIFRA taskforce include: Albaugh Inc.; Aventis; BASF Corp; Bayer CropScience; Dow AgroSciences LLC; DuPont AgProducts; FMC Corp; ISK Biosciences Corp.; Monsanto; Nissan Chemical Industries Ltd; Nufarm Co; Syngenta; Uniroyal Chemical Co.; Valent USA Co.
- 25 “At Risk and In the Dark: Will Companies in Our Communities Reduce Their Chemical Disaster Zones?” Allison LaPlante (US PIRG); Paul Orum (Working Group on Community Right-to-know); Mike Newman, Sierra Club. June 14, 1999.
- 26 “At Risk and In the Dark: Will Companies in Our Communities Reduce Their Chemical Disaster Zones?” Allison LaPlante (US PIRG); Paul Orum (Working Group on Community Right-to-know); Mike Newman, Sierra Club. June 14, 1999.
- 27 Industrial Safety and Hygiene News. May 1994. pp. 31-32. Cited in “Accidents Waiting to Happen: Hazardous Chemicals in the U.S. Fifteen Years After Bhopal.” Jeremiah Baumann (U.S. PIRG Education Fund); Paul Orum (Working Group on Community Right to Know); Richard Puchalasky (Grassroots Connection). December 1999.

- 28 "Corporate Security Management: Organization and Spending Since 9/11" Conference Board. 2004.
- 29 "Bhopal: The Inside Story. Carbide Workers Speak Out on the World's Worst Industrial Disaster." T.R. Chouhan and Others. The Other India Press. Goa. 1994.
- 30 Phone interview with Gerald Poje, US Chemical Safety Board. 3 June, 2004.
- 31 "Explosions and Asphyxiation Deaths Among Contract Employees in Industrial Plants." Michael McCann. Center to Protect Workers' Rights. December 2003.
- 32 "Hazard Investigation: Improving Hazard Management." US Chemical Safety and Hazard Investigation Board, October 2002.
- 33 "Bhopal Disaster Spurs U.S. Industry, Legislative Action." Bryce, A. U.S. Chemical Safety & Hazard Investigation Board, 1999.
- 34 "Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer, and Developmental Disabilities." Philip J. Landrigan; Schecter, C.B.; Lipton, J.M.; Fahs, M.C. and Shwartz J. Environmental Health Perspectives 110:721-728 (2002).
- 35 Dr. Philip Landrigan (Mt. Sinai Medical Center) et al. Abstract.
- 36 "Chemical Wastes, Children's Health, and the Superfund Basic Research Program." Philip J. Landrigan; Suk, W.A.; and R.W. Amler. Environmental Health Perspectives 107:423-427
- 37 "Second National Report on Human Exposure to Environmental Chemicals." Center for Disease Control and Prevention, January 2003.
- 38 "Equity and the Distribution of Environmental Risk: The Case of TRI Facilities." Evan J. Ringquist. Social Science Quarterly. Vol. 78, No. 4. December 1997
- 39 "Chemical Trespass: Pesticides in Our Bodies and Corporate Accountability." Pesticide Action Network North America. May 2004.
- 40 "Chemical Trespass: Chemical Body Burden and the Threat to Public Health." Stacy Malkan. Multinational Monitor, April 2003. Vol. 24, No. 4.

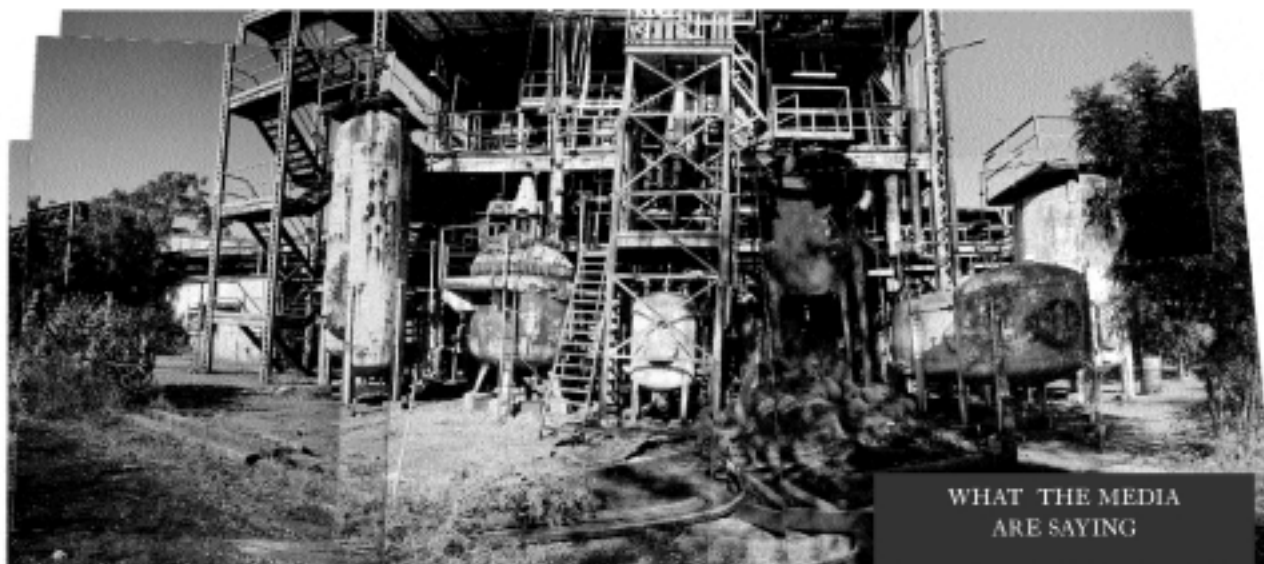


Photo: Raghu Rai

Bhopal: Never again!

To the American Chemistry Council:

Here is the truth about your 'Responsible Care'.



'Twice in the last twelve months, I have stood at the seat of great devastation. Manhattan, and here in Bhopal. Yet Ground Zero was cleared within eight short months. Here, eighteen long years on, where three times as many people perished, the place is still uncleared.'

JON SNOW, CHANNEL 4 TV, August 2002

'Responsible Care', as a voluntary program, was the Chemical Industry's direct response to 'the public relations' crisis caused by Bhopal. We are quoting your own industry records. You obviously never saw it as a human crisis because after 20 years, Union Carbide's factory in Bhopal has never been cleaned up. It remains derelict, its soil contaminated, leaking poisons into the groundwater. The failure first of Union Carbide, and since then of Carbide's owner Dow Chemical, to clean it up is powerful testimony to the criminal

negligence and recklessness of the entire chemical industry. Just such negligence caused the Bhopal disaster, and continues to cause a massive number of accidents at chemical plants around the world. Your industry is out of control. Since 1990 there have been 25,000 accidents, more than 1,800 a year. Today there are 112 chemical facilities in the US that, were they to explode or be attacked by terrorists, would kill at least one million people. PR won't protect those people's lives. You have learned nothing from Bhopal.

WHAT THE MEDIA ARE SAYING

The state of the Union Carbide plant is a disgrace. When the company finally left the city in 1995 it left behind around 5,000 tonnes of process and waste chemicals, toxins that have leached into the soil and water in and around the factory. *The Guardian*

[Bhopal] Children are born with deformities like cleft palate, three eyes, webbed fingers, one extra finger, one testicle, different skull shapes, and Down's syndrome. *The Lancet*

No certainty as to where Union Carbide ends and nature begins. *Jon Snow, Channel 4 TV report on birth defects in Bhopal*

There are few more glaring cases of the developed world abusing the developing world and getting away with murder than Union Carbide's rape of Bhopal. *The Independent*

Bhopal isn't only about charred lungs, poisoned kidneys & deformed fetuses [but] corporate crime, multinational skullduggery, injustice, dirty deals, medical malpractice, corruption, callousness and contempt for the poor. Average compensation of \$500 for a lifetime of misery! Yet the victims haven't given up. Their struggle for justice is one of the most valiant anywhere. The fight has not ended. It won't as long as our collective conscience stirs. *Outlook India*

IF YOU HAVE A SHRED OF HUMANITY MAKE DOW CHEMICAL CLEAN UP CARBIDE'S MESS IN BHOPAL BEFORE MORE PEOPLE GET SICK AND DIE.