

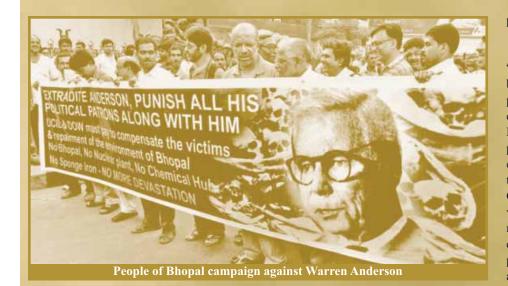
Dog's sense of smell is 1,000 times stronger than that of humans.

Big Story B

Bhopal Gas Tragedy

A corporate crime

It was post midnight of December 3, 1984 when the city of lakes, Bhopal was struck by two tragedies: one that happened immediately, and the other that transpires through the years that followed the disaster



Krish Vijayan, AIS PV, XI

wasn't born then, but my parents 667 were in their younger days. It was Lthe year of 1984, when my college going father and mom experienced the disastrous night that shooked the nation. From what they describe it to me, it was really bad. Around 2 or 3 am at night, they were awake by a commotion around. The news of leakage of some deadly gas was everywhere. They immediately left their houses, leaving all their belongings back, running for life. There was no time to find a transport, so they just ran on foot. However, their families escaped death as they evacuated on time. Many of those who couldn't escape died in their sleep. Even after many days bodies continued to be recovered. It was a horrible time to say the least," recounts a family member of the survivors of the Bhopal Gas Tragedy.

The tragedy

December 2, 1984, the night when Bhopal died a million deaths. The night when the city turned into a vast gas chamber, when the chemical, methyl isocyanate (MIC) leaked into air from the Union Carbide India Ltd's (UCIL's) pesticide factory. People ran on the streets, vomiting and eventually suffocating to death. Days, week and months later the no better. They were equally diseased with dizziness, breathlessness, skin irritation and even sudden blindness. The symptoms of the deadly gas 'methyl isocyanate' were unknown to the doctors.

Apart from leaving the gentry diseased, the leakage polluted drinking water & soil too. About 400 infants died within a few hours of their birth. Following the disaster, Bhopal turned into a state of death-laden chaos. Corpses coated the streets as the cloud of poison continued to ooze death and agony.

The backlash

Till then, the government had handled floods, cyclones and even earthquakes, but this was unusual, hence there was no backup plan or clue as to how to respond to this deadly gas. The doctors were perplexed how to treat 50,000 people within the first two days of the tragedy. The plant site was filled with toxic remains further hampering the deadly situation. For months cleaning the factory site and other affected resources such as water, soils and air was the biggest challenge for the administration.

The theory

The first hand possible cause seemed to be that water entered the tank where about 40 cubic meters of MIC (used in production of the insecticide carbaryl) was stored. When the water came in contact with the MIC, an exothermic chemical reaction started, which produced extreme heat. As a result, it caused the safety valve of the tank to burst because of immense pressure. Investigation suggested that around 20-30 tonnes ie, 40,000 kgs of MIC was released within an hour of leakage and wrapped everything around from articles in the atmosphere to people. Bhopal witnessed it all.

The UCIL theory

"The gas leak could only have been caused by deliberate sabotage. Someone purposely put water in the gas storage tank, and this caused a massive chemical reaction. Process safety systems had been put in place that would have kept the water from entering into the tank by accident," stated the statement released by the Union Carbide Company. They conducted over 70 interviews and around 500 laboratory experiments. After extensive research, the company once again stated that, "An employee seeking revenge triggered the disaster, by deliberately adding water to the tank of MIC."

The revelations

People demanded justice and answers for what evoked this catastrophe? The Indian Government stated that slack management caused this havoc, while the Union Carbide blamed 'sabotage'. The company also notified that it held only 51% of the company rest was taken over by local executives. The company also declined the allegations of mixing dangerous chemicals in India to save money.

Legal proceedings

The legal proceedings started soon after the disaster. The Government of India passed the Bhopal Gas Leak Act in March 1985, which permitted the Govt. of India to act as the only authorized representative of the victims. In 1987 criminal proceedings were field and reinstated in 1991. Warren Anderson, the ex-CEO of the Union Carbide faced criminal charges in India of 'Culpable homicide'. Repeatedly, the summons issued went unanswered, which instigated the Indian Government to declare Warren as 'absconders' of the country.

33 years and on...

Researchers estimated that within 8 hours of gas leakage, 5,00,000 -600,000 people were approximately impacted by the chemical gas, most of who suffered long-term illnesses. Thousands of families, for years, have been using the water contaminated with chemicals. The remains on the site such as wastes from machinery, sub standard products by solvents are still lying inside and outside the plant. Even after suffering for over three decades, the city is still finding it hard to come out of the deadly grip.

city ran out of cremation grounds. So far, it is India's first and the only major industrial disaster.

Figures that shook

3787 deaths; 40 tonnes methyl isocyanate; 2 government hospitals. The deadly gas choked every possible person residing in Bhopal. Those who managed to survive were

Health implications ever-after

Respiratory disorder: Irritation in lungs, causing coughing and shortening of breathing. The higher exposure caused build up of fluids (pulmonary edema), which caused Asthma.

Cancer hazard: Caused mutation that is genetic changes, which causes cancer. **Reproductive hazard:** Exposure to Methyl Isocyanate causes miscarriages in women. When it enters the body of a pregnant female, it starts to damage the growing fetus. The toxin also affected the fertility in men and women. **Lifelong impacts:** Traces of the deadly toxins were found in the milk of mother, which was ultimately transmitted to the recipient babies.