Aftermath of an Environmental Disaster:
Union Carbide in Bhopal

On Sunday, December 3, 1984, the peaceful life of a city in India was joltingly disrupted. The Union Carbide plant at Bhopal, a city less than 400 miles from New Delhi, India, had leaked poisonous gas into the air. Within one week, over 2,000 people died and more remained critically ill. Over 100,000 people were treated for nausea, blindness, and bronchial problems. It was one of history’s worst industrial accidents, which continues to affect lives today. Through 1998, more than 8,000 people have died as a result of the accident and 500,000 have become ill. According to the International Medical Commission on Bhopal, some 50,000 survivors are permanently disabled. Families still live just outside the barbed wire fence of the abandoned Union Carbide facility, which is dismantled and waiting to be sold. Contamination of nearby water and soil has been detected. Potable water flows each morning for only 30 minutes. The ground water in the areas most affected continues to be polluted by the toxic waste that was dumped by the plant in the waste disposal area. Local farmlands have been abandoned due to sharp drops in crop yields in the years following the accident.

In 1984, Union Carbide was America’s 37th largest industrial corporation, with more than 100,000 employees and an annual sales volume of over $9 billion. The firm was active in petrochemicals, industrial gases, metals and carbon products, consumer products, and technology transfers.

Union Carbide operated 14 plants in India. Total Indian operations accounted for less than 2 percent of corporate sales. In spite of a policy by the Indian government to restrict foreign majority ownership of plants, Union Carbide owned 50.9 percent of the Bhopal plant. The government granted this special arrangement because the plant served as a major technology transfer project. In order to achieve lasting technology transfer, management of the plant was mostly carried out by Indian nationals. General corporate safety guidelines applied to the plant, but local regulatory agencies were charged with enforcing Indian environmental laws. Only three weeks before the accident, the plant had received an “environmental clearance certificate” from the Indian State Pollution Board.

The accident resulted in wide public awareness in the United States. A poll afterwards showed that 47 percent of those questioned linked Union Carbide’s name to the Bhopal disaster. The direct impact of this awareness on Union Carbide’s business remains uncertain. Most U.S. consumers did not connect the Union Carbide name to its line of consumer products, which consisted of brands such as Energizer, Glad, and Presto. Industrial users, on the other hand, were highly aware of Union Carbide’s products. One area that could be particularly affected was technology transfer, which in 1983 accounted for 24 percent of Union Carbide’s revenues. The firm had concentrated increasingly on that sector, selling mainly its know-how in the fields of engineering, manufacturing, and personnel training.
THE PUBLIC REACTION

Internationally, the reaction was one of widespread consumer hostility. In India, demonstrations were held in New Delhi. The protesters demanded that the Indian government ensure steps would be taken for the extradition of the foreign accused, including Warren Anderson, former chairman of the Union Carbide Corporation. Environmentalists also demonstrated at Union Carbide plants in West Germany and Australia. Some facilities were firebombed; most were spray-painted. Plans for plants in Scotland had to be frozen. The operation of a plant in France was called into question by the French government.

Major financial repercussions occurred as well. Within a week of the accident, Union Carbide stock dropped by $10, a loss in market value of nearly $900 million. A $1.2 billion line of credit was frozen. Profits of Union Carbide India Ltd., which in 1984 had been about 8.2 million rupees, or about $480,000, dropped by 1985 to 1.3 million rupees, or $78,000. In 1985, with its shares devastated by the disaster, Union Carbide became the target of a hostile takeover bid and was forced to sell valuable assets, including its consumer-products division. It raised $3 billion of debt to buy back 55 percent of its shares and managed to stay independent. The following year it sold its battery, agricultural, and home and auto product divisions.

In the ensuing debate of the Bhopal disaster, three basic issues were highlighted—responsible industrial planning, adequate industrial safety measures, and corporate accountability. In terms of industrial planning, both Union Carbide and the Indian government were said to have failed. The Indian subsidiary of Union Carbide did little to inform workers about the highly toxic methyl isocyanate (MIC) the plant was producing and the potential health threat to neighboring regions. When the accident occurred, the subsidiary's management team reportedly resisted the parent company's instructions to apply first aid to victims for fear of generating widespread panic within the corporation and the region. The Indian government, on the other hand, seemed to regard technology transfer as a higher priority than public safety. The local government approved construction of the plant with little medical and scientific investigation into its biological effects on the environment and on people.

The second issue was the absence of a “culture of safety” among Indian technicians, engineers, and management. From the very beginning, the project lacked a team of experienced maintenance personnel who would have recognized the need for higher safety measures and, more important, a different choice of technology. When the entire Indian government wholeheartedly approved the import of the most advanced chemical production facility to a developing country without qualified personnel to handle the material and without insight into appropriate precautionary measures in case of an accident, the seeds were sown for potential disaster.

The third area of interest in the Bhopal incident is that of corporate accountability. There are three general norms of international law concerning the jurisprudence of the home government over the foreign subsidiary:

- Both state and nonstate entities are liable to pay compensation to the victims of environmental pollution and accidents.
The corporation is responsible for notifying and consulting the involved officials of actual and potential harm involved in the production and transport of hazardous technologies and materials.

- The causer or originator of environmental damage is liable to pay compensation to the victims.

These and other developing norms of international law serve to make transnational corporations more responsible for their operation.

**COMPENSATION TO VICTIMS: “THE SECOND TRAGEDY”**

Five days after the incident, the first damage suit, asking for $15 billion, was filed in U.S. Federal District Court. Since then, more than 150 suits have been filed in the United States and more than 2,700 in India. Union Carbide offered to pay $300 million over a period of 30 years to settle the cases before the courts in the United States and India. The Indian government rejected the offer, claiming that the amount was far below its original request of $615 million. By 1986, most U.S. lawsuits had been consolidated in the New York federal court. In May 1986, however, the judge presiding over the collective Bhopal cases ruled that all suits arising out of the accident should be heard in the Indian judicial system, claiming that “India is where the accident occurred, and where the victims, witnesses, and documents are located.” Although this decision appeared to benefit Union Carbide because of lower damage awards in India, the judge explicitly stated that (1) Union Carbide (USA) and its Indian affiliate must submit to the jurisdiction of the Indian court system; (2) Union Carbide must turn over all relevant documents to the plaintiffs' lawyers in India, as they would if in the United States; and (3) Union Carbide must agree to whatever judgment is rendered in India. This decision had a major effect on Union Carbide (USA) because both Union Carbide and its Indian subsidiary now had to answer to the Indian court, and the entire company's assets had become involved.

In India, the class suit traveled from the Bhopal District court to the Madhya Pradesh High Court and finally to the Indian Supreme Court. Although a settlement agreement was reached between Union Carbide and the Indian government, the descendants of the 2,000 victims were not satisfied. Several victims’ consumer groups and public interest lawyers filed petitions contesting the authority of the government to handle the lawsuit on behalf of the victims’ descendants. The petitions claimed that the government had no right to represent the victims because governmental negligence had caused the accident in the first place and the government itself should be as much a target as Union Carbide in the suit. It was expected that if the Indian Supreme Court upheld this rationale, then the government would be unable to settle on the victims’ behalf. In this case, the agreed-upon settlement amount would also be voided. As a result of the internal debate in India, the $421 million paid in settlement by Union Carbide was frozen. Instead the Indian government disbursed 200 rupees, about $10, a month to all persons who lived in the neighborhoods affected by the gas leak.

On October 3, 1991, almost seven years after the incident, the Supreme Court of India rendered its decision. The total amount of $470 million, which had already been paid by Union Carbide, was upheld as settlement. Criminal charges against the Union Carbide Corporation were reinstated, even though the court acknowledged that due to its lack of jurisdiction, it could not enforce any criminal fines in the United States.
Since the decision cannot be reviewed further, it freed up the frozen funds to be distributed to Bhopal victims and their families. Although many victims were delighted about that fact, Prashant Bhushan, a New Delhi attorney, had severe misgivings. He believed the upholding of the civil settlement to be a big blow to the development of law on the subject—particularly since he had argued that Carbide should be forced to pay “first-world” compensation rates to victims rather than “third-world” rates. He was not alone in his fight. A consortium of 25 human rights and environmental organizations demanded in 1996 that Union Carbide stand trial in India on the charge of culpable homicide. The group, which includes Greenpeace and Friends of the Earth, has urged the New York State Attorney General to begin charter revocation proceedings against Union Carbide based on a state law that provides for dissolving corporations that cause great harm.

The Union Carbide Corporation has taken private measures to aid the gas victims. It established an independent charitable trust in London that works closely with an Indian government committee and prominent Bhopal citizens. A new hospital and clinics have been built with $100 million from the trust. Union Carbide Corporation officials have also been carrying on a media campaign on the humanitarian initiative of the corporation through the trust.

**ANOTHER BHOPAL?**

Were any lessons learned from the Bhopal disaster? As a result of Union Carbide’s experience in Bhopal, several chemical companies have reduced the size of their storage tanks of toxic materials, while others have cut their inventories by as much as 50 percent. Many have provided information to the communities in which they manufacture. Some have even invested in risk assessment studies of their operations of hazardous materials.

The most significant regulatory changes have been the introduction of the Environmental Protection Act (EPA) in India, which makes environmental plans compulsory. The act empowers the Ministry of Environment and Forests (MOEF) to directly order closure of firms without going through the State Pollution Control Boards. Another result has been public interest legislation, together with a statutory right to information. The government of India has now made environmental clearance mandatory for every new project supported by the government or international agencies.

Union Carbide Corporation continues to be in the spotlight for environmental problems. Environmental groups attacked UCC following the discovery of 69 drums of highly toxic dioxin waste near the Olympics 2000 site in Australia. From March 13 to June 1, 1999, three fires on the premises of the defunct Union Carbide factory in Bhopal sparked panic among survivors of the Bhopal gas disaster.

In 1998, controversy erupted when Union Carbide Corporation and Petronas National Oil joined forces to build the Integrated Petrochemical Complex in Kereth, Terengganu, a territory under the Malaysian government. What guarantee did Malaysia have that there would not be a repeat of Bhopal? UCC corporate ventures director Charles Zeynel stated, “UCC will adhere to the strictest standards. . . . There will be no double standards and we won’t allow another Bhopal to happen.” The building of the new plant will cost $1.6 billion and is expected to be completed by 2001.
As to the standing of Union Carbide in the financial community, the firm had profits of $403 million in 1998 on sales of $5.7 billion. On November 1, 1999, the firm was replaced as a member of the 30 stocks that are used to compute the Dow Jones Industrial Average index. In October 1999, Union Carbide was acquired by Dow Chemical for $9.3 billion in stock, creating the world's second largest chemical company behind DuPont.

**QUESTIONS FOR DISCUSSION**

1. Why did Union Carbide invest in India?
2. How could Union Carbide have planned for an event such as the accident in Bhopal?
3. How would such planning have improved corporate response to the disaster?
4. What are the implications for Union Carbide being allowed to construct a new plant in Malaysia?
5. Do you feel that Union Carbide has learned from its experience in Bhopal?