

BHOPAL: Continuing the Fight for Health and Justice

On the night of December 2nd-3rd 1984, 40 tons of lethal gases leaked from Union Carbide Corporation's pesticide factory in Bhopal, India. It was the worst chemical disaster in history. Methyl isocyanate, hydrogen cyanide and other toxic gases escaped from a tank during routine maintenance operations. Poorly designed safety systems either malfunctioned or were turned off.

By the third day after the disaster, an estimated 8,000 people had died from direct exposure to the gases. Union Carbide refused to provide full information regarding the nature of the poisoning which meant that doctors were unable to properly treat those exposed. Even to this day, survivors and Indian medical agencies have been unable to obtain information on the composition of the leaked gases and their effects on the body from Union Carbide, and its new owner, Dow Chemical.

Sadly, the night of the disaster was only the start of a tragedy that is still unfolding. Union Carbide, which owned the pesticide plant at the time of the gas leak, abandoned the factory and left behind large quantities of dangerous poisons. What it left the people of Bhopal was a contaminated water supply and a toxic legacy that is still causing injury today.

The Disaster

On the night of the disaster, six safety measures designed to prevent a gas leak had either malfunctioned, were turned off or were otherwise inadequate. In addition, the safety siren intended to alert the community should an accident occur was turned off.

The gases burned the tissues of people's eyes and lungs, crossed into the bloodstream and damaged almost every system in the body. Many died in their beds, others staggered from their homes, blinded and choking, to die in the street. Many more died after reaching hospitals and emergency aid centers. The early acute effects were vomiting and burning sensations in the eyes, nose and throat, and most deaths have been attributed to respiratory failure. For some, the toxic gas caused lungs to fill with fluids, while for others, constriction of the bronchial tubes led to suffocation. Many of those who survived the first day were found to have impaired lung function. Further studies of survivors have also reported neurological problems including headaches, disturbed balance, depression, fatigue, irritability as well as damage to musculoskeletal, reproductive and immunological systems.

Union Carbide Merges with Dow Chemical

In 1999, Union Carbide and the multinational Dow Chemical announced intentions to merge. In buying Union Carbide for a sum of \$9.3 billion USD, Dow became the largest chemical company in the world. Dow not only bought Union Carbide's assets, but also its liabilities. Yet Dow has refused to accept moral responsibility for the actions of Union Carbide in Bhopal. While its legal responsibility is being tested in the U.S. courts, the people of Bhopal continue to suffer from the disaster and from toxic exposure at the contaminated factory site.

According to Dow, the companies have combined annual revenues of over \$24 billion USD and assets of over \$30 billion USD. In November 2000, Dow's newly elected President and CEO Michael D. Parker, in his first media briefing, fully supported Union Carbide's actions in Bhopal: "Clearly we're enormously aware of Bhopal and the fact that particular incident is associated with Union Carbide, [but Union Carbide has] done what it needs to do to pursue the correct environment, health and safety programs."

As was the case with the September 11 attacks in the U.S., the loss of innocent civilian life shocked the world and caused a response. After Bhopal, environment and chemical safety regulations in many countries were tightened – in the U.S., it brought about Right-to-Know legislation and the chemical industry developed codes of practice such as Responsible Care. As Sam Smolik, Dow Vice-President for Environment, Health and Safety said in a recent speech, "in 1984, the terrible tragedy in Bhopal occurred which served as a wake up call to all of us in industry". But reforms have not gone far enough and have been of little benefit to people most affected by the disaster whose calls for proper compensation, medical rehabilitation and clean up of the site have been ignored.



Sevin pesticide residue at the deserted Union Carbide factory in India.

Justice for Bhopal

Union Carbide was asked to compensate those injured in Bhopal for the loss of their ability to work. After five years of legal wrangling, the Indian government agreed to an out-of-court settlement of \$470 million USD in February 1989. This was to be the full and final settlement of all civil liability. The average pay out for personal injury was between \$370 to \$533 per person, barely enough money to cover medical expenses for five years. Many of these people and their children will be sick all their lives.

Local survivors' organizations estimate that 10-15 people continue to die each month from illnesses related to exposure to the toxic gases. Well over 150,000 chronically ill survivors are in desperate need of medical attention and a second generation of children face health impacts from the toxic legacy. Since 1984, over 140 civil actions have commenced in the United States Federal Courts on behalf of Bhopal victims and survivors in an attempt to obtain appropriate compensation. The cases continue today.

Contamination at the Factory Site

In 1999, Greenpeace and Bhopal community groups visited the abandoned factory to assess the environmental condition of the site and its surroundings. The team documented the presence of stockpiles of toxic pesticides, hazardous wastes and contaminated material scattered throughout the factory site. The survey found substantial and, in some locations, severe contamination of land and water supplies with heavy metals and chlorinated chemicals.

From the Greenpeace samples, groundwater from wells around the site showed high levels of chlorinated chemicals including chloroform and carbon tetrachloride – two chemicals indicative of long-term contamination. Additionally, soil samples found mercury, lead, nickel, copper, chromium, hexachlorocyclohexane, chlorobenzene and Sevin. Overall contamination of the site and its immediate surroundings was due to routine spills and accidents during the operation of the factory, or continued releases of chemicals from the toxic wastes that remain on site.

People who continue to live in the vicinity of the factory, including survivors of the deadly gas leak, are left with no alternative but to use groundwater contaminated with toxic pollutants. The fight for clean water has been going on since 1990. Local government testing reported heavy contamination, stating that many wells were unfit for drinking in 1996.

Greenpeace and Bhopal survivors are calling on Dow Chemical to:

- **clean up the factory site at its expense as would be required in the U.S.,**
- **secure long-term medical treatment facilities and medical rehabilitation for the survivor's of the poison gas,**
- **ensure economic compensation for the gas-affected people and their families, and**
- **provide clean drinking water to communities that are forced to consume contaminated groundwater.**

Additionally, Greenpeace and the survivor organizations* are calling for international law to be established to hold corporations criminally and financially liable for industrial disasters and ongoing pollution.

What You Can Do

Write or call President and CEO of Dow Chemical and urge him to accept responsibility for the ongoing problems in Bhopal resulting from the gas leak.

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For More Information

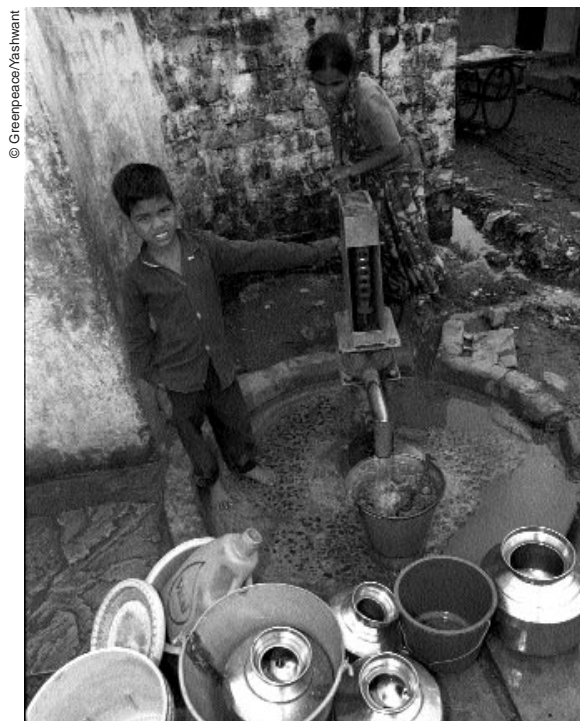
For more in depth information about the ongoing pollution in Bhopal, please see the following websites:

www.greenpeaceusa.org/toxics (click on reports icon to view our Bhopal Legacy report)

www.bhopal.org (Sambhavna Trust, a Bhopal-based medical and charitable organization)

www.bhopal.net (details and updates from local Bhopal community groups)

*Greenpeace is part of a coalition, International Campaign for Justice in Bhopal, that is composed of the Bhopal-based organizations Bhopal Gas Affected Women Stationary Workers Association, and Bhopal Group for Information and Action and their allies: Association for India's Development, Bhopal Action Resource Center, CorpWatch, UK Campaign for Justice in Bhopal and The Other Media. The campaign is also supported by the Ecology Center of Michigan, Environmental Health Fund, Environmental Health Watch, Pesticide Action Network, Essential Action and the Center for Health, Environment and Justice.



Water supply in Bhopal has been identified as unfit for drinking purposes, but people continue to use it due to a lack of clean water.